

Chapter 1

Introduction

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Chapter 1. Introduction

1.1 PURPOSE OF THE IRWMP

The purpose of the Imperial Region Integrated Regional Water Management Plan (Imperial IRWMP) is to define a portfolio of cost-effective water management strategies that support economic development and provide a reliable water supply for new municipal, commercial, and industrial (MCI) demands without impacting historical MCI and agricultural uses of water or impacting existing agreements or contracts. The IRWMP is to guide action on resource management strategies and projects to be implemented by participating agencies and stakeholder groups in order to meet the Region's water management goals and objectives (see Section 1.7).

The IRWMP is also a resource the Imperial Region can use to define its long-term needs and priorities for water infrastructure, and match these needs to available state and federal funding. In the near-term, the purpose of the IRWMP is to ensure that the Imperial Region qualifies for funding available from the State of California by meeting IRWMP standards by the State Legislature and managed by the California Department of Water Resources (CDWR).

1.2 CONVENING THE IMPERIAL WATER FORUM

Following the April 2010 kick-off meeting, the Imperial Water Forum (Water Forum) was convened in June 2010 by Imperial Irrigation District (IID) and Imperial County (the County). The IID Board of Directors and the County Board of Supervisors recognized that all stakeholders in the region, whether representing public or private agencies, have unique perspectives and that all of the individual interests need to be recognized if the Imperial IRWMP is to be successful. The Water Forum adopted the following mission statement:

The mission of Imperial Water Forum is to preserve and enhance the economic and environmental health and well-being for the Imperial Region through the regional stewardship and comprehensive management of water resources in a practical, cost effective, and responsible manner.¹

The intent of the Water Forum is to provide the mechanism for different stakeholders to communicate, collaborate, and cooperate when addressing water issues and developing regional solutions. It provided the oversight and management structure for institutional, public, and stakeholder group involvement

¹ Imperial IRWM website: Imperial IRWM Mission, Goals and Objectives. June 2011.
<http://imperialirwmp.org/20100824%20WF%20GoalsObjectives_rev_16June2011.pdf>

and multi-stakeholder participation. All meetings were noticed and open to the public. The Water Forum consists of members and interested parties; Water Forum members are listed in Table 1-1.

Participating entities recognize that regional integration can enhance their ability to manage individual agency operations and the available regional water supply; and that, to a large degree, the success of the Imperial IRWMP depends on participation of those agencies that have jurisdictional authority to implement the IRWMP; however participation by agricultural, renewable energy, business and civic stakeholders was also important.

In addition, agencies are assured that participation in an integrated regional water management program and adoption of the IRWMP will not in any way diminish their control of their own future or compromise their autonomy. Regional integration in no way seeks to weaken an agency's decision-making power or authority. Rather, the IRWMP process is designed to enhance the collective power of local entities, support economic development and environmental wellbeing, increase the ability to obtain state and federal funding, and protect the Region's Colorado River water supply.

The IRWMP is intended to support and complement water management and land use plans which are based on the statutory authorities of IID, the County, and Imperial Region Cities (the Cities). By involving stakeholders and agencies with diverse interests and authorities, the IRWM planning process has opened the doors for partnerships, funding, operational connectivity, increased awareness of related planning efforts, and regional project opportunities.

The Water Forum united local expertise and information and thereby facilitated communication concerning complex and controversial topics. The Water Forum recognizes that implementation of the Imperial IRWMP cannot succeed without continuous review and updates to meet unanticipated challenges. Therefore, the Water Forum plans to provide an ongoing mechanism for identifying common problems; finding solutions and resolving conflicts; and coordinating groups with differing missions, agendas, and interests.

Table 1-1. Water Forum Members

- 
- Imperial Irrigation District
 - County of Imperial
 - Imperial County Farm Bureau
 - Imperial Valley Vegetable Growers Association
 - IID Water Conservation Advisory Board
 - City of Brawley
 - City of Calexico
 - City of El Centro
 - City of Holtville
 - City of Imperial
 - City of Westmorland
 - Heber Public Utility District
 - Niland Sanitary District
 - Geothermal Energy Stakeholder Group
 - Comité Cívico Del Valle Inc in Brawley
 - Institute for Socioeconomic Justice
 - Brawley Chamber of Commerce
 - El Centro Chamber of Commerce & Visitors Bureau
 - Imperial Valley Economic Development Corporation
 - New River Improvement Project
 - Sierra Club, CA- NV Regional Conservation Committee
 - USFWS Sonny Bono Salton Sea National Wildlife Refuge

1.3 IMPERIAL REGION OVERVIEW

The Imperial Region is located in the southeast corner of Imperial County – bordered to the east by the crest of the Chocolate Mountains (which lie west of the Colorado River), to the west by San Diego County, to the north by the Coachella Valley IRWM boundary, the Salton Sea and Riverside County, and to the south by the U.S./Mexico international border. Figure 1-1 shows the location of the Imperial Region, the region boundary, major IID water delivery infrastructure, and other geographical features.

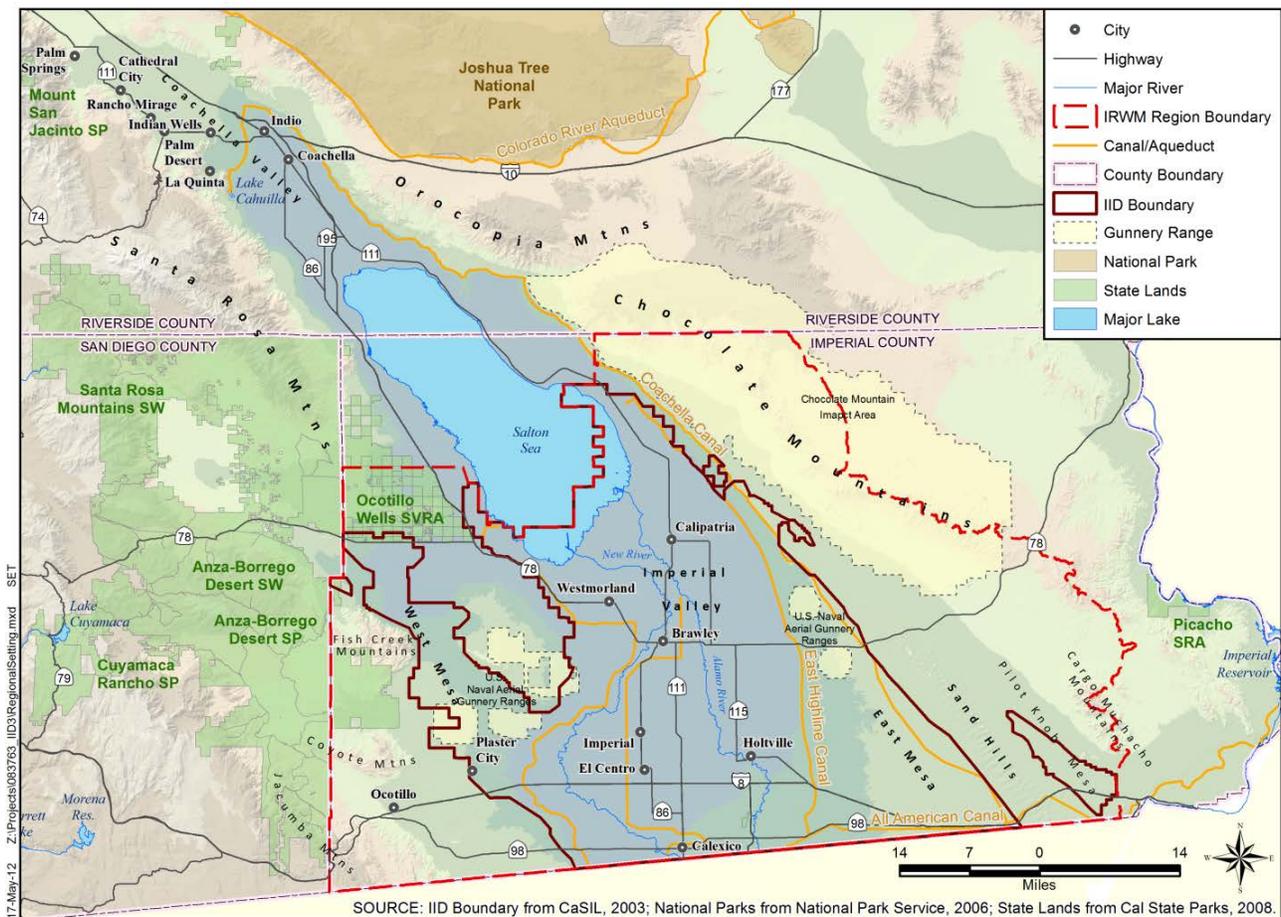


Figure 1-1. Imperial IRWMP Regional Setting

The basis for selection of the region boundary is described in Chapter 2. The area, having annual average rainfall of less than three inches a year, relies almost exclusively on imported Colorado River water. Groundwater development has occurred to a very limited degree in areas outside of the IID water service area. The Coachella Valley is to the north and the Mexicali Valley (Baja California, Mexico)

to the south, while the Imperial Valley is central to the Imperial Region, all three of which lie within the Salton Sea watershed. The Region, which abuts the Coachella Valley IRWM and Anza Borrego IRWM regions and is nestled among surrounding mountain ranges, lies entirely within the state's Colorado River Hydrologic Region. The major population centers are located along California State Route (SR) 86 and SR 111 in the Imperial Valley.

1.4 BACKGROUND

1.4.1 Draft IID Integrated Water Resources Management Plan

The 2008 IID Strategic Plan included a strategic objective to develop an integrated water resources plan by the end of 2009.² In early 2009, the IID Board began preparing the integrated water resources management plan (Draft IID Plan) and directed staff and consultants to “leave no stone unturned” in developing a list of potential projects, demand management measures, and policy alternatives to meet existing and future demands.

The outcome was to be a water supply portfolio of capital projects which, combined with management actions and policies, would identify water supplies to meet planned and anticipated future municipal, commercial and industrial (MCI) water demands without affecting current agricultural and municipal water users. The Draft IID Plan described a range of water management options including groundwater blending, groundwater storage, desalination, IID system improvement, and wastewater treatment and recycling. These options provided the building blocks that were used to configure infrastructure facilities (capital projects) and non-structural policy or program solutions (e.g., water conservation programs, policies for allocating water during times of shortage, etc.)

In the process of preparing the Draft IID Plan and as a result of discussion with community stakeholders, the IID Board realized that a wider effort such as the CDWR IRWM process could benefit not only IID, but also the other agencies and stakeholders in the Imperial Region. The Board made a mid-course adjustment in February 2009 and directed staff to continue to develop the Draft IID Plan, but also to initiate the process to develop the Imperial IRWMP.

In September 2009, the Board accepted the Draft IID Plan which the consulting team used as the basis for developing the Imperial IRWMP. However, substantial effort remained as the Imperial Region includes areas outside of the IID water service area, because the IRWM process involves the Cities, County and other stakeholders in addition to IID in plan development and includes CDWR resource management strategies not considered in the Draft IID Plan (e.g., water quality, flood management).

² IID 2008 Strategic Plan Adopted September 23, 2008; Strategic Objective B

1.4.2 State Water Management and Planning

As directed by the legislature and statute, CDWR prepares and updates the California Water Plan (see Figure 1-2).³ The California Water Plan defines hydrologic planning regions, provides a statewide water planning framework for integrated regional water management (IRWM), and identifies resource management strategies for groups like the Water Forum to consider when developing their IRWMP.



Investing in Innovation and Infrastructure

Figure 1-2. California Water Plan Update 2009 Framework for Integrated Water Management and Sustainability

California's IRWM strategy calls for collaborative efforts on the part of regions throughout the state to manage all aspects of water resources by implementing strategies appropriate for their unique needs and goals. The IRWM planning framework is also intended to identify regional project priorities and provide the basis for state investments and for allocating public resources such as bond funds.

³ California Water Plan Update 2009. CDWR is coordinating CWP Update 2013.
<<http://www.waterplan.water.ca.gov/cwpu2013/index.cfm>>

IRWM planning is focused not on deriving water resource solutions to serve a single purpose, but on how to manage solutions based on all the ways the water resource is being used, and includes multi-agency collaboration, stakeholder involvement and collaboration, regional approaches to water management, consideration of water management in land use decisions, and project monitoring to evaluate results of practices that are utilized.⁴

CDWR IRWM Guidelines⁵ define specific IRWM standards that project proponents and the Imperial IRWMP must meet to qualify for Proposition 84, Proposition 1E, or other state funding.⁶ Eligibility for IRWM and Stormwater Flood Management project grants are contingent on:⁷

- IRWMP projects that support local goals and objectives
- IRWMP content meeting the state standards
- Compliance with Groundwater Management Plan requirements if seeking funding for groundwater projects
- 2010 Urban Water Management Plan⁸ accepted by CDWR, if project proponent seeking funding is a municipality required to prepare an UWMP
- Agricultural Water Management Plan or Water Conservation Plan accepted by CDWR, if project proponent seeking funding is an irrigation district required to prepare an AWMP or WCP
- Implementation of best management practices⁹ for urban water conservation and metering⁹ by urban water service providers seeking funding

1.4.3 Direction from IID Board and County Supervisors

IID holds the water rights to and is responsible for delivering untreated Colorado River water to users in the IID service area (Imperial Valley). The County is responsible for land use planning in the unincorporated areas of Imperial County and for groundwater management. Broad policy concepts were developed by IID and County staff and then presented to the IID/County Water Planning Group.¹⁰ In April 2010, overarching direction on IRWMP development was provided by the Water Planning Group, as follows:

⁴ CDWR. 2012 Guidelines, Pg. 18, IRWM Plan Standards.

<http://www.water.ca.gov/irwm/docs/Guidelines/GL_2012_DRAFT.pdf>

⁵ IRWM Program. CDWR, 2010. <<http://www.water.ca.gov/irwm/index.cfm>>

⁶ Proposition 84, Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Public Resource Code §75001 et seq.); and Proposition 1E, Disaster Preparedness and Flood Prevention Bond Act of 2006.

⁷ Ibid. Pg. 15, Eligibility requirements

⁸ CWC §10610 et seq. Required of municipal suppliers serving 3000 connections or more.

⁹ AB 1420 (Stats. 2007, Ch. 628) requirements for best management practices; CWC §529.5 for metering compliance.

¹⁰ The Water Planning Group is composed of two members of IID Board of Directors and two members of Imperial County Board of Supervisors.

- Annual apportionment to water users: The IID Board should make a yearly determination of forecasted water use – among all categories of users – and apportion supplies in a manner that is consistent with IID’s Regulations for Equitable Distribution Plan.¹¹
- Joint land-use conversion policy: Imperial County, as the land-use planning entity, and IID, as the purveyor of water to the region, should agree to the establishment of designated corridors that would facilitate the conversion of agricultural lands to the development of renewable energy production.¹²
- Joint groundwater study: Imperial County and IID should conduct a joint feasibility study to ascertain the availability and accessibility of groundwater resources throughout the region.
- Fallowing for in-valley water use: IID will consider rotational fallowing of IID-owned land and/or private land to generate or reallocate water for MCI purposes.
- Water storage and banking: IID will pursue storage projects it has identified within its service area and banking opportunities in the Coachella Valley IRWM Region. While projects to augment the Colorado River water supply are generally more expensive to build and operate than policy options, IID recognizes that storage is vital to the long-term management of its water supply and provides the most durable and defensible means of addressing fluctuations in usage from year to year.
- Commitment to a regional planning model: In concert Imperial County and IID will develop a regional water plan that actively solicits and relies on stakeholder advice and consent to balance the needs of diverse interests. Plan development will be guided by the goals of multiple use and sustained yield.

1.5 IMPERIAL IRWMP OBJECTIVES AND CONFLICTS

CDWR IRWM Guidelines require a description of the major water management objectives and conflicts within the region, including clear identification of problems within the region that focus the objectives, implementation strategies, and implementation projects that ultimately provide resolution.¹³ The Imperial IRWMP and Water Forum seek to resolve and/or reduce conflicts among water users in the Imperial Region, and to anticipate and avoid future conflicts. Conflicts cannot be resolved without a recognition and clear understanding of the problems that drive them. Conflicts within the Imperial Region have historical, geographic, technical, and institutional components, and center around three main areas: 1) QSA/Transfer Agreements which cap the region’s ability to import Colorado River water;

¹¹ 2009 Regulations for Equitable Distribution Plan. IID website. <<http://www.iid.com/index.aspx?page=141>>

¹² In 2012, the County adopted a conditional use permit procedure for such land use conversion; and IID adopted a temporary land conversion fallowing policy. These are presented in Chapter 12.

¹³ California Water Code (CWC) §10541. (e)(3)) and CDWR Guidelines/Standards

2) forecasted renewable energy and other MCI development; and 3) DAC needs. These changes have resulted in a planning environment that is realizing how to operate under a new paradigm.

A summary of conflicts and objectives identified in the Region Acceptance Process (RAP) was presented to the Water Forum in October 2010 for discussion and to lay the foundation for establishing goals and objectives. The conflicts and issues are summarized in the sections below.

1.5.1 QSA and Related Agreements (QSA/Transfer Agreements)

RAP.1 - With the growth of Las Vegas, the completion of the Central Arizona Project, and creation of the Arizona Water Banking Authority, IID and the other Colorado River contractors became enmeshed in interstate and interregional conflicts surrounding use of the Colorado River. The October 2003 Quantification Settlement Agreement and Related Transfer Agreements (QSA/Transfer Agreements) (Chapter 5) settled many interstate and interregional conflicts among the federal interests (USBR), Lower Basin States (California, Arizona, Nevada), and tribal and California water rights holders (San Luis Ray Tribe, PVID, Yuma Project, IID, CVWD, MWD) over the use of, and rights to, Colorado River water. This prevented litigation that could have resulted in even greater impacts to IID's water supply.

RAP.2 - A host of technical problems and institutional issues facing Southern California and Lower Colorado River geography were resolved by the QSA/Transfer Agreements, and after extensive public hearings the State Water Resources Control Board issued approvals authorizing the transfer agreements. The QSA/Transfer Agreements have been approved by all appropriate parties, creating a complex legal, political, regulatory, and operational landscape.

RAP.3 - The Secretary of the Interior, acting as Water Master for the Colorado River manages the large federal facilities on the Colorado River, establishes operating policies, and provides final accounting of diversions, return flows, and consumptive use of water diverted from the Colorado River below Lee's Ferry, including components of the QSA/Transfer Agreements. Since adoption of the QSA/Transfer Agreements, two major changes that both benefit and constrain IID are the Inadvertent Overrun and Payback Policy (IOPP) (USBR 2002, 2003) and the Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead (USBR 2007a and 2007b).

RAP.4 - The QSA/Transfer Agreements define a new reality and create changed circumstances under which IID must manage the major water source of the Imperial Region. Specifically, resolution of the interregional and interstate conflicts resulted in supply constraints for IID customers that now must be resolved at the local level. QSA/Transfer Agreements and related Colorado River operating policies represent the baseline conditions for the IRWMP.

RAP.5 - California's annual share of the Colorado River is fixed at 4.4 million acre-feet (MAF) per year plus 50% of any declared surplus flow in the river. The seniority of the IID water right is

confirmed in the QSA/Transfer Agreements for the term of the QSA, while its consumptive use is effectively capped at 3.1 MAF per year (volume measured at Imperial Dam). In addition, the QSA/Transfer Agreements require that IID, by 2026 and for the term of the QSA (2037 or 2047), take actions to reduce its net annual consumptive use of Colorado River water by 408,000 acre-feet, with the conserved water transferred out of the Imperial Region. The result is to reduce IID's net consumptive use, measured at Imperial Dam, to just over 2.6 MAF per year.¹⁴ System and on-farm efficiency conservation measures have been formulated and there is a schedule for their implementation. These measures are designed to maintain historic levels of agricultural productivity and MCI use, and this amount is anticipated to meet demand in most years. This supply is stable and reliable due to IID's senior water rights. However, when forecasted renewable energy and other MCI demand is incorporated into the future demand, this amount is no longer expected to be sufficient.

RAP.6 - IID/MWD 1988 Agreement projects produce a verified amount of conserved water each year for transfer to MWD. Under the terms of the Second Amendment to the Approval Agreement, dated June 18, 2007, 105,000 acre-feet (AF) per year (under most conditions) are to be made available by IID for transfer to MWD. The system and on-farm efficiency conservation measures were designed to ensure that historic levels of agricultural productivity and MCI use would be maintained.

RAP.7 - The SWRCB, as part of its approval of the IID/SDCWA transfer, stipulated that from 2003 through 2017, IID must provide mitigation water to the Salton Sea to compensate for reduction in discharge accountable to the SDCWA transfer. To meet this obligation, IID instituted a voluntary Following Program.

RAP.8 - As of 2017, IID's entire transfer requirement to SDCWA and CVWD (195,000 acre-feet in 2017, ramping up to 303,000 acre-feet per year by 2026) is to be achieved through IID system and voluntary on-farm efficiency conservation measures. The IID/SDCWA and IID/CVWD transfer agreements bring monies to IID based on the amount of water transferred (\$/AF); therefore, IID and participating growers must find monies to fund capital improvements and programs needed to achieve the required conservation and to address the environmental impacts of these programs.

RAP.9 - As with the IID/MWD program, measures implemented for the IID/SDCWA and IID/CVWD transfer programs are expected to ensure historical levels of agricultural and MCI consumptive

¹⁴ USBR LCR home page. "Colorado River Water Delivery Agreement." Exhibit B. 10 Oct 2003.
<<http://www.usbr.gov/lc/region/g4000/QSA/crwda.pdf>>

use. What will be impacted is inflow to IID drains, the New and Alamo rivers, and the Salton Sea as operational spill and tailwater runoff are reduced to meet transfer requirements; IID's net consumptive use of Colorado River water, volume at Imperial Dam, will be reduced by the amount of the transfers.

RAP.10 - The IID Efficiency Conservation Definite Plan (Definite Plan; IID 2007) provides a road map of projects, costs, and investments that can be implemented as voluntary on-farm and IID system efficiency conservation measures. In short, the Definite Plan outlines how IID and Imperial Valley growers can decrease their discharge to the Salton Sea to meet transfer obligations according to schedules in the QSA/Transfer Agreements, while ensuring the long-term viability of the Imperial Region's agricultural economic base and MCI activity.

1.5.2 Inadvertent Overrun Payback, and Underrun Opportunity

RAP.11 - Even with full implementation of efficiency conservation measures, agricultural water demand can vary significantly from year to year due mainly to market fluctuations and to some extent the amount of rainfall, further complicating IID's operations. In some years IID's total consumptive use may exceed its Colorado River entitlement, resulting in inadvertent overruns (annual use that exceeds the capped amount), which IID must pay back in subsequent years from extraordinary conservation practices according to the terms of the USBR Inadvertent Overrun and Payback Policy.¹⁵ Forecasted increases in Renewable energy and MCI demand are expected to exacerbate this situation.

RAP.12 - To reduce the likelihood of an overrun in any given year, the IID board has approved the 2009 Regulations for the Equitable Distribution Plan (EDP, IID 2009) that define how IID will apportion water to its customers when demand is anticipated to be greater than the available supply. When this is projected to occur, a Supply Demand Imbalance (SDI) may be declared by the Board of Directors. For agricultural water users, implementation of the EDP will cap their annual water apportionments and call into effect other measures that require additional planning and water management actions, with resulting higher costs.

RAP.13 - In other years IID may experience an underrun, where annual consumptive use is less than IID's entitlement. During underrun years, California agencies with water right priorities junior to IID's can divert and beneficially use the water that IID is not able to use. IID is seeking to develop opportunities to divert and store this water to increase water supply reliability in the Imperial Region. Potential storage may be available in the East Mesa groundwater basin, which is under

¹⁵ USBR: Inadvertent Overrun and Payback Policy, April 21, 2006.
<<http://www.usbr.gov/lc/region/g4000/4200Rpts/DecreeRpt/2006/agreements/IOPP.pdf>>

the jurisdiction of Imperial County. The needed agreements regarding such a project could benefit from cooperation and development through the IRWMP process.

1.5.3 Non-Agricultural Users

RAP.14 - Municipal, commercial, industrial, and environmental uses are not required to cut back as much (if any) during a SDI year. The higher degree of reliability granted to non-agricultural users in the IID water service area can limit and/or reduce the supply available to agricultural water users in any year that SDI is in effect – especially if new developments, with their associated water demands, are approved. Figure 1-3 illustrates the difference in delivery patterns. With MCI development increasing water demand and the higher reliability granted MCI users, agriculture will take the brunt of SDI cutbacks (dashed lines) during the peak season. *The dashed lines for each curve reflect a 20 percent overall cutback in IID deliveries with a maximum eight percent reduction for MCI demands¹⁶ with agriculture taking up the difference to minimize an overrun.*

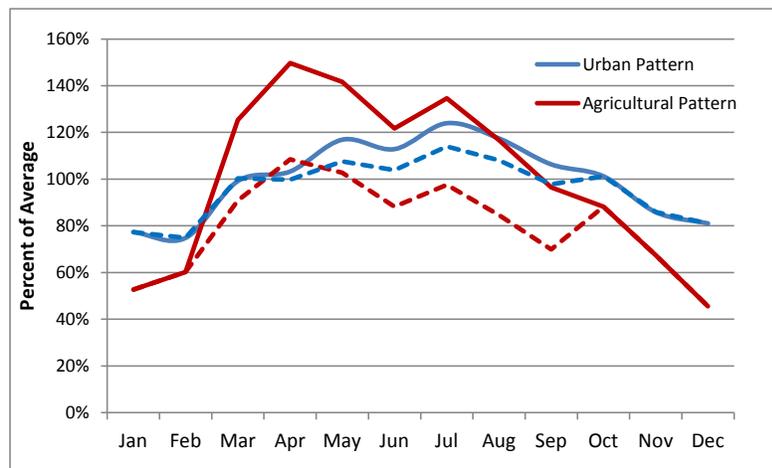


Figure 1-3. Illustrative Example of Monthly Demands and SDI Cutbacks for Urban and Agriculture

RAP.15 - Two areas of conflict arise out of the potential for an annual overrun, both resulting from the reliability of supply provided to the MCI and environmental uses, which are not as affected in times of an SDI determination. One conflict is that MCI water users pay a higher price associated with the increased reliability, whether or not an SDI is declared. That this is

¹⁶ The expected maximum MCI reduced apportionment after meeting water conservation reductions per SBX7-7, the Water Conservation Act of 2009.

associated with benefits of increased reliability is not widely recognized. The other conflict is that MCI and, to a degree, environmental uses will reduce the supply for agricultural uses in SDI years. Development of new non-agricultural uses will exacerbate this situation.

1.5.4 Forecasted Renewable Energy and Other MCI Development

RAP.16 - Municipal, commercial, and industrial developments anticipated for the Imperial Region may impact agricultural consumptive use unless new water projects are constructed.

RAP.17 - As noted above, the annual cap on IID's supply has created competition and conflicts at the local level among agricultural, MCI and environmental uses within the Imperial Region. The Cities and County have realized that their economic development is constrained by the cap on IID's Colorado River water supply and by the lack of new reliable water supplies needed to avoid impacting existing agricultural water availability. Agricultural users are concerned that new development projects may negatively impact their supply. To address the challenges, either "new" water is needed to support growth or water would have to be allocated from existing agricultural uses.

1.5.5 The Imperial Planning Environment, a New Paradigm

RAP.18 - The new reality and changed circumstances affect the planning environment in which Imperial Region stakeholders are making land use and water management decisions, resulting in existing and potential conflicts within the Imperial Region between current users and future uses and/or among the types of water users (agricultural, MCI, and environmental). The conflicts are manifested in lawsuits among local interests and in unresolved requests for water supply for new uses.

RAP.19 - Water management and land use planning are interdependent. IID, as the water right holder and wholesaler of the Colorado River supply, is working to develop a consensus with the other stakeholders in the Imperial Region regarding water availability realities, possibilities for "new" supply, and how best to set water supply policies that will affect land use decisions; and the County and Cities need to be able to make defensible findings related to reliable water supply availability needed to meet the water demands of new development.

RAP.20 - The water supply and demand management problems and conflicts described herein must be resolved within the Imperial Region at the local level by community stakeholders. A host of other issues related to DAC needs, including water treatment, source water protection, drainage, recycling, and groundwater management may best be addressed at the local level.

The Imperial Region seeks to use the IRWMP planning framework to address and resolve conflicts through a facilitated process to reduce competition and polarization in the community, to build consensus, to provide an alternative to litigation, and to find a way forward in which the water demands

for agriculture, economic development, and environmental uses can be met in a more harmonious manner. As such, the Imperial IRWMP sets forth a wide range of resource management strategies that can be used to develop project alternatives that meet local goals and objectives (see Section 1.7).

1.6 ISSUES IDENTIFIED BY THE WATER FORUM AND STAKEHOLDERS

As part of the outreach activity, a stakeholder assessment was conducted to introduce the IRWMP to potential participants, seek their input, and identify stakeholder issues and expectations. The consulting team also conducted outreach to Disadvantaged Communities (DACs) to document their issues (see Appendix Q where both documents are compiled). The list presented below is a summary and compilation of the issues identified in the stakeholder interviews, initial water Forum meetings and interviews with the DACs:

Regional Water Supply

- Inability to store Colorado River Water – need groundwater or surface water storage to make full use of available supply
- Aging IID conveyance infrastructure and lack of funds for maintenance of facilities
- Need for a reliable water supply for geothermal and renewable energy projects and to support other economic development
- Continued competition for IID’s water supply
- Potential threats from other regions seeking to acquire additional Colorado River water

Wastewater Treatment Plant and Related Infrastructure

- Aging collection pipelines, infiltration of groundwater into the collection systems
- Compliance with water quality standards and waste discharge requirements
- Inability to fund plant upgrades to meet standards and increasing regulatory requirements
- Recycling and reclaiming wastewater is not affordable for rate payers

Drinking Water Treatment

- Aging and decaying distribution infrastructure
- Increasing costs to maintain, upgrade, and expand drinking water treatment plants
- Meeting seven-day water supply storage standard
- Catastrophic supply interruptions
- Safe drinking water compliance in rural areas

Flood Control and Stormwater Management

- Inadequate regional and sub-regional stormwater facilities; IID drains not designed for urban runoff and conveyance
- No regional flood control district, no benefit assessment zones to provide a revenue source, and no regional master plan for drainage
- Requirements for on-site stormwater retention limit MCI development potential

Other

- Need to define who benefits and who pays for projects, and to equitably distribute cost
- Disadvantaged communities' limited technical, management, and fiscal resources constrain the ability to participate in the IRWMP process and state or federal grant programs
- Reluctance to increase rates and fees
- Changing and evolving regulatory requirements
- Increased, and sometimes unrealistic, expectations on how much water can be conserved through efficiency practices
- Disconnect between land use planning and water supply

1.7 GOALS AND OBJECTIVES

Setting IRWMP goals and objectives is the foundation of the planning process. The goals and objectives establish the intent of the IRWMP and indicate to the public which regional conflicts and water management issues the IRWMP is designed to address.

1.7.1 Setting the Mission, Goals and Objectives

In October 2010, the Water Forum established a Policy Work Group to draft a mission statement and goals and objectives. The work group considered technical studies, stakeholder assessment results, and issues and conflicts identified by DAC stakeholders. Members worked to make the objectives measurable, so they could be used to track progress during IRWMP implementation. Specific metrics were included where possible in the objective statements.

The identified issues, conflicts, and challenges provided the Water Forum with a basis for establishing and prioritizing the IRWMP goals and objectives. The Water Forum prioritized the IRWMP goals in March 2011. The goal priorities are:

1. Water Supply
2. Water Quality

3. Flood Protection and Stormwater Management
4. Environmental Protection and Enhancement

A fifth goal, Develop Regional Policies, is conceived as an overarching goal that serves to tie together the other goals. The Imperial IRWMP Mission, Goals and Objectives were adopted by the Water Forum on September 9, 2010. The Water Forum made a minor change in the Goals and Objectives in June 2011 to clarify some objectives and eliminate redundant language.¹⁷

In August 2010, a Charter Work Group was established. Members developed the Imperial IRWMP Water Forum and Regional Water Management Group Charter which defines the governance and decision making processes followed during development of the IRWMP (see Chapter 3) and that will be followed for the IRWMP Implementation Plan (see Chapter 13).

A resolution supporting preparation of an IRWMP; accepting and endorsing the IRWMP mission, goals and objectives, and the Imperial IRWMP Water Forum and RWMG Charter; and designating a representative to the Water Forum was prepared for stakeholders to take to their respective agencies and organizations for adoption.¹⁸ The resolution has been adopted by the agencies listed in Table 1-2; adopted resolutions are in Appendix A.

At its September 2010 meeting, the Water Forum adopted a resolution announcing the intent to prepare the IRWMP through an open, participatory and collaborative process. The resolution supported preparation and submittal of the Proposition 84 Planning Grant by IID on behalf of the Imperial Water Forum. The Notice of Intent to adopt this resolution was placed in the *Imperial Valley Press*.

On September 14, 2010, the IID Board of Directors adopted a resolution authorizing the IID, serving in its capacity as the project coordinator, to submit an application for Proposition 84 Planning Grant funding.¹⁹

¹⁷Imperial IRWMP Mission, Goals & Objectives. Imperial Water Forum. June 2010, revised June 2011.

<http://imperialirwmp.org/20100824%20WF%20GoalsObjectives_rev_16June2011.pdf>

¹⁸Resolution to Support Goals. Imperial Water Forum. September 9, 2010.

<http://imperialirwmp.org/Resolution%20G&OParticipationAdoption_FNL.pdf>

¹⁹IID Board Resolution No. 24-2010. <<http://www.iid.com/Modules/ShowDocument.aspx?documentid=2380>>

Table 1-2. Agencies with Resolutions Adopting Imperial IRWMP Goals, Objectives and Charter

	Imperial County
	Imperial Irrigation District
	City of Brawley
	City of Calexico
	City of El Centro
	City of Holtville
	City of Imperial
	City of Westmorland
	Calexico New River Committee

1.7.2 Imperial IRWMP Goals and Objectives

The Water Forum with the participation of region stakeholders and agency representatives, adopted water resources management goals and objectives, prioritized as follows:

Water Supply Goal: Diversify the regional water supply portfolio to ensure a long-term, verifiable, reliable, and sustainable supply to meet current and future agricultural, municipal, commercial, industrial, and environmental demands.

Objectives

1. Meet 100% of future demands without adverse impact to existing users that are not mitigated.
2. Implement projects or programs that will provide a firm, verifiable, and sustainable supply of 50 to 100 thousand acre-feet per year (KAFY) for municipal, commercial or industrial demands by 2025.
3. Ensure equitable and appropriate cost sharing among water users who would receive benefits from any proposed water management project.
4. Protect surface water rights.
 - a. Optimize and sustain use of Colorado River entitlements through development of groundwater banking and storage projects.

- b. Implement water conservation measures that demonstrate reasonable beneficial use of the available supplies and are consistent with established industry standards,²⁰ and state and federal requirements.
5. Integrate resources management strategies that diversify the regional water supply portfolio through projects such as desalination of brackish groundwater or drain water, reclaimed waste water, and stormwater reuse; or through coordinated land use and water management policies.
6. Promote economic development that is consistent with existing agreements on use and management of the Colorado River water supply and is consistent with County and Cities general plans and other local ordinances and regulations.
7. Protect correlative groundwater rights and currently designated sole source aquifers from further overdraft, and optimize the use of other groundwater where feasible.

Water Quality Goal: Protect water quality for beneficial uses consistent with regional community interests and the Colorado River Regional Water Quality Control Board (RWQCB) Basin Plan through cooperation with stakeholders and local and state agencies.

Objectives

1. Maintain or improve the quality of incoming Colorado River water.
2. Support disadvantaged and other communities in meeting wastewater disposal and permit requirements.
 - a. Define local and regional opportunities, evaluate economies of scale and where cost effective, develop capital facilities for wastewater reuse/reclamation.
 - b. Match water quality to appropriate uses and supply treated wastewater to extend use of Colorado River supplies.
3. Support disadvantaged and other communities in meeting drinking water standards.
 - a. Define local and regional opportunities, evaluate economies of scale and where cost effective, develop capital facilities.
4. Comply with Total Maximum Daily Loads (TMDLs) established by the Colorado River Regional Water Quality Control Board (Region 7) for the Imperial Region, and implement established Best Management Practices or other measures to minimize water quality impacts from stormwater.

²⁰ Water conservation measures include Efficient Water Management Practices recognized by the Agricultural Water Conservation Council; and Demand Management Measures and Best Management Practices as defined by the California Urban Water Conservation Council; or those related actions defined by federal or state law.

5. Preserve and, where and when technology allows, improve quality of groundwater resources in Imperial Region.

Environmental Protection and Enhancement Goal: Protect and enhance aquatic ecosystems and wildlife habitat consistent with municipal, commercial, industrial, and agricultural land uses.

Objectives

1. Recognize and mitigate impacts to IID drains, small natural floodways, and the New or Alamo rivers that could result from reduced flows as a result of development or reclaimed water use
2. Investigate and develop regional mitigation banking program to provide cost-effective environmental mitigation for proposed projects that reduce IID drain flow or have other adverse impacts.
3. Identify opportunities for open spaces, trails, parks and other recreational projects in the Imperial Region that can be incorporated with water supply, water quality or flood protection projects, consistent with public use and property rights.

Flood Protection and Stormwater Management Goal: Protect life and property from flooding and develop regional and local flood protection and stormwater management strategies.

Objectives

1. Assess regional flood control and local storm water management needs through a collaborative effort to develop policies and cost effective physical solutions.
 - a. Address vector control and safety concerns related to overflow ponds.
 - b. Encourage local agencies to maintain and enforce FEMA floodway and flood plain maps and regulations adopted by Imperial County in 1984 so Imperial Region communities are eligible for federal flood insurance.
2. Document and define technical and policy approaches for flood and storm water management that can be integrated with other water management actions to meet multiple objectives and provide multiple benefits.
3. Evaluate and define local and regional projects that prevent or minimize flooding and damage to public and private facilities and property.

And a fifth, non-prioritized goal that supports the four prioritized goals:

Develop Regional Policies Goal: Develop regional policies, in accordance with and respecting the individual agencies' jurisdiction and authorities, by engaging the water and land use agencies and other interested parties in a cooperative, regional approach.

Objectives

1. Streamline permitting process and integrate land use and water supply planning requirements where appropriate.
2. Define cost-effective projects and equitable cost sharing agreements with those entities that would receive benefits from proposed water management projects of all types.
3. Develop consistent policy across all water and land use agencies: Imperial County, Cities, IID, federal lands.

1.8 CONTENTS AND ORGANIZATION

The Imperial IRMWP is presented in 14 chapters grouped into four major parts:



