

## 7. IMPACTS AND BENEFITS

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*Impacts and benefits from the ARB IRWMP and its component projects are assessed as part of the planning process. This section describes the impacts and benefits from plan implementation at a screening level including:*

- *Potential benefits and impacts from implementation of the ARB IRWMP and its component projects within the region and in adjacent areas*
- *Advantages of regional planning as opposed to individual local efforts*
- *Interregional benefits and impacts*
- *Benefits to disadvantaged communities*
- *Impact/benefits to other resources (such as air quality and energy).*

### 7.1. Potential Benefits and Impacts from Implementation

There are numerous potential benefits and impacts that will result from implementation of the projects and programs proposed in the ARB IRWMP. These benefits and impacts have been quantified, where possible in this IRWMP. If not possible, a qualitative assessment was performed. It is not anticipated that the ARB IRWMP itself will require compliance with CEQA, NEPA, or other local, state or federal permitting requirements. However, if it is determined that environmental compliance is required for individual projects, the appropriate documentation will be prepared by the participating agencies. Benefits and impacts are developed in more detail for each project as part of any required environmental documentation processes.

#### 7.1.1. Benefits from Implementation

Implementation of the projects proposed in the ARB IRWMP will result in quantitative and qualitative benefits for the region and beyond. In addition to direct quantitative benefits such as new or more reliable water supplies, there are benefits from avoiding the negative impacts of not implementing the projects included in the ARB IRWMP. Quantitative benefits are summarized in **Table 7.1** for projects with an estimated water supply yield in AF/yr. Qualitative benefits are summarized for each project in **Table 7.2**, and include: improved water quality, water supply reliability, improved levee system integrity, improved recreation, habitat protection, improved drainage, groundwater quality (by mitigating migration of regional contaminant plumes), reduction/prevention of groundwater overdraft conditions, ecosystem restoration, increased operational flexibility, reduced flood risk, public and professional (water-related) education.

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**Table 7.1 Quantitative Benefits from IRWMP Implementation**

Projects and Programs	Responsible Agency(ies)	Project Yield (AF/yr) 1
Peterson Water Treatment Plant Improvements	SJWD	33,000
Bajamont Water Treatment Plant Expansion	CWD	5,500
Cosumnes River Flow Augmentation Project	SCWA	5,000
Recycled Water Program Storage Reservoir	EID	5,000
Mesa Verde Groundwater Production Well	CHWD	850
Lincoln Recycled Water Distribution System Expansion - Southwest Placer County	City of Lincoln	1,400
Wildhawk Groundwater Treatment Plant	SCWA	8,800
Groundwater Production Well Project	SSWD	5,000
Eastern Sacramento County Replacement Water Supply Project	SCWA	15,200
Freeport Regional Water Project	FRWA	203,500
Groundwater Production Well Project	OVWC	1,200
Fair Oaks Boulevard Groundwater Production Well	CHWD	800
Old Auburn Road Groundwater Production Well	CHWD	900
Woodcreek North Aquifer Storage and Recovery Project <sup>2</sup>	City of Roseville	6,790
Groundwater Production Well Improvement Project	OVWC, SJWD	3,320
Roseville Water Treatment Plant Expansion	City of Roseville	44,000
SRCS D Water Recycling Master Plan	SRCS D	33,000
Twin Oaks Avenue Groundwater Production Well	CHWD	800
Sunset Industrial Area Groundwater Supply Improvements	PCWA	3,000
East Elk Grove Groundwater Treatment Plant	SCWA	14,300
SRCS D Water Recycling Betterment and Expansion Project (Phase II Project & Bartley Cavanaugh Golf Course)	SRCS D, City of Sacramento	7,150
Recycled Water Program Expansion	City of Roseville	6,133
Meter Retrofitting Program & Activities (e.g., meter installation)	City of Roseville	1,982
Sacramento River Water Reliability Study (SRWRS)	City of Sacramento, City of Roseville, SSWD, PCWA	35,000
Foothill 2 Water Treatment Plant Construction Project	PCWA	33,000
American River Water Supply Project	PCWA	35,500
Regional Pipeline for Surface Water	RLECWD	3,000
Replace Existing Wells/Install New Wells	RLECWD	11,000
SRCS D Recycled Water Program Expansion - Delta Shores	SRCS D, City of Sacramento	650
Fairbairn Intake Pump to serve City of Sacramento and SCWA Zone 40 <sup>3</sup>	City of Sacramento	23,100
EID Water Recycling Program	EID	6,963
Water Loss Reduction Project	EID	2,000
RMCS D Water Recycling Program	RMCS D	1,000
Vineyard Surface Water Treatment Plant	SCWA	55,000
Anatolia Groundwater Treatment Plant	SCWA	14,560
Big Horn Groundwater Treatment Plant	SCWA	14,560
Bond Groundwater Treatment Plant	SCWA	7,280
City of Sacramento (POU) North Vineyard - Storage and Booster Pump	SCWA	22,400
Franklin Groundwater Treatment Plant	SCWA	7,840
Laguna Ridge (Whitelock) Groundwater Treatment Plant	SCWA	14,560
Poppy Ridge Groundwater Treatment Plant	SCWA	14,560
Sheldon Road Storage	SCWA	560
Sunrise Douglas (Suncreek) Groundwater Treatment Plant	SCWA	4,480
Zone 50 Infrastructure	SCWA	5,200

Notes:

1. Maximum project yield. For storage projects, this is the storage volume in AF.
2. Yield for Woodcreek North, Woodcreek West, HP, Del Webb, West Roseville Specific Plan (4) wells.
3. The pump will also serve Cal-Am/Rosemont and Parkway services areas.

**Table 7.2 Qualitative Benefits and Impacts from IRWMP Implementation**

Projects and Programs	Responsible Agency(ies)	Qualitative Benefits	Impacts
Zone 40 Groundwater Management Plan	SCWA	Water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	None
El Dorado Water and Power Authority Projects/Programs/Activities	El Dorado Water and Power Authority	Water quality, habitat protection	None
Initial Fisheries and In-Stream Habitat (FISH) Management and Restoration Plan for the Lower American River	Water Forum Successor Effort	Habitat protection, ecosystem restoration	None
Folsom Dam Outlet Modifications	U.S. Bureau of Reclamation, SAFCA, local sponsors	Operational flexibility, habitat protection	Construction-related
Sacramento River Pioneer Reservoir Sites	SAFCA	Improved levee system integrity, reduced flood risk	Construction-related
Laguna Creek Watershed Assessment	SCWA	Water quality, habitat protection, recreation, improved drainage	None
Peterson Water Treatment Plant Improvements	SJWD	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
East Bank Levee Widening Project at RM 78.1	SAFCA	Improved levee system integrity	Construction-related
Pocket Area Levee Underseepage	SAFCA	Improved levee system integrity	Construction-related
South Sacramento Streams Group Levee Project	SAFCA	Improved levee system integrity	Construction-related
Folsom Dam Mini-Raise	U.S. Army Corps of Engineers, SAFCA	Ecosystem restoration, reduced flood risk	Construction-related
Bajamont Water Treatment Plant Expansion	CWD	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Pocket Area - Sacramento River Erosion Sites	SAFCA	Improved levee system integrity, reduced flood risk	Construction-related
Carriage/Lauppe Transmission Main Project	CHWD	Water supply reliability	Construction-related
Central Sacramento County Groundwater Management Plan	SCWA	Water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	None
Lincoln Recycled Water Distribution Pipeline Expansion - Western Placer County	City of Lincoln	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Rosemont Conjunctive Use Pipeline	City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Vineyard-Florin Gap Conjunctive Use Pipeline	City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Cosumnes and Mokelumne Rivers Floodplain Integrated Resources Management Plan	SSCAWA	Reduce/prevent groundwater overdraft, habitat protection, ecosystem restoration, reduced flood risk	None
Cosumnes River Fish Passage Project	SSCAWA	Habitat protection, ecosystem restoration	Construction-related
Cosumnes River Flow Augmentation Project	SCWA	Habitat protection, ecosystem restoration, reduce/prevent groundwater overdraft	None
SSWD Demand Management Study	SSWD	Water supply reliability, operational flexibility, reduce/prevent groundwater overdraft, groundwater quality	None
Recycled Water Program Storage Reservoir	EID	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Ethan Way/Silica Avenue Conjunctive Use Pipeline	City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
City of Galt Wastewater Treatment Facilities Plan	City of Galt	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None

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Table 7.2 (continued) Qualitative Benefits and Impacts from IRWMP Implementation

Projects and Programs	Responsible Agency(ies)	Qualitative Benefits	Impacts
Gardenland Flood Management, Habitat Restoration, and Recreation Project	SAFCA	Habitat protection, ecosystem restoration, recreation	None
Mariposa/Madison Transmission Main Project	CHWD	Water quality, water supply reliability, operational flexibility	Construction-related
Memorandum of Agreement for the Management for Water and Environmental Resources Associated with the Lower Cosumnes River	SSCAWA	Water quality, habitat protection, ecosystem restoration, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
Mesa Verde Groundwater Production Well	CHWD	Water supply reliability, operational flexibility	Construction-related
Mitchell Farms Blending and Storage Facility	CHWD	Water quality, water supply reliability, operational flexibility	Construction-related
Palm Avenue Blending and Storage Facility	CHWD	Water quality, water supply reliability, operational flexibility	Construction-related
TNC River Management and Conjunctive Management Opportunities of the Cosumnes River	TNC	Habitat protection, ecosystem restoration, reduce/prevent groundwater overdraft	None
Lincoln Recycled Water Distribution System Expansion - Southwest Placer County	City of Lincoln	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Wildhawk Groundwater Treatment Plant	SCWA	Water quality, water supply reliability	Construction-related
Groundwater Production Well Project	SSWD	Water supply reliability, operational flexibility	Construction-related
Eastern Sacramento County Replacement Water Supply Project	SCWA	Water quality, water supply reliability	None
Freeport Regional Water Project	FRWA	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Groundwater Production Well Project	OVWC	Water supply reliability, operational flexibility	Construction-related
Fair Oaks Boulevard Groundwater Production Well	CHWD	Water supply reliability, operational flexibility	Construction-related
Old Auburn Road Groundwater Production Well	CHWD	Water supply reliability, operational flexibility	Construction-related
Woodcreek North Aquifer Storage and Recovery Project	City of Roseville	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Groundwater Production Well Improvement Project	OVWC, SJWD	Water supply reliability, operational flexibility	Construction-related
Cosumnes River Preserve Management Plan	TNC	Habitat protection, ecosystem restoration	None
Lower Sacramento Regional Project	SAFCA	Improved levee system integrity, reduced flood risk	None
River Corridor Management Plan	Water Forum Successor Effort	Habitat protection, recreation, ecosystem restoration, reduced flood risk	None
Sacramento Stormwater Management Program & Activities	City of Sacramento, SCWA	Water quality, improved drainage	None
Roseville/Citrus Heights Pipeline Interconnection	CHWD	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Roseville Water Treatment Plant Expansion	City of Roseville	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
South Sacramento County Basin Groundwater Management Plan	SSCAWA	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	None
SRCS D Water Recycling Master Plan	SRCS D	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
SSWD Water Resources Strategic Plan	SSWD	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None

Table 7.2 (continued) Qualitative Benefits and Impacts from IRWMP Implementation

Projects and Programs	Responsible Agency(ies)	Qualitative Benefits	Impacts
SSWD Water Resources Strategic Plan	SSWD	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
Twin Oaks Avenue Groundwater Production Well	CHWD	Water supply reliability, operational flexibility	Construction-related
Mayhew Drain Levee	SAFCA	Improved levee system integrity, reduced flood risk	Construction-related
Water Forum Successor Effort	Water Forum Successor Effort	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility, habitat protection, recreation	None
North Delta Flood Control Studies	SAFCA	Improved levee system integrity, reduced flood risk	None
The Lower American River Habitat Management Plan	Water Forum Successor Effort	Habitat protection, recreation	None
Mission Avenue Pipeline Interconnection - Sacramento Suburban	CWD	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Groundwater Monitoring Wells for Contaminant Plume Containment	CWD	Water supply reliability, groundwater quality	Construction-related
Sunset Industrial Area Groundwater Supply Improvements	PCWA	Water quality, water supply reliability, operational flexibility	Construction-related
East Elk Grove Groundwater Treatment Plant	SCWA	Water quality, water supply reliability	Construction-related
Indian River/Flaming Arrow Conjunctive Use Pipeline	SSWD	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
SRCS D Water Recycling Betterment and Expansion Project (Phase II Project & Bartley Cavanaugh Golf Course)	SRCS D, City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Mayhew Floodplain Environmental Enhancement Project	SAFCA	Ecosystem restoration	None
Mission Avenue Pipeline Interconnection - Citrus Heights	CWD	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Sacramento County Stormwater Quality Program, 2003 Stormwater Quality Improvement Plan, & Activities	County of Sacramento	Water quality, habitat protection	None
Water Purveyor Implementation of Best Management Practices (BMPs)	Water Forum Successor Effort, Water Purveyors	Water supply reliability, reduce/prevent groundwater overdraft	None
Steelhead Creek Wetland Improvement Project	SAFCA	Ecosystem restoration, improved drainage	None
Cosumnes River Watershed Inventory and Assessment	Sloughhouse Resource Conservation District and Cosumnes River Task Force	Water quality, habitat protection	None
American River Parkway Plan	County of Sacramento	Habitat protection, ecosystem restoration, recreation	None
Aquifer Storage and Recovery (ASR) -- City of Roseville	City of Roseville	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Western Placer County Groundwater Storage Study	PCWA	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	None
City of Roseville Dry Creek Corridor Plan	City of Roseville	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	None
City of Roseville Water Recycling Program and Projects	City of Roseville	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
Recycled Water Program Expansion	City of Roseville	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related

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Table 7.2 (continued) Qualitative Benefits and Impacts from IRWMP Implementation

Projects and Programs	Responsible Agency(ies)	Qualitative Benefits	Impacts
Del Webb Well	City of Roseville	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Dry Creek Project	City of Roseville	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
HP Well	City of Roseville	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Meter Retrofitting Program & Activities (e.g., meter installation)	City of Roseville	Water supply reliability, reduce/prevent groundwater overdraft	Construction-related
North Industrial Storage Tank	City of Roseville	Water supply reliability, operational flexibility	Construction-related
Northeast Storage Tank	City of Roseville	Water supply reliability, operational flexibility	Construction-related
Stoneridge Zone 2 Storage Tank	City of Roseville	Water supply reliability, operational flexibility	Construction-related
Water Distribution Facilities - North Central Specific Plan Area	City of Roseville	Water supply reliability, operational flexibility	Construction-related
West Roseville Specific Plan (Annexation Area) 4 Wells	City of Roseville	Water quality, water supply reliability, operational flexibility	Construction-related
West Roseville Specific Plan Storage Tank	City of Roseville	Water supply reliability, operational flexibility	Construction-related
Woodcreek West Aquifer Storage and Recovery Project	City of Roseville	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Western Placer County Groundwater Management Plan (Revision)	City of Roseville, PCWA, City of Lincoln	Water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	None
Sacramento River Water Reliability Study (SRWRS)	City of Sacramento, City of Roseville, SSWD, PCWA	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
PCWA Watershed Study	PCWA	Water quality, water supply reliability	None
Foothill 2 Water Treatment Plant Construction Project	PCWA	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
American River Water Supply Project	PCWA	Water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Meter Retrofitting Program & Activities (e.g., meter installation)	PCWA	Water supply reliability	Construction-related
PCWA East Loomis Basin Project	PCWA	Water supply reliability, habitat protection	None
PCWA Federal Energy Regulatory Commission Re-Licensing	PCWA	Not directly water-related	None
PCWA Water Supply Infrastructure Plan (WSIP)	PCWA	Water supply reliability, operational flexibility	None
PCWA/SSWD Pipeline Interconnection	PCWA	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Wellhead Treatment for Arsenic Removal	RLECWD	Water quality, water supply reliability	Construction-related
Regional Pipeline for Surface Water	RLECWD	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Replace Existing Wells/Install New Wells	RLECWD	Water supply reliability, operational flexibility	Construction-related
Rio Linda/Elverta Groundwater Recharge Project	RLECWD	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related

Table 7.2 (continued) Qualitative Benefits and Impacts from IRWMP Implementation

Projects and Programs	Responsible Agency(ies)	Qualitative Benefits	Impacts
Storage Tank	RLECWD	Water supply reliability, operational flexibility	Construction-related
Water Agreement between SSWD and RLECWD	SSWD, RLECWD	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	None
SRCSO Recycled Water Program Expansion - Delta Shores	SRCSO, City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Capital Improvement Plans (CIPs)	Water Purveyors	Any/all qualitative benefits listed	None
Urban Water Management Plans (UWMPs)	Water Purveyors	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
Water Supply Master Plans	Water Purveyors	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
County of Sacramento Low Flow Drainage Project	County of Sacramento	Water quality, water supply reliability, habitat protection	None
Lower American River Task Force	SAFCA	Habitat protection, recreation, reduced flood risk	None
North Area Round Table	SAFCA	Habitat protection, recreation	None
Sacramento River Corridor Planning Forum	SAFCA	Recreation, reduced flood risk	None
Sacramento Stormwater Quality Partnership	County of Sacramento; Cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova	Water quality	None
"Mr. Leaky"	RWA	Water supply reliability, reduce/prevent groundwater overdraft	None
City of Folsom Sphere of Influence Water Supply Investigation	City of Folsom	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Unknown
City of Folsom Water Management Strategy for Dry-year Reliability	City of Folsom	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Unknown
Cosumnes River Blvd. Transmission Main	City of Sacramento	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
El Centro Transmission Main	City of Sacramento	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Fairbairn Intake Pump to serve City of Sacramento and SCWA Zone 40	City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Fairbairn Water Treatment Plant Intake Pump to serve Cal-Am/Rosemont and Parkway service areas	City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Fairbairn Water Treatment Plant-Florin Connector (South Cross Tie)	City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Meter Retrofitting Program & Activities (e.g., meter installation)	City of Sacramento	Water supply reliability, reduce/prevent groundwater overdraft	Construction-related

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Table 7.2 (continued) Qualitative Benefits and Impacts from IRWMP Implementation

Projects and Programs	Responsible Agency(ies)	Qualitative Benefits	Impacts
North Cross Tie	City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Panhandle Transmission Main	City of Sacramento	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
South City Reservoir and Pump Station	City of Sacramento	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
EID Water Recycling Program	EID	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
Water Loss Reduction Project	EID	Water supply reliability	Construction-related
Regional Water Authority American River Basin Conjunctive Use Program (ARBCUP)	Participating Water Purveyors	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
American River Basin Cooperating Agencies (ARBCA) Regional Water Master Plan (RWMP)	Participating Water Purveyors	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
RMCS D Water Recycling Program	RMCS D	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
RWA Training Program	RWA	Professional Education	None
RWA Water Efficiency Program (WEP)	RWA	Water supply reliability, reduce/prevent groundwater overdraft	None
"Be Water Wise" Program	RWA, The Sacramento Bee	Public education	None
Sacramento Area Council of Governments (SACOG) Blueprint	SACOG	Not directly water-related	None
Vineyard Surface Water Treatment Plant	SCWA	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Anatolia Groundwater Treatment Plant	SCWA	Water quality, water supply reliability	Construction-related
Big Horn Groundwater Treatment Plant	SCWA	Water quality, water supply reliability	Construction-related
Bond Groundwater Treatment Plant	SCWA	Water quality, water supply reliability	Construction-related
City of Sacramento (POU) North Vineyard - Storage and Booster Pump	SCWA	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Franklin Groundwater Treatment Plant	SCWA	Water quality, water supply reliability	Construction-related
Laguna Ridge (Whitelock) Groundwater Treatment Plant	SCWA	Water quality, water supply reliability	Construction-related
Poppy Ridge Groundwater Treatment Plant	SCWA	Water quality, water supply reliability	Construction-related
Sheldon Road Storage	SCWA	Water supply reliability, operational flexibility	Construction-related
Sunrise Douglas (Suncreek) Groundwater Treatment Plant	SCWA	Water quality, water supply reliability	Construction-related
Zone 50 Infrastructure	SCWA	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
SGA Data Management System (DMS)	SGA	Water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	None
SGA Groundwater Management Plan (GMP)	SGA	Water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	None

Table 7.2 (continued) Qualitative Benefits and Impacts from IRWMP Implementation

Projects and Programs	Responsible Agency(ies)	Qualitative Benefits	Impacts
SGA Measuring and Monitoring Program	SGA	Water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	None
SGA Contaminant Committee	SGA	Water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	None
Water Accounting Framework	SGA	Water supply reliability, reduce/prevent groundwater overdraft	None
IGSM Hydrologic Model Refinement	SGA, SCWA, SSCAWA	Water supply reliability, reduce/prevent groundwater overdraft	None
Aquifer Storage and Recovery (ASR) Program -- SSWD	SSWD	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
City of Sacramento Transmission Main	SSWD	Water quality, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Habitat Conservation Plans (HCPs) -- Placer Legacy, Natomas Basin, South Sacramento	Various agencies	Habitat protection	None
Stone Lake Wildlife Refuge	Various local/regional agencies	Habitat protection	None
Environmental/Community Organization Interests and Activities	Various organizations	Public education	None
SRWRS Elverta Diversion	Various water purveyors and agencies/organizations	Water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	Construction-related
Water Efficient Landscape (WEL) Garden Program	Various water purveyors	Water supply reliability, reduce/prevent groundwater overdraft	None
Water Forum Agreement (WFA) State of the River Report	Water Forum Successor Effort	Public education	None
SRCSO Water Recycling Project (Phase I Project)	SRCSO, City of Sacramento	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
Placer County Stormwater Quality Program, Plan, and Activities	Placer County	Water quality	None
City of Sacramento Stormwater Quality Improvement Program	City of Sacramento	Water quality	None
City of Folsom Stormwater Quality Program and Activities	City of Folsom	Water quality	None
City of Elk Grove Stormwater Quality Program and Activities	City of Elk Grove	Water quality	None
City of Roseville Stormwater Management Program and Activities	City of Roseville	Water quality	None
Upgrade Water Main	City of Roseville	Water supply reliability, reduce/prevent groundwater overdraft	None
Northridge Water Line	City of Roseville	Water supply reliability	Construction-related
Water System Security	City of Roseville	Water supply reliability	None
West Side Tank and Pump Station Project	City of Roseville	Water supply reliability, operational flexibility	Construction-related
Water System Rehabilitation Program	City of Roseville	Water supply reliability, reduce/prevent groundwater overdraft	Construction-related
City of Lincoln Regional Wastewater Treatment and Reclamation Facility Expansion	City of Lincoln	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related
General Plans	Various agencies	Not directly water-related	None
PCWA Integrated Water Resources Plan	PCWA	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
Pleasant Grove Wastewater Treatment Plant Expansion	City of Roseville	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	Construction-related

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Table 7.2 (continued) Qualitative Benefits and Impacts from IRWMP Implementation

Projects and Programs	Responsible Agency(ies)	Qualitative Benefits	Impacts
SRCS D Water Recycling Program	SRCS D	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
Sunrise Side-Channel Enhancement Project	Water Forum Successor Effort	Water quality, habitat protection, operational flexibility	Construction-related
Water Forum Agreement (WFA)	Water Forum	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility, habitat protection, recreation	None
Water Supply Strategy Sierra Vista and Creek View Specific Plans	City of Roseville	Water quality, water supply reliability, reduce/prevent groundwater overdraft, operational flexibility	None
ARB IRWMP Implementation	RWA, FRWA	Improved levee system integrity, water quality, habitat protection, recreation, improved drainage, water supply reliability, groundwater quality, reduce/prevent groundwater overdraft, ecosystem restoration, operational flexibility, reduced flood risk, public education, professional education	Construction-related
SSCAWA Groundwater Management Plan	SSCAWA	Water supply reliability, groundwater quality, reduce/prevent groundwater overdraft	None

### **7.1.2. Impacts from Implementation**

Implementation of the projects in the ARB IRWMP will have both quantitative and qualitative impacts and benefits. The primary quantitative impacts to the region are financial, related to costs to the community for implementing a project or program and are discussed in more detail in **Section 10 – Financing**. Qualitative impacts to the region are summarized by project/program in **Table 7.2**.

In addition, there could likely be additional impacts if the ARB IRWMP and/or its component projects are not managed or implemented well. These impacts include:

- Increased project/program costs to agencies and rate payers
- Delayed construction/operation of planned facilities and programs, and therefore delayed water supply and other benefits
- Delayed construction/operation of planned facilities leading to increased negative impacts on surface water quality and groundwater quality, including greater contaminant plume migration and related impacts

More limited operational flexibility, particularly in times of drought, causing increased water rationing and associated pressure on water users and the environment.

### **7.2. Advantages of Integrated Regional Planning**

Implementation of the ARB IRWMP will provide numerous benefits, provide cost savings and minimize impacts to the environment in the region. In addition to the project-specific benefits anticipated to accrue from project implementation, additional benefits are expected to result from a regional approach to planning, including:

- **Increasing Regional Understanding.** By working together as a cohesive group, each agency or participant gains a deeper understanding of the effects of their projects on other agencies, as well as the effects of other agencies' projects on their own agency. This in turn assists agencies and participants in developing projects that minimize the types of interagency conflicts that can ultimately prevent projects from gaining the support necessary for successful implementation.
- **Economies of Scale.** Many of the agencies in the region use common sources, or combinations of sources of water supply. As a result, many agencies share the same water management challenges. By developing integrated regional approaches to water management together, resources can be pooled, maximizing efficiency on a regional scale. In this way, existing resources can be optimized, duplication of efforts can be avoided, and larger-scale efforts can be established, potentially providing a greater benefit than from individual efforts alone.
- **Fostering Support.** When planning is conducted on a regional scale, more parties are involved in projects, more diversity of opinion is introduced in the process, which generally yields better, more informed projects. In collaborative processes, each participant brings his or her own values and priorities to the process which is ultimately reflected in the plan. The result is projects that

not only minimize impacts to more parties, but incorporate benefits to more parties as well. When more benefits are realized and impacts avoided, more support follows.

### **7.3. Interregional Benefits and Impacts**

Implemented projects can and do provide benefits that extend beyond meeting the needs of the region. Projects contained in the IRWMP not only benefit local agencies but will be beneficial to the Delta, the Cosumnes River watershed, and East Bay Municipal Utility District (EBMUD). The following sections describe how the regional projects are beneficial to adjacent regions and any potential impacts on adjacent regions.

#### **7.3.1. Delta Benefits**

- Reduced effluent discharges (and attendant mass loadings) into the American River, Sacramento River and their tributaries due to the increase in recycled water will work to promote better water quality in both river systems and downstream into the Delta.
- Improved regional water supply reliability for the East Bay, as accomplished by the FRWP, will place a reduced pressure on the Delta to serve the region in times of significant drought.
- As part of an agreement with the U.S. Fish and Wildlife Service regarding the development of drought contingency supplies, EBMUD will reserve a portion of its Mokelumne supply in Pardee Reservoir for use in meeting aquatic needs in the downstream system, which connects to the Delta.
- Conjunctive use projects will increase water supply reliability within the region, resulting in increased surface water supply availability in dry years to meet environmental needs downstream into the Delta.

#### **7.3.2. Cosumnes River Watershed Benefits**

- IRWMP projects will supply data that can be used to better define the groundwater / surface water interactions in the watershed, hence identifying the best ways to introduce and restore flows into the system. Flows are expected to be introduced as part of planned future projects, that when completed, are intended to restore riparian and aquatic habitats along the Cosumnes River.

#### **7.3.3. East Bay Municipal Utility District Benefits**

- EBMUD would avoid negative impacts associated with not implementing the FRWP including limited operational flexibility and more severe water rationing in drought year.

#### **7.3.4. Interregional Impacts**

The primary interregional impact that is anticipated is a financial impact on EBMUD as a funding partner in the FRWP. However, the financial benefits as discussed in **Section 7.3.3** are expected to outweigh the

impacts. Aside from this, there are no anticipated direct impacts to adjacent areas or regions from implementation of the ARB IRWMP. Should any significant impacts to adjacent areas or regions be foreseen as the ARB IRWMP and its component projects change over time, the impacts would be addressed in future versions of the ARB IWMP and in appropriate environmental documentation.

#### **7.4. Benefits for Disadvantaged Communities**

The ARB IRWMP will ensure that Environmental Justice concerns for disadvantaged communities are addressed. This involves “the fair treatment of people of all races, cultures, and income with respect to development, adoption, and implementation of environmental laws, regulations, and policies (Government Code 65040.1(c)).” Noticed public meetings will be held as necessary to address the public and ratepayers’ concerns regarding the ARB IRWMP and/or its component projects and programs. The participating agencies will routinely review the ARB IRWMP to ensure disadvantaged communities are not adversely affected, and to address any potential environmental justice concerns related to the plan. Also, any grant money received will help offset costs to ratepayers and ensure that those ratepayers are not adversely affected. The ARB IRWMP and/or component projects and programs will be reviewed for compliance with CEQA, NEPA, and any other local, state, and federal requirements. Through any necessary NEPA review, compliance with Executive Order 12898 will be addressed (if applicable).

Environmental justice communities are commonly identified as those where residents are predominantly minorities or low-income; where residents have been excluded from the environmental policy setting or decision-making process; where they are subject to a disproportionate impact from one or more environmental hazards; and/or where residents experience disparate implementation of environmental regulations, requirements, practices and activities in their communities (California Resources Agency 2005). Disadvantaged communities within the region are discussed in more detail in Section 2. Lower income / disadvantaged communities are defined as those areas where the mean household income (MHI) is less than 80% of the State Average MHI, mapped/recorded via census track data.

Public outreach and education efforts that are a component of project planning include activities to reach these communities and citizens. Outreach recognizes the fact that English may not be the first language and/or be spoken by many of these residents. In addition, efforts that offer improvements to the watersheds of the region are seen as highly beneficial to the citizens of the watershed.

## **7.5. Impacts/Benefits to Other Resources**

The ARB IRWMP has the potential to benefit resources beyond the regional water resources, which it most directly affects. By integrating the water management strategies as described, it is possible to benefit air quality and energy resources as well—even if indirectly. The environmental benefits of improving the quality of surface water resources and the related ecosystems will contribute to the improvement/enhancement of shaded riverine habitat. Enhanced tree cover, while viewed as a habitat enhancement, will also directly benefit regional air quality. By optimizing water supply operations and implementing conjunctive use, additional surface water supply will be available for hydropower generation to benefit statewide energy resources. Potential impacts and benefits to other resources are summarized in **Table 7.3**.

Project-specific EIR/EIS documents have been prepared for those efforts whose impacts were viewed as potentially significant (such as the EIR/EIS effort undertaken for the FRWP). The impacts associated with the projects were limited to construction-related impacts that would be mitigated. The construction impacts include construction noise, dust, and traffic impacts to adjacent neighborhoods. However, these impacts would be addressed through mitigation measures such as work hour limitations, dust control requirements, and traffic plans.

As described above, the benefits of the projects to other resources in the region are significant. The integrated projects have a positive impact or benefit to the regional environmental resources including recreation, air quality, energy resources, fisheries habitat/riparian corridors, and wetlands.

Table 7.3 Potential Benefits and Impacts to Other Resources

Project Name	Potential Impacts				Potential Benefits				
	Recreational	Construction Noise	Construction Dust	Traffic	Recreational	Air Quality	Energy Resources	Shaded Riverine Habitat	Wetlands Habitat
Zone 40 Groundwater Management Plan									
El Dorado Water and Power Authority Projects/Programs/Activities							✓		
Initial Fisheries and In-Stream Habitat (FISH) Management and Restoration Plan for the Lower American River					✓	✓		✓	
Folsom Dam Outlet Modifications		✓	✓					✓	
Sacramento River Pioneer Reservoir Sites		✓	✓	✓					
Laguna Creek Watershed Assessment					✓	✓		✓	
Peterson Water Treatment Plant Improvements		✓	✓	✓					
East Bank Levee Widening Project at RM 78.1		✓	✓	✓					
Pocket Area Levee Underseepage		✓	✓	✓					
South Sacramento Streams Group Levee Project		✓	✓	✓					
Folsom Dam Mini-Raise		✓	✓		✓	✓		✓	
Bajamont Water Treatment Plant Expansion		✓	✓						
Pocket Area - Sacramento River Erosion Sites		✓	✓	✓					
Carriage/Lauppe Transmission Main Project		✓	✓	✓					
Central Sacramento County Groundwater Management Plan									
Lincoln Recycled Water Distribution Pipeline Expansion - Western Placer County		✓	✓	✓					
Rosemont Conjunctive Use Pipeline		✓	✓	✓					
Vineyard-Florin Gap Conjunctive Use Pipeline		✓	✓	✓					
Cosumnes and Mokelumne Rivers Floodplain Integrated Resources Management Plan					✓	✓		✓	✓
Cosumnes River Fish Passage Project		✓	✓	✓	✓				
Cosumnes River Flow Augmentation Project						✓		✓	✓
SSWD Demand Management Study									
Recycled Water Program Storage Reservoir		✓	✓	✓					
Ethan Way/Silica Avenue Conjunctive Use Pipeline		✓	✓	✓					
City of Galt Wastewater Treatment Facilities Plan									
Gardenland Flood Management, Habitat Restoration, and Recreation Project					✓	✓		✓	✓
Mariposa/Madison Transmission Main Project		✓	✓	✓					
Memorandum of Agreement for the Management for Water and Environmental Resources Associated with the Lower Cosumnes River						✓		✓	✓
Mesa Verde Groundwater Production Well		✓	✓	✓					
Mitchell Farms Blending and Storage Facility		✓	✓	✓					

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Table 7.3 (continued) Potential Benefits and Impacts to Other Resources

Project Name	Potential Impacts				Potential Benefits				
	Recreational	Construction Noise	Construction Dust	Traffic	Recreational	Air Quality	Energy Resources	Shaded Riverine Habitat	Wetlands Habitat
Palm Avenue Blending and Storage Facility		✓	✓	✓					
TNC River Management and Conjunctive Management Opportunities of the Cosumnes River									
Lincoln Recycled Water Distribution System Expansion - Southwest Placer County		✓	✓	✓					
Wildhawk Groundwater Treatment Plant		✓	✓	✓					
Groundwater Production Well Project		✓	✓	✓					
Eastern Sacramento County Replacement Water Supply Project									
Freeport Regional Water Project		✓	✓	✓					
Groundwater Production Well Project		✓	✓	✓					
Fair Oaks Boulevard Groundwater Production Well		✓	✓	✓					
Old Auburn Road Groundwater Production Well		✓	✓	✓					
Woodcreek North Aquifer Storage and Recovery Project		✓	✓	✓					
Groundwater Production Well Improvement Project		✓	✓	✓					
Cosumnes River Preserve Management Plan						✓		✓	✓
Lower Sacramento Regional Project									
River Corridor Management Plan					✓	✓		✓	
Sacramento Stormwater Management Program & Activities									
Roseville/Citrus Heights Pipeline Interconnection		✓	✓	✓					
Roseville Water Treatment Plant Expansion		✓	✓						
South Sacramento County Basin Groundwater Management Plan									
SRCSO Water Recycling Master Plan									
SSWD Water Resources Strategic Plan									
Twin Oaks Avenue Groundwater Production Well		✓	✓	✓					
Mayhew Drain Levee		✓	✓	✓					
Water Forum Successor Effort									
North Delta Flood Control Studies									
The Lower American River Habitat Management Plan					✓	✓		✓	
Mission Avenue Pipeline Interconnection - Sacramento Suburban		✓	✓	✓					
Groundwater Monitoring Wells for Contaminant Plume Containment		✓	✓	✓					
Sunset Industrial Area Groundwater Supply Improvements		✓	✓	✓					
East Elk Grove Groundwater Treatment Plant		✓	✓	✓					
Indian River/Flaming Arrow Conjunctive Use Pipeline		✓	✓	✓					
SRCSO Water Recycling Betterment and Expansion Project (Phase II Project & Bartley Cavanaugh Golf Course)		✓	✓	✓					

Table 7.3 (continued) Potential Benefits and Impacts to Other Resources

Project Name	Potential Impacts				Potential Benefits				
	Recreational	Construction Noise	Construction Dust	Traffic	Recreational	Air Quality	Energy Resources	Shaded Riverine Habitat	Wetlands Habitat
Mayhew Floodplain Environmental Enhancement Project					✓				✓
Mission Avenue Pipeline Interconnection - Citrus Heights		✓	✓	✓					
Sacramento County Stormwater Quality Program, 2003 Stormwater Quality Improvement Plan, & Activities									
Water Purveyor Implementation of Best Management Practices (BMPs)									
Steelhead Creek Wetland Improvement Project					✓				✓
Cosumnes River Watershed Inventory and Assessment									
American River Parkway Plan					✓				
Aquifer Storage and Recovery (ASR) -- City of Roseville		✓	✓	✓					
Western Placer County Groundwater Storage Study									
City of Roseville Dry Creek Corridor Plan									
City of Roseville Water Recycling Program and Projects									
Recycled Water Program Expansion		✓	✓	✓					
Del Webb Well		✓	✓	✓					
Dry Creek Project		✓	✓	✓					
HP Well		✓	✓	✓					
Meter Retrofitting Program & Activities (e.g., meter installation)		✓							
North Industrial Storage Tank		✓	✓	✓					
Northeast Storage Tank		✓	✓	✓					
Stoneridge Zone 2 Storage Tank		✓	✓	✓					
Water Distribution Facilities - North Central Specific Plan Area		✓	✓	✓					
West Roseville Specific Plan (Annexation Area) - 4 Wells		✓	✓	✓					
West Roseville Specific Plan Storage Tank		✓	✓	✓					
Woodcreek West Aquifer Storage and Recovery Project		✓	✓	✓					
Western Placer County Groundwater Management Plan (Revision)									
Sacramento River Water Reliability Study (SRWRS)									
PCWA Watershed Study									
Foothill 2 Water Treatment Plant Construction Project	✓	✓	✓	✓					
American River Water Supply Project	✓	✓	✓	✓					
Meter Retrofitting Program & Activities (e.g., meter installation)		✓							
PCWA East Loomis Basin Project									
PCWA Federal Energy Regulatory Commission Re-Licensing							✓		
PCWA Water Supply Infrastructure Plan (WSIP)									

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Table 7.3 (continued) Potential Benefits and Impacts to Other Resources

Project Name	Potential Impacts				Potential Benefits				
	Recreational	Construction Noise	Construction Dust	Traffic	Recreational	Air Quality	Energy Resources	Shaded Riverine Habitat	Wetlands Habitat
PCWA/SSWD Pipeline Interconnection		✓	✓	✓					
Wellhead Treatment for Arsenic Removal		✓	✓	✓					
Regional Pipeline for Surface Water		✓	✓	✓					
Replace Existing Wells/Install New Wells		✓	✓	✓					
Rio Linda/Elverta Groundwater Recharge Project		✓	✓	✓					
Storage Tank		✓	✓	✓					
Water Agreement between SSWD and RLECWD									
Capital Improvement Plans (CIPs)									
Urban Water Management Plans (UWMPs)									
Water Supply Master Plans									
County of Sacramento Low Flow Drainage Project									
Lower American River Task Force					✓	✓		✓	
North Area Round Table					✓	✓		✓	
Sacramento River Corridor Planning Forum					✓				
Sacramento Stormwater Quality Partnership									
"Mr. Leaky"									
City of Folsom Sphere of Influence Water Supply Investigation									
City of Folsom Water Management Strategy for Dry-year Reliability									
Cosumnes River Blvd. Transmission Main		✓	✓	✓					
El Centro Transmission Main		✓	✓	✓					
Fairbairn Intake Pump to serve City of Sacramento and SCWA Zone 40		✓	✓	✓					
Fairbairn Water Treatment Plant Intake Pump to serve Cal-Am/Rosemont and Parkway service areas	✓	✓	✓						
Fairbairn Water Treatment Plant-Florin Connector (South Cross Tie)		✓	✓	✓					
Meter Retrofitting Program & Activities (e.g., meter installation)		✓							
North Cross Tie		✓	ü	ü					
Panhandle Transmission Main		✓	✓	✓					
South City Reservoir and Pump Station		✓	✓	✓					
EID Water Recycling Program									
Water Loss Reduction Project									
Regional Water Authority American River Basin Conjunctive Use Program (ARBCUP)									
American River Basin Cooperating Agencies (ARBCA) Regional Water Master Plan (RWMP)									

Table 7.3 (continued) Potential Benefits and Impacts to Other Resources

Project Name	Potential Impacts				Potential Benefits				
	Recreational	Construction Noise	Construction Dust	Traffic	Recreational	Air Quality	Energy Resources	Shaded Riverine Habitat	Wetlands Habitat
RMCS D Water Recycling Program									
RWA Training Program									
RWA Water Efficiency Program (WEP)									
"Be Water Wise" Program									
Sacramento Area Council of Governments (SACOG) Blueprint									
Vineyard Surface Water Treatment Plant		✓	✓	✓					
Anatolia Groundwater Treatment Plant		✓	✓	✓					
Big Horn Groundwater Treatment Plant		✓	✓	✓					
Bond Groundwater Treatment Plant		✓	✓	✓					
City of Sacramento (POU) North Vineyard - Storage and Booster Pump		✓	✓	✓					
Franklin Groundwater Treatment Plant		✓	✓	✓					
Laguna Ridge (Whitelock) Groundwater Treatment Plant		✓	✓	✓					
Poppy Ridge Groundwater Treatment Plant		✓	✓	✓					
Sheldon Road Storage		✓	✓	✓					
Sunrise Douglas (Sun creek) Groundwater Treatment Plant		✓	✓	✓					
Zone 50 Infrastructure		✓	✓	✓					
SGA Data Management System (DMS)									
SGA Groundwater Management Plan (GMP)									
SGA Measuring and Monitoring Program									
SGA Contaminant Committee									
Water Accounting Framework									
IGSM Hydrologic Model Refinement									
Aquifer Storage and Recovery (ASR) Program -- SSWD		✓	✓	✓					
City of Sacramento Transmission Main		✓	✓	✓					
Habitat Conservation Plans (HCPs) -- Placer Legacy, Natomas Basin, South Sacramento						✓		✓	✓
Stone Lake Wildlife Refuge					✓	✓			✓
Environmental/Community Organization Interests and Activities					✓		✓	✓	
SRWRS Elverta Diversion		✓	✓	✓					
Water Efficient Landscape (WEL) Garden Program									
Water Forum Agreement (WFA) State of the River Report									
SRCSD Water Recycling Project (Phase I Project)		✓	✓	✓					
Placer County Stormwater Quality Program, Plan, and Activities									

Table 7.3 (continued) Potential Benefits and Impacts to Other Resources

Project Name	Potential Impacts				Potential Benefits				
	Recreational	Construction Noise	Construction Dust	Traffic	Recreational	Air Quality	Energy Resources	Shaded Riverine Habitat	Wetlands Habitat
City of Sacramento Stormwater Quality Improvement Program									
City of Folsom Stormwater Quality Program and Activities									
City of Elk Grove Stormwater Quality Program and Activities									
City of Roseville Stormwater Management Program and Activities									
Upgrade Water Main		✓	✓	✓					
Northridge Water Line		✓	✓	✓					
Water System Security									
West Side Tank and Pump Station Project		✓	✓	✓					
Water System Rehabilitation Program		✓	✓	✓					
City of Lincoln Regional Wastewater Treatment and Reclamation Facility Expansion		✓	✓	✓					
General Plans									
PCWA Integrated Water Resources Plan									
Pleasant Grove Wastewater Treatment Plant Expansion		✓	✓	✓					
SRCSD Water Recycling Program									
Sunrise Side-Channel Enhancement Project		✓	✓	✓					
Water Forum Agreement (WFA)					✓	✓		✓	✓
Water Supply Strategy Sierra Vista and Creek View Specific Plans									
ARB IRWMP Implementation	✓	✓	✓	✓	✓	✓	✓	✓	✓
SSCAWA Groundwater Management Plan									

## **7.6. Identification of Objectives Needing Regional Solution**

Impacts and benefits have been assessed for bundles of integrated projects, as well as for individual projects. This type of impact and benefit assessment is necessary because most of the regional objectives need a regional solution. The ability to achieve objectives needing a regional solution is one major advantage of a regional plan as opposed to aggregating individual local planning efforts. Objectives needing a regional solution include (from **Section 3**) include:

### **7.6.1. Water Supply Objectives**

- Identify and develop specific integrated facilities and operations that will enhance regional and individual drinking water supply availability and reliability.
- Identify and cultivate promotion of multi-jurisdictional infrastructure and joint operational planning partnerships to enhance total water supply system capacity/capability and reliability to the region.
- Recognize the importance of reliable and affordable water supplies for self-supplied and agricultural groundwater users.
- Develop i) a water accounting framework for evaluating the increase in water supply yield of specific projects and programs and ii) a financial accounting methodology for equitably distributing capital and operating costs of those projects and programs in relation to the benefits received. These efforts are to support equity discussions between regional partners.
- Develop analytical tools to enable evaluation of proposed projects and programs for example, updating the existing groundwater model for the portion of the ARB IRWMP region that overlies the Central Valley aquifer. The updated groundwater model will assist in groundwater supply management and protection of groundwater quality.

### **7.6.2. Stormwater and Flood Plain Management**

- Lead a regional effort to ensure 200-year flood protection strategies are developed through a collaborative, watershed-wide approach designed to maximize opportunities for comprehensive management of water resources and minimize flooding potential through proactive measures of flood control in unprotected areas.

### **7.6.3. Groundwater Management Objectives**

- Recognize that the region will have up to four adopted GMPs among its stakeholders with each being specific to its own unique groundwater basin but complementary with linkages all of the GMPs. Implementation of the provisions of each GMP will be the responsibility of their respective groundwater basin governance bodies (e.g., SGA for north of the American River in Sacramento County, Central Sacramento County, South Sacramento County, and Western Placer County).
- Identify and resolve issues connected to conjunctive use water management practices and groundwater contamination such as those at Aerojet and the former McClellan and Mather Air Force Bases.

- Evaluate the effectiveness of existing regional groundwater monitoring systems to aid in accurately assessing the condition of the regional groundwater basin in terms of its long-term health and sustainability. The existing monitoring systems will be evaluated for its effectiveness in monitoring impacts to groundwater elevations, groundwater gradients, and migration of known contaminant plumes. This effort will include the identification of data gaps and potential threats to the health of the basin, and include a recommendation for improvements to groundwater monitoring systems.

#### **7.6.4. Ecosystem Restoration Objectives**

- Coordinate with agencies developing plans that identify potential areas for ecosystem restoration and environmental and habitat protection and improvement, and how best to implement restoration projects in the region. These plans should include identifying stakeholders and forming appropriate partnerships and establishing other requirements necessary for implementation.
- Lead a region-wide effort to preserve the environmental health and well-being of the region by identifying opportunities to restore and enhance the natural resources of streams and watersheds during the development of regional water management programs and projects in partnership with environmental stewards.
- Identify opportunities where the ARB IRWMP objectives are consistent with and assist in meeting the CALFED Bay-Delta Program mission and objectives of water supply reliability, water quality and ecosystem restoration. The IRWMP planning objectives comply with the solution principles outlined in the CALFED Programmatic Record of Decision by providing a means for identifying projects that reduce conflicts in the system, are equitable, affordable, durable, implementable and have no significant redirected impacts.

#### **7.6.5. Recycled Water Objectives**

- Identify potential opportunities for expanding recycled water use in urban and agricultural areas and in industrial applications, thereby extending existing water supplies by reducing demands on surface and groundwater supplies.

#### **7.6.6. Potable Water Quality Objectives**

- Identify groundwater programs and projects that improve the water quality of potable water supplies through improved source water quality (e.g., wellhead protection) and treatment alternatives for public and private wells impacted by groundwater contamination.
- Develop a program for identifying and evaluating the physical, regulatory and legal issues associated with operationally interconnecting adjacent water distribution systems and blending water supplies from different water purveyors and agricultural water districts to achieve the highest water quality that is economically affordable to the end user.

#### **7.6.7. Other Objectives**

- Evaluate the regional water efficiency program currently being implemented by RWA and identify potential improvements that could be made to that program for region-wide implementation.

- Develop a strategy for the region's stakeholders to successfully procure external funding for potential projects and programs (including state and/or federal grant funding) as individual members or as a group.
- Evaluate data and information from ongoing and recently completed plans for stormwater management, recreational and public access, and environmental and habitat protection/improvement. This information is important for integrating these water management strategies within the ARB IRWMP.

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