

2014 Eastern San Joaquin Integrated Regional Water Management Plan

CONFORMANCE TO IRWM GUIDELINES

The following list provides a cross-reference to sections of the IRWM Plan mapped to DWR's November 2012 Integrated Regional Water Management Guidelines.

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Governance				
Document a governance structure to ensure updates to the IRWM Plan				
The name of the RWMG responsible for implementation of the IRWMP	18/35	CWC §10539	2.1.1	Eastern San Joaquin Groundwater Banking Authority (GBA)
A description of the IRWM governance structure	19/36		2.5	The GBA is a Joint Powers Authority
A description of how the chosen form of governance addresses and ensures:				
Public outreach and involvement processes	19/36-37	§10540, §10541	2.6, 5.3	Public meetings with agendas and minutes, website, DAC and specialty agency outreach
Effective decision making	19/37		2.5.2	Majority vote of membership
Balanced access and opportunity for participation in the IRWM process	19/37		2.5.1, 16.2.8	Actively and successfully seeking out and recruiting membership
Effective communication – both internal and external to the IRWM region	19/37-38		2.6.1, 2.6.2, 5.3, 11.2, 14	Public meetings with published agendas and minutes, website, flood control coordination, DACs, local and regional agencies and organizations, adjacent IRWM Regions
Long term implementation of the IRWM Plan	19/38		16.2, 16.2.5	57 Management Actions to guide long-term implementation; Prioritized project list
Coordination with neighboring IRWM efforts and State and federal agencies	19/38		2.6.2, 14	GMP, Mokelumne Forum, federal advocacy, USGS joint study, focus groups, Mokelumne WISE
The collaborative processes used to establish plan objectives	19/38		2.3.3, 7.4	Consensus-based approach; Objectives established as part of Groundwater Management Plan, Countywide Water Management Plan, and Mokelumne Aquifer Recharge and Storage Project; Objectives reviewed and updated in stakeholder workshop
How interim changes and formal changes to the IRWM Plan will be performed	19/38		16.2.3.4	Biennial review and update as necessary; minor changes adopted by GBA Board; Comprehensive review and update every five years.
Updating or amending the IRWM Plan	19/38			



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Publish NOI to prepare/update the plan; adopt the plan in a public meeting	35	CWC §10543	2.2, 2.6.2	Public hearing to adopt a resolution of intent to update IRWMP held 12/14/11
Region Description				
If applicable, describe and explain how the plan will help reduce dependence on the Delta supply regionally	20	--	9.4.1, 10.3.35	City of Stockton developed the Delta Water Supply Project to make use of its Delta water rights, and has begun taking transfer water from the Mokelumne River
Describe watersheds and water systems	19/39	PRC §75026.(b)(1) and CWP Update 2009	4.1, 6.4.2, 11.2	Watersheds include the Cosumnes, Mokelumne, Calaveras and Stanislaus rivers and the Delta; Region overlies portions of the Cosumnes and Easter San Joaquin groundwater sub-basins; Tabulated surface water rights; Flood management infrastructure
Describe internal boundaries	19/39	--	2.10.2, 2.11, 2.12, 4.1	Groundwater Management Plans; Municipalities; Land use authorities; Water districts
Describe water supplies and demands for minimum 20 year planning horizon	19/39	--	6.2, 6.3, 6.4.2	Planning horizon 2010-2035; Urban demand projected to grow 53% but with lower per capita use; Agricultural demands projected to decrease 6%
Describe water quality conditions	19/40	--	6.5.5, 6.5.6, 6.8, 8.1.6, 15.7	Overall good water quality; Saline water migration; USGS/DWR/ GBA joint study; Surface water quality; Groundwater Quality monitoring; Climate change risk
Describe social and cultural makeup, including specific information on DACs and tribal communities in the region and their water challenges.	19/40	--	4.2, 5.1.1	Demographics, employment, disadvantaged communities
Describe major water related objectives and conflicts *	19/40	§10541 (e)(3)	2.3.3, 3.3.1, 6.4.1	Objectives; Mokelumne River conflict resolution; Water rights conflicts
Explain how IRWM regional boundary was determined and why region is an appropriate area for IRWM planning.	19/40	--	2.2.1, 4.4.1	Manageable number of political jurisdictions centered on Eastern San Joaquin Sub-basin
Describe neighboring and/or overlapping IRWM efforts	19/40	--	3.3, 4.5.2, 14	American River RWMG (South Sacramento County); Mokelumne/ Amador/Calaveras RWMG; Tracy sub-basin; South Area Water Council; Stanislaus County; Inter-Regional collaboration



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Explain how opportunities are maximized (e.g. people at the table, natural features, infrastructure) for integration of water management activities	38	--	2.2.1, 4.4.1	Water supply and flood water management best performed at regional level; Integration of existing agencies working toward these objectives

Objectives

Through the objectives or other areas of the plan, address:

- | | | | | |
|--|----------|------------|--|--|
| <ul style="list-style-type: none"> - Protection and improvement of water supply reliability, including identification of feasible agricultural and urban water use efficiency strategies - Identification and consideration of the drinking water quality of communities within the area of the Plan - Protection and improvement of water quality within the area of the Plan consistent with relevant basin plan - Identification of any significant threats to groundwater resources from overdrafting - Protection, restoration, and improvement of stewardship of aquatic, riparian, and watershed resources within the region - Protection of groundwater resources from contamination - Identification and consideration of water-related needs of disadvantaged communities in the area within the boundaries of the Plan * | 20/40-41 | §10540.(c) | 2.3.3, 7.4
3.1.4, 9.5.2
6.8, 8.1.3
2.6.2, 6.5.5,
6.5.6
2.6.2, 6.5.5,
6.5.6
3.4, 10.5, 10.7.1
16.2.1.2, 16.2.4
5 | Objectives
Water use efficiency
Drinking water quality
Water quality protection and improvement
Threats from groundwater overdraft

Resource stewardship
Groundwater resource protection
Water-related DAC needs |
|--|----------|------------|--|--|

Describe the collaborative process and tools used to establish objectives:

- | | | | |
|--|-------|------------|--|
| <ul style="list-style-type: none"> - How the objectives were developed - What information was considered (i.e., water management or local land use plans, etc.) - What groups were involved in the process - How the final decision was made and accepted by the IRWM effort | 20/41 | 2.3.3, 7.4 | Consensus-based approach; Objectives established as part of Groundwater Management Plan, Countywide Water Management Plan, and Mokelumne Aquifer Recharge and Storage Project; Objectives reviewed and updated in stakeholder workshop |
|--|-------|------------|--|



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Identify quantitative or qualitative metrics and measureable objectives: Objectives must be measurable - there must be some metric the IRWM region can use to determine if the objective is being met as the IRWM Plan is implemented. Neither quantitative nor qualitative metrics are considered inherently better. *	20/41-42	10541.(e)	7.6, 7.7, 12.3, 12.4	Performance Measures; Prioritization Criteria
Explain how objectives are prioritized or reason why the objectives are not prioritized	20/42-43	--	12.4.2	Overall ranking does not change significantly when weighting criteria are changed
Resource Management Strategies (RMS)				
Identify RMS incorporated in the IRWM Plan: Consider all California Water Plan (CWP) RMS criteria (29) listed in Table 3 from the CWP Update 2009 *	20/43	CWP Update 2009 Volume II; 10541(e)(1)	9.3	All Resource Management Strategies were considered
Consideration of climate change effects on the IRWM region must be factored into RMS	20/43	--	15.4, 15.7	Projected range of impacts under various climate change scenarios; Water supply vulnerabilities
Integration				
Contains structure and processes for developing and fostering integration: ¹				
- Stakeholder/institutional	20/44-45	§10540.(g); §10541.(h)(2)	2.1.1, 4.4.1, 4.5, 8.7, 9.3, 14	Internal and external integration of stakeholders, resources, and projects
- Resource				
- Project implementation				
Project Review Process				
Process for projects included in IRWM plan must address 3 components:				
- procedures for submitting projects	20/45	§75028.(a)	9.5	Projects included in 2007 IRWMP were updated; Active project solicitation was posted on gbawater.org and emailed to stakeholders internal and external to GBA; A subcommittee rates and ranks projects; All submitted projects are listed in the IRWMP
- procedures for reviewing projects				
- procedures for communicating lists of selected projects				



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Does the project review process in the plan incorporate the following factors:				
How a project contributes to plan objectives	20	§75028.(a)	7.4, 7.6, 9.5, 12.3	Performance Measures are derived from Plan Objectives
How a project is related to Resource Management Strategies identified in the plan.	20		9.3, 9.5, 10	All projects are identified by their Primary Management Objective and Resource Management Strategy; Projects with detailed information are identified by secondary and potential Resource Management Strategy
The technical feasibility of a project.	20		9.5, 12.3.1	All projects are characterized by the quality of information available; Technical Feasibility is a Performance Measure grouped within Implementability
A projects specific benefits to a DAC water issue.			5, 10	Projects benefiting DAC areas are identified both by mapped project location and in individual project descriptions
Environmental Justice considerations.	20		5	Environmental Justice considerations included as part of DAC outreach
Project costs and financing	20		10, 11, 12.3	Project costs supplied by project proponents or independently estimated are included; Identified financing is Prioritization Criterion grouped under Readiness
Address economic feasibility	21		10, 11, 12.3	Economics are evaluated by life-cycle cost, unit cost or B:C ratio, and power cost sensitivity; Flood damage reduction estimates are in being developed in other processes and are mostly not yet available
Project status	21		10, 11, 12.3	Project status is reported in each project description; Readiness to Proceed is based on an status assessment of water rights, engineering, financing, and environmental documentation
Strategic implementation of plan and project merit	21/48		12.3, 12.4	Readiness to Proceed criteria include Project Need, Technical Feasibility, Ability to Phase, Readiness to Proceed, and Public and Stakeholder Acceptance
Project's contribution to climate change adaptation	21		12.3, 15	Shift in rainfall/runoff to winter from spring/summer can be mitigated by buffering supplies in groundwater storage



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Contribution of project in reducing GHGs compared to project alternatives	21		12.3	Assumed proportional to energy use
Status of the Project Proponent's IRWM plan adoption	21		2.2	Project proponents will adopt plan subsequent to GBA Board adoption
Project's contribution to reducing dependence on Delta supply (for IRWM regions receiving water from the Delta).	21		9.4.1, 10.3.35	City of Stockton developed the Delta Water Supply Project to make use of its Delta water rights, and has begun taking transfer water from the Mokelumne River; Other projects do not take water from the Delta
Impact and Benefit				
Discuss potential impacts and benefits of plan implementation within IRWM region, between regions, with DAC/EJ concerns and Native American Tribal communities	21	--	12.3, 13	Impact and benefit assessed using Performance Measures and groundwater modeling
State when a more detailed project-specific impact and benefit analysis will occur (prior to any implementation activity)	49	--	12.4.2, 16.2.5	An estimated schedule for project development, water rights and engineering, environmental documentation, financing and construction is presented
Review and update the impacts and benefits section of the plan as part of the normal plan management activities	50	--	16.2.3.4	GBA will produce a biennial report summarizing progress and adjusting assumptions, operations, actions, impacts and benefits, as necessary
Plan Performance and Monitoring				
Contain performance measures and monitoring methods to ensure that IRWM objectives are met *	21/53		16.2.1, 16.2.3.4	GBA will continue monitoring activities to improve methodologies to quantify water budget components, and ensure water level and other targets are being met. GBA will produce a biennial report summarizing progress and adjusting assumptions, operations, actions, impacts and benefits, as necessary
		PRC §75026.(a)		
Contain a methodology that the RWMG will use to oversee and evaluate implementation of projects.	21/53		16.2.1, 16.2.5	GBA will continue monitoring activities to improve methodologies to quantify water budget components, and ensure water level and other targets are being met.



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Data Management				
Describe data needs within the IRWM region	54	--	4.3.4, 16.2.1	Groundwater levels and water quality; Water budget components; Population growth; Water conservation; Evapotranspiration; Data management systems
Describe typical data collection techniques	54	--	16.2.1	Water level measurement; Water quality sampling; Surface and groundwater modelling; Review of UWMPs and other reports; State DOF and Census population estimates; CIMIS
Describe stakeholder contributions of data to a data management system	54	--	16.2.1	Engineer's reports; Environmental documentation; UWMPs and other documents; Water level and water quality measurements
Describe the entity responsible for maintaining data in the data management system	54	--	4.3.4, 16.2.1	The County Flood Control and Water Conservation District maintains the data management system
Describe the QA/QC measures for data	54	--	4.3.4, 6.5, 16.2.1	Water level data contouring; Trend analysis
Explain how data collected will be transferred or shared between members of the RWMG and other interested parties throughout the IRWM region, including local, State, and federal agencies*	54	--		
Explain how the Data Management System supports the RWMG's efforts to share collected data	54	--		
Outline how data saved in the data management system will be distributed and remain compatible with State databases including CEDEN, Water Data Library (WDL), CASGEM, California Environmental Information Catalog (CEIC), and the California Environmental Resources Evaluation System (CERES).	54	--	4.3.4, 16.2.1.7	The County Flood Control and Water Conservation District maintains the data management system and publically posts data on the Groundwater Data Center at SJWater.org; Water level data is also reported to the State CASGEM system



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Finance				
<p>Include a programmatic level (i.e. general) plan for implementation and financing of identified projects and programs* including the following:</p> <ul style="list-style-type: none"> List known, as well as, possible funding sources, programs, and grant opportunities for the development and ongoing funding of the IRWM Plan. List the funding mechanisms, including water enterprise funds, rate structures, and private financing options, for projects that implement the IRWM Plan. An explanation of the certainty and longevity of known or potential funding for the IRWM Plan and projects that implement the Plan. An explanation of how operation and maintenance (O&M) costs for projects that implement the IRWM Plan would be covered and the certainty of operation and maintenance funding. 	21	§10541.(e)(8)	2.6.3, 16.2.7, 16.4	GBA currently funded through Water Investigation Zone 2 and local contributions; Zone 2 expires June 2015; Comprehensive listing of funding sources and mechanisms; Local sponsoring agencies would fund and maintain projects, potentially with special zones established for projects of general benefit
Technical Analysis				
Document the data and technical analyses that were used in the development of the plan *	22	--	1.1.1, 2.10, 3.1, 3.3, 3.4, 4.2, 6, 8.4, 9.4, 10, 11, 12.2, 13, 15, 17	Existing IRWMP, UWMPs, and local planning documents; Project engineering reports; County Groundwater Data Center; USGS/ DWR/ GBA Joint Water Quality Study; DYNFLOW Groundwater Model; Draft Regional Flood Management Plan; CVFPP
Relation to Local Water Planning				
Identify a list of local water plans used in the IRWM plan	22			
Discuss how the plan relates to these other planning documents and programs	22	§10540.(b)	1.1.1, 2.10, 3.1, 3.3, 3.4, 4.2, 6, 9.4, 10, 11, 12.2, 14, 17	Existing IRWMP, UWMPs, and local planning documents; Project engineering reports; Draft Regional Flood Management Plan; CVFPP; MokeWISE inter-regional study
Describe the dynamics between the IRWM plan and other planning documents	22			



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Describe how the RWMG will coordinate its water management planning activities	58			
Relation to Local Land Use Planning				
Document current relationship between local land use planning, regional water issues, and water management objectives	22/59 - 62	--	2.6.1.4, 2.11, 2.12, 3.5, 4.2.1, 6.2, 6.3, 11.2, 16.2.1.3, 16.2.1.4, 16.2.3.2, 16.2.4.3	Existing and projected land use; General Plans; SJAFCA and CVFPP Flood Management Plans, Land use authorities, Population and demographics, Urban and agricultural land use, Water supply measurement, Population growth and development, Protection of recharge areas; Compatibility with existing land uses
Document future plans to further a collaborative, proactive relationship between land use planners and water managers	22/59 - 62	--		
Stakeholder Involvement				
Contain a public process that provides outreach and opportunity to participate in the IRWM plan *	22/63	§10541.(g)		Regional Water Management Group; GBA membership and governance; Stakeholder outreach and coordination; Participation in other planning efforts; Flood management stakeholders; Regional and inter-regional integration; DAC outreach and stakeholder identification; Objective setting; Groundwater management planning efforts; Project solicitation and stakeholder review; Alternative formulation and selection; Development of Evaluation and Prioritization Criteria; Long-term public participation and community outreach
Identify process to involve and facilitate stakeholders during development and implementation of plan regardless of ability to pay; include barriers to involvement*	64	§10541.(h) (2)	2.1, 2.5, 2.6, 3.3, 3.4, 4.5.1, 5, 7.4, 8.1, 9.5, 11.1, 12.2, 12.3, 13.1, 14.1.4, 14.1.9, 16.2.6, 16.2.8	
Discuss involvement of DACs and tribal communities	23	--	5	DAC Outreach Plan and results; No tribal entities in Plan area
Describe decision-making process and roles that stakeholders can occupy	23	--	2.5.2, 2.6, 3.3, 9.5, 14.1.4, 14.1.9, 16.2.6, 16.2.8	Decision-making process; Stakeholder outreach and coordination; Regional and intra-Regional stakeholder forums; Project identification and stakeholder review; Governance; Public participation and community outreach
Discuss how stakeholders are necessary to address objectives and RMS	23	--	2.3.3, 16.2.6	Objectives; Governance
Discuss how a collaborative process will engage a balance in interest groups	23	--	2.1, 2.3.3, 2.5, 4.5, 7.4, 9.1, 14	Governance; Objectives; Regional Integration; Integrated Conjunctive Use Program; Inter-Regional Coordination



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Coordination				
Identify the process to coordinate water management projects and activities of participating local agencies and stakeholders to avoid conflicts and take advantage of efficiencies *	23/65	§10541.(e) (13)	1.1.2; 2.1, 2.3.3, 2.5, 4.5.1, 7.4, 9.1	Integrated Conjunctive Use Program; Objective Setting; GBA Governance; Intra-Regional Coordination;
Identify neighboring IRWM efforts and ways to cooperate or coordinate, and a discussion of any ongoing water management conflicts with adjacent IRWM efforts	23/65	--	2.1, 2.3.3, 2.6.2, 4.5.2, 14	Inter-Regional Coordination and Integration
Identify areas where a state agency or other agencies may be able to assist in communication or cooperation, or implementation of IRWM Plan components, processes, and projects, or where State or federal regulatory decisions are required before implementing the projects.	23	--	2.6.2, 10, 11, 12	State and federal regulatory processes and decisions
Climate Change				
Evaluate IRWM region's vulnerabilities to climate change and potential adaptation responses based on vulnerabilities assessment in the DWR Climate Change Handbook for Regional Water Planning *	23/66-73	Climate Change Handbook vulnerability assessment ¹²	15.7	Climate change vulnerabilities
Provide a process that considers GHG emissions when choosing between project alternatives *	23/68	Guidelines Legislative and Policy Context, p.66, §10541.(e)(11)	16.2.5, 16.2.9	Implementation and Climate Change actions
Include a list of prioritized vulnerabilities based on the vulnerability assessment and the IRWM's decision making process.	23/66-73		15.7	Prioritized climate change vulnerabilities



2014 Eastern San Joaquin Integrated Regional Water Management Plan

Requirement from IRWM Guidelines	Plan Standard Source		Evidence of Sufficiency	
	2012 IRWM Grant Program Guidelines Source Pages	Regulatory and/or Other Citations	IRWM Plan Sections	Key Points or Descriptors
Contain a plan, program, or methodology for further data gathering and analysis of prioritized vulnerabilities	23/66-73		16.2.9	Climate change management actions
Include climate change as part of the project review process	23/68			

* Requirement must be addressed.

\1 If not included as an individual section use Governance, Project Review Process, and Data Management per November 2012 Guidelines, p. 44.Standards

\2 <http://www.water.cagov/climatechange/CCHandbook.cfm> November 2012



2014 Eastern San Joaquin Integrated Regional Water Management Plan

