

# Development of the Integrated Regional Water Management Plan

March 14, 2013



#### **Stakeholder Meeting Agenda**

- 1. Introductions
- 2. Overview of Administrative Draft IRWMP
- 3. Schedule
- 4. In-kind Work Accounting
- 5. Next Steps
- 6. Questions

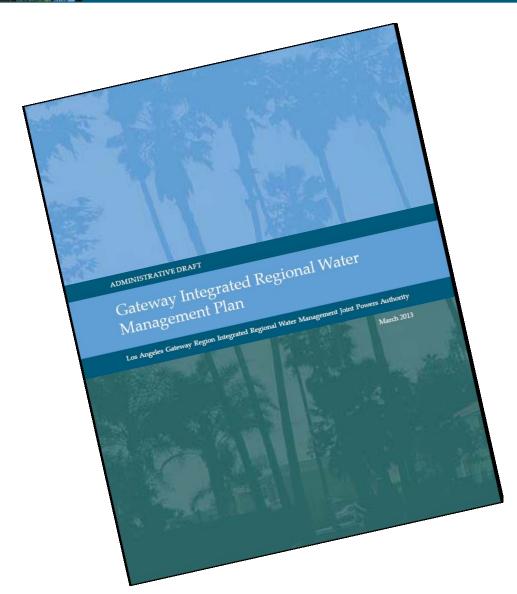


# Introductions





#### **Administrative Draft IRWMP**



For GWMA review



	Gateway IRWMP Chapter Outline		
Chapter Number	Chapters		
1	Executive Summary		
2	Introduction		
3	Region Description		
4	Governance and Coordination		
5	Outreach: Public and Stakeholder Involvement Processes		
6	IRWMP Goals and Objectives		
7	Groundwater and Water Quality Issues		
8	Storm Water and Flooding Issues		
9	Water Supply and Demand: Today and in the Future		
10	Water Management Strategies		
11	Climate Change		
12	Project Solicitation and Prioritization		
13	Project Integration – Project Alternatives		
14	Other Planning Coordination		
15	Plan Impacts and Benefits		
16	Financing Strategies		
17	Data Management		
18	Plan Performance and Monitoring		
19	Plan Amendments		
20	Conclusions and Recommendations		
21	Appendices		







Exec	utive	Summary	ES-
2	Intro	oduction	•
	2.1	Purpose	
	2.2	IRWMP Sponsorship and Adoption	4
		2.2.1 Point of Contact	4
		2.2.2 Adoption	4
	2.3	What is an IRWMP?	4
	2.4	Why an IRWMP?	
	2.5	IRWMP Development	,
	2.6	IRWMP Development Process	,
		2.6.1 Steps in the Development Process	10
	2.7	Plan Organization	15



<b>Region De</b>	scription	17
3.1	Hydrology and Infrastructure	19
	3.1.1 Rivers	19
	3.1.2 Floodplain	19
	3.1.3 Seawater Barriers	22
	3.1.4 Whittier Narrows Dam and Conservation Pond	22
	3.1.5 Spreading Grounds	22
3.2	Water Resources	22
	3.2.1 Groundwater	22
	3.2.2 Surface Water	25
	3.2.3 Recycled Water	25
3.3	Water Rights in the Central Basin	26
	3.3.1 Surface Water Rights	26
	3.3.2 Groundwater Rights	27
3.4	The Gateway IRWM Region Boundary	28
	3.4.1 History	31
	3.4.2 Gateway IRWM Region Development	31
	3.4.3 Advantages of the Region Boundary	33
3.5	Cities and Water Suppliers	34
	3.5.1 Cities	34
	3.5.2 Water Companies	39
	3.5.3 Water Wholesalers and Groundwater Suppliers	41
	3.5.4 Wastewater Agencies	42



3.6	Demo	ographics	42
	3.6.1	Population, Housing, and Income	43
	3.6.2	Land Use	46
3.7	Water	Management Challenges	47
	3.7.1	Water Quality	47
	3.7.2	Aging Infrastructure	48
	3.7.3	Urbanization	48
	3.7.4	Floods	48
3.8	Integr	ration with Surrounding Regions	49



<u>4</u>	Gove	ernance and Coordination	<u>50</u>
_	4.1	Governance of the IRWMP	50
	4.2	LA Gateway IRWM JPA Composition	51
		4.2.1 Summary of Participating Agencies	52
	4.3	Stakeholder Involvement	57
<u>5</u>	<u>Outr</u>	each: Public and Stakeholder Involvement Processes	61
	5.1	Stakeholder Outreach and Involvement	61
		5.1.1 Disadvantaged Community (DAC) Outreach	61
		5.1.2 Outreach Process	62
	5.2	Public Outreach and Involvement	63
		5.2.1 Outreach Elements	64
		5.2.2 Tribes	65
	5.3	Communications	65
<u>6</u>	<u>IRW</u>	MP Goals and Objectives	66
	6.1	Overview	66
	6.2	Initial Goals	66
	6.3	IRWMP Issues: Have we covered the important issues?	67
	6.4	IRWMP Developed Goals and Related Objectives	69
	6.5	Measureable Objectives	69
	6.6	Why not prioritize Goals?	71
	6.7	State Water Management Priorities	71



<u>7</u>	Gro	undwater and Water Quality Issues	73
_	7.1	Water Quality Issues	73
		7.1.1 Methodology	73
		7.1.2 Groundwater Quality in the Los Angeles Gateway Region	94
	7.2	Data Gaps	98
<u>8</u>	Stor	m Water and Flooding Issues	115
_	8.1	Flooding Problem Areas	115
	8.2	Water Quality Problem Areas	118
	8.3	Best Management Practices	128
		8.3.1 Centralized BMPs (draining/treating larger areas)	129
		8.3.2 Distributed BMPs (draining/treating smaller areas)	129
	8.4	Summary of Storm Water Problem Areas	131
<u>9</u>	Wat	er Supply and Demand: Today and in the Future	134
	9.1	Sources	134
	9.2	Background	135
		9.2.1 Senate Bill X7-7 and the Water Conservation Act of 2009	139
		9.2.2 Methodology	139
		9.2.3 Results	143
	9.3	Recommendations	149



wate	er Management Strategies	<u> 152</u>
10.1	Formulation of Water Management Strategies	152
10.2	Gateway Strategies	153
10.3	Using Strategies	154
Clim	ate Change	157
11.1	Baseline Climatology	157
	11.1.1 Local Climate	157
	11.1.2 Climate in Water Source Regions	158
11.2	Climate Predictions	158
	11.2.1 Projections of Local Climate Change	159
	11.2.2 Projections of Sea Level Rise	161
	11.2.3 Projections for Imported Water Sources	163
11.3	Water System Vulnerability of the Gateway Region	164
	11.3.1 Coastal Aquifer Vulnerability	164
	11.3.2 Water Supply Vulnerability	164
	11.3.3 Ecological Vulnerability	164
	11.3.4 Water-Energy Vulnerability	165
11.4	Water-Energy Intensity and GHG Emission	165
	10.1 10.2 10.3 <b>Clim</b> 11.1	<ul> <li>10.1 Formulation of Water Management Strategies</li> <li>10.2 Gateway Strategies</li> <li>10.3 Using Strategies</li> <li>Climate Change</li> <li>11.1 Baseline Climatology <ul> <li>11.1.1 Local Climate</li> <li>11.1.2 Climate in Water Source Regions</li> </ul> </li> <li>11.2 Climate Predictions <ul> <li>11.2.1 Projections of Local Climate Change</li> <li>11.2.2 Projections of Sea Level Rise</li> <li>11.2.3 Projections for Imported Water Sources</li> </ul> </li> <li>11.3 Water System Vulnerability of the Gateway Region <ul> <li>11.3.1 Coastal Aquifer Vulnerability</li> <li>11.3.2 Water Supply Vulnerability</li> <li>11.3.3 Ecological Vulnerability</li> <li>11.3.4 Water-Energy Vulnerability</li> </ul> </li> </ul>



<u>12</u>	<u>Proje</u>	ect Solicitation and Prioritization	<u>168</u>
	12.1	Project Solicitation and Submittal Process	168
		12.1.1 Project Database Tool	169
		12.1.2 Project Solicitation	170
		12.1.3 Consultant Suggested Projects	170
		12.1.4 Past Project Suggestions	171
	12.2	Project Review Process	171
		12.2.1 Review and Ranking Criteria	171
		12.2.2 Weighting Factors for Ranking Criteria	174
		12.2.3 Project Technical Review Team	176
		12.2.4 Project Review and Discussion	178
	12.3	Project Scoring and Ranking	179
		12.3.1 Project Statistics	179
		12.3.2 Project Ranking	183
<u>13</u>	<u>Proje</u>	ect Integration – Project Alternatives	184
	13.1	Integration Strategy and Approach	184
	13.2	Integration Analysis	185
		13.2.1 Project Bundles	185
		13.2.2 Program Alternatives	187
		13.2.3 Compatibility with Other Projects	191
		13.2.4 Compatibility with Projects in Other Regions	191



<u>14</u>	Othe	r Planning Coordination	193
	14.1	Coordination of Activities within and IRWM Region	193
	14.2	Identification and Coordination with Neighboring IRWM Regions	194
	14.3	Coordination with Agencies	194
	14.4	Relation to Local Water Planning	195
		14.4.1 Water Quality Control Plan	196
		14.4.2 Urban Water Management	196
		14.4.3 Regional Recycled Water Planning	197
		14.4.4 Groundwater Management	198
		14.4.5 Related Watershed Planning	198
	14.5	Salt and Nutrient Plan	200
	14.6	Relation to Land Use Planning	200
		14.6.1 City and County General Plans	200
		14.6.2 Local Ordinances, Zoning and Design Standards, and Regulation	201
<u> 15</u>	Plan	Impacts and Benefits	203
	15.1	General Benefits and Impacts of Regional Planning and Implementing the	e
		IRWMP	203
	15.2	Impacts and Benefits of the IRWMP Program Alternatives	204
	15.3	Quantifiable Benefits and Costs of Proposed Projects	213
	15.4	California Environmental Quality Act and Permitting	216
		15.4.1 Compliance Approach and Responsibilities	216
		15.4.2 Avoiding, Minimizing, and Mitigating Potential Impacts	217
15.5	Impac	ets and Benefits to DACs 217	



<u>16</u>	Fina	Financing Strategies	
	16.1	Funding Alternatives	219
		16.1.1 Local Government Funding	219
		16.1.2 Grants and Loans – State and Federal	220
		16.1.3 Recycled Water/ Desalination Funding Programs	225
17	Data	Management	239



<u>18</u>	<u>Plan</u>	Performance and Monitoring	<u> 257</u>
	18.1	Water Quality	258
		18.1.1 Monitoring	258
		18.1.2 Reporting	259
		18.1.3 Performance Measures	259
	18.2	Enhance Water Use Efficiency to Meet 20X2020 per Capita Water Use	
		Targets	261
		18.2.1 Monitoring	261
		18.2.2 Performance Measures	261
	18.3	Expand Regional Water Recycling Facilities	262
		18.3.1 Monitoring	262
		18.3.2 Performance Measures	263
	18.4	Systematically Upgrade Aging Water Infrastructure	263
		18.4.1 Monitoring	263
		18.4.2 Performance Measures	263
	18.5	Create Habitat, Open Space, and Water Based Recreational Opportunities	264
		18.5.1 Monitoring	264
		18.5.2 Performance Measures	264
	18.6	Project Performance and Monitoring Plan	265
10	Dlan	Amendments	267
<u>19</u>	<u>19.1</u>		267
	19.1	Basic Plan Changes Project List Changes	268
	19.2	Project List Changes	200

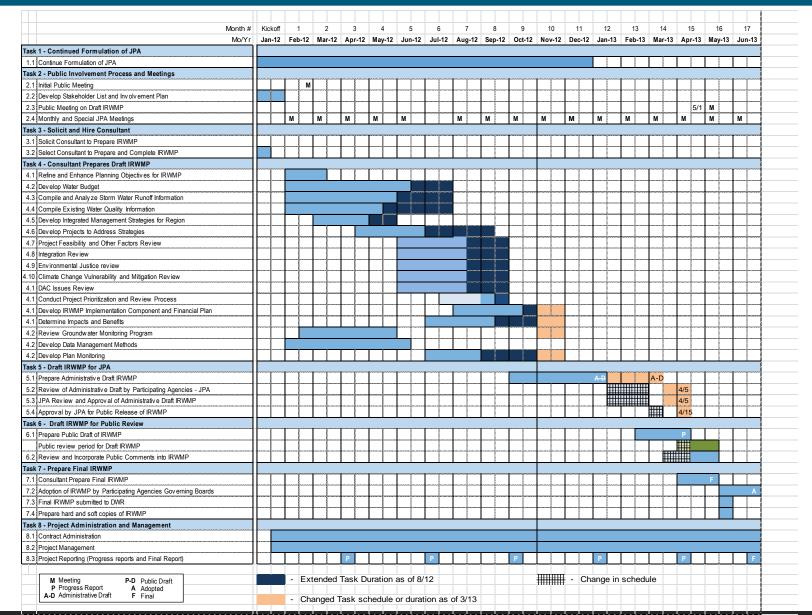


#### **Draft Admin**

20 Recom	mendations and Conclusions	270
21 Refere	nces	271
Appendix E	Flood Survey Results	A-1
Appendix B	Outreach Plan	B-1
Appendix C	Project Submittal Review and Process	C-1
Appendix D	Project Integration	D-1

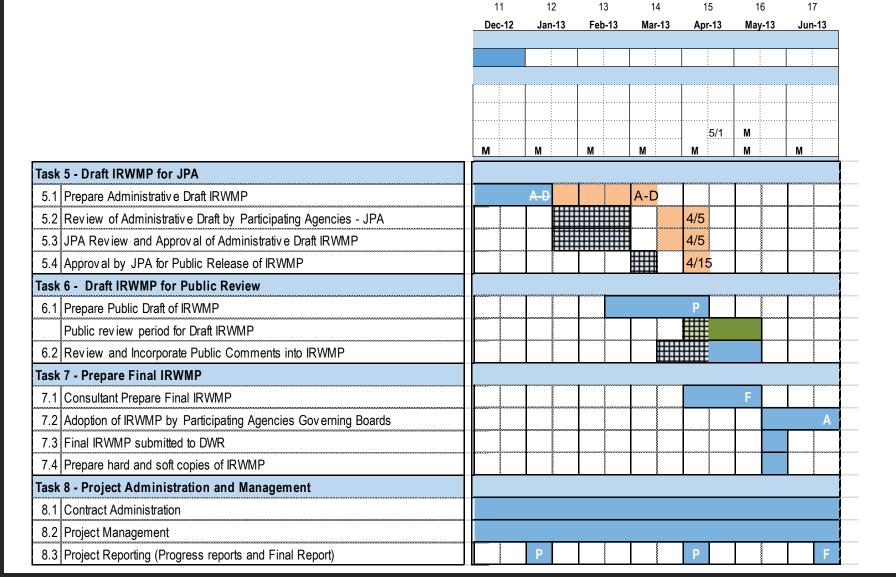


#### **Schedule**





#### **Schedule**



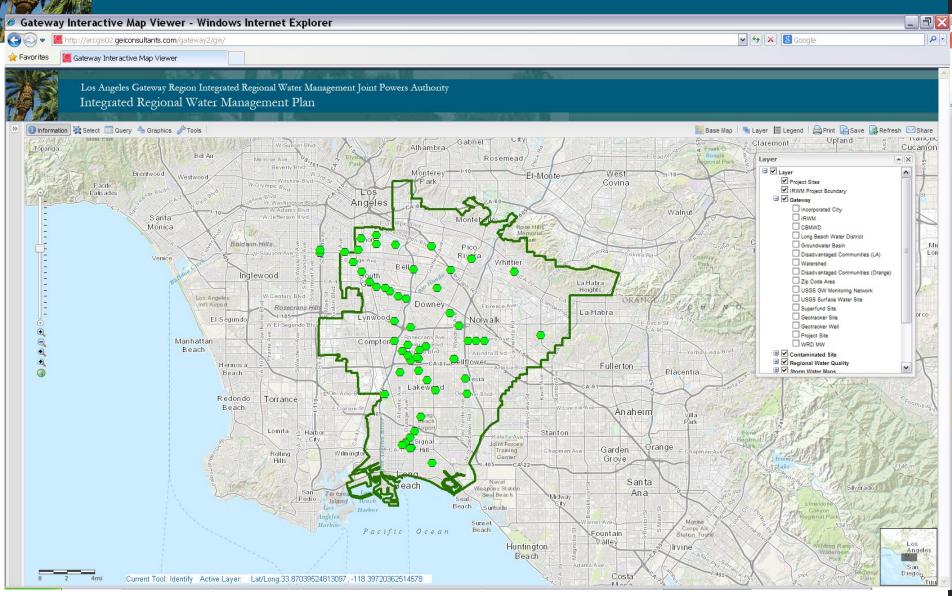


#### **Schedule - Dates**

- Distribute Administrative Draft
- Comments back by
- Release Public Review Draft IRWMP
- Public Meeting
- Public Comment Closes
- Final IRWMP available
- GWMA Adopts Final IRWMP

- March 14
- April 5
- April 15
  - May 1
- May 15
- ~ June 3
- June 13

# **Correcting Project Locations**





## **In-kind Work Accounting**

GWMA In-Kind Expense Rate Certification					
Date:	Gateway IRWMP In-Kind Timesheet				
Name:	Organization:				
Organization:		Date mm/dd/yy	Hours*	Task	Description of Work**
Address:					
Phone:					
Email:					
I hereby certify that I am a paid employee ofactively represent that organization in the Gateway IRWMP pro					
participation for that organization would constitute In-Kind expedevelopment.					
My hourly charge rate for that organization, including related o		TOTAL IN-KIND HOURS	0		
My electronic signature is	-	*nearest 1/2 hour **if meeting, give purpose	•		
Signature: Date:	I certify this accounting as true and correct,				
	Signature				
	Note: Electronic signature must be on file				



## **Next Steps**

- Prepare Public Draft Plan
- Engage Outreach for Public Meeting
- Follow-up on In-Kind Timesheets

Next Stakeholders Meeting May 9th

