Active Projects and Programs (Based on IRWM Group Submissions)

The tables on the following pages include the 86 projects and programs which have been submitted by the districts, agencies, organizations, and individuals that participate in the IRWM Group. Each project and program was reviewed by the RWMG and various Work Groups as to how they achieve the Regional Goals and Measurable Objectives set forth in the IRWM Plan (2014 Plan Update, Sections 4.4 and 4.5, respectively). Applicable Measurable Objectives and Applicant(s) are identified, and each project and program is labeled with a "Map No." corresponding to the locations in and around the Region as shown in Figure 5.1 of the Plan.

The projects and programs are also classified by a "status", meaning the readiness for implementation and/or inclusion in grant funding applications. These designations are not part of a formal submission or review process, but are simply used by the IRWM Group as a means of tracking approved projects and programs. The following are the three statuses used:

1. "Near Term" (N), meaning a project or program has already been subjected to planning and preliminary design phases. These activities are effectively ready form implementation and will likely be included in grant applications, assuming they met funding opportunity guidelines.

2. "Long Term" (L), meaning a project or program that is only in the conceptual phase, potentially with some minor planning or design documentation. Although these activities may be streamlined to meet grant funding opportunities (i.e., pushed towards implementation readiness for a particular grant application), in general, more planning and design work will need to performed by the Applicant and IRWM Group. As such, these activities will likely be "ready" in more than one year from the release of this Plan.

3. "Continuous/On-Going" (C), meaning a project or program which has begun but is not subjected to a near-term end (completion) date. The implementation of these activities continues over a longer period to time, with support from the IRWM Group.

The projects and programs listed in the Plan vary in terms of their generalized Purpose(s) towards the water supply and management concerns of the IRWM Group. Note that many of these projects and programs were submitted prior to or following adoption of the latest Plan. As such, the RWMG is making a concerted effort to refile and organize PDCFs for each of these activities which formally defines the purposes of each project/program, as well as an estimation of regional impacts and benefits. A PDCF for each project and program will be made available to the IRWM Group as they are compiled.

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Active Projects and Programs (Based on IRWM Group Submissions) List Printed on: 8/13/2019

Map No. <sup>1</sup>	Status <sup>2</sup>	Year(s) <sup>3</sup>	Activity Title	Activity Type	Purpose	Applicant	Measurable Objective(s)*	Est	timated Total Cost(s)
1	L	2009	North Kern and Semitropic System Interconnection	Project	Conveyance Improvements	Semitropic WSD	C, E, K, L		
2	С	2012	On-Farm Mobile Lab, Water Efficiency Services	Project	Water Conservation	North West Kern RCD	C, E, K, L. P	\$	236,400
3	C/N	2012	NRCS On-Farm Programs for Water Quality and Supply Conservation	Program	Water Conservation	Poso Creek IRWM Group	C, E, G, K, L, P		
4	С	2013	Demand Reduction/Land Retirement	Program	Water Conservation	Semitropic WSD	I, K, L, P		
5	Ν	2014	Enhance Groundwater Monitoring and/or Modeling	Program	Non-Structural Enhancement to Regional Water Management	Poso Creek IRWM Group	F, G, K, L, M, N		
6	Ν	2014	Stormwater Improvement in McFarland	Project	Assist Economically- Disadvantaged Communities (Enhance Flood Control)	City of McFarland	H, J, K, L		
7	Ν	2014	Semitropic Groundwater Model Update	Program	Assess Groundwater Uses in Region	Semitropic WSD	B, F, K, L, M, N	\$	300,000
8	N/L	2014	Calloway Canal Improvements: 8-1 Pumping Plant Connection to Friant-	Project	Modify Water Conveyance Systems	North Kern WSD	C, E, G, H, K, L		
9	Ν	2014	Kern Canal Regional Groundwater Assessment	Program	Assess Groundwater Uses in Region	Poso Creek IRWM Group, Kern Groundwater	B, F, K, L, M, N		
10	Ν	2015	Tulare Lake Floodwater Storage and Recovery Project	Project	Temporary Water Storage	Semitropic WSD	A, C, D, E, G, H, I, L	\$	252,970,991
11	Ν	2015	Delano Recycled-water Wetland Enhancement Project (DRWEP)	Project	Water Supply / Reuse	City of Delano	A, B, C, D, E	\$	2,493,000
12	L	2015	Kern-Tulare Reuse of Oil Field Produced Water	Project	Water Supply / Reuse	Kern-Tulare Water District	B, C, D, F		

1 See Figure 5.1 for locations around region, labeled according to 'Map No.'

2 Status based on activity readiness for implementation, see description page for letters.

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Active Projects and Programs (Based on IRWM Group Submissions) List Printed on: 8/13/2019

Map No. <sup>1</sup>	Status <sup>2</sup>	Year(s) <sup>3</sup>	Activity Title	Activity Type	Purpose	Applicant	Measurable Objective(s)*	Est	imated Total Cost(s)
13	Ν	2015	New Well No. 3	Project	Water Supply / Reuse	Lost Hills Utility District	D, F, J, K, L	\$	1,378,250
14	Ν	2015	Browning Road Reservoir - 1.0 million gallon Welded Steel Reservoir, Booster Pump Station, and System Intertie	Project	Conveyance Improvements	City of McFarland	B, F, K	\$	2,037,500

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Active Projects and Programs (Based on IRWM Group Submissions) List Printed on: 8/13/2019

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15	Ν	2016	Schuster Spreading Grounds	Project	Recharge & Recovery Facility	Semitropic WSD	C, D, E, H, K, L, O	\$	875,000
16	Ν	2016	Shafter-Wasco Irrigation District Recharge Project	Project	Recharge & Recovery Facility	Shafter-Wasco Irrigation District	C, D, E, H, K, L, O	\$	5,840,179
17	L	2016	In District Banking Projects	Project	Recharge & Recovery Facility	Southern San Joaquin Municipal Utility District	C, D, E, H, K, L, O		
18	L	2016	Out-of District Banking Projects	Project	Recharge & Recovery Facility	Southern San Joaquin Municipal Utility District	C, D, E, H, K, L, O		
19	C/N	2006-2014+	Oilfield Produced Water Supplies	Project	Alternative Water Supply to Reduce Dependence on Traditional Supplies	North Kern WSD	A, C, E, G, K, L		
20	Ν	2010+	Water Meter Installation in Wasco	Project	DAC Assistance	City of Wasco	J, K, L, P		
21	Ν	2012-2020	Stored Water Recovery Unit	Project	Expand In-Lieu Service Areas	Semitropic WSD	A, C, D, E, F, G, K, L	\$	32,000,000
22	Ν	2013-2016	GW-Banking (North of DEID with Pixley ID)	Project	Expand Direct Recharge Facilities	Delano-Earlimart ID	C, D, E, F, G, H, K, L, O	\$	37,000,000
23	Ν	2013-2016	Modified Shafter- Wasco/Semitropic Intertie on Madera Ave	Project	Modify Water Conveyance Systems	Semitropic WSD, Shafter-Wasco ID	C, D, E, F, G, H, K, L	\$	11,000,000
24	L	2014+	Connect Friant-Kern Canal Turnout to Cawelo's North	Project	Expand In-Lieu Service Areas	Cawelo WD	C, D, E, K, L		
25	L	2014+	System Cecil Avenue Pipeline Capacity Expansion	Project	Modify Water Conveyance Systems	Kern-Tulare WD	C, D, E, K, L	\$	8,500,000
26	L	2014+	G-W Banking Conveyance Improvements to North Kern WSD Recharge and Recovery	Project	Expand Recharge & Recovery Facilities	North Kern WSD	C, D, E, F, G, H, K, L, O		
27	L	2014+	Phase II: Pond Poso Spreading and Recovery Facility	Project	Expand Direct Recharge Facilities	Semitropic WSD	C, D, E, F, G, H, K, L, O		

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Active Projects and Programs (Based on IRWM Group Submissions) List Printed on: 8/13/2019

Map No. <sup>1</sup>	Status <sup>2</sup>	Year(s) <sup>3</sup>	Activity Title	Activity Type	Purpose	Applicant	Measurable Objective(s)*	Estimated Total Cost(s)
28	L	2014+	Pond-Poso Entrance Ponds	Project	Expand Direct Recharge Facilities	Semitropic WSD	C, D, E, F, G, H, K, L, O	
29	L	2014+	Calloway Canal Improvements: Calloway Canal to Friant Kern Canal	Project	Modify Water Conveyance Systems	Delano-Earlimart ID	C, E, G, H, K, L	
30	L	2014+	Calloway Canal Improvements: Siphon at CVC to Calloway Intertie	Project	Modify Water Conveyance Systems	North Kern WSD	C, E, G, H, K, L	\$ 2,000,000
31	L	2014+	Multi-District Conveyance Facility (CA Aqueduct to Friant-Kern Canal)	Project	Modify Water Conveyance Systems	Semitropic WSD	A, C, D, E, F, G, H, K, L	\$ 70,000,000
32	L	2014+	Reverse Flow in the Friant- Kern Canal	Project	Modify Water Conveyance Systems	Kern-Tulare WD	C, E, K, L	
33	L	2014+	Shafter-Wasco/Semitropic Intertie on Kimberlina Rd.	Project	Modify Water Conveyance Systems	Semitropic WSD, Shafter-Wasco ID	C, D, E, F, G, H, K, L	\$ 20,000,000
34	L	2014+	G-W Banking for Parties Outside Poso Creek IRWMP	Program	0	Semitropic WSD	A, C, D, E, F, G, H, K, L, N	
35	Ν	2014+	Region Reverse Flow in the CA	Program	Management Non-Structural Enhancement to Regional Water	Semitropic WSD	C, E, K, L	
36	Ν	2014+	Aqueduct Optimizing Region's Pumping Lifts	Program	Management Non-Structural Enhancement to Regional Water Management	Poso Creek IRWM Group	C, E, F, K, L, P	
37	L	2014+	Wildlife Improvement Projects in IRWMP Region (coordination with TBWP)	Project	Enhance Environmental Resources	Poso Creek IRWM Group	I, K, L	
38	L	2014+	Enviornemntal Water Management in Support of Wildlife Settlements Outside	Project	Enhance Environmental Resources	Poso Creek IRWM Group	I, K, L	
39	L	2014+	The Poso Creek Flood Control and Water Conservation Reservoir	Project	Enhance Flood Control	Semitropic WSD, North Kern WSD, Cawelo WD, County	H, I, K, L	
40	L	2014+	Flood Management and Habitat Restoration Improvemenvd along Poso	Project	Enhance Flood Control	North West Kern RCD	H, I, K, L, Q, R	

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Active Projects and Programs (Based on IRWM Group Submissions) List Printed on: 8/13/2019

Map No. <sup>1</sup>	Status <sup>2</sup>	Year(s) <sup>3</sup>	Activity Title	Activity Type	Purpose	Applicant	Measurable Objective(s)*	Esti	imated Total Cost(s)
41	L	2014+	Flood Management and Habitat Restoration Improvements in McFarland	Project	Enhance Flood Control	City of McFarland	H, I, K, L, Q, R		
42	L	2014+	Enhance Water Supply, Address Drinking Water Treatment Needs, and	Project	Assist Economically- Disadvantaged Communities	Various	C, G, J, K, L		
43	Ν	2014+	Lost Hills Repair and Upgrade Wastewater Treatment Plant	Project	Assist Economically- Disadvantaged Communities (Wastewater Treatment)	City of Lost Hills	C, G, J, K, L		
44	Ν	2014+	Delano Wastewater Treatment Plant Upgrade	Project	Assist Economically- Disadvantaged Communities (Wastewater Treatment)	City of Delano	C, G, J, K, L		
45	Ν	2014+	and Effluent Reuse Buttonwillow Wastewater Treatment Plant Upgrade	Project	Assist Economically- Disadvantaged Communities (Wastewater Treatment)	Community of Buttonwillow	C, G, J, K, L	\$	4,100,000
46	Ν	2014+	Richgrove Waterwater	Project	Assist Economically- Disadvantaged Communities (Wastewater Treatment)	Community of	C, G, J, K, L		
47	N/L	2014+	Treatment Plant Upgrade Richgrove CSD Water Well	Project	Assist Economically- Disadvantaged Communities	Richgrove Community of Richgrove	C, G, J, K, L	\$	9,000,000
			and Storage Tank South Shafter Wastewater		Assist Economically-	Community of South		*	
48	C/L	2014+	Treatment Plant Upgrade	Project	Disadvantaged Communities (Wastewater Treatment)	Shafter	C, G, J, K, L	\$	12,700,000
49	C/L	2014+	Lateral Connections, South Shafter Sewer Phase II	Project	Assist Economically- Disadvantaged Communities (Wastewater Treatment)	Community of South Shafter	C, G, J, K, L	\$	3,397,320
50	L	2014+	Wasco Drinking Water Storage Tank	Project	Assist Economically- Disadvantaged Communities (Water Supply)	City of Wasco	C, G, J, K, L		

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Active Projects and Programs (Based on IRWM Group Submissions) List Printed on: 8/13/2019

Map No. <sup>1</sup>	Status <sup>2</sup>	Year(s) <sup>3</sup>	Activity Title	Activity Type	Purpose	Applicant	Measurable Objective(s)*	Estimated Total Cost(s)
			Shafter-Wasco Irrigation			Shafter-Wasco		
51	Ν	2016+	District Recharge Project	Project	Recharge & Recovery Facility		C, D, E, H, K, L, O	\$ 5,840,179
52	L	2017-2018	(Bell Recharge Site) SSJMUD and Semitropic	Project	Modify Water Conveyance Systems	Irrigation District Southern San Joaquin Municipal	A, B, C, D, G, J, L	\$ 11,000,000
50	Ţ	0017 0010	WSD Schuster Intertie SSJMUD and CWD Intertie		Modify Water Conveyance	Utility District Southern San		\$ 100,000 -
53	L	2017-2018	Pipeline SSJMUD and North Kern	Project	Systems	Joaquin Municipal Utility District Southern San	A, B, C, D, F, G, J	\$ 20,000,000
54	L	2017-2018	WSD 9-28 Intertie Pipeline	Project	Modify Water Conveyance Systems	Joaquin Municipal Utility District	A, B, C, D, G, J, L	\$ 2,000,000
55	L	2017-2018	Southeast Delano Spreading Grounds	Project	Expand Direct Recharge Facilities	Southern San Joaquin Municipal Utility District	A, B, C, D, F, G, I, J, L, O	\$ 425,000 - \$ 8,000,000
56	L	2017-2018	City of Delano Spreading Grounds	Project	Expand Direct Recharge Facilities	Southern San Joaquin Municipal Utility District	A, B, C, D, F, G, I, J, L, O	\$ 425,000 - \$ 900,000
57	L	2017-2018	Pond Road Spreading Grounds	Project	Expand Direct Recharge Facilities	Southern San Joaquin Municipal Utility District	A, B, C, D, F, G, I, J, L, O	\$ 650,000 - \$ 6,000,000
58	N/L	2018-2019	InDistrict Spreading Grounds	Project	Expand Direct Recharge Facilities	Southern San Joaquin Municipal Utility District	A, B, C, D, F, G, I, J, L, O	\$ 44,000,000
59	L	2018-2019	Conversion of Dairy to Recharge Facility	Project	Expand Direct Recharge Facilities	Southern San Joaquin Municipal Utility District	A, B, C, D, F, G, I, J, L, O	\$ 5,600,000
60	Ν	2018-2019	Improved Water Level Measurement of District Recharge Facility SCADA Automation and	Project	Improve Monitoring of Recharge Facilities	Shafter-Wasco Irrigation District North Kern WSD	B, C, D, E, F, J, K, L, O	\$ 184,541
61	Ν	2018-2019	Evapotranspiration Measurement Improvements	Project	Improve Monitoring of Wells and Install ET Stations to reduce Groundwater Pumping	North Kent wob	B, D E, F, J, L, M	\$ 168,432

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Active Projects and Programs (Based on IRWM Group Submissions) List Printed on: 8/13/2019

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62	L	2018-2019	Pond-Poso Spreading Grounds, Phase 2 Stored Water Recovery Unit,	Project	Expand Direct Recharge Facilities	Semitropic WSD Semitropic WSD	A, B, C, D, F, G, H, J, L, O		
63	L		Element of the Semitropic	Project	Groundwater banking	Ĩ	A, B, C, D, F, G, H, J, L	\$	197,000,000.00
64	N	2018-2019 2019+	Groundwater Bank Installation of 123-TCP Treatment Facilities Upgrade Water Meter	Project	Assist Economically- Disadvantaged Communities (Water Supply)	City of Wasco City of Wasco	G, J, K		
65	L	2019+	Infrastructure to Advanced Meter Infrastructure	Project	Assist Economically- Disadvantaged Communities (Water Supply)	City of wasco	J, K, L, P		
66	L	2019+	Browning Road Well- 1,2,3- TCP Treatment	Project	Water Quality Improvements	City of McFarland	G, J, K	\$	1,550,000.00
67	L	2019+	Municipal Water Supply Well Project	Project	Water Quality Improvements	City of McFarland	G, J, K, P	\$	2,437,500.00
68	L	2019+	Reclaim Tank and Pump Station	Project	DAC Assistance	Lost Hills Utility District	G, J, K	\$	35,000.00
69	L	2019+	Backwash Tank Repair	Project	DAC Assistance	Lost Hills Utility District	G, J, K	\$	80,000.00
70	L	2019+	Feed Pump VFDs	Project	DAC Assistance	Lost Hills Utility District	G, J, K	\$	40,000.00
71	L	2019+	SCADA Programming	Project	DAC Assistance	Lost Hills Utility District	B, G, J, L	\$	15,000.00
72	L	2019+	Transfer Water PS Upgrades	Project	DAC Assistance	Lost Hills Utility District	G, J, K	\$	120,000.00
73	Ν	2019+	Leonard Ave Pipeline	Project	Conveyance Improvements	Shafter-Wasco Irrigation District	C, D, E, F, G, H, K, L	\$	1,724,852.00
74	L	2019+	Merced Avenue Intertie Calloway Canal	Project	Conveyance Improvements	Shafter-Wasco Irrigation District North Kern WSD	C, D, E, F, G, H, K, L		
75	Ν	2019+	Improvements: Lining Snow Rd. to 7th Standard Rd.	Project	Modify Water Conveyance Systems		C, E, G, H, K, L	\$	3,133,029.00

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76	Ν		Water Delivery		Modify Water Conveyance	North Kern WSD	A, C, D, E, F, H, K, L		
10	11	2019+	Improvements	Project	Systems		И, С, D, E, Г, П, К, L		
77	L	2019+	Calloway Canal Lining	Project	Conveyance Improvements	North Kern WSD	A, C, D, E, H, K, L		
78	L	2019+	Poso Creek Weir	Project	Conveyance Improvements	North Kern WSD	A, C, E, H, K, L		
79	L	2019+	Spreading Pond Facility	Project	Recharge & Recovery Facility	North Kern WSD	C, D, E, H, K, L, O		
80	L	2019+	Sub Surface Spreading Infrastructure	Project	Recharge & Recovery Facility	North Kern WSD	C, D, E, H, K, L, O		
81	L	2019+	Replacement of Wells	Project	Water Supply / Reuse	North Kern WSD	F, G, K, L, M, N		
82	Ν	2019+	Leonard Distribution System	Project	Modify Water Conveyance Systems	Semitropic WSD	C, D, E, F, G, H, K, L	\$	6,657,936.00
83	L	2019+	Poso Creek Flood MAR	Project	Floodwater Management	Semitropic WSD	A, C, D, E, G, H,K, O		
84	C/L	2019+	Sierra Vista Water Consolidation City of Delano Sphere of	Project	DAC Assistance	Community of Sierra Vista Southern San	G, J, K	\$	6,000,000.00
85	L	2019+	Influence Water Cosolidation	Drojoot	DAC Assistance	Joaquin Municipal	B, G, J, K	\$	100,000.00
00	L	2019+	Study 320-Acre Spreading Facility	Project	Groundwater	Utility District Delano-Earlimart ID			
86	Ν	2019-2020	520-Acre Spreading Facility	Project	Banking/Permitting	Delano-Barimart ID	C, D, E, H, K, L	\$	12,175,000.00
87	L	2020-2021	320-Acre Spreading Facility	Project	Groundwater Banking/Permitting	Delano-Earlimart ID	C, D, E, H, K, L	\$	12,175,000.00
88	L		GW Banking Facility Pipeline	-	Groundwater	Delano-Earlimart ID	C, D, E, H, K, L	\$	2,500,000.00
00	Ľ	2020-2021	Improvement Project	Project	Banking/Permitting		0, 2, 2, 1, 11, 11, 1	4	2,000,000.00

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