



TODAY'S ACTION

Consider Approving and Recommending that the Monterey County Water Resources Agency Board of Supervisors Approve the Amended and Restated Water Recycling Agreement Between the Monterey County Water Resources Agency and the Monterey Regional Water Pollution Control Agency; and, Requesting the Chair of the Water Resources Agency Board of Supervisors to Execute the Agreement



AGENDA

1. Overview
2. Water Recycling Agreement
3. Costs
4. Conditions Precedent – The Off F
5. Review of Benefits
6. Previous Questions

Amended and Restated Water Recycling Agreement Between
Monterey Regional Water Pollution Control Agency and
Monterey County Water Resources Agency





OVERVIEW

Memorandum of Understanding

- **October 8, 2014 MOU**
- **5 Parties:**



- **Objective:** Provide framework for provision of additional source waters dedicated to Pure Water Monterey Project and additional supply to the Castroville Seawater Intrusion Project



WATER RECYCLING AGREEMENT

Advantages

1. **Complemented by five other agreements**
2. **Melds existing Agreements & 5 Party MOU**

Agreement	Parties	Status
Water Purchase Agreement	Cal Am, MPWMD, PCA	In progress – Final Draft
Water Rights – Ag Wash Water	City of Salinas, PCA	Complete and Approved
Operation of Industrial WW Ponds	City of Salinas, PCA	In progress – initial discussions and developing deal points
Marina Coast Water District – RUWAP Pipeline	MCWD, PCA	In progress – Negotiations parties are meeting regarding draft agreement
Umbrella Agreement	WRA, PCA, City of Salinas, MCWD, MPWMD	Draft expected November 20, 2015





WATER RECYCLING AGREEMENT

Significant Terms

- 1. Clearly identifies allotment of New Source Waters (8,701AFY):**
 - 49.6% 4,320 AFY Pure Water Monterey
 - 50.4 % 4,381 AFY CSIP
 - PCA retains 4,320 AFY of New Source Waters, pro rata monthly, if 8,701 AFY of New Source Waters is reduced
- 2. Outlines indirect cost charging**
- 3. Includes a revised payment & accounting protocol at PCA**
- 4. Removes 3,900 AF to PCA & no mention of 19,500 AF**
- 5. Identifies facilities capital split (45% WRA, 55% PCA)**
- 6. Growers provided a minimum volume of all wastewater going to plant, excluding MCWD flows and 650 AFY to PCA**
- 7. 30-year term with automatic extensions**



Cost Comparison Cases for CSIP Operation

Scenario Based on 22,750 (AFY)	Supplemental Wells (AFY)	SRDF (AFY)	Recycled Water (AFY)	New Source Water (AFY)
FY 15-16 Demand Schedule	6,058		14,260	2,432
Case No. 1 - No SRDF, Reduced Well, and Maximized Source Waters	4,169		14,260	B - 1,856 IWW – 1,866 REC - 599
Case No. 2 - SRDF, Minimized Well, and Source Water	1,634	5,000	14,260	B – 1,856
Case No. 3 – SRDF and No Well usage and source water		5,000	14,260	B- 1,856 IWW – 1,634



Cost Comparison with Salinas Water Availability

	FY 15-16 Demand Schedule	Case No. 1	Case No. 2	Case No. 3
Water Resources Agency	\$ 3,802,000	\$ 3,802,000	\$ 3,802,000	\$ 3,802,000
PCA O & M	3,423,000	3,330,934	3,112,692	3,037,553
Indirect	431,000	390,500	377,400	373,000
Capital	432,000	432,000	432,000	432,000
Loan	1,819,000	1,819,000	1,819,000	1,819,000
	<u>\$ 9,907,000</u>	<u>\$ 9,774,434</u>	<u>\$ 9,543,092</u>	<u>\$ 9,463,553</u>
New Source Waters				
Interruptible Rate		183,467	137,344	137,344
Debt Service		151,118	151,118	151,118
Replacement/Renewal/Reserve		46,400	46,400	46,400
Salinas Charge for Water Availability		135,300	135,300	135,300
		<u>516,285</u>	<u>470,162</u>	<u>470,162</u>
Total Cost	<u>\$ 9,907,000</u>	<u>\$ 10,290,719</u>	<u>\$ 10,013,254</u>	<u>\$ 9,933,715</u>
Average Interruptible Rate - This Scenario		\$ 75	\$ 74	\$ 74
Difference from original budget		\$ 383,719	\$ 106,254	\$ 26,715



Cost Comparison without Salinas Water Availability

	FY 15-16 Demand Schedule	Case No. 1	Case No. 2	Case No. 3
Water Resources Agency	\$ 3,802,000	\$ 3,802,000	\$ 3,802,000	\$ 3,802,000
PCA O & M	3,423,000	3,330,934	3,112,692	3,037,553
Indirect	431,000	390,500	377,400	373,000
Capital	432,000	432,000	432,000	432,000
Loan	1,819,000	1,819,000	1,819,000	1,819,000
	<u>\$ 9,907,000</u>	<u>\$ 9,774,434</u>	<u>\$ 9,543,092</u>	<u>\$ 9,463,553</u>
New Source Waters				
Interruptible Rate		183,467	137,344	137,344
Debt Service		151,118	151,118	151,118
Replacement/Renewal/Reserve		46,400	46,400	46,400
Salinas Charge for Water Availability		-	-	-
		<u>380,985</u>	<u>334,862</u>	<u>334,862</u>
Total Cost	<u>\$ 9,907,000</u>	<u>\$ 10,155,419</u>	<u>\$ 9,877,954</u>	<u>\$ 9,798,415</u>
Difference from original budget		\$ 248,419	\$ (29,046)	\$ (108,585)





FINANCING

PCA's actions to decrease cost to the final user:

- **Applying for a State Revolving Fund (SRF) Loan through the State Water Resources Control Board**
 - 1% loan for 30 years
 - SRF Application positions the New Source Water Project for Proposition 1 grants





CONDITIONS PRECEDENT – THE OFF RAMPS

1. Water Rights for Blanco Drain & Reclamation Ditch (SWQCB)
2. Approved Water Purchase Agreement (CPUC)
3. Blanco Drain treatment requirements are met for dry weather flows (RWQCB)
4. Independent third party review of proposed capital & operating costs and approved Engineers Report (BOD & BOS)
5. Successful assessment or Prop 218 process (Landowners)
6. Agreement on Salinas Pond Utilization Costs (PCA & WRA)



CONDITIONS PRECEDENT – THE OFF RAMPS

Water Recycling Agreement is structured to survive even if Conditions Precedent are not met:

- 1. New Source Facilities drop out**
- 2. All other provisions of Water Recycling Agreement remain**
 - Resolution of water allocations
 - Indirect cost issue resolved
 - Revised payment & accounting protocols
 - Non applicable information removed
 - Agreement extended for approximately 10 years



Review of Benefits

- 1. Outlines Water Allotments**
 - CSIP: Additional 4,381 AFY
 - Pure Water Monterey: 4,320 AFY
- 2. Provides both an Indirect Cost Plan and payment/accounting protocols**
- 3. Offers simplified O&M agreements with CSIP, SVRP, SRDF and New Source Waters facilities**
 - Addresses Blanco Drain water quality concerns
 - Ensures a greater factor of safety with New Source Waters
- 4. Additional water sources allow reduction or elimination of well pumping**
- 5. Expansion of CSIP becomes possible**
- 6. Treatment option for Blanco Drain**



Previous Questions

- **Priority of New Source Water**
 - 4.02 – Pro rated on a monthly basis
- **Blanco Drain and RWQCB**
 - Phone call with Ken Harris and Staff on 10/28/15
 - RWQCB will send a letter requesting information required to make a determination
- **How will competing Water Sources be Prioritized?**
 - Water Quality and Operations Committee will have input
- **USBR Loan**
 - Contacted by MRWPCA - BOR does not need to review new Water Recycling Agreement
- **Unknown Costs**
 - MCWRA protected by Condition Precedent requiring approved Engineering Report



TODAY'S ACTION

Approve and Recommend that the Monterey County Water Resources Agency Board of Supervisors Approve the Amended and Restated Water Recycling Agreement Between the Monterey County Water Resources Agency and the Monterey Regional Water Pollution Control Agency; and, Request the Chair of the Water Resources Agency Board of Supervisors to Execute the Agreement





TODAY'S ACTION

Consider Receiving the
2014 Groundwater Extraction Summary Report



Committee Action/Financial Impact

- None





Program Discussion

- Purpose

- Supports Agency Mission/Purpose *to Protect and Enhance the Quantity and Quality of Water for Present and Future Generations of Monterey County*

- Objectives

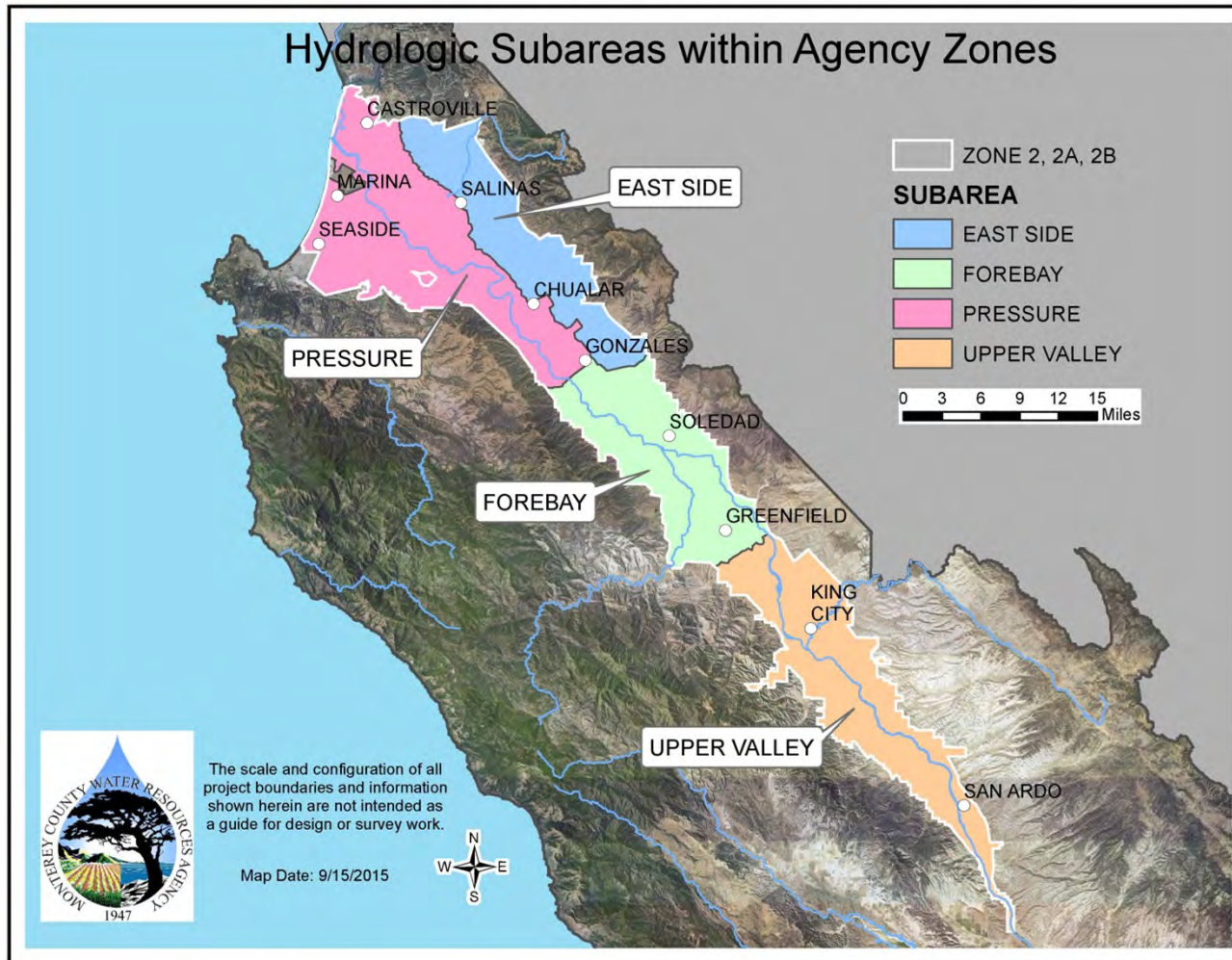
- Evaluate Agricultural & Urban Water Use
- Evaluate Agricultural & Urban Water Conservation Measures



Program Discussion

- Ordinance Driven
- Long Term Program ~ Began in 1993

Program Area



- Geographic Area
- Zone 2, 2A, 2B Boundaries



Components of the GWCE Program

- 2014 Well Extraction Reporting
- 2015 Conservation Practices Reporting
- 2014 Water & Land Use Reporting





2014 Well Extraction Reporting

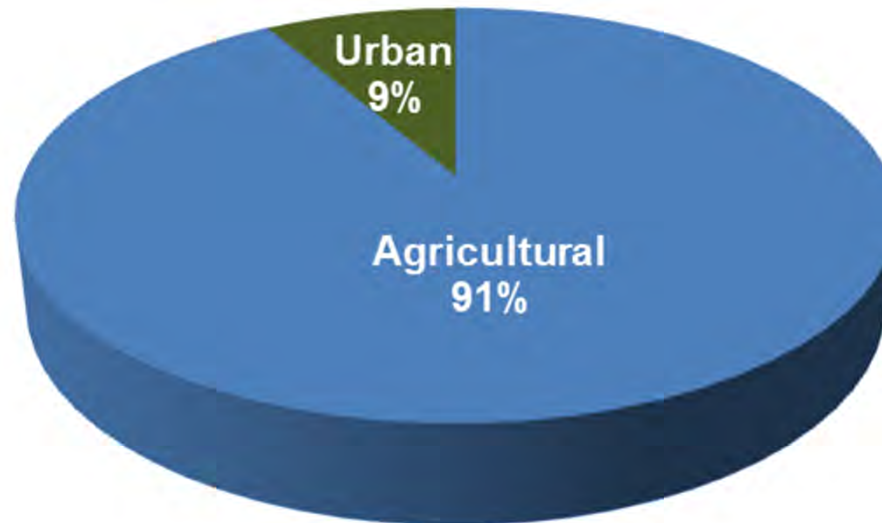
- Reporting Success
 - **98% 1,841 of 1,879 wells**
(2013 – 97% 1,819 of 1,871 wells)
- Total Pumping
 - **524,487 acre-feet (AF)**
(2013 – 508,205 AF)

2014 Total Extractions

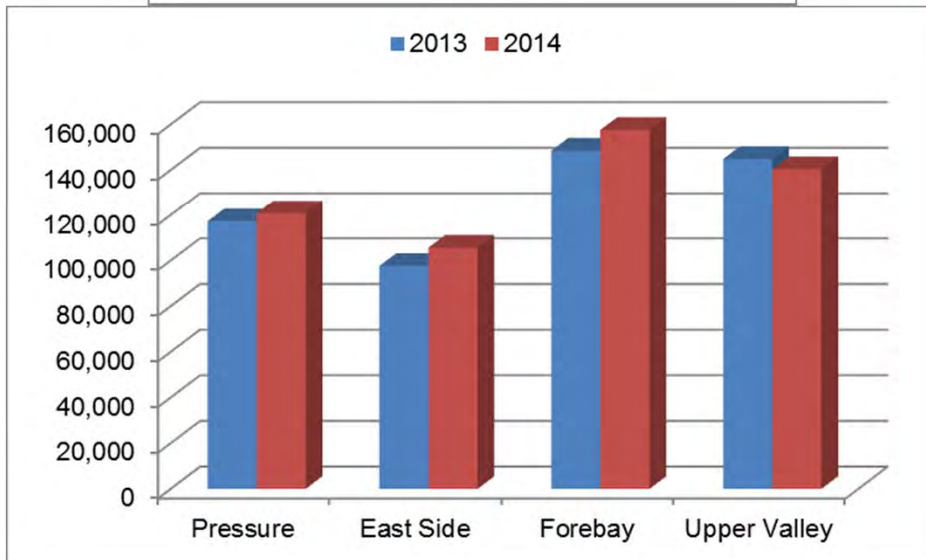
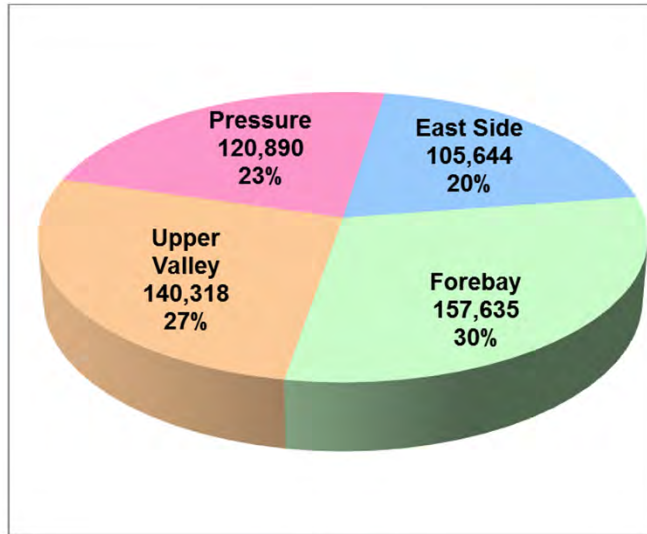
Ag Pumping: 480,160 AF (2013 – 462,873 AF)

Urban Pumping: 44,327 AF (2013 – 45,332 AF)

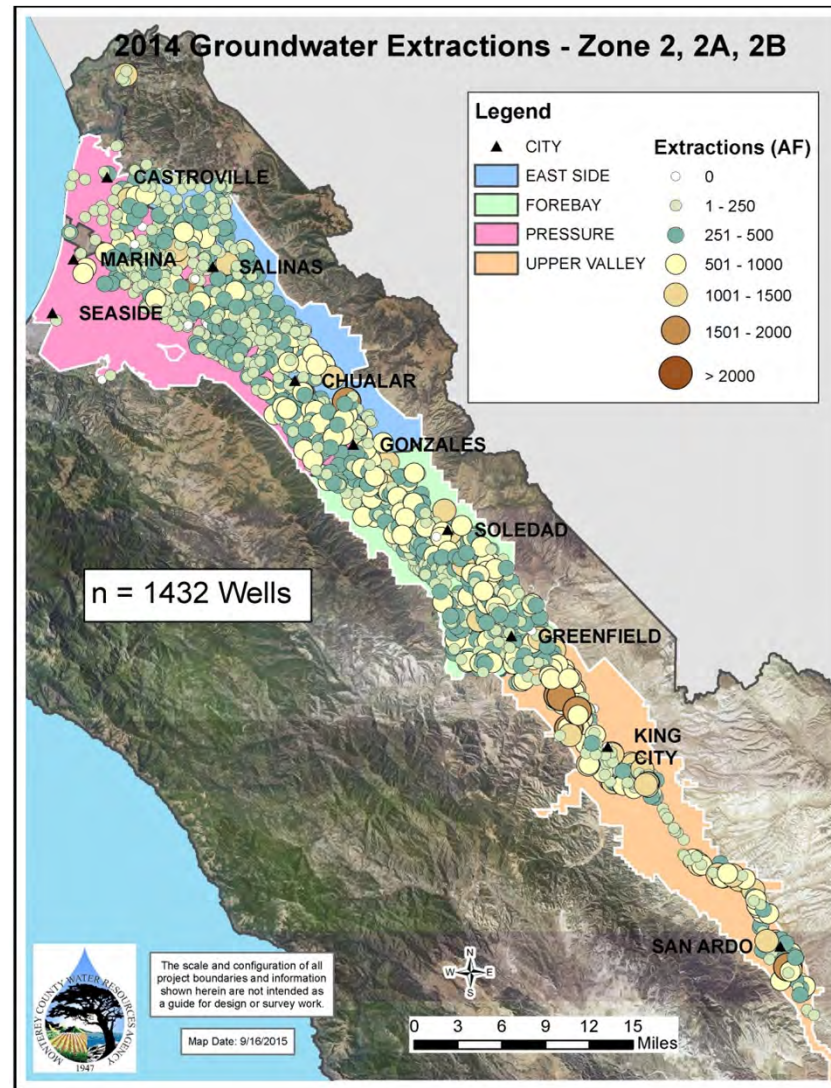
Agricultural & Urban Pumping 524,487 AF Total



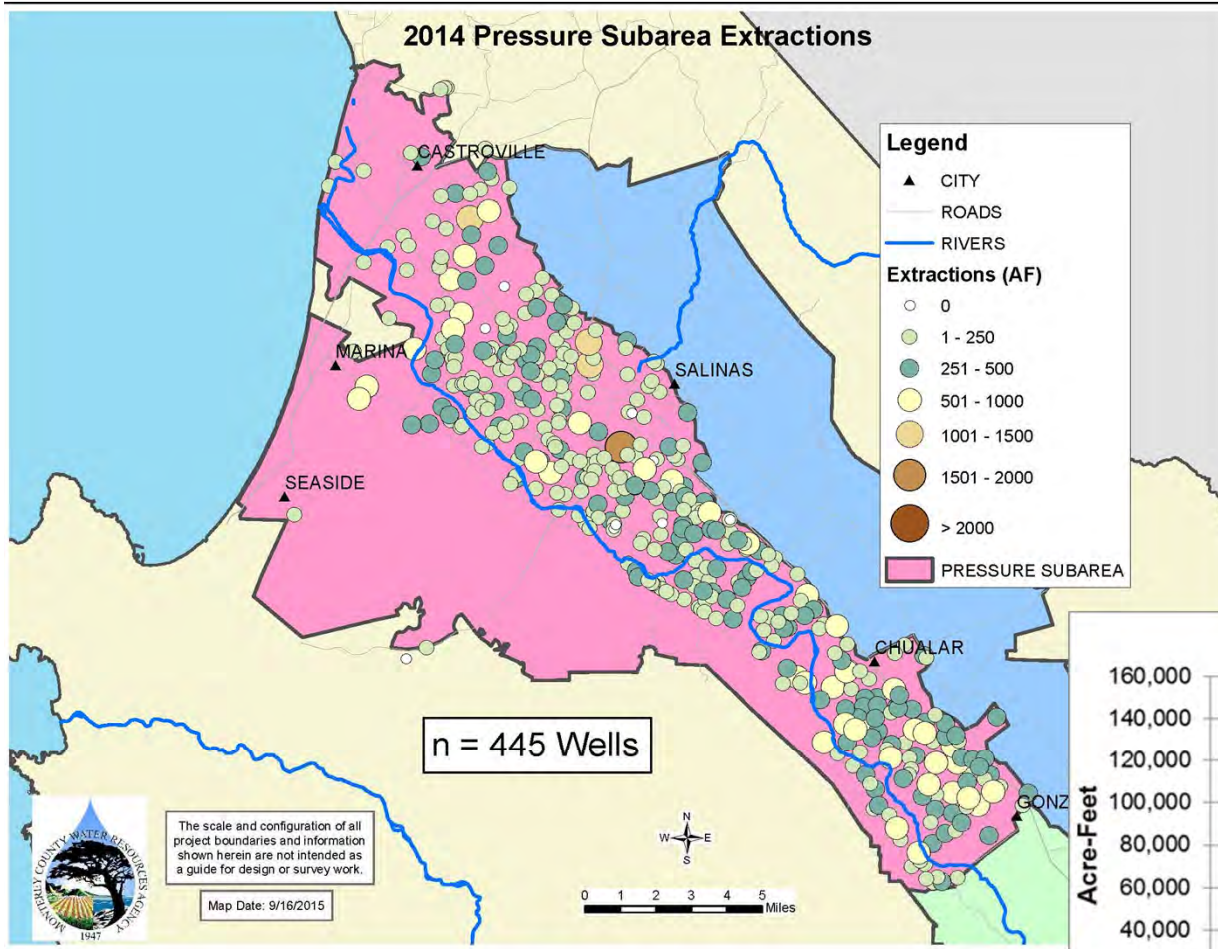
2014 Extractions by Subarea



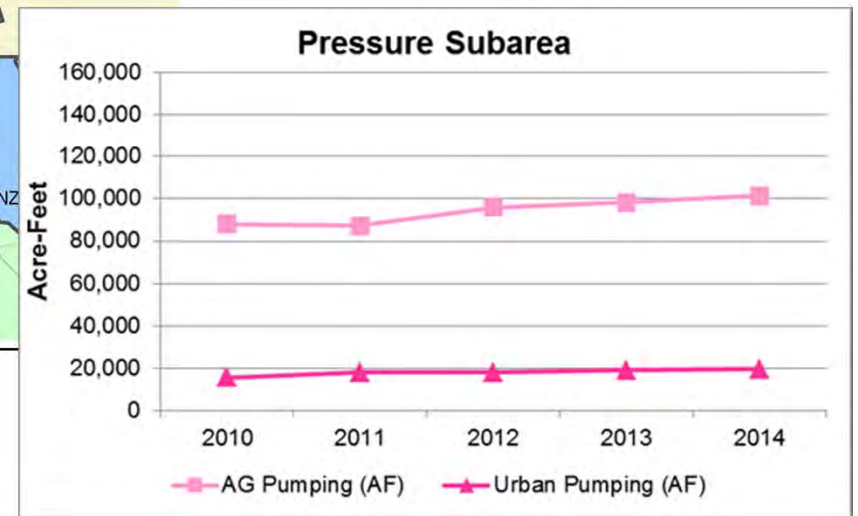
2014 Total Extractions



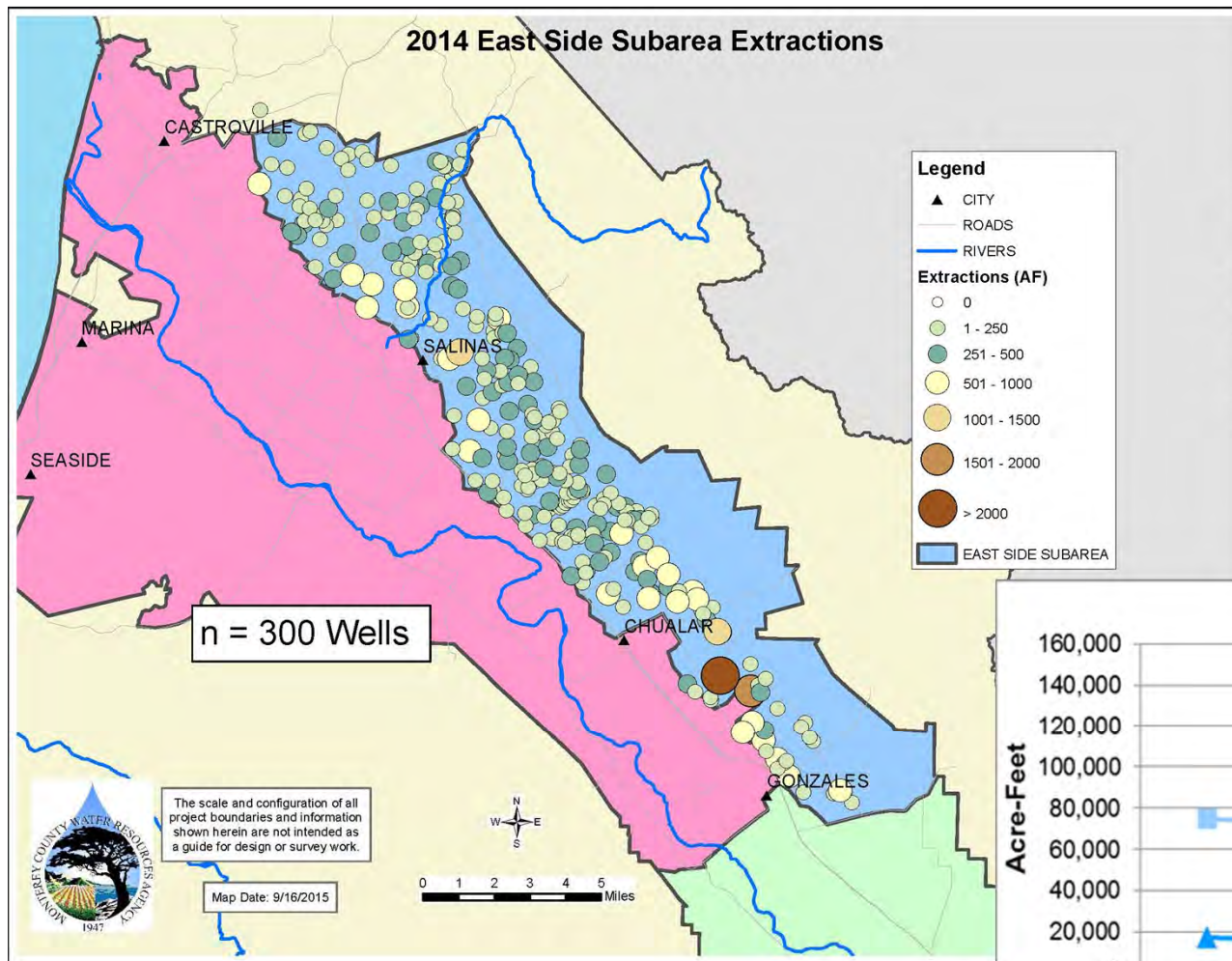
Total Extractions - Pressure



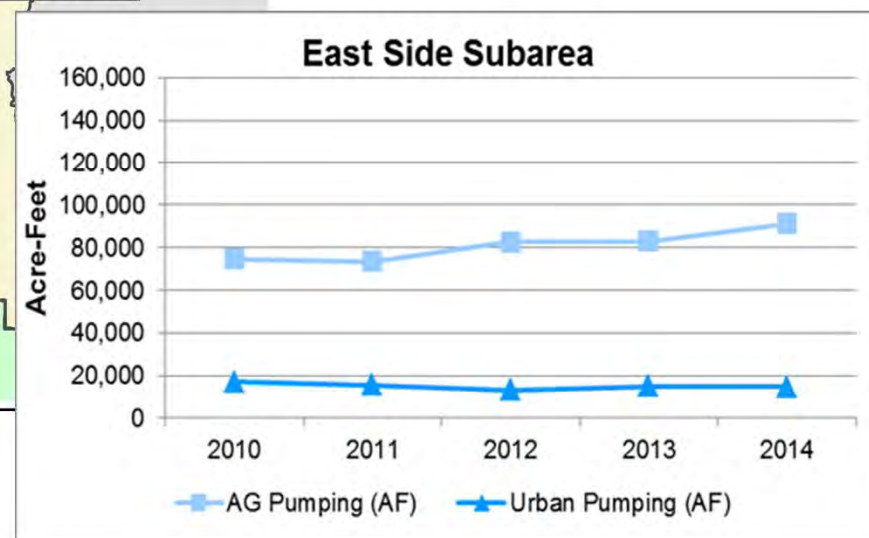
Year	Total Pumping (AF)	AG Pumping (AF)	Urban Pumping (AF)
2010	103,543	87,880	15,663
2011	105,172	87,290	17,882
2012	113,898	95,814	18,084
2013	117,242	98,141	19,101
2014	120,890	101,465	19,425



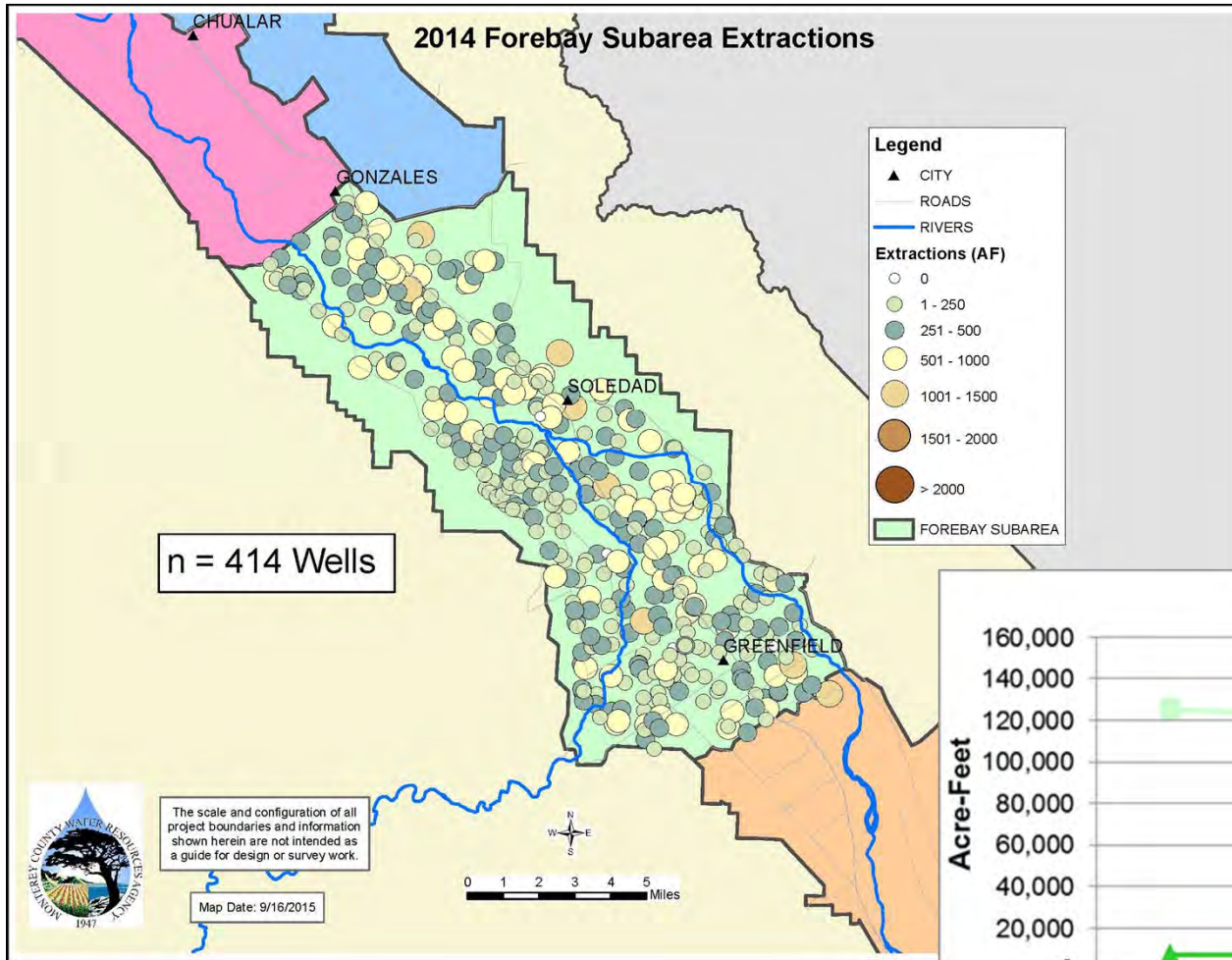
Total Extractions – East Side



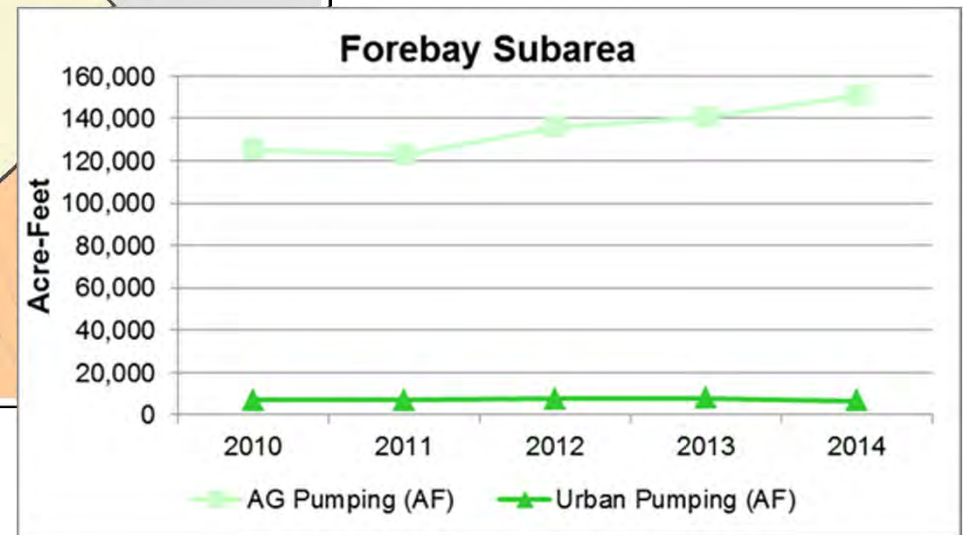
Year	Total Pumping (AF)	AG Pumping (AF)	Urban Pumping (AF)
2010	91,300	74,512	16,788
2011	89,052	73,495	15,557
2012	95,543	82,451	13,092
2013	97,622	82,895	14,727
2014	105,644	91,160	14,484



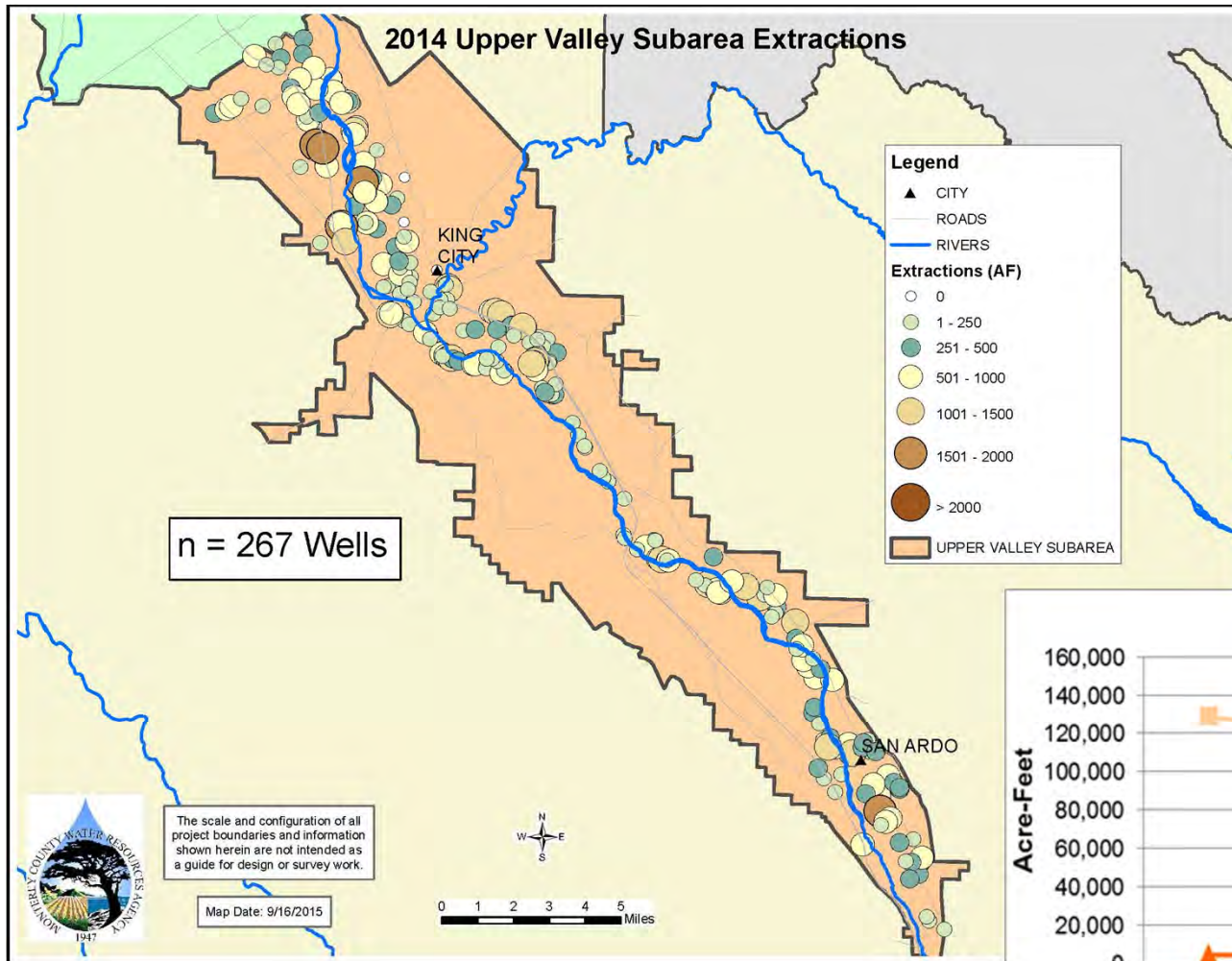
Total Extractions - Forebay



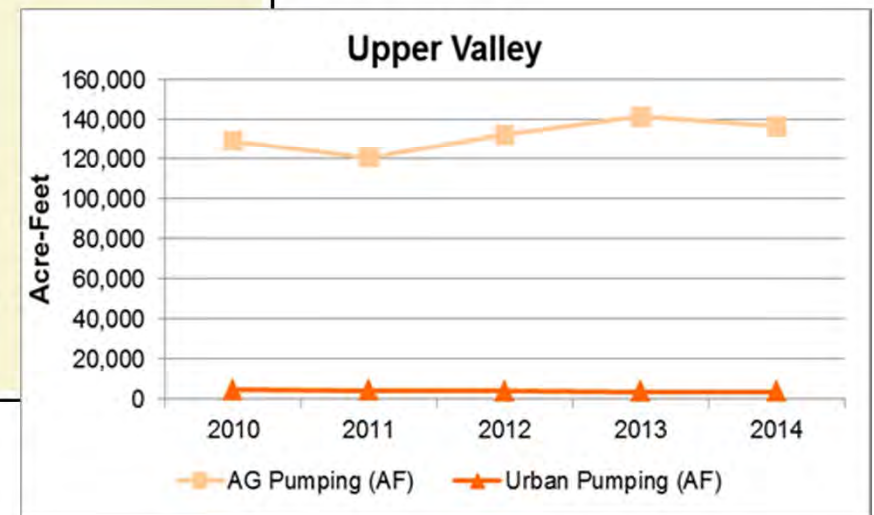
Year	Total Pumping (AF)	AG Pumping (AF)	Urban Pumping (AF)
2010	132,147	125,145	7,002
2011	129,737	122,903	6,834
2012	143,459	135,971	7,488
2013	148,467	140,574	7,893
2014	157,635	150,890	6,745



Total Extractions – Upper Valley



Year	Total Pumping (AF)	AG Pumping (AF)	Urban Pumping (AF)
2010	133,451	128,883	4,568
2011	124,623	120,422	4,201
2012	136,340	132,383	3,957
2013	144,874	141,263	3,611
2014	140,318	136,645	3,673





2015 Conservation Plan Reporting

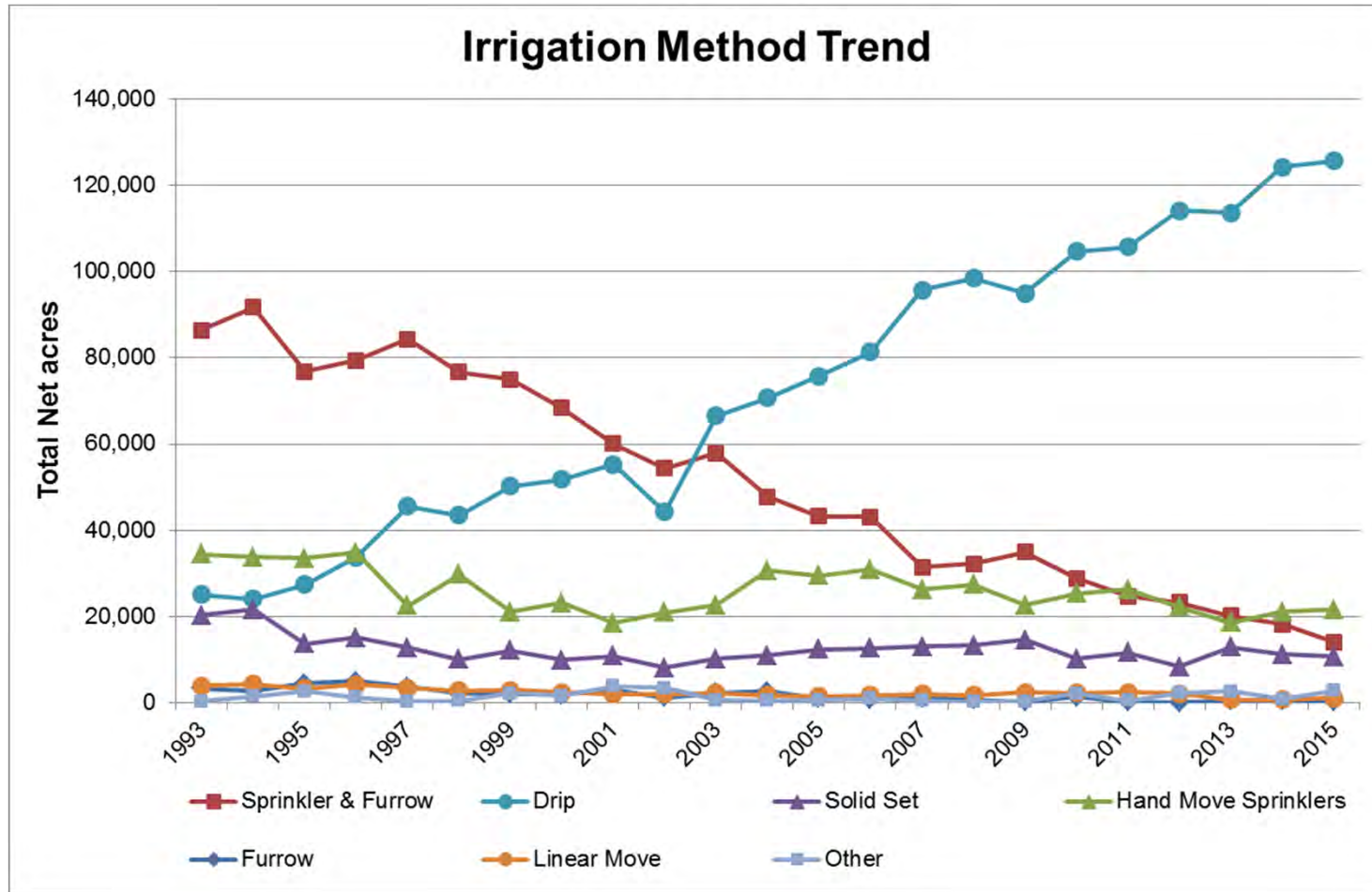
- Agricultural
 - 96% of 190 companies

- Urban
 - 100% of 39 purveyors with 15 or more connections

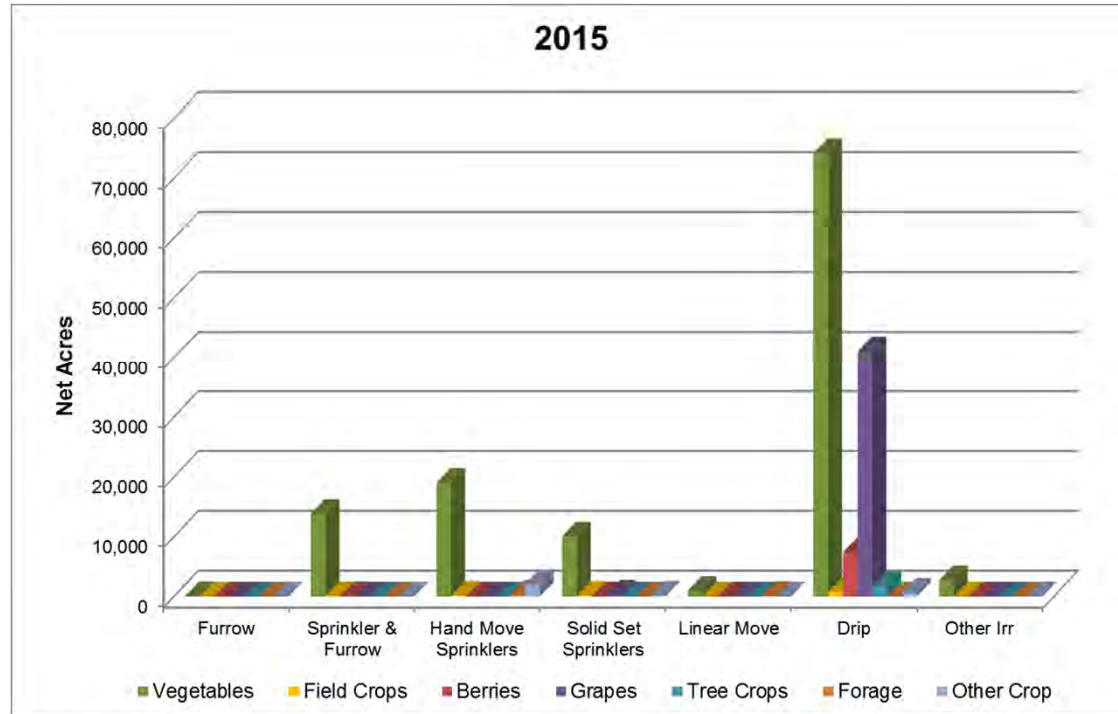




Irrigation Method Trend (1993-2015)



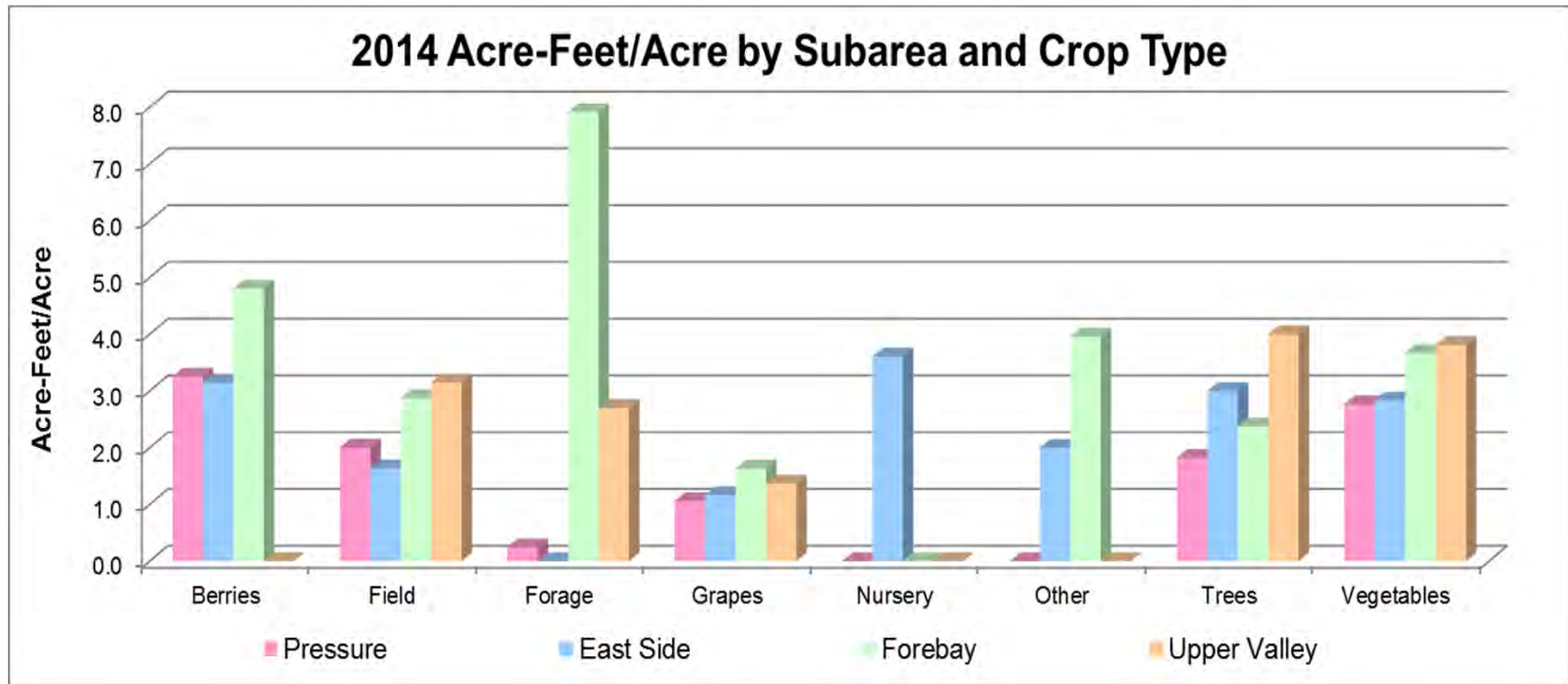
Net Acres of Irrigation Methods by Crop Type



2015	Furrow	Sprinkler & Furrow	Hand Move Sprinklers	Solid Set Sprinklers	Linear Move	Drip	Other Irr	Total
Vegetables	80	13,826	18,998	10,020	949	74,108	2,724	120,705
Field Crops	0	72	137	140	0	771	0	1,120
Berries	0	84	0	0	0	7,369	0	7,453
Grapes	0	0	0	346	0	41,091	0	41,437
Tree Crops	0	0	0	0	0	1,726	0	1,726
Forage	7	0	301	3	126	0	4	441
Other Crop	0	0	2,071	146	0	643	25	2,885
Unirrigated								3,754
Total	87	13,982	21,507	10,655	1,075	125,708	2,753	179,521



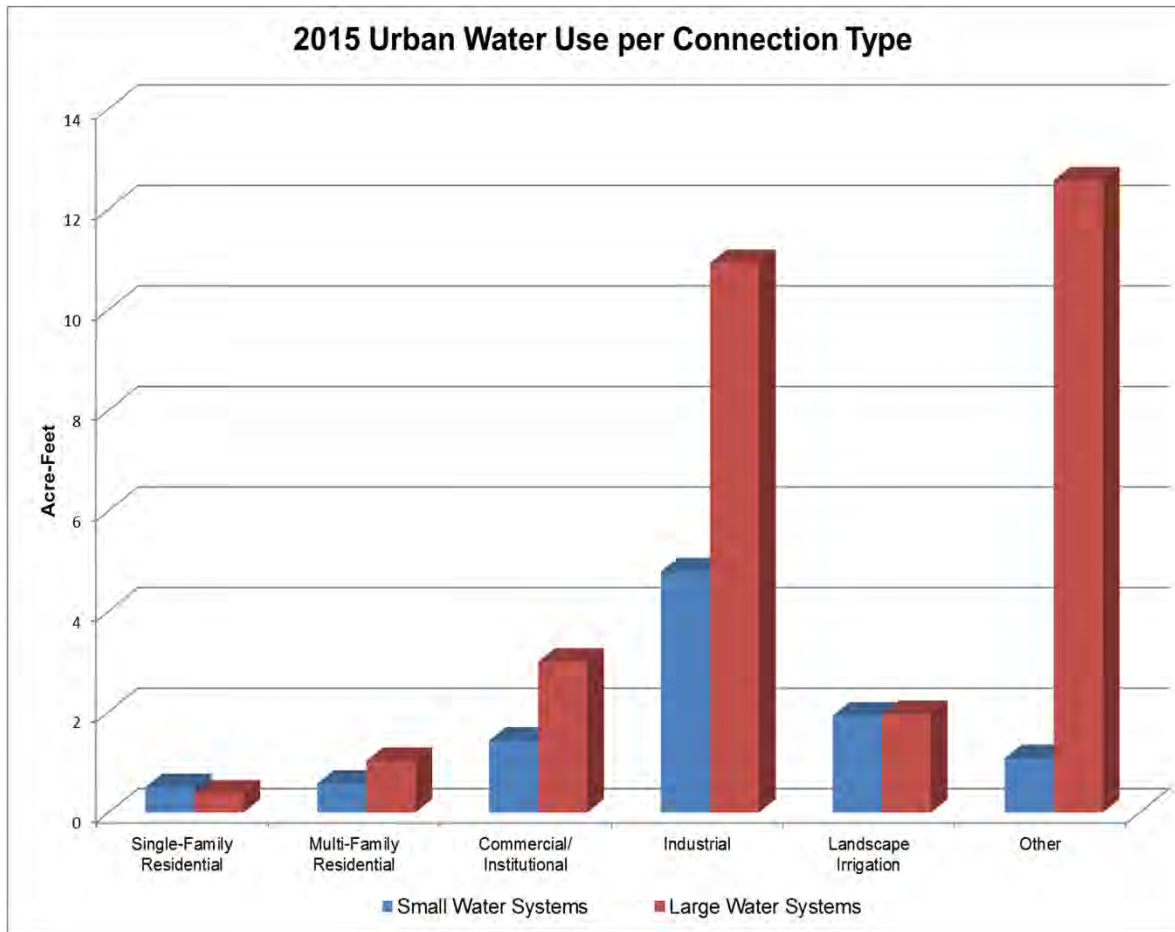
Acre-Feet/Acre Use by Subarea



2015	Berries (AF/Acre)	Field (AF/Acre)	Forage (AF/Acre)	Grapes (AF/Acre)	Nursery (AF/Acre)	Other (AF/Acre)	Trees (AF/Acre)	Vegetables (AF/Acre)
Pressure	3.3	2.0	0.2	1.1	-	-	1.8	2.8
East Side	3.1	1.6	-	1.2	3.6	2.0	3.0	2.8
Forebay	4.8	2.9	7.9	1.6	-	4.0	2.4	3.7
Upper Valley	-	3.1	2.7	1.4	-	-	4.0	3.8



Urban Water Use



Connection Class For Small Water Systems	Water Use per Connection (AF)
Single-Family Residential	0.504
Multi-Family Residential	0.573
Commercial/Institutional	1.429
Industrial	4.795
Landscape Irrigation	1.927
Other	1.077

Connection Class For Large Water Systems	Water Use per Connection (AF)
Single-Family Residential	0.372
Multi-Family Residential	1.025
Commercial/Institutional	2.997
Industrial	10.928
Landscape Irrigation	1.956
Other	12.574





TODAY'S ACTION

Receive the
2014 Groundwater Extraction Summary Report





TODAY'S ACTION

Consider Approving the *Monterey County Floodplain Management Plan 2014 Update*; and Recommending Adoption to the Monterey County Board of Supervisors



Prior BOD/BOS Action

- BOD/BOS adopted the Monterey County Floodplain Management Plan (FMP)
 - 2002 (version 1)
 - 2008 (version 2)

- Final FMP 2014 Update (version 3) presented to BOD in August 2015
 - 2010 Mo Co GPU consistency
 - Mo Co Planning Commission
 - Recommendations



Discussion (cont.)

- In Sept 2015, MCWRA staff met twice with RMA
 - Consistent with the 2010 GP (table added)
 - Mo Co Planning Commission considers matters of Zoning Code (Title 19, 20, & 21)
 - No proposed changes to Zoning Code
 - Limited benefit
 - Chapter outlining recommendations



Discussion (cont.)

- 30 day Public Review / Comment
- Two letters
 - Refinement Group
 - Contention 1: In conflict with General Plan policies
 - Contention 2: Expands authority
 - Contention 3: Duplicates effort
 - Mo Co RMA Environmental Services Dept
 - Suggestions incorporated



Discussion (cont.)

- In 1991, Mo Co joined in National Flood Insurance Program (NFIP) Community Rating System (CRS)



Discussion (cont.)

- Benefits of participating in the NFIP/CRS
 - Nationally recognized program aimed at reducing flood losses
 - Disaster resilient community
 - Class 7 rating gives \$2,000,000 in flood insurance savings during 5 year cycle



Discussion (cont.)

- 1995 & 1998 flood losses
 - Mo Co 107 Repetitive Loss (RL) Properties
 - 2 or more flood insurance claims in 10-year period
- FEMA designated Mo Co CRS Class C community
 - FMP required
 - flood mitigation options
 - FMP Update every 5 years



FLOODPLAIN MANAGEMENT PLAN

Monterey County, CA

2014 Update



Prepared by:
Monterey County Water Resources Agency



Salinas River, March 1995



Pajaro, March 1995



Castroville, March 1995



Carmel River, February 1998



Discussion (cont.)

- What efforts does Monterey County engage in to stay flood disaster resilient?

- FMP 2014 Update describes in detail FEMA recognized flood management efforts
 - Preventive (Chapter 6)
 - Property Protection (Chapter 7)
 - Natural Resources Protection (Chapter 8)
 - Emergency Services (Chapter 9)
 - Structural Project (Chapter 10)
 - Public Information (Chapter 11)



Discussion (cont.)

- RL Areas (Chapter 12)
 - 109 RL Properties
 - 13 RL Areas
- Hazard Mitigation Goals and Action Plan (Chapter 13)
 - Recommendations:
 - result in a reduction in flood risk
 - promote floodplain management strategies
 - improve the NFIP/CRS rating



Discussion (cont.)

- 2010 Mo Co General Plan (Policy S-2.4) “Mo Co shall strive to improve its NFIP CRS classification”

- CRS Class 7 rating
 - 150 points away from a Class 6
 - 650 points away from a Class 5
 - Action # 4 recommendation 2-foot vs 1-foot “free-board elevation” *+125 additional points...*
 - Action # 5 recommendation prohibit fill *+280 points...*
 - Or, Action # 10 recommendation provide more flood protection info via the MCWRA website *+60 points*



Discussion (cont.)

- Action Plan & Recommendations
 - Maintaining and improving the Mo Co CRS rating
 - Modify areas of the floodplain management program for more points

- Class 7 rating is a favorable rating
 - Average rating in CA is Class 7
 - 24 out of 58 counties in CA (40%)
 - Santa Cruz County 8, Kern County 7, Sacramento County 3



Discussion (cont.)

- Next Steps
 - November 2015
 - Bring to County BOS for final adoption
 - Carl Holm, Director of the RMA offered to present with WRA



Financial Impact

- The Agency has funded this effort through a grant
- In September 2011, Monterey County was awarded \$90,000 by FEMA to update the 2008 FMP
- Grant expired in September 2015
- FEMA ISO/CRS Auditor needs BOS resolution



TODAY'S ACTION

Approve the *Monterey County Floodplain Management Plan 2014 Update*; and Recommend Adoption to the Monterey County Board of Supervisors





TODAY'S ACTION

Consider Approving and Recommending
that the Monterey County Water
Resources Agency Board of Supervisors
Approve the Monterey County Water
Resources Agency DRAFT
“Comprehensive Salinas Valley Basin
Sustainability Program 2015”



Prior BOD/BOS Action

- Previous BOD and BOS meetings have covered the following topics:
 - Interlake Tunnel
 - Water Rights Permit 11043
 - Salinas River Stream Maintenance / River Management
 - Source Water Agreement
- These projects provide a comprehensive path forward towards achieving Salinas Valley groundwater basin sustainability



Prior BOD/BOS Action (cont.)

- This document replaces the previously-presented “Comprehensive Salinas Valley Basin Sustainability Approach” document that was presented to both the Agency BOD and Agency BOS at a joint meeting on March 24, 2015.
- This item has been to the August, September and October BMP Committee meetings





Where we are...

- Agency (and predecessor District) was established to develop solution to SWI
- Solution required three steps:
 - Develop a new water source
 - Move that new water north
 - Stop pumping at the Coast
- Agency and SV have built projects to combat SWI, and the SWI rate has slowed



Where we are... (cont.)

- Projects built:
 - Nacimiento and San Antonio Reservoirs (1957 / 1967)
 - Monterey County Water Recycling Projects (CSIP / SVRP) (1998)
 - Salinas Valley Water Project (SVWP) (2010)

- These projects comprise the “Foundational Project Suite” for the Salinas Valley



New Paradigm - SGMA

- SGMA brief summary
 - Complex legislation
 - Establishes GSA's for basins
 - GSA's need to develop GSP's
- Current state-wide drought has increased the attention on sustainability of groundwater sources
- Legislation generally requires the adoption of a plan that will provide for sustainable management of a basin no later than 25 – 27 years, and over a 50-year time frame



New Paradigm – SGMA (cont.)

- Sustainable Groundwater Management is the management and use of groundwater in a manner that can be maintained over a 50-year period without causing undesirable results.

- Undesirable results include:
 - Chronic lowering of groundwater levels
 - Significant and unreasonable:
 - Reduction in groundwater storage
 - Seawater Intrusion
 - Degraded water quality
 - Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of surface water.



Next Steps

- Moving towards sustainability will require:
 - Establishment of a GSA (facilitated process occurring)
 - Development of a GSP
 - Implementation and evaluation of GSP over time
- Agency is proposing a Comprehensive Salinas Valley Basin Sustainability Program
 - Program revolves around the development of additional water supply projects versus planning for extreme reductions in extractions
 - Recent analyses indicate basin needs additional water between 24,000 ac-ft/yr and 58,000 ac-ft/yr



Monterey County Water Resources Agency
893 Blanco Circle
Salinas, CA 93901

DRAFT Comprehensive Salinas Valley Basin Sustainability Program

INTRODUCTION

The Monterey County Water Resources Agency (Agency) Valley Basin Sustainability Program" in response to need sustainable fashion, once a Groundwater Sustainability Program on three main points:

- Sustainability will be achieved
- Sustainability is not just about water resources
- Implement Physical Solutions versus Imposition
- Stay Committed to Completion

1.1 Objective

The objective of this Comprehensive Salinas Valley Basin Sustainability Program is to achieve sustainability through physical solutions that projects that together will: 1) halt seawater intrusion and 2) utilize local water resources more effectively

1.2 Background

The Salinas Valley in Monterey County is critical to the success of the agricultural industry. Revenue from the agricultural industry is critical to the success of agriculture. Seawater intrusion (SWI) was identified as a major problem in the Salinas Valley in 1946. That study, "Bulletin of Public Works (predecessor to Department of Water Resources) Bulletin 52," identified a three-prong approach to address SWI:

- Develop a new water source;
- Move new water to the coast;
- Stop pumping at the coast.

The Agency and its predecessor have been using the strategy of physical solutions to address SWI. To date, the following physical solutions have been implemented:

- New water source – National Center for Water Reclamation Project
- Move water to coast – National Center for Water Reclamation Project
- Stop pumping at the coast – National Center for Water Reclamation Project

The National Center for Water Reclamation Project (NCWRP) and San Antonio Valley Reclamation Project (SAVRP) were completed and operating in 1998; and these projects, along with the National Center for Water Reclamation Project (NCWRP) and Pressure 400 Project (Bulletin 52), has yet to be fully implemented.

Revised: 8/12/15



DRAFT
Comprehensive Salinas Valley Basin Sustainability Program
2015

DRAFT Comprehensive Salinas Valley Basin Sustainability Program

Over the next 20 years and has multiple processes moving along phases in the overall SGMA process:

For critically overdrafted basins and other basins, the Agency will be no state intervention in that specific basin. If there is an overdraft in the Legislation, the State Water Resources Control Board will be required to take action.

For critically-overdrafted basins with no GSP, and basin in long-term overdraft, the Agency will be required to take action on depletions of interconnected streams.



Monterey County Water Resources Agency
893 Blanco Circle
Salinas, CA 93901

Board of Supervisors Meeting
Monterey County Water Resources Agency





Next Steps (cont.)

- DRAFT “Comprehensive Salinas Valley Groundwater Basin Sustainability Plan”
 - Series of Projects to build off “Foundational Project Suite”
 - Interlake Connection and Regional Water Conservation Project
 - Source Water Development and Water Recycling Project
 - Salinas River Stream Maintenance / River Management Program
 - Water Rights Permit #11043 Utilization

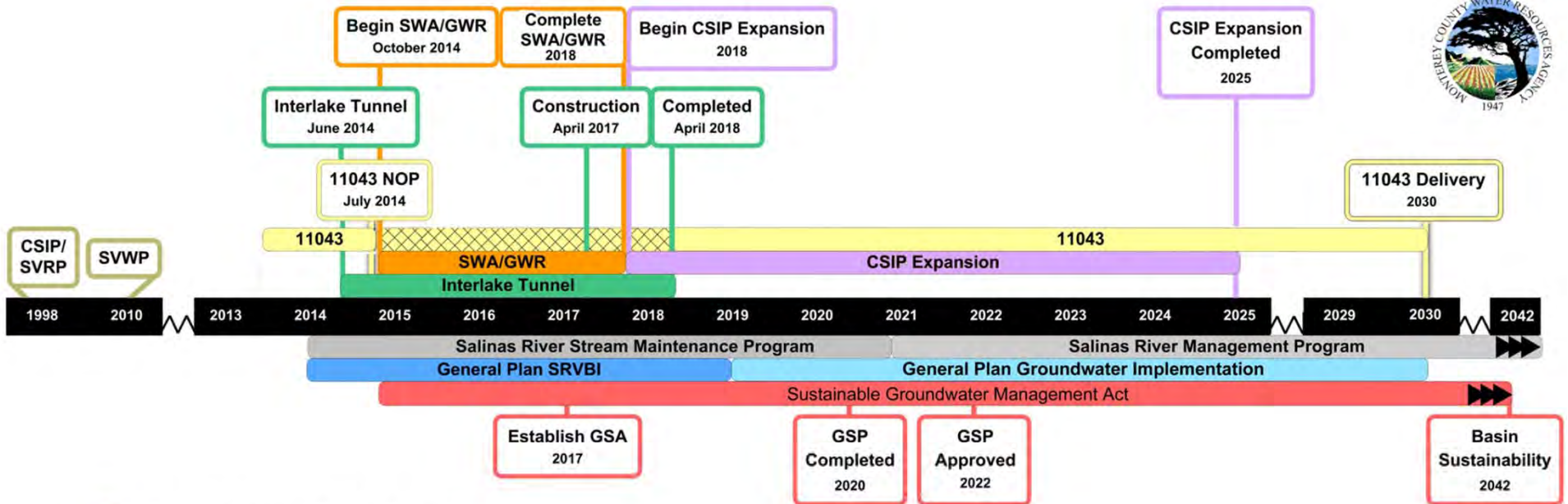


Next Steps (cont.)

- Sustainability Program will require
 - Public Outreach (facilitated process occurring)
 - Buy-in from regulators
 - Sustainable funding
 - Time to implement

- Sustainability Program will result in
 - “Sustainability Project Suite”
 - Salinas Valley Groundwater Basin Sustainability
 - Stopping of SWI
 - Water for Peninsula (Pure Water) and North County

Comprehensive Salinas Valley Basin Sustainability Program



(CSIP) Castroville Seawater Intrusion Project/
 (SVRP) Salinas Valley Reclamation Project
 (SVWP) Salinas Valley Water Project

(SWA/GWR) Source Water Agreement/Ground Water Replenishment

General Plan (SRVBI) Salinas River Valley Basin Investigation

General Plan Groundwater Implementation
 (address seawater intrusion and falling groundwater levels by 2030)





Summary

- Reviewed background information, including existing projects that form the “Foundational Project Suite”
- Brief summary of SGMA
- Presented DRAFT “Comprehensive Salinas Valley Basin Sustainability Program” that defines “Sustainability Project Suite”



TODAY'S ACTION

Approve and Recommend that the Monterey County Water Resources Agency Board of Supervisors Approve the Monterey County Water Resources Agency DRAFT “Comprehensive Salinas Valley Basin Sustainability Program 2015”

