

# Monterey Regional Plenary Oversight Group

## *Regional Urban Water Supply Evaluation*

*September 26, 2007*



*Presenter:  
Lyndel Melton*



*Innovative Solutions for Water and the Environment*

# *Today's meeting*

- Review water needs
  - Regional water supply gaps
  - CalWater / Salinas Update
- Review regional approach
- Present recommended program
- Discuss next steps

# Water Supply Gaps within Northern Monterey County



## Identified Water Gap (AFY)

<u>Area</u>	<u>Regulated</u>	<u>Future</u>
MPWMD	12,500	17,000
MCWD	0	2,400
Castroville	0	1,000
Moss Landing	0	70
North County	0	4,900
Pajaro Sunny Mesa	0	3,000
Salinas	0	0

## Basis for Planning

Replacement	12,500 afy
Regional	28,400 afy

# *CalWater Conclusions for City of Salinas*

- Sufficient supply using Salinas Basin groundwater
- No identified supply gap

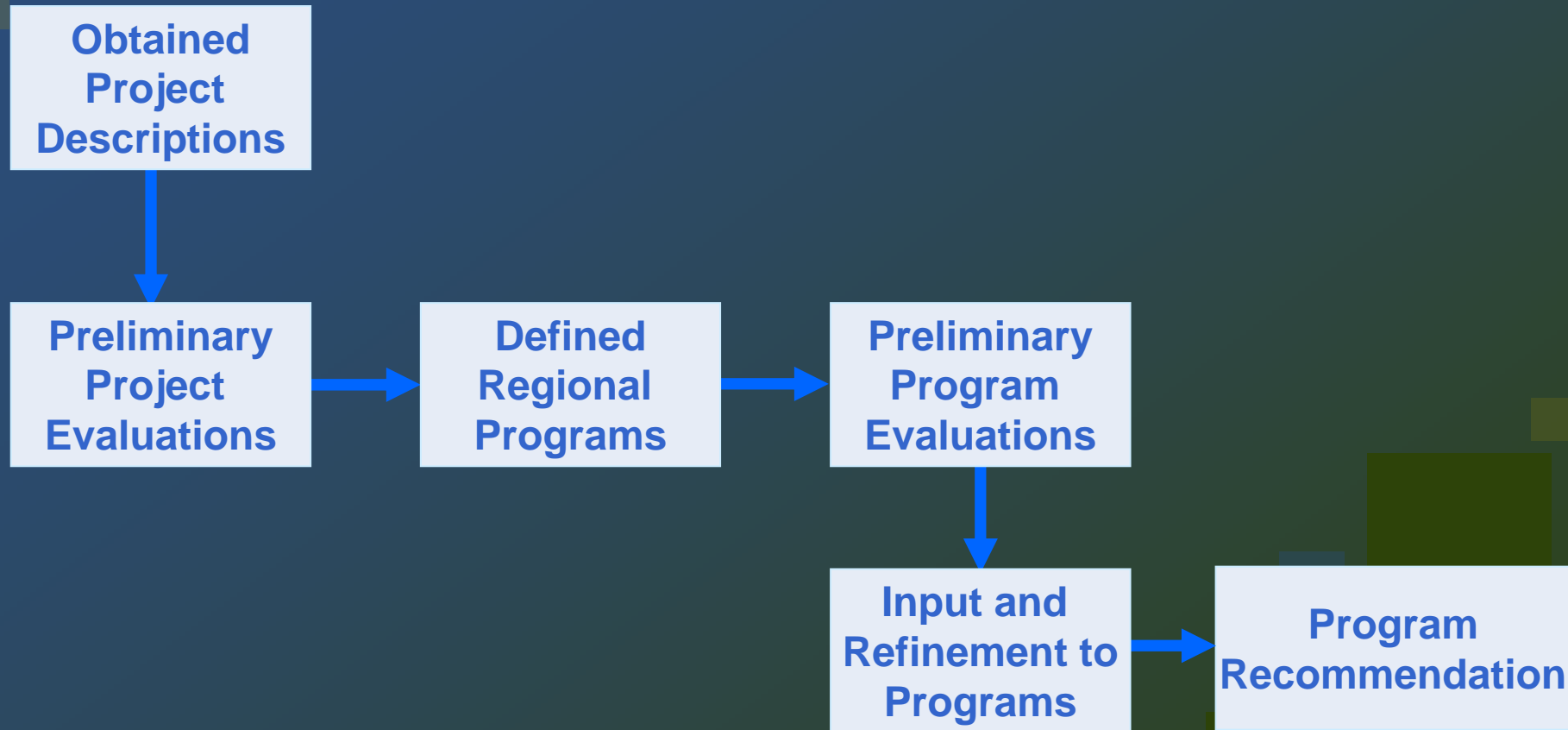
# *Phased Programmatic Approach*

- Supply scenarios
  - Additional supply necessary to meet **Regulatory** requirements (95-10 and Seaside Adjudication)
    - **12,500 AF**
  - Additional **Regional** supply required
    - Regulatory supply + future demand (includes demand both in AND outside of the CAW service area)
    - **28,400 AF**

# *Objectives of Programmatic Approach to Regional Water Supply*

- Most advantageous for rate payers
- Meet regulatory and demand schedules
- Maximize reliability
- Maximize sustainability
- Minimize environmental impacts
- Maximize flexibility for moving forward
  - Provide multiple pathways to successful outcome
  - Continued momentum

# *Regional Water Supply Program Developed Based on Feedback and Input*



# Programmatic Evaluation (Updated)

## REPLACEMENT SUPPLY: 12,500 AFY

Program	Criteria Evaluation								
	Schedule	Reliability	Permitting	Public Acceptance	Environmental	Cost	Regulatory Requirements		Sustainability
							95-10	Seaside Adjudication	
A	○	●	◐	○	◐	\$\$\$	●	●	●
B	○	◐	◐	○	◐	\$ - \$\$	◐	●	●
C	◐	●	◐	◐	◐	\$\$	●	●	◐
D	◐	●	○	◐	○	\$\$\$	●	●	○
D'	◐	●	◐	◐	◐	\$\$	●	●	○

# Programmatic Evaluation (Updated)

## REPLACEMENT SUPPLY: 12,500 AFY

Program	Water Supply (AFY)							
	Recycled Water		Conjunctive Management			Conservation	Stormwater Reuse	Desalination
	Recycled Water (irrigation)	Groundwater Replenishment	Seaside ASR / In-lieu recharge	Salinas River	Salinas Basin Groundwater			
<b>A</b>	300	2,500	920	3,930	0	150	300	4,400
<b>B</b>	300	0	920	10,530	0	150	300	300
<b>C</b>	300	2,500	920	0	0	150	300	8,330
<b>D</b>	300	0	920	0	0	150	300	10,830
<b>D'</b>	300	0	920	0	0	150	300	10,830

# Programmatic Evaluation (Updated)

## REGIONAL SUPPLY: 28,400 AFY

Program	Criteria Evaluation								
	Schedule	Reliability	Permitting	Public Acceptance	Environmental	Cost	Regulatory Requirements		Sustainability
							95-10	Seaside Adjudication	
A'	●	●	●	●	●	\$\$\$	●	●	●
A''	●	●	●	●	●	\$\$	●	●	●
A'''	●	●	●	●	●	\$\$	●	●	●
B'	●	○	●	○	●	\$\$	●	●	●
C'	●	●	○	○	○	\$\$\$	●	●	○
D''	●	●	○	○	○	\$\$\$\$	●	●	○

28,400 AFY includes 12,500AFY Replacement supply PLUS future and regional demand.

# Programmatic Evaluation (Updated)

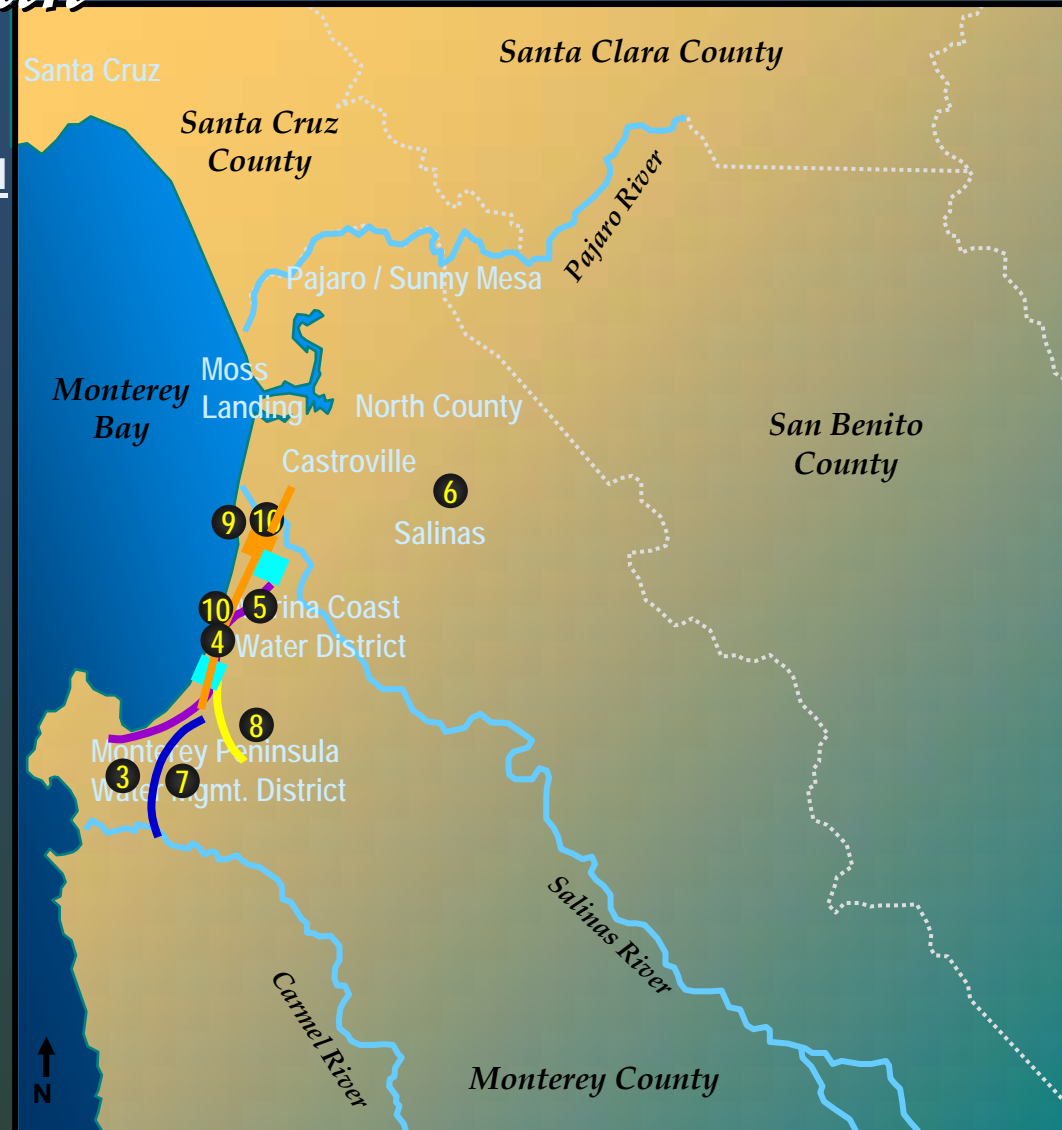
## REGIONAL SUPPLY: 28,400 AFY

Program	Water Supply (AFY)							
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	Recycled Water (irrigation)	Groundwater Replenishment	Seaside ASR / In-lieu recharge	Salinas River	Salinas Basin Groundwater			
A'	3,000	2,500	1,400	3,930	4,300	300	500	12,470
A''	3,000	2,500	1,400	7,800	4,300	300	500	8,600
A'''	3,000	2500	1,400	11,020	0	300	500	9,680
B'	3,000	2,500	1,400	16,100	4,300	300	500	300
C'	1,700	2,500	1,400	0	4,300	300	500	17,700
D''	1,700	0	1,400	0	0	300	500	24,500

28,400 AFY includes 12,500AFY Replacement supply PLUS future and regional demand.

# Recommended Program with Incremental Implementation Plan

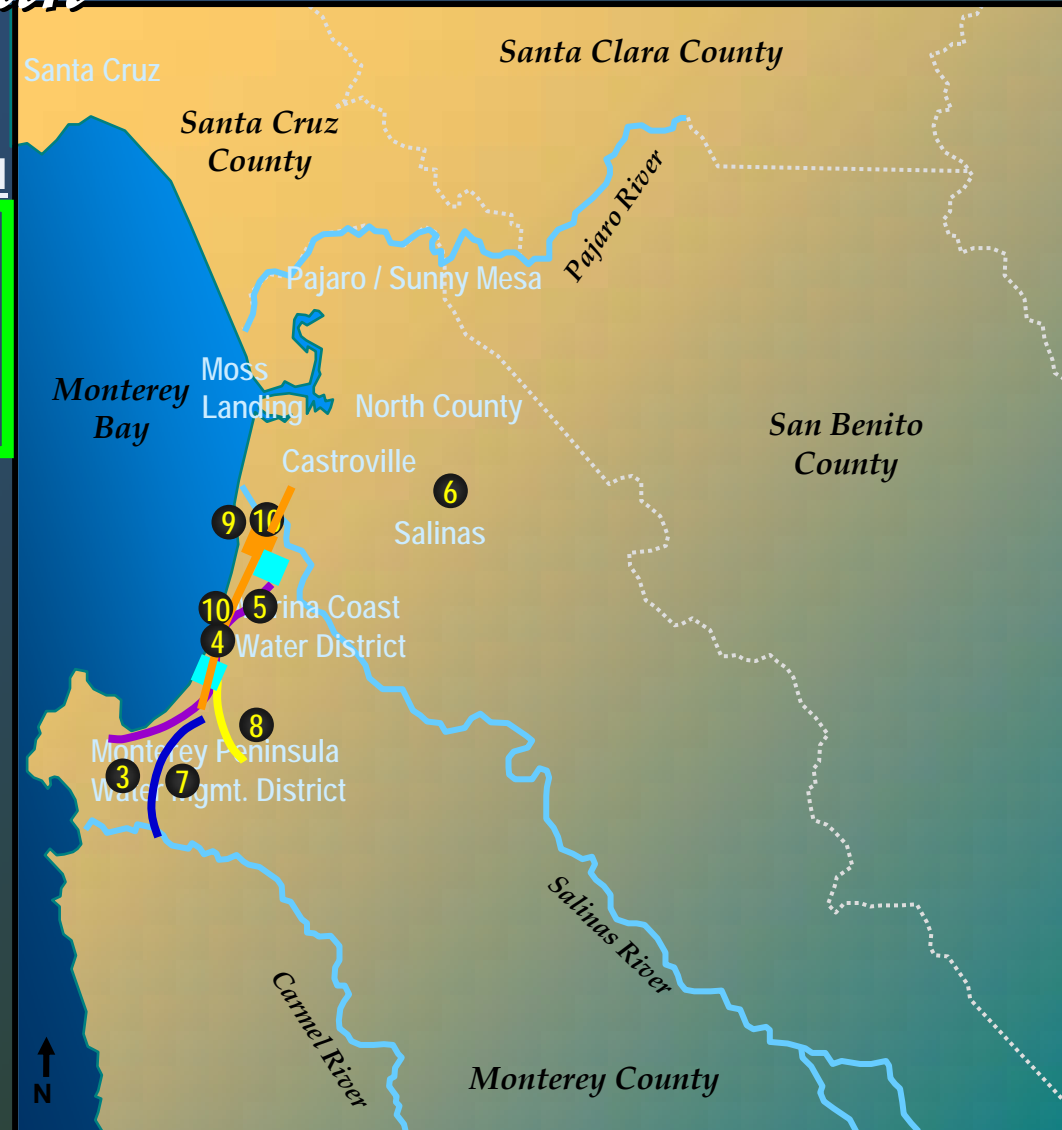
	<u>Component</u>	<u>Regulatory</u>	<u>Regional</u>
1.	Conservation	>150	>300
2.	Stormwater	>300	>500
3.	Seaside ASR	920	920
4.	Sand City Desal	300	300
5.	Recycled Water	300	3,000
6.	Salinas Basin GW	0	4,300
7.	Seaside ASR/ ILR	0	480
8.	Seaside Replenish	2,500	2,500
9.	Salinas River	0	7,800
10.	Regional Desal	8,030	8,300



# Recommended Program with Incremental Implementation Plan

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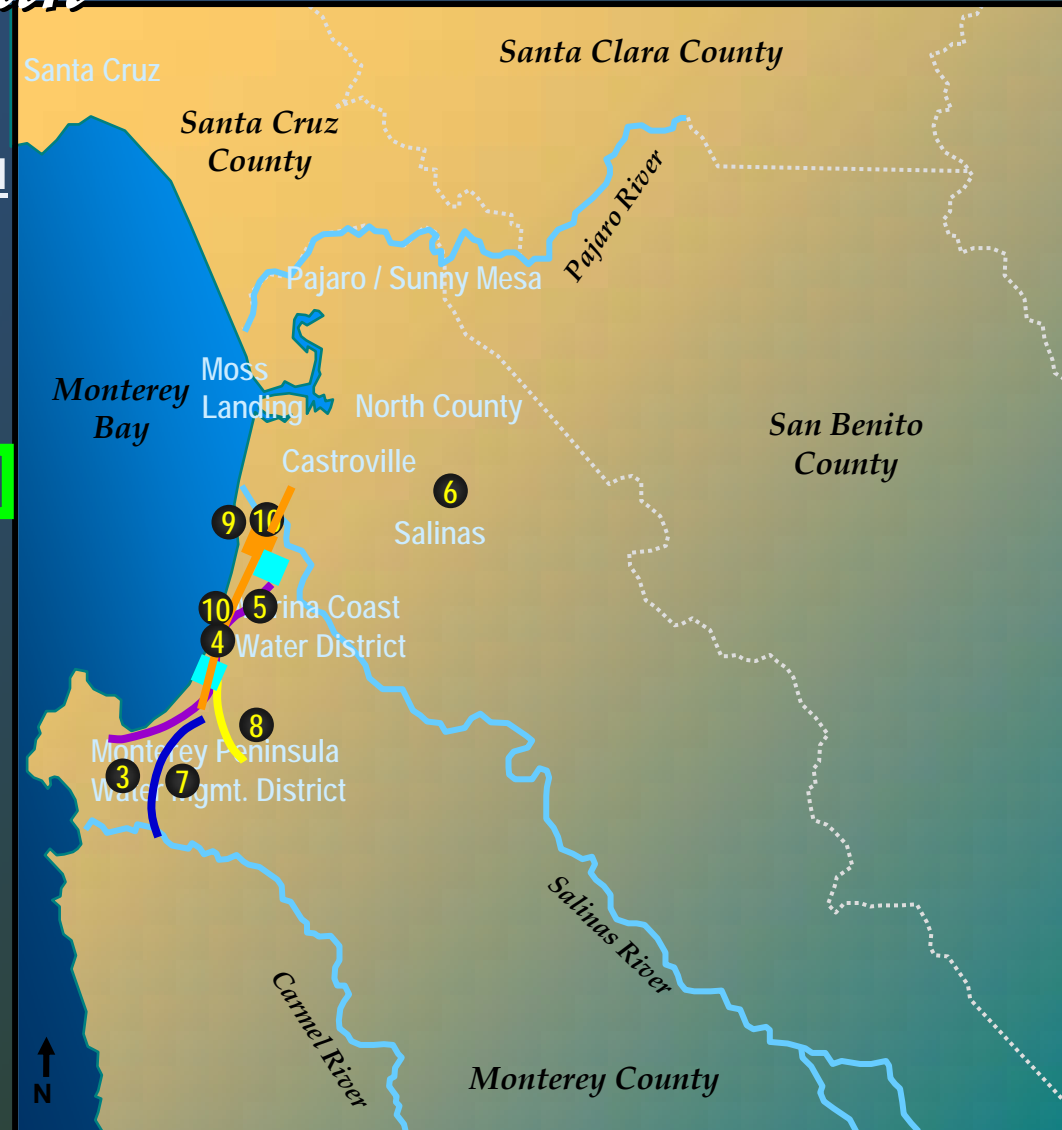
Immediate Implementation



# Recommended Program with Incremental Implementation Plan

	<u>Component</u>	<u>Regulatory</u>	<u>Regional</u>
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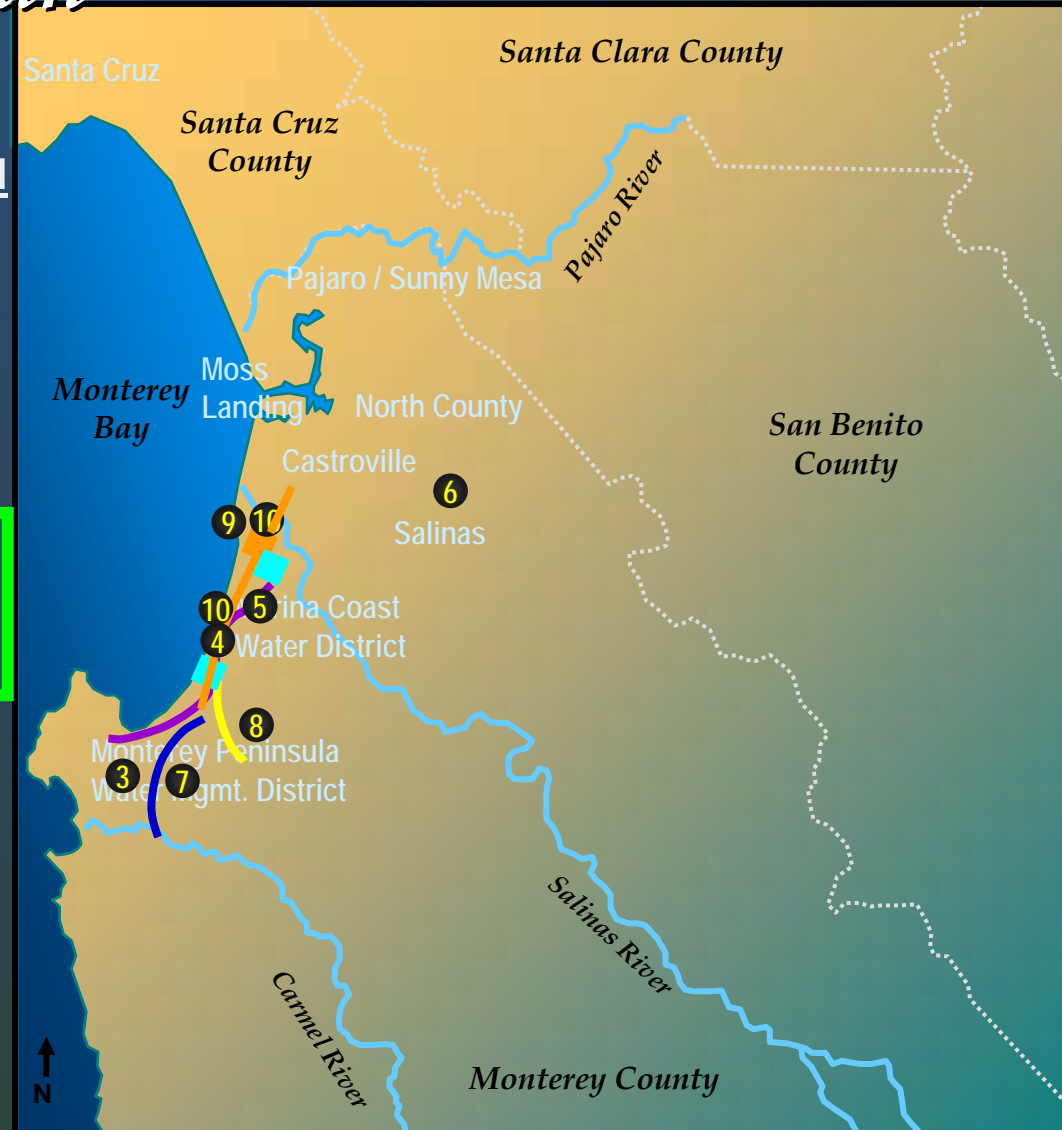
Complete  
Interagency  
Agreements



# Recommended Program with Incremental Implementation Plan

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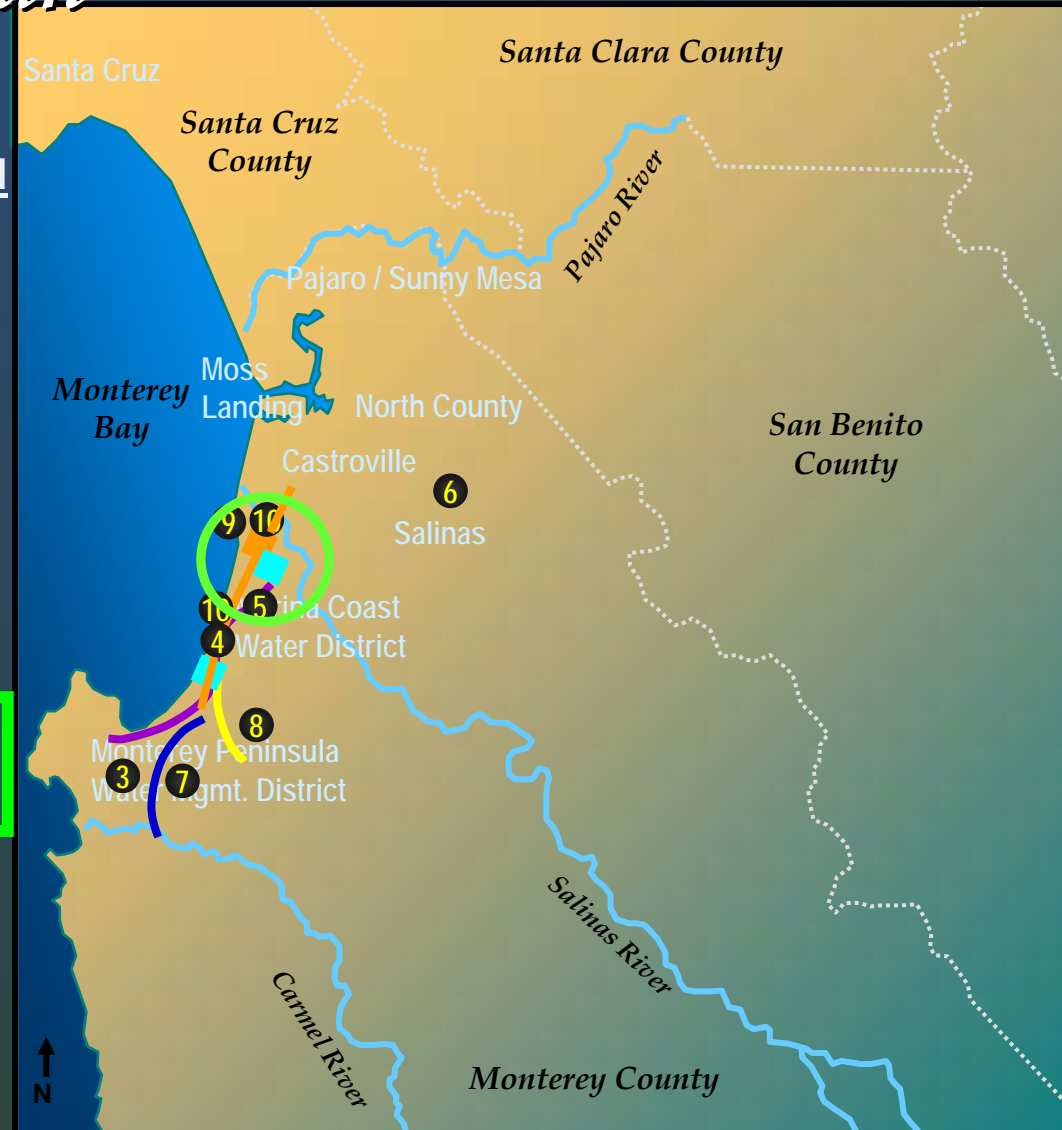
Continue  
Evaluation



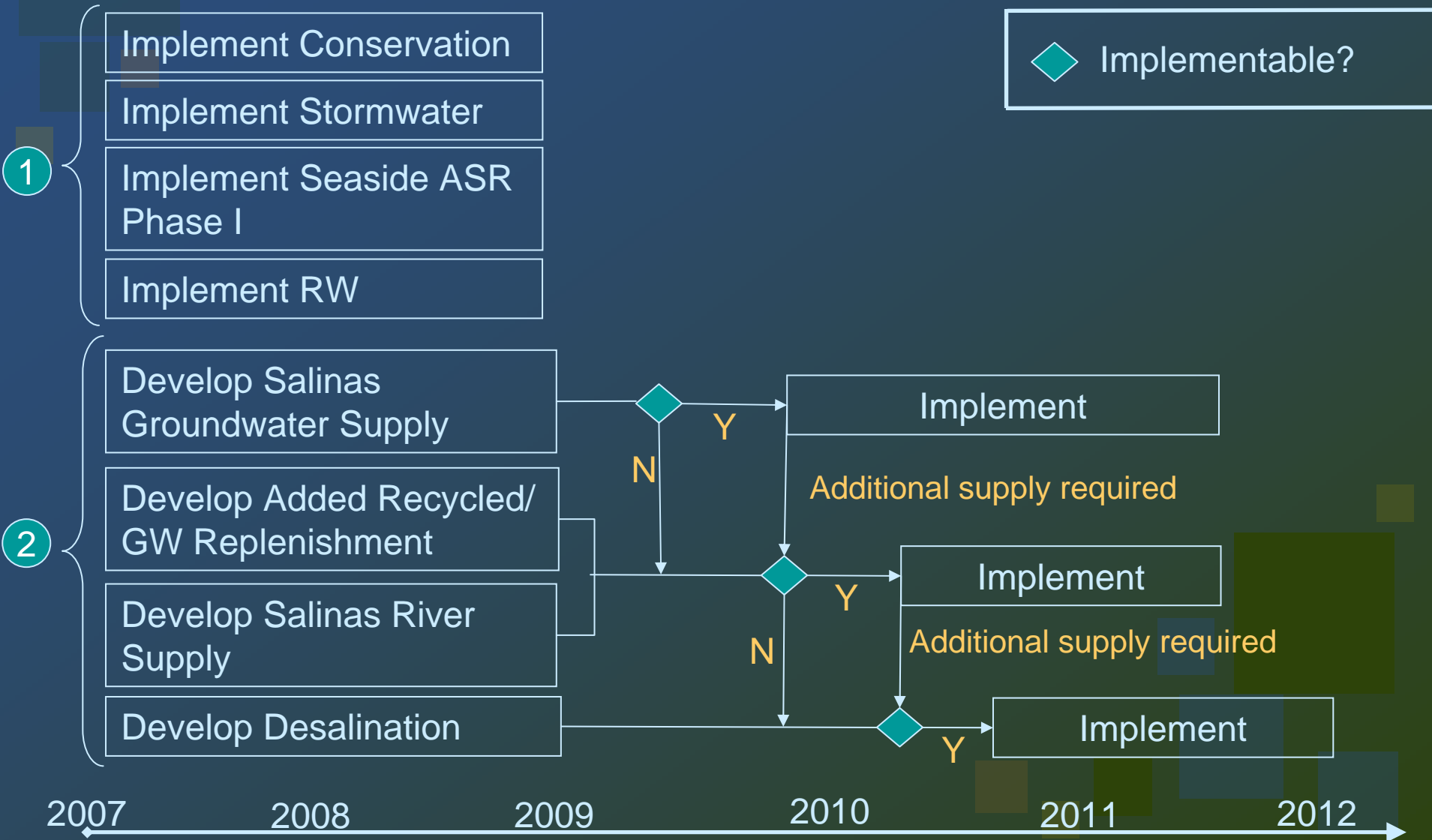
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Opportunity for Regional Potable Treatment Facility



# Implementation Decision Process



# *Next Steps for Regional Program Planning*

- Complete Phase I – Prepare Summary Memorandum
  - Approach
  - Component screening
  - Program evaluation
  - Recommended program
- Initiate Phase II
  - Submit for EIR analysis and IRWMP
  - Identify champions for project implementation and development
  - Develop regional support
  - Coordinate conservation and stormwater programs
  - Further evaluate Phase II components
  - Quantify project and program costs
  - Evaluate financing and implementation options

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# *Summary of Existing and Projected Recycled Water Availability and Uses*

- Existing Supply 23,600 AFY
- Future Supply (10 yr) 26,000 AFY (avg.)
  
- CSIP Deliveries 14,200 AFY
- Urban Irrigation 3,000 AFY
- Seaside Augmentation 2,500 AFY
- Remaining Supply 

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3,900 AFY (exist.)  
6,300 AFY (future)
  
- Potential Uses
  - Expanded CSIP
  - GW Augmentation
  - Expanded Urban Irrigation