

CALIFORNIA'S WATER FUTURE

i2i Report

(Based on Draft issued for Peer
Review on 1/23/14)

PROJECT TEAM

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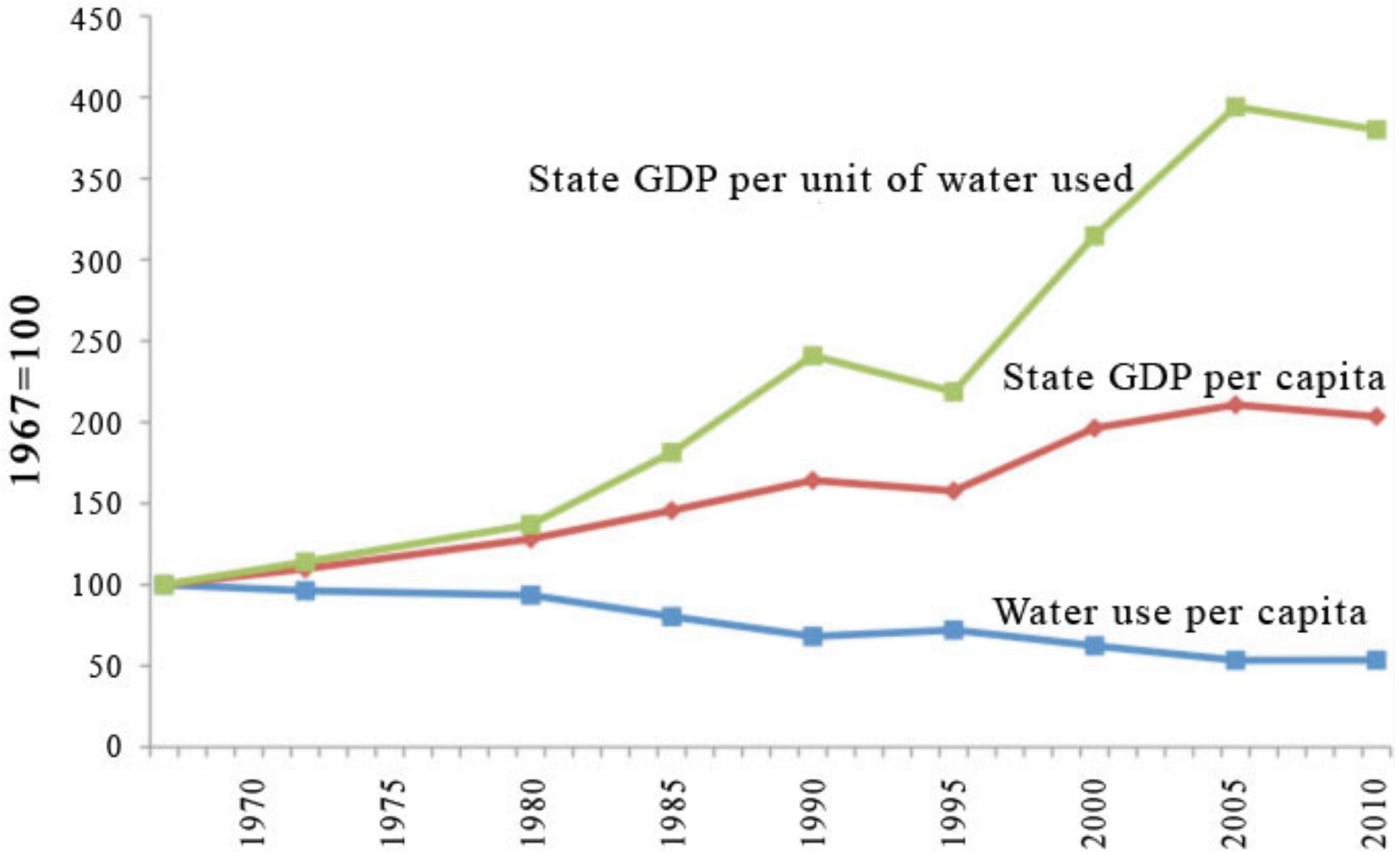
WHAT IT IS

- USED THE WATER USE CYCLE AS A FRAMEWORK FOR OUR ANALYSIS AND RECOMMENDATIONS
- IDENTIFIED INNOVATIONS IN SCIENCE AND TECH FOR EACH STEP IN CYCLE – IT WORKS!
- MADE MANY RECOMMENDATIONS ON WHAT TO SHOULD BE DONE BOTH SHORT AND INTERMEDIATE TERM

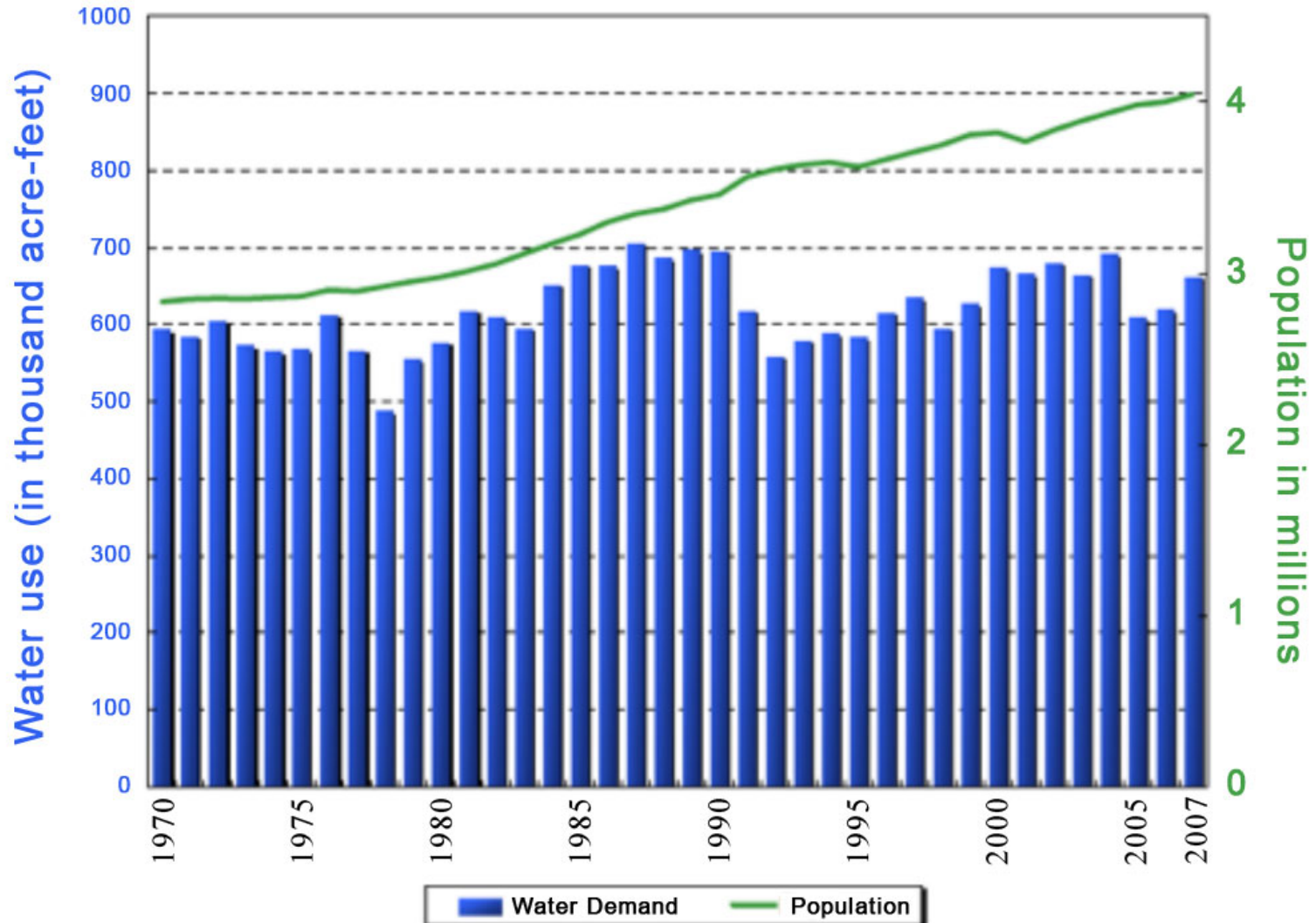
WHAT IT IS'NT

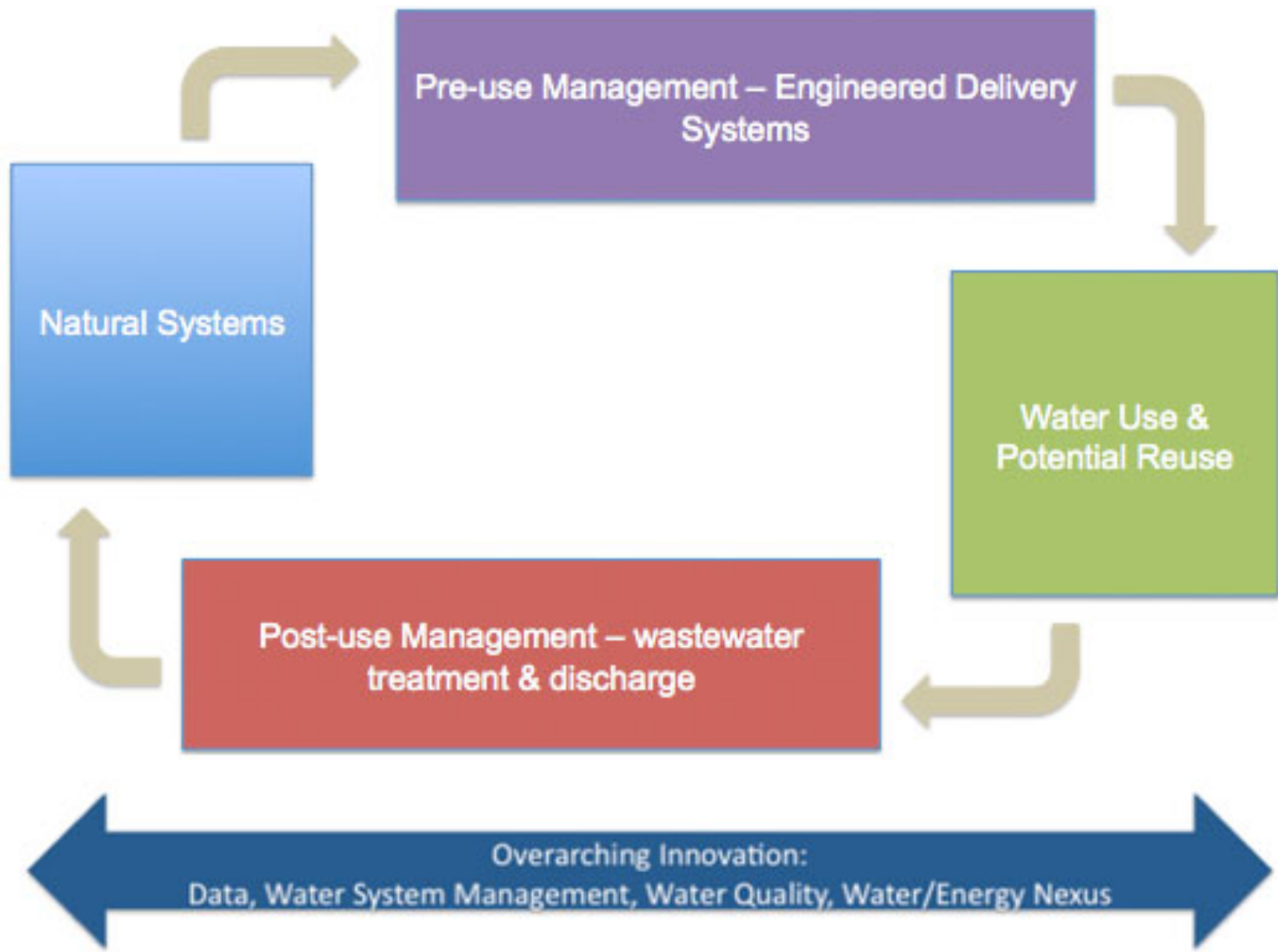
- NO SPECIFIC POLICY RECOMMENDATIONS
ALTHOUGH A LOT OF POLICY THOUGHTS
- NO EVALUATION OF THE ECONOMICS AND
POTENTIAL OF EACH TECHNOLOGY
- NO POSITION ON THE DELTA ISSUES

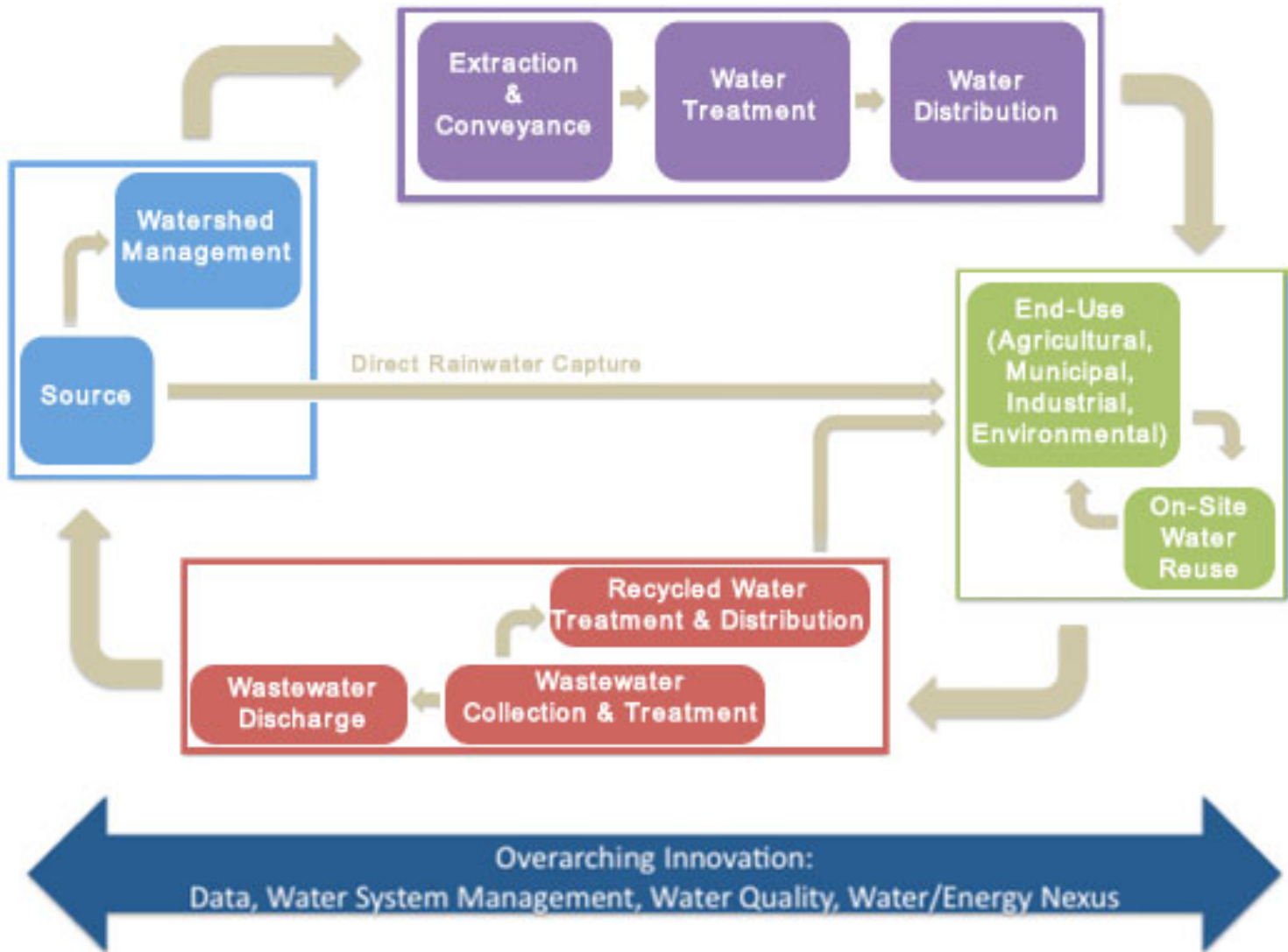
CA STATE GDP PER UNIT OF WATER USED



L.A. WATER DEMAND AND POPULATION, 1970-2007







INNOVATIONS ASSESSED IN TWO CATEGORIES

- OVERARCHING

- DATA ACQUISITION & MGMT
- WATER SYSTEM MGMT
- WATER/ENERGY NEXUS
- WATER QUALITY

- INDIV PROCESS STEPS

- WATERSHED MGMT
- EXTRACTION, CONVEYANCE, DISTRIBUTION & STORAGE
- WATER/WASTEWATER TREATMENT
- WATER USE
 - AGRICULTURE
 - URBAN

FOR EACH CATEGORY

- DEFINITION
- OVERVIEW
- INNOVATION OPPORTUNITIES
- CASE STUDIES
- RECOMMENDATIONS

MAIN RECOMMENDATIONS

2. Expand the use of monitoring technology and management practices
3. Improve water use efficiency in all sectors and at all stages of the water cycle
 - A. Agricultural sector –
 - B. Urban sector –
 - C. Utilize “system thinking” across all sectors

MAIN RECOMMENDATIONS (Cont'd)

floodplains - focus on ground water recharge

5. Develop new and expand the application of proven chemical, physical and biological water treatment technologies w/ a special focus on salinity mgmt, nitrate control & recycling water

6. Integrate water, energy and land use planning and management

MAIN RECOMMENDATIONS (Cont'd)

various public sector institutions

8. including public/private partnerships
9. Identify, evaluate adapt and implement best practices from around the U.S. and the world

CHANGE AND NEXT STEPS

- FUNDING, ACCURATE INFORMATION, ALIGNED GAME PLAN, SYSTEMIC COORDINATION, PUBLIC SUPPORT
- AGENTS OF CHANGE
 - POLITICAL LEADERS, WATER AGENCY LEADERS, WATER TECHNICAL EXPERTS, OTHER STAKEHOLDERS
- NEXT STEPS / ROLL OUT PLAN

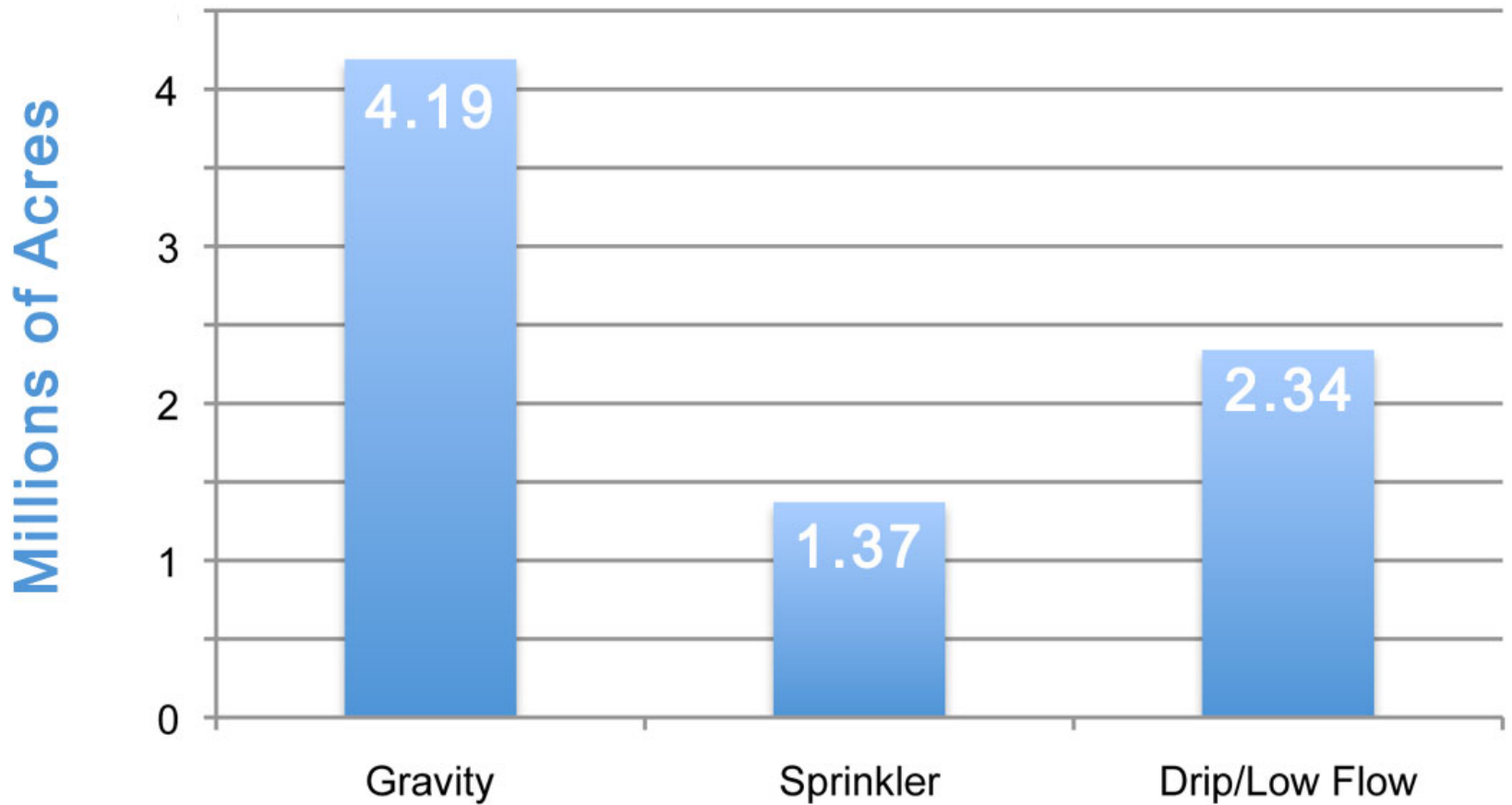
ROLL OUT PLAN

- SCHEDULE
- RESPONSE TO GOVERNORS DECLARATION OF
 - AGRICULTURE
 - URBAN
-

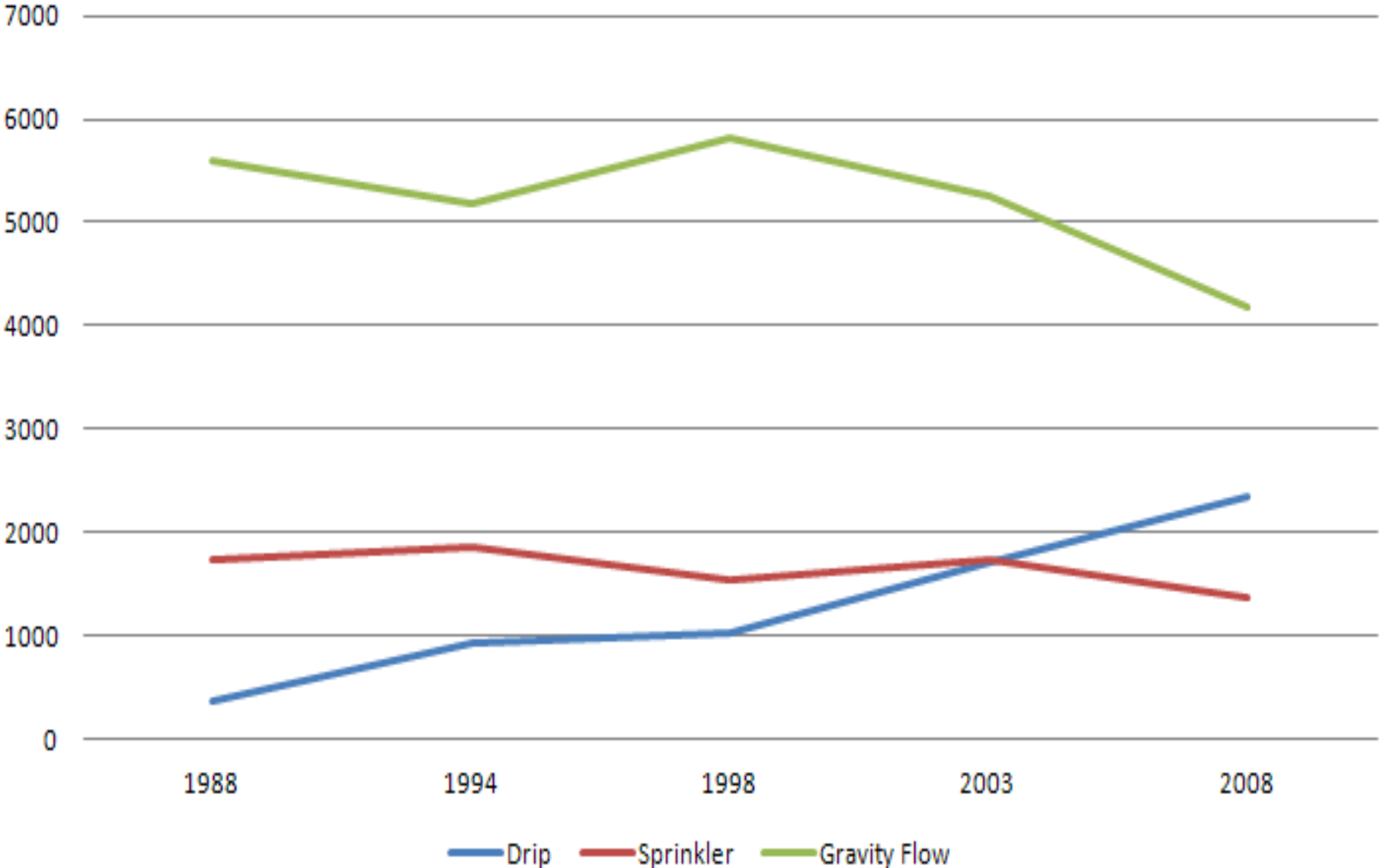
Background

(million acre-feet)

California by Acreage (2008)



CA Acres (000) by Systems of Irrigation



CA Crop Statistics

Irrigated Acreage by Crop and Method: California

	Acres (1,000s)	Sprinkler	Gravity	Drip
Lettuce	200	52	47	101
Tomatoes	234	26	102	107
Vegetables	912	357	214	341
Fruits/Nuts	2,547	365	424	1,758

What can be done now?

- Water management is critical (timing and amount)
 - ✓ Provide incentives for flow meters and soil moisture sensors
 - ✓ Provide training on their installation and use

Timing is critical

- Legislative language can be developed immediately
- ~~Legislative language can be developed immediately~~
- With strong support, program could be

STORY LINE / TAKE AWAYS

- We can do more with less, but requires a road-
 - We can do more with less, but requires a road-map that all agree to follow
 - We require good quality information about the need more re-use, efficiency and the capture of 0103333 000000 (330000 000000, 0000 0000, 0000)
- water etc)
 - A systems approach is essential using science and