

Community Forum on Groundwater Sustainability:

What Will It Take & Cost to Get Into Balance

Michael DeLapa, Executive Director, LandWatch Monterey County
Gary Peterson, General Manager, Salinas Valley Basin
Groundwater Sustainability Agency

Agenda

- Welcome
- Brief Introduction to LandWatch
- Getting into Balance: Projects & Management Actions -- Gary Peterson, Salinas Valley Basin Groundwater Sustainable Agency
- LandWatch's Role and Positions
- Questions

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Thank You!



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What Does LandWatch Do?

Turn Knowledge into Public Policy



Land Use As It Impacts
Environment, Equity, Economy

Mission

Since 1997 LandWatch has protected and enhanced Monterey County's incredible *quality of life*.

LandWatch's mission is to promote *sound land use policies* that better our community – its long-term economic vitality, high agricultural productivity, environmental health, and social equity.

Through *grassroots education and organization*, LandWatch *catalyzes* public participation in planning, *connects* people to government, addresses human needs, and *inspires* conservation of natural resources for current and future generations.

New Vision of Sustainability

- New urban design that is climate-friendly
 - Urban growth boundaries
 - Mixed use
 - Infill & upzoning
 - Create pedestrian & bike-friendly alternatives to cars
- And equitable!
 - Affordable housing
 - Apartments & ADUs
- Sustainable & affordable water



Practical Leadership

- Conduct technical reviews of policies, projects, and EIRs
- Educate elected and appointed officials
- Organize grassroots support to advocate for sustainability
- Litigate (when all else fails)



Radical Hope

*When I started to do something—to take action, **to try to make a difference instead of sitting in despair**—that changed my life. Because then that gives your life meaning . . . and that's important, because things can sometimes seem meaningless. But to know that you can actually have an impact. Really, it makes you feel a lot better. So if not to save the world, then you can engage in activism to help yourself.*

-- Greta Thunberg



Getting Into Balance

Gary Peterson, Senior Consultant &
General Manager

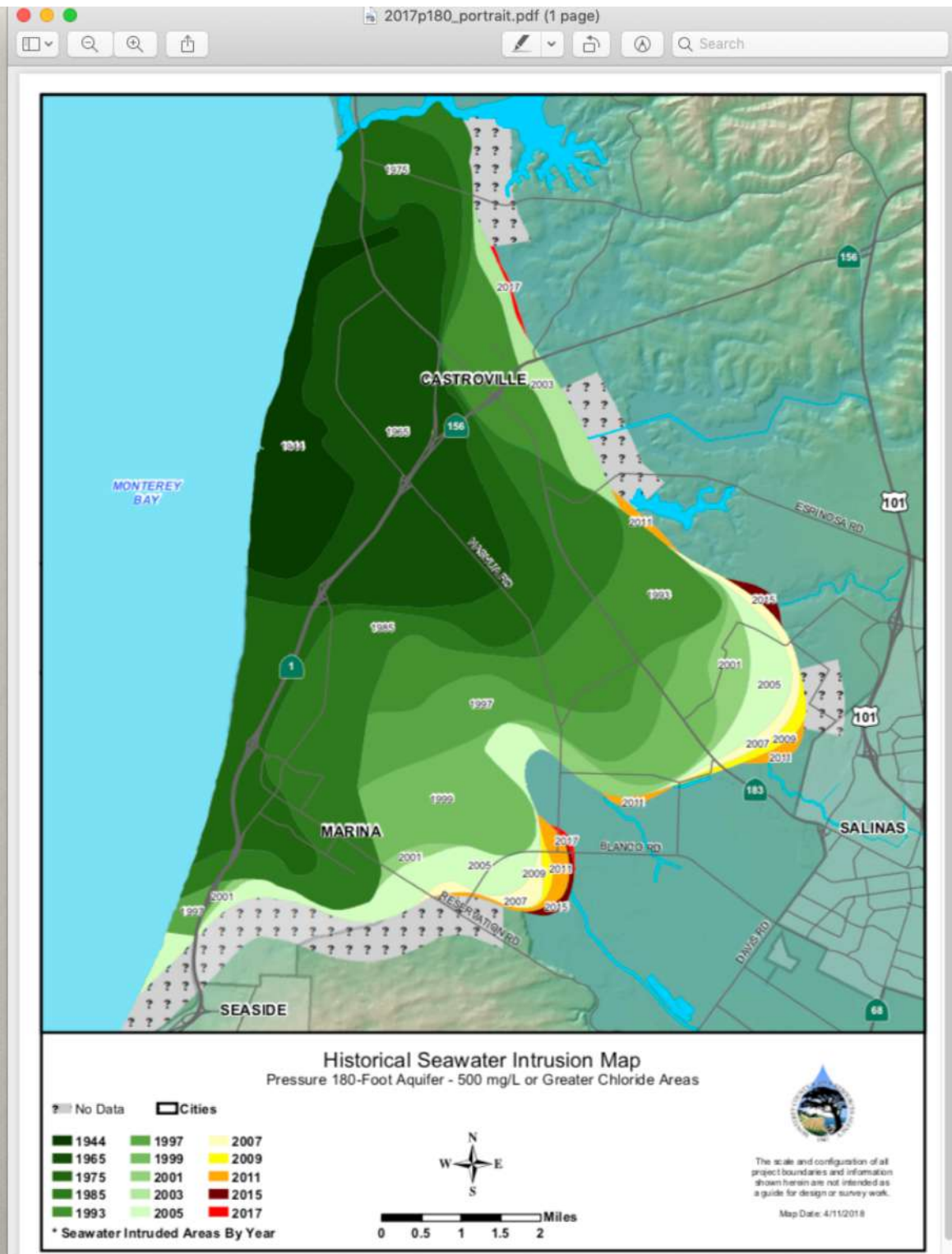
Salinas Valley Basin Groundwater
Sustainability Agency (SVBGSA)

Groundwater Sustainability Plan
(GSP)



Gary's Slides

What's The Problem ?



CULTURAL EVOLUTION AND WATER MANAGEMENT IN THE SALINAS RIVER VALLEY¹

James G. Thompson and Robert Reynolds, Jr.²

ABSTRACT: This article reports the findings of a case study of a major California water management district's effort to change its management approach. The following key findings and factors have influenced the Salinas basin management plan (BMP) and its progress: (1) the Salinas Valley is an economy dominated by highly sophisticated irrigated agriculture dependent on ground water; (2) a persistent pattern of agricultural overdraft of ground water has hurt growers primarily in the north end of the valley via induced saline intrusion of irrigation wells; (3) a complex set of water institutions, property and water rights, and land lease practices offer little incentive for good stewardship of land and water; and (4) the BMP approach initially may have intensified tension among growers and between growers and other water user groups. Water rules and practices in the Salinas Valley and Monterey County have evolved through a long historical process of adaptations. Therefore, any significant changes in local water use practices need to be understood in terms of cultural change, that is, changes in deeply held values, beliefs, and assumptions. We believe the BMP and the MCWRA are succeeding when evaluated from this evolutionary perspective. The fact that both still exist relatively intact testifies that they are working, *albeit* slowly.

(KEY TERMS: basin management planning; social science technologies; collaborative planning; cultural evolution.)

resource has fostered a series of new approaches to water management. Where historically water management was oriented to delivery of new water supplies to satisfy growth requirements, current management concepts almost always include some notion of conserving the existing supply. These concepts include best management practices, integrated resource management, and basin management planning. These concepts involve a "systems" view of hydrology and its relationship to user populations and usually a blending of traditional supply orientations with conservation approaches. The most sophisticated version of conservation is water demand management (WDM). WDM reflects the view that a resource cannot be sustained for optimal benefit to society without concerted management of demand and resource augmentation of supply (Tate, 1990).

A major objective of this study is to help policy makers better understand the sociopolitical environment in which WDM plans are implemented. Such knowledge can improve their ability to select WDM technical assistance activities that will be most effective. The study also examines the role of the water

LandWatch's Role

- Janet Brennan
 - Member of Collaborative Working Group that developed recommendations leading to the formation of the SVBGSA Board of Directors 2016-2017
 - Member of Board of Directors of the SVBGSA – Term 2017-2020.
 - Represents the Environmental Caucus
- Tom Ward
 - Member of SVBGSA Advisory Committee – 2017-2020
 - Represents LandWatch
- Michael DeLapa
- John Farrow, Mark Wolfe & Associates, Attorney-at-Law
- Hydrologists and other technical consultants



Salinas Valley Basin Groundwater Sustainability Plan Chapters

- Chapter 6 Water Budget
- Chapter 7 Monitoring
- Chapter 8 Sustainable Management Criteria
- **Chapter 9 Projects & Management Actions!**



Voluntary Pumping Reductions

Problem: Voluntary pumping reductions will not achieve sustainable yield because financial incentives are insufficient to change pumping practices

- Proposed Water Charges Framework would not limit supplementary pumping amounts
- The GSA does not have the necessary information to set “Supplementary Fees” high enough to limit pumping to sustainable yield



Restrict Pumping to Specific Allowances

Solution: GSA should restrict pumping to specific pumping allowances

- Establish allowances
- “New water” should not be allocated until it is actually produced
- What matters is actual groundwater pumping, which should be measured through an enforceable ordinance requiring well registration, annual reporting, flow meters, and annual calibrations.

BE SPECIFIC



Transitional Pumping Allowances Risky

Problem: Transitional pumping allowances may prevent the GSP from achieving sustainability

- “Transitional Pumping Allowances” (TPAs) are users’ shares of current unsustainable pumping levels
- GSP proposes to ramp down TPAs to zero, but only over a 10-15 years
- A key GSP objective is to halt seawater intrusion where it stands now
- But pumping in excess of sustainable yield will cause more seawater intrusion



Establish 3-5 Year Transition Period

Solution: Limit transitional pumping allowance period to 3-5 years

- There is no evidence that sustainability can be met in 20 years with a 10-15 year ramp-down period
- Transitional pumping should be set at the minimum feasible period



No Basis for Transitional Pumping Surcharge

Problem: GSP does not provide basis to set Transitional pumping surcharge

- Fees for Sustainable Pumping Allowances are “regulatory fees”
- Supplementary Pumping fees may be set at production cost for “new water”
- But GSP does not propose basis for setting Transitional pumping surcharge



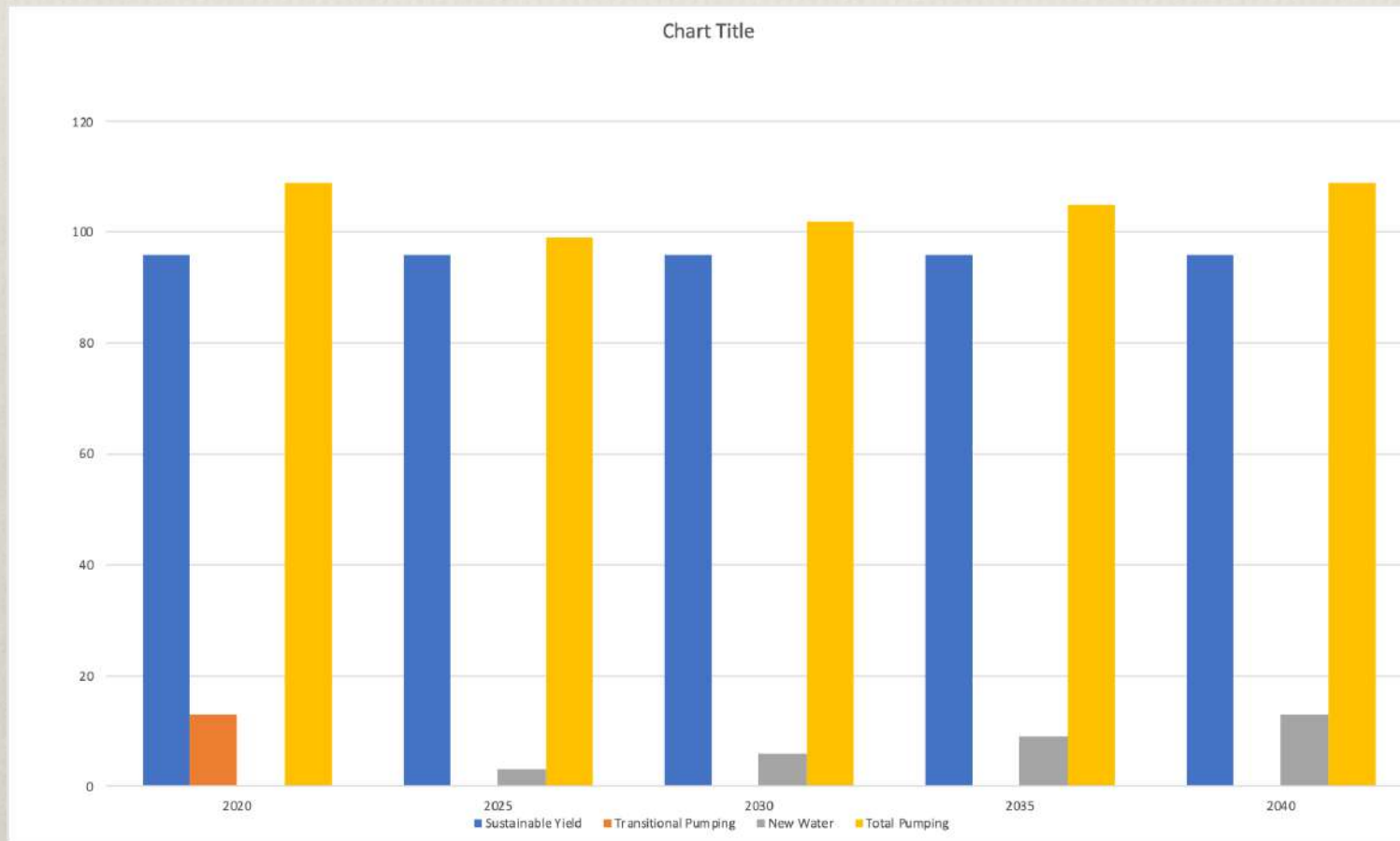
Set Transitional Pumping Surcharge at Cost of New Water

Solution: Set Transitional pumping surcharge at best estimate of cost for “new water”

- GSP says supplementary fees and the transitional surcharges are intended to fund future projects
- Average cost per acre-foot of new water from projects proposed in GSP Chapter 9 is \$609
- Use this as the Transitional surcharge



Hypothetical Water Charge Framework For 180/400



Year	2020	2025	2030	2035	2040
Sustainable Yield	96	96	96	96	96
Transitional Pumping	13	0	0	0	0
New Water (Theoretical)	0	3	6	9	13
Total	109	99	102	105	109

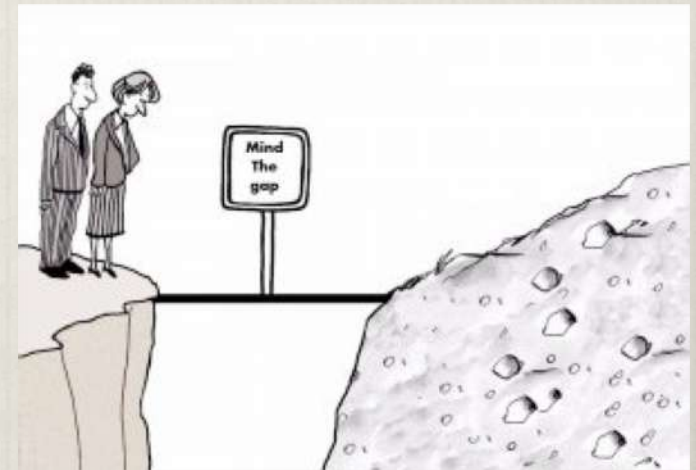
Debt & Deficit

- **Cumulative water debt**
 - 559,000 AF for entire basin
 - 110,000 AFY for 180/400 Pressure Zone (2013)
- **Ongoing annual water deficit** (e.g., under drought conditions 2014-2016)
 - 50-85,000 AFY for entire basin
 - 10-15,000 AFY for Pressure Zone

More Work Required on Chapter 9

Problem: Proposals for projects and management actions are incomplete. Law requires

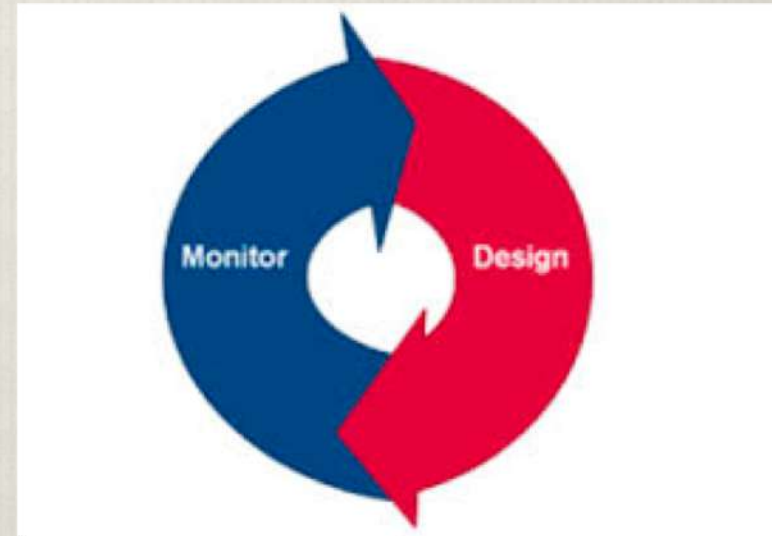
- Cost estimates for 4 of 5 management actions
- Quantified overdraft reduction from 5 management actions
- Overdraft reduction benefits to the 180/400 Foot Aquifer Subbasin



Adaptive Management Critical to Success

Solution: Adaptive Management!

- Complete the GSP draft with the best current information
- After that, GSP can and must be updated over time
- Mandated every 2 years



Conclusions

- Salinas Valley Groundwater Basin Groundwater Sustainability Agency has made a good start on the 180/400 Foot Aquifer Subbasin Groundwater Sustainability Plan (GSP)
- Much work on GSP remains:
 - Complete modeling and close data gaps to determine actual sustainable yield (Chapter 6)
 - Obtain consensus on workable Water Charges Framework
 - Provide mandated cost, benefit, and schedule information for projects and management actions

Questions?



www.landwatch.org/subscribe

execdir@landwatch.org

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