WHERE WE’VE BEEN,

WHERE WE’RE GOING...
Outline of Tonight’s Discussion

- Review of District’s Water Shortage Problem
- Overview of District’s Long Term Planning Efforts
- How District is Addressing Water Shortage Issues
- Developing a Supplemental Water Supply
  - Exploring Back up Options
  - Tonight’s focus on Mandatory Rationing
  - Future meetings will cover other potential options
Primary Water Shortage Issue: Seawater Intrusion
Seawater Intrusion: California Southern Monterey Bay, Moss Landing to Seaside

Source: Monterey County Water Resources Agency
Seawater Intrusion: California
Pajaro Valley (Just south of Soquel Creek WD)
Seawater Intrusion: Our Community
Soquel Creek Water District’s service area
Groundwater Levels are Below Sea-Level
Soquel Creek Water District’s service area

Figure 3-3 (2012): Groundwater Elevation Contours, Purisima A-Unit, Fall 2012
Public Process for Long-Term Water Planning

1999
Developed with a Public Advisory Committee of more than 20 individuals

2006
Updated with newer information on supply & demands

2012
- Updated with newer information on supply and demand and re-evaluated 10 different alternatives
RE-EVALUATING ALTERNATIVES:

2012 Integrated Resources Plan Approach:

1. Continue water conservation
2. Continue to evaluate recycled water (as feasible)
3. Proactive groundwater management
4. Continue to evaluate scwd² desalination
5. Continue to evaluate surface water exchange
6. Consider District-only desalination and mandatory water rationing if scwd² desalination is no longer pursued.
SUPPLY & DEMAND = SHORTAGE

Where we thought water use could be*

Re-evaluated Water Demands **

Conservation Savings

Water Shortage

Groundwater Supply Yield
Not to exceed 2,900 acre-feet per year for at least 20 years for Basin Recovery

* Based on District’s 2005 Urban Water Management Plan
**Based on District’s 2010 Urban Water Management Plan
Supply and Demand for Soquel Creek Water District

- **Projected Community Water Demand:** 4790 afy

- **Groundwater Supply:** 2,900 afy (60%)
  - Conservation: 530 afy (10%)
  - Water Shortage: 1,360 afy (30%)

- Limit groundwater pumping to no more than 2,900 afy
  - Based on groundwater modeling
  - 70th percentile goal of achieving groundwater levels and outflows to protect against seawater intrusion
  - Recovery time estimated to be at least 20 years

- Continue to maximize and increase water conservation savings
  - Set goal to reduce overall use by 15% (720 afy) by 2030
Addressing Water Shortage Issues: Shared Groundwater Basin

- Groundwater Basin is used by many: District, City of SC, Central WD, small mutuals, and private pumpers

- Property Owners Have Priority Right to the Water Under Their Property

- Municipal Water Suppliers Only Have a Right to Surplus Water in the Basin
District increased the water demand offset (WDO) factor from 1.2 to 1.6 in July 2013.

Goal is for new development to offset water use by 200% through retrofitting existing homes with conservation fixtures.

Will discuss revised WDO program and connection moratoriums at April 1st meeting.

Unique legal and conservation challenges related to moratoriums.
Addressing Water Shortage Issues: Ongoing Conservation

- Maximizing and Prioritizing Water Conservation in our Community.
- Goal is to achieve an additional 10% by 2025.
- Emphasizing water conservation year-round
- District pilot tested Water Smart program and applied for Water Smart Grant to continue and expand program
- Continue to expand and add new rebates for conservation
- Initiated monthly billing
Addressing Water Shortage Issues: Securing a Supplemental Supply

- District is actively pursuing a supplemental water supply
- Public Advisory Committee recommended both regional desalination and recycled water as recommended options for supplemental supply.
Looking Closer at Back-up Options

- Exploring Desalination (October 15)
  - Deep Water Desal
  - District only Desal

- Exploring Surface Water (November 5)
  - SC County Water Transfer Study Update
  - Surface Water Rights
  - Presentations by Public Individuals (Bill Smallman and Jerry Paul)
Looking Closer at Back-up Options

**Recycled Water (February 4)**
- Groundwater Injection
- Saltwater Barrier
- Rail Trail Purple Pipe

**Groundwater Options (March 4)**
- Private Well Stakeholder Group
- Replenishment District Powers
- Replenishment District Formation
Looking Closer at Back-up Options

- **Water Demand Offset**
  (part of Demand Reductions)  **(April 1)**
  - Water Demand Offset and Moratorium

- **Evaluation and Shortlisting Back-Up Options**  **(May 6 and June 3)**
  - Review and evaluate back-up options based on a set of objective criteria
  - Criteria weighting and sensitivity analysis
Tonight:
Mandatory Water Rationing

- Can we develop a program to reduce overall water use by 35% if a supplemental water supply isn’t secured?
- What would the impacts be to the community: quality of life, business, parks, economy, etc.?
- What might a water rationing program look like and what might it cost?

2012
Presented Two Mandatory Water Rationing Scenarios: Enforcement and Full-Toolbox

2013
Board Adopts Resolution 13-02

2014
Tonight Presenting a Modified Phased-Approach to further consider
Challenges to Success

California Water Law results in this program needing full voluntary community support in order to be successful in a shared basin.
Questions for the Board

- 35% blanket reduction or use of personal and business water budgets?
- Use of phased approach with off-ramps to allow for diversion from mandatory rationing to supplemental supply?
- Study the economic impacts to the region from mandatory rationing and try to minimize those impacts?
- Move forward with WDO program and explore moratoriums (April meeting)
- Can a mandatory rationing program be successful without a Replenishment District to remove the incentive for homeowners to obtain their own water supply?