

It's Getting Hot Out There

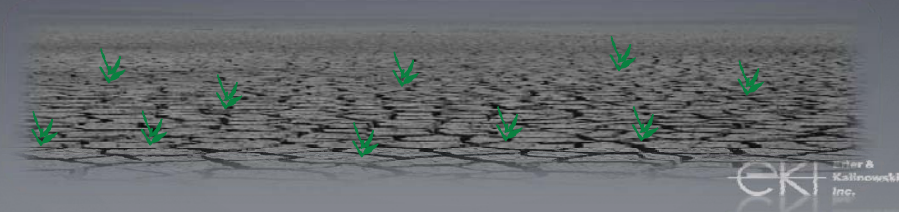
Considerations for Updating Your Drought Water Shortage Contingency Plan

Anona Dutton, P.G., C.Hg.
Bay Area Water Conservation Coordinators Meeting
December 4, 2013



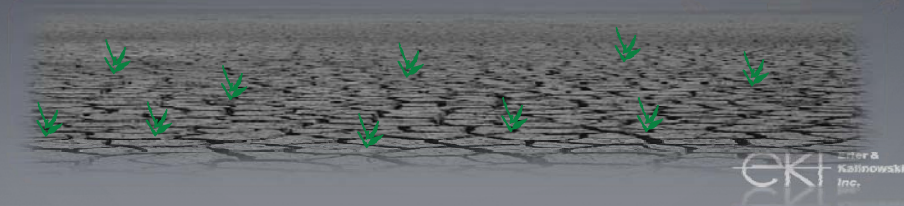
Presentation Overview

- Projected Hydrologic Conditions
- Overview of Regulations
- How Good is your Water Shortage Contingency Plan?
- Elements of a Water Shortage Contingency Plan
- WSCP Development



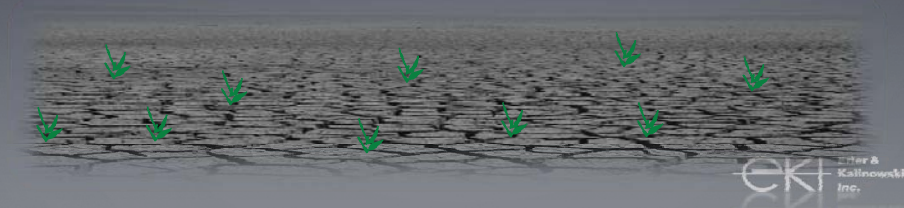
As a Water Supplier What Do You Worry About?

- Supply sufficiency and reliability
- Meeting regulatory requirements
- Climate Change
- Demand hardening
- Financial Solvency
- Supporting economic development and quality of life in the communities you serve



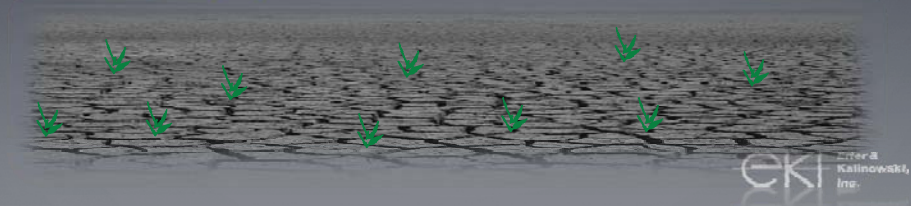
What if 2014 is Also Dry?

- 2013 has been one of the driest years on record
- 2011 and 2012 were also dry years
- Depressed water demand in recent years mitigated dry year impacts
- Demand is rebounding, which puts additional stress on the ability to meet demands without calling for rationing
- Demand hardening has decreased our ability to cutback



Applicable Regulations

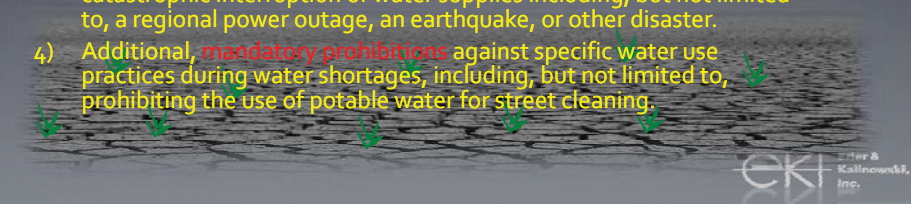
- Required element of Urban Water Management Plans
- **California Water Code Section 10632(a):** Urban water suppliers must develop a water shortage contingency plan which indicates the actions the supplier will take in response to supply shortages of up to 50 percent.



UWMP Act Requirements

Section 10632 of the Water Code (a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

- 1) **Stages of action** to be undertaken ...in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions that are applicable to each stage.
- 2) An estimate of the **minimum water supply available** during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.
- 3) **Actions to be undertaken** ... to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.
- 4) **Additional, mandatory prohibitions** against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.



UWMP Act Requirements

Section 10632 of the Water Code (a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

- 5) **Consumption reduction methods** in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.
- 6) **Penalties** or charges for excessive use, where applicable.
- 7) **An analysis of the impacts** of each of the actions and conditions described in paragraphs (1) to (6), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments

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UWMP Act Requirements

Section 10632 of the Water Code (a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

- 8) A draft water shortage contingency **resolution or ordinance**.
- 9) Commencing with the urban water management plan update due December 31, 2015, for purposes of developing the water shortage contingency analysis pursuant to subdivision (a), the urban water supplier shall **analyze and define water features** that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

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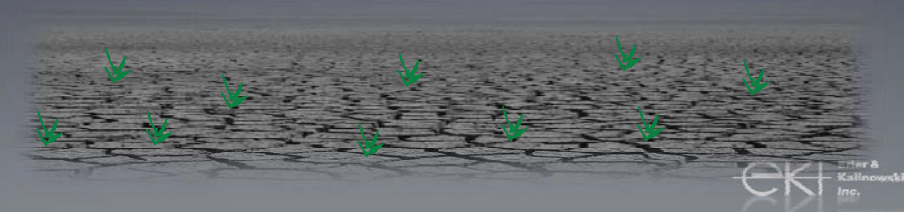
So That is What The Law Requires, But...

- How good is your WSCP?
 - Does it reflect the significant strides your customers have made in increasing their water use efficiency?
 - Was it developed through a public process to reflect the local policy interests regarding water shortage allocations?
 - Does it clearly specify the mechanisms by which the necessary cutbacks can be realized?
 - Does it assess the impacts of the projected cutbacks on revenues, staffing and the local economy?



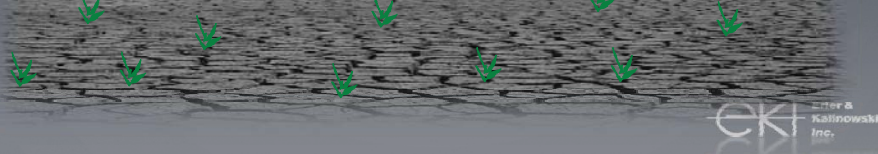
So That is What The Law Requires, But...

- How good is your WSCP?
 - Does it include a detailed implementation plan and lead time estimates for specific actions?
 - Is it coupled with a drought rate schedule that has been vetted through a Proposition 218 process?
 - Do you trust that it will get you from here to there?



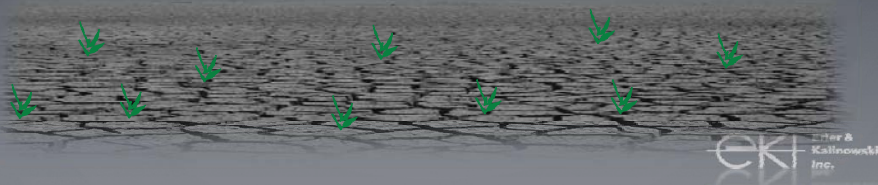
Scope to Consider When Updating Your WSCP

- Prepare a **Work Plan** to develop a WSCP that reflects the interests of the Agency, its Governing Body, the Customers, and the available budget, data and schedule;
- **Engage the public** in the WSCP planning and development process through development of a Task Force, regular public meetings, or other mechanisms;
- Identify the laws, **goals and principles** that will govern the development of the WSCP and that reflect the interests of the Agency, its Governing Body, and the Customers;
- Determine water supply availability and the triggers for the declaration of a water shortage emergency, potentially including the establishment of a **Level of Service goal**;



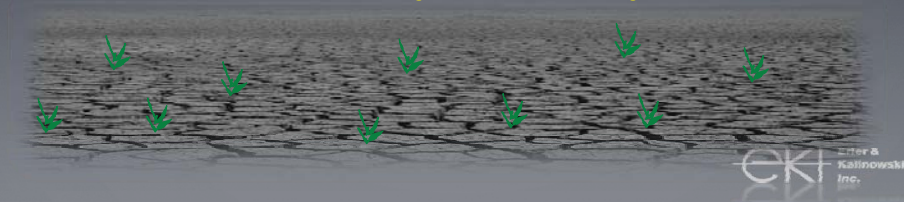
Benefits of Engaging The Public

- Buy in early in the process means that there will be less drama during the shortfall



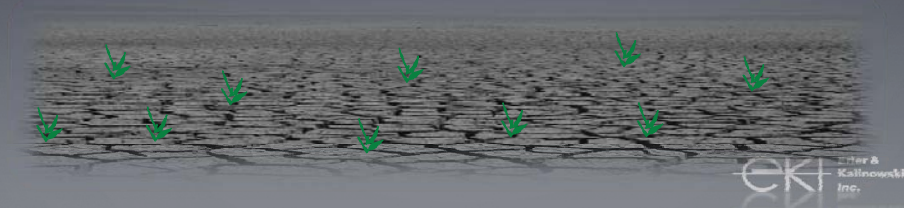
Scope to Consider When Updating Your WSCP

- Define the **Stages of Action** (i.e., the classification a shortage event into one of five levels, up to a reduction of 50 percent);
- Develop a **water allocation methodology** using an analytical tool (GIS- or excel-based) that will allow testing of different water allocation methodologies and assess water use and revenue impacts on both a system-wide scale, and disaggregated based on customer type and geographic areas;
- **Analyze consumption reduction methods** (i.e., the demand reduction measures, communications actions, and operating actions that the Agency and/or Customers must take to achieve the stated water reduction goals for each Stage of Action);



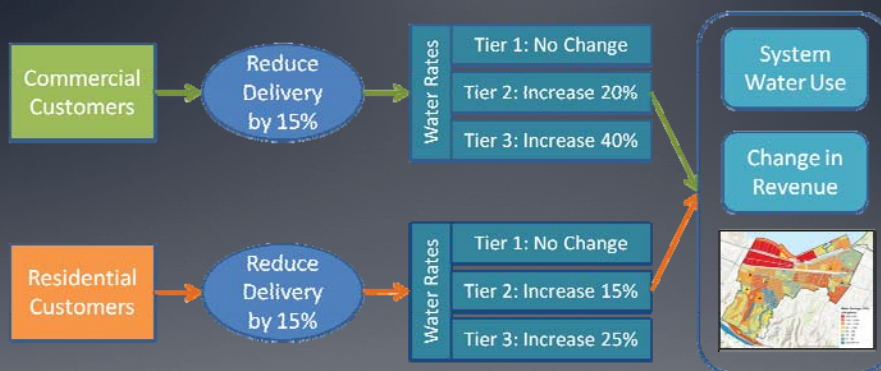
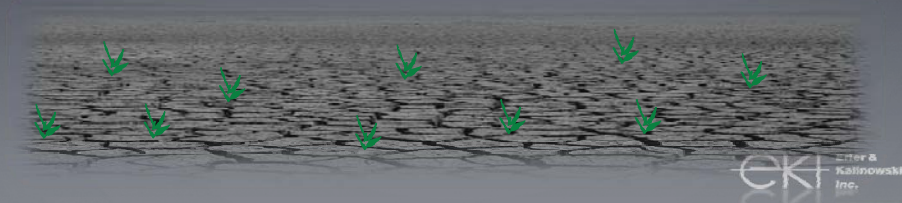
Benefits of Developing The WSCP Analytically

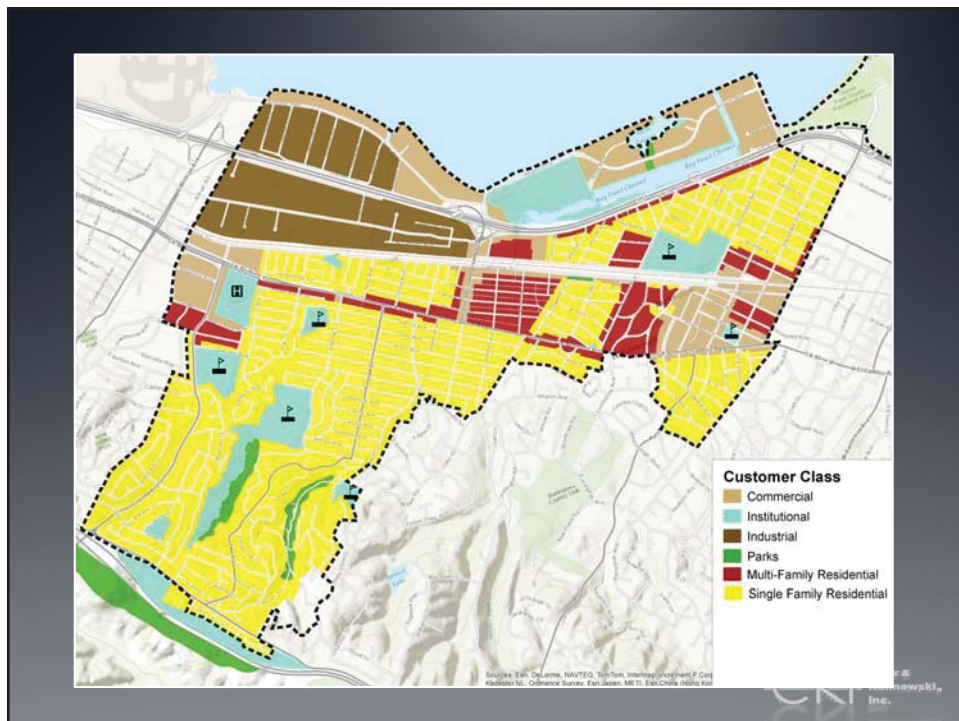
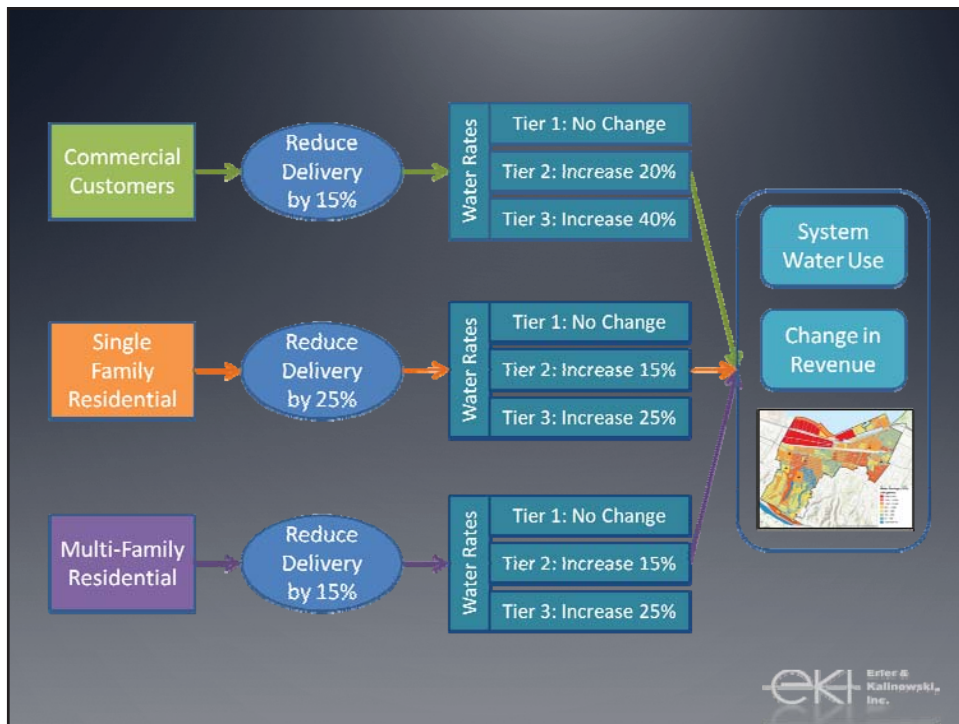
- Real confidence in savings potential
- Ability to analyze economic impacts, disaggregated spatially and by customer class

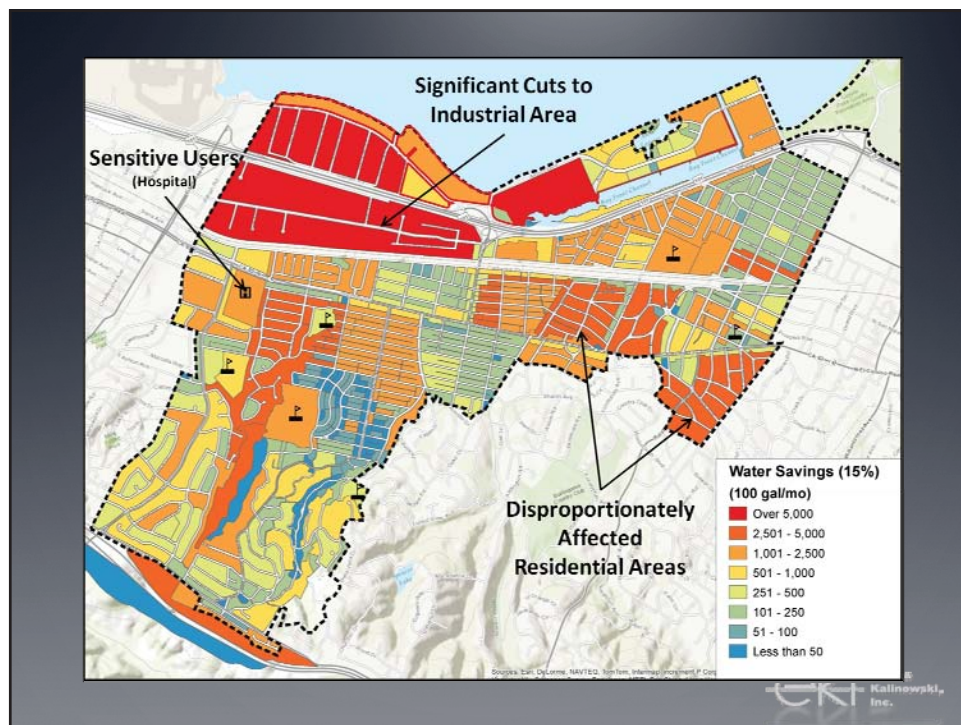
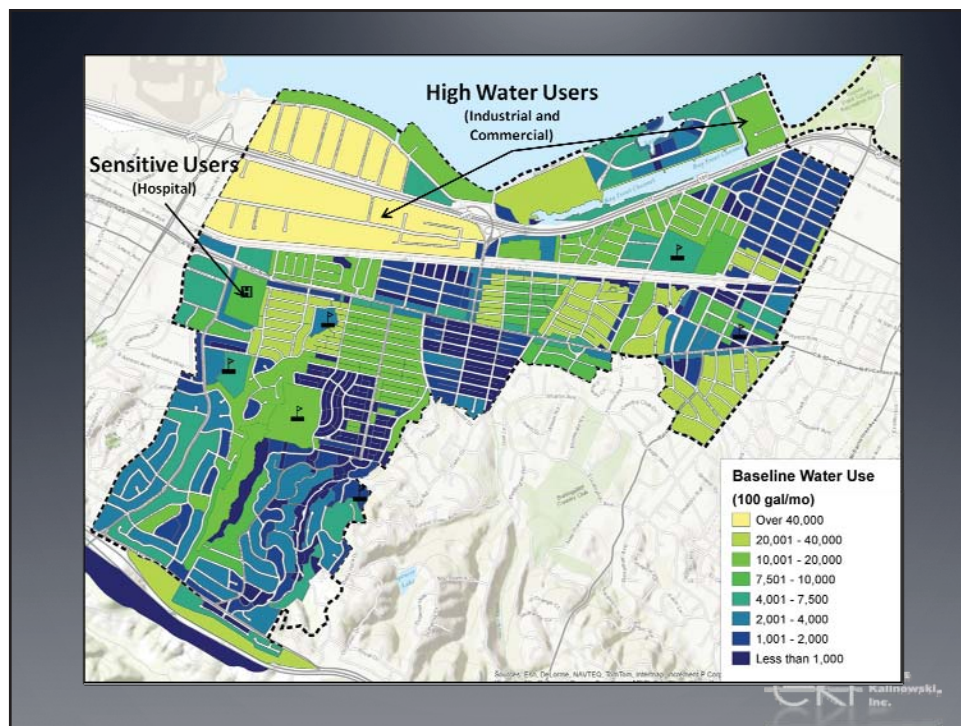


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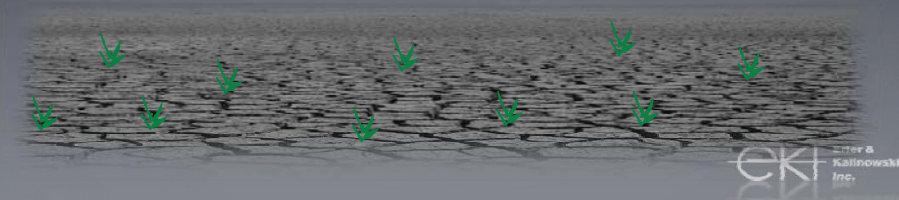






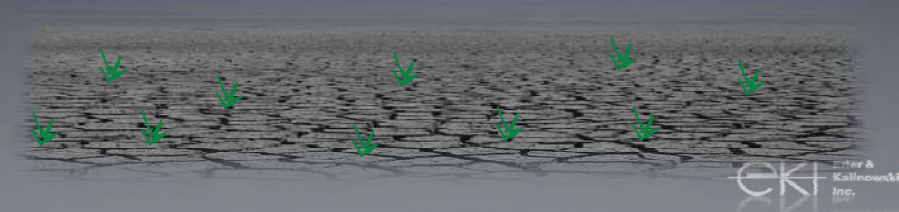
Scope to Consider When Updating Your WSCP

- Summarize enforcement and appeals procedures that the Agency would follow with respect to its Customers in the event of a water shortage;
- Develop a WSCP Implementation Plan that includes specific Agency and/or Customer actions and includes the approximate lead time needed to activate the different elements of a demand reduction program; and
- Prepare a WSCP and Template Water Shortage Ordinance.



Benefits of Developing The WSCP Implementation Plan

- Tied into rates
- Ready to put the process in place that are needed (e.g., switching billing cycles)



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Questions?

