Building a Resilient Water System

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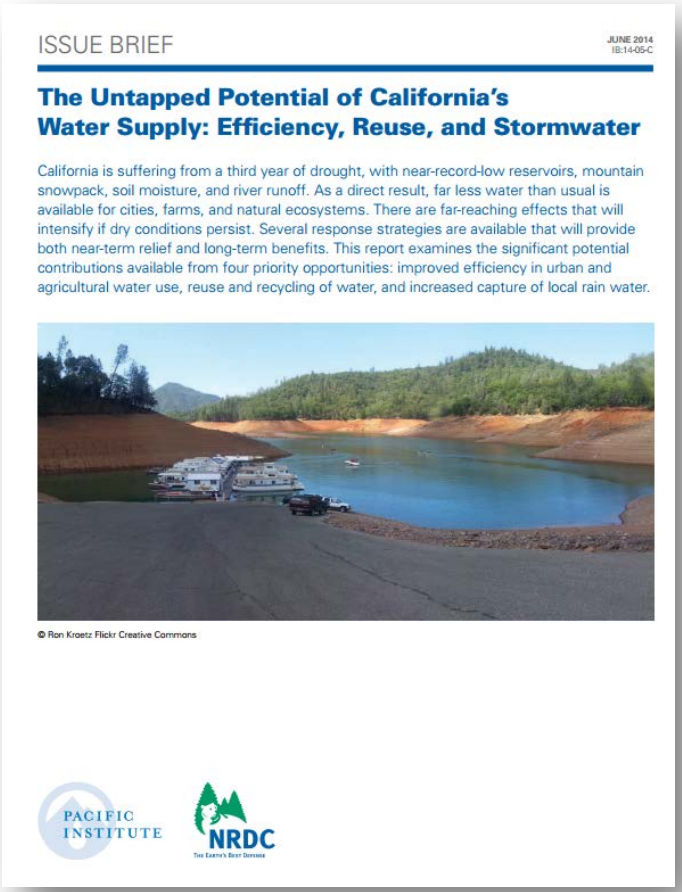
What are our goals?

- Only “new” water?
- Or new water *and* reliable, timely, and appropriate water?

NRDC/Pacific Institute Findings



ISSUE BRIEF

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The Untapped Potential of California's Water Supply: Efficiency, Reuse, and Stormwater

California is suffering from a third year of drought, with near-record-low reservoirs, mountain snowpack, soil moisture, and river runoff. As a direct result, far less water than usual is available for cities, farms, and natural ecosystems. There are far-reaching effects that will intensify if dry conditions persist. Several response strategies are available that will provide both near-term relief and long-term benefits. This report examines the significant potential contributions available from four priority opportunities: improved efficiency in urban and agricultural water use, reuse and recycling of water, and increased capture of local rain water.

PACIFIC INSTITUTE

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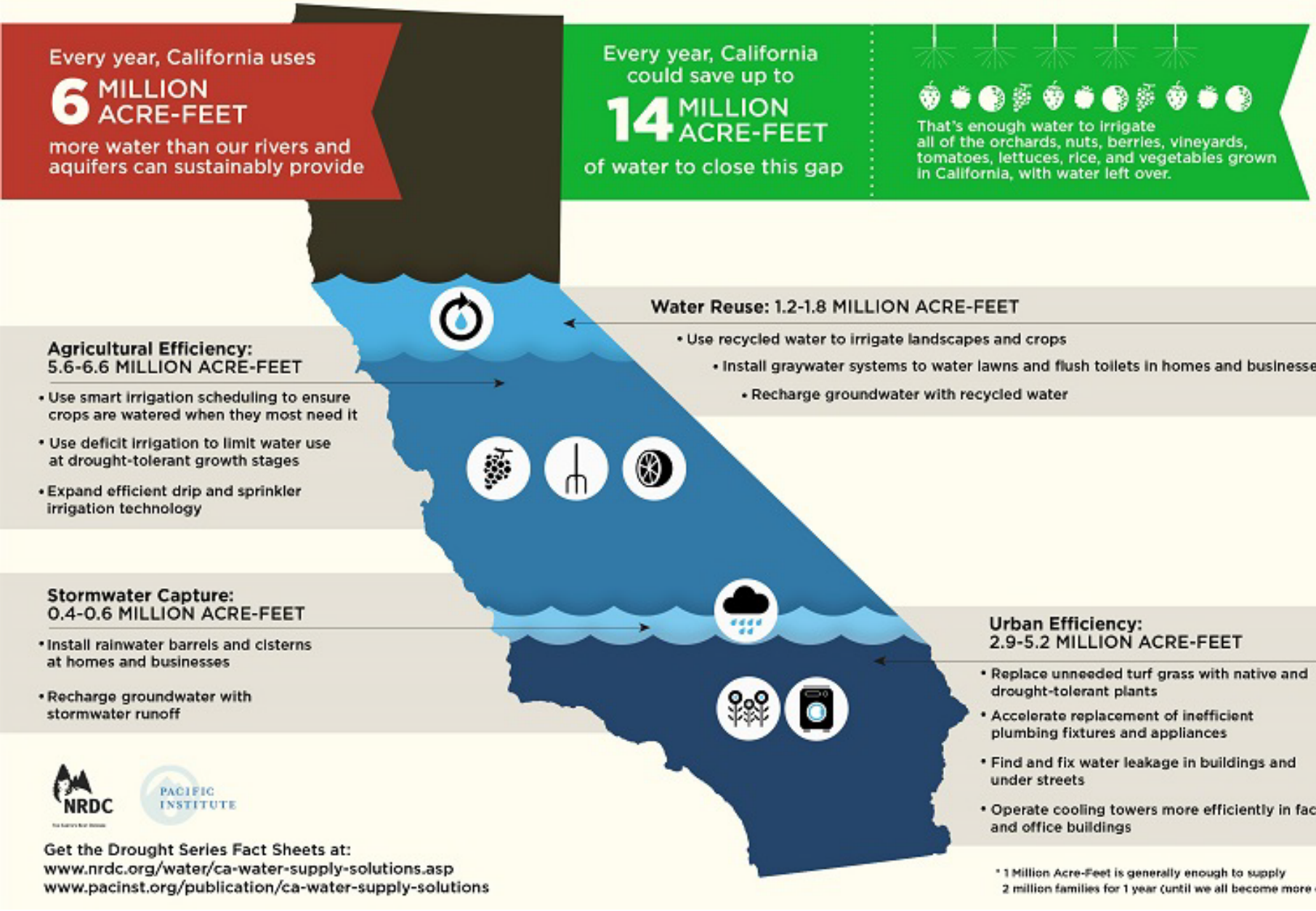
"[T]here is tremendous untapped potential to improve efficiency and augment supplies in California. Water efficiency, water reuse, and stormwater capture can provide **10.8 million – 13.7 million acre-feet of water in new supplies and demand reductions**. These alternatives can provide both effective drought responses in the near-term and permanent water-supply reliability benefits for the state."

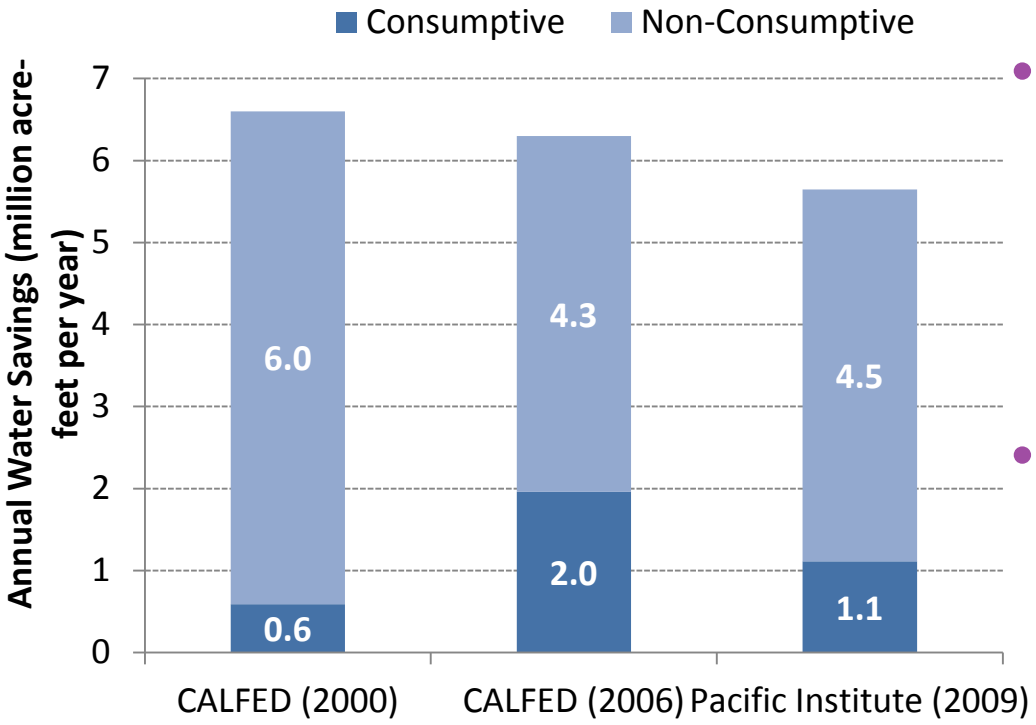


- Focused on improving *resiliency*, not just increasing *supply*

Findings: Water Reuse, Stormwater Capture, and Urban Efficiency

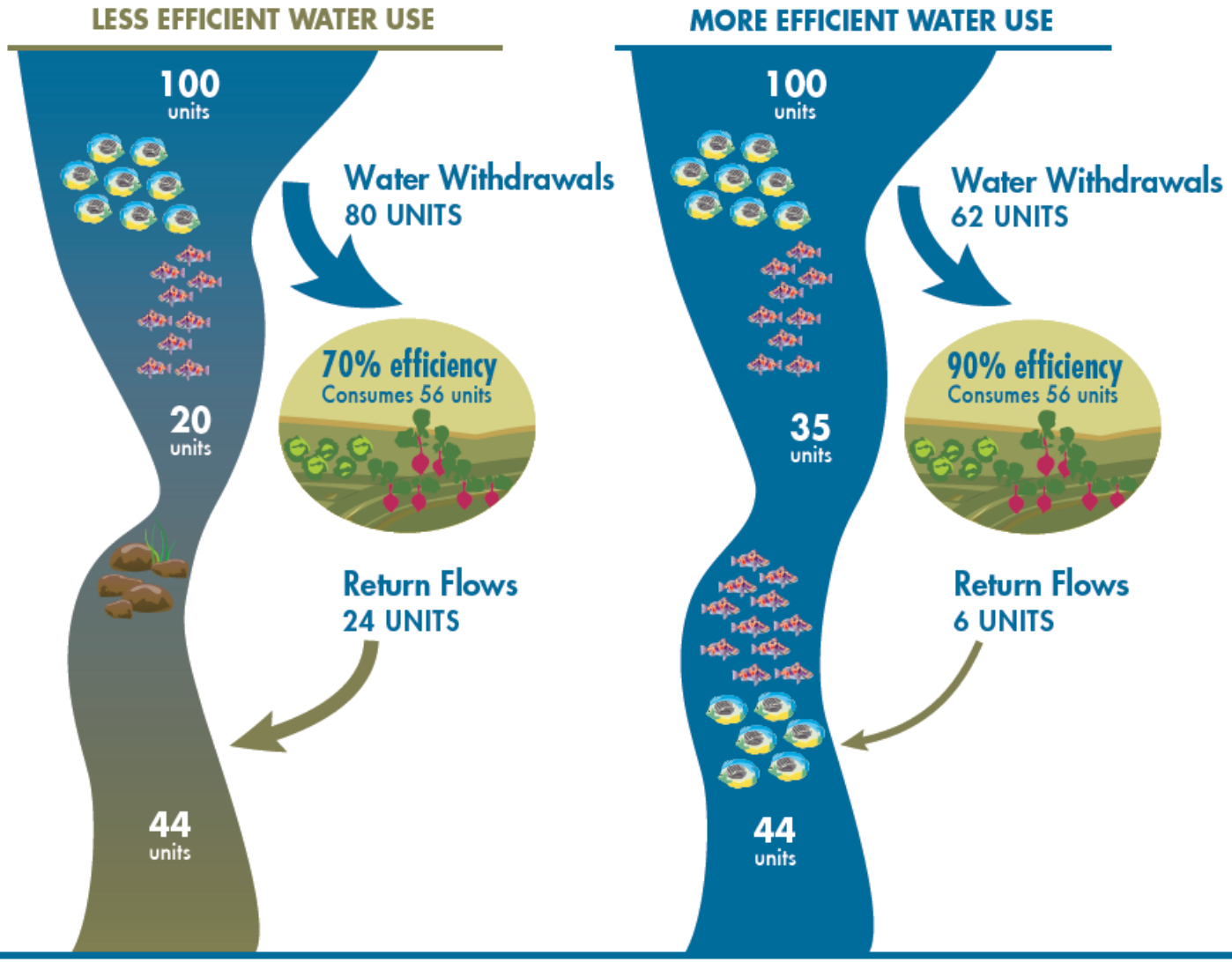
- **Water Reuse** could provide an additional 1.2 – 1.8 MAF/year
- **Stormwater Capture** could provide an additional 420,000 – 630,000 AF/year to coastal communities
- **Urban Efficiency** could be increased by 30% - 60%, decreasing demand by 2.9 – 5.2 MAF/year

Findings: Ag Efficiency



- **Agricultural Water Efficiency** could be increased by 17% - 22%, reducing demand by 5.6 – 6.6 MAF/year
- Consumptive savings of 0.6 – 2.0 MAF/year

The Real Benefits of Water Efficiency

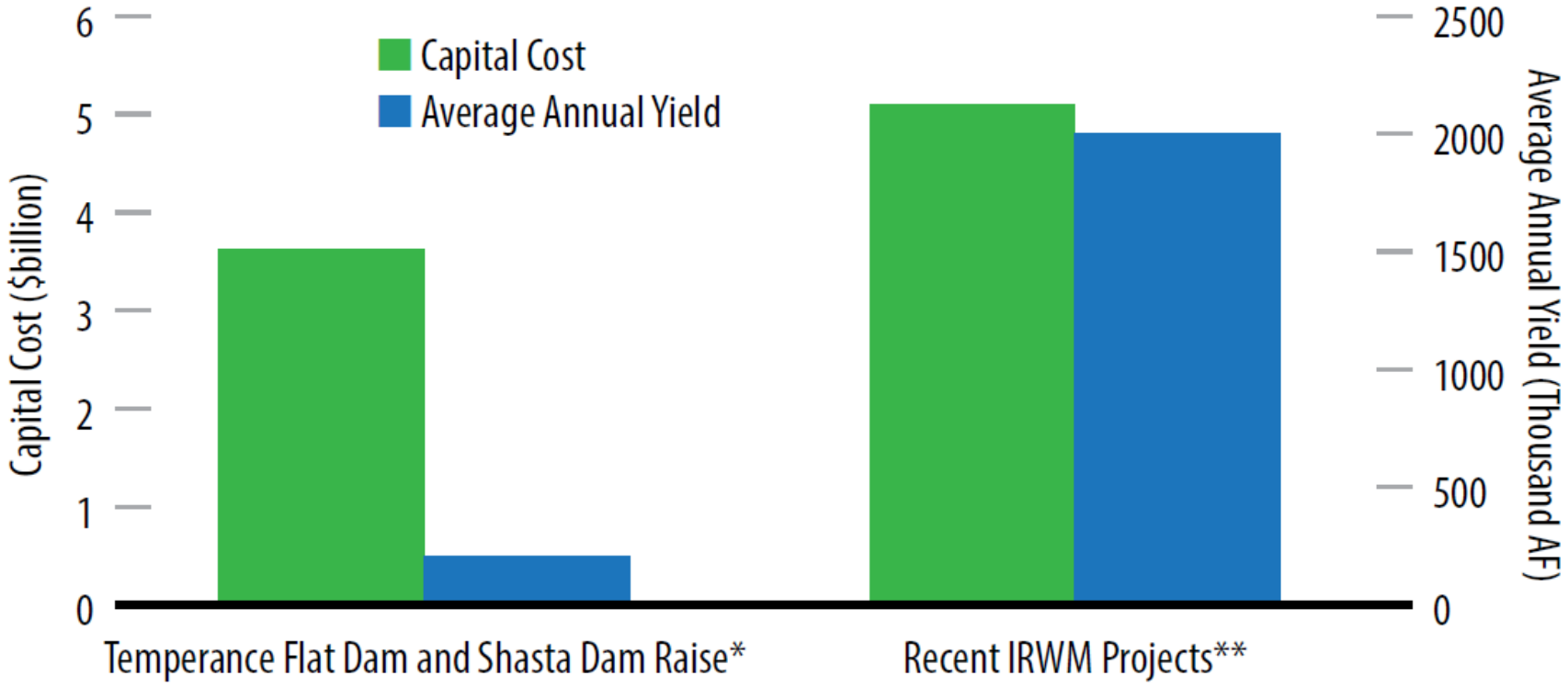


BENEFITS OF EFFICIENCY INCLUDE:

- Less polluted runoff into rivers, streams, and groundwater aquifiers
- More water to support in-stream flows
- Lower energy use from pumping
- Reduce or eliminate need for expensive infrastructure
- Less vulnerability to drought

Source: Pacific Institute

Figure 1: Capital cost and annual water yield comparison



Take Aways

- Our goal is broader than “new water;” we need to have a resilient system that can provide the right kind of water in the right place at the right time
- Improved efficiency (in urban and ag) is *often* the cheapest and quickest way to work toward that resilient system

Thank You!

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