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The Nature Conservancy



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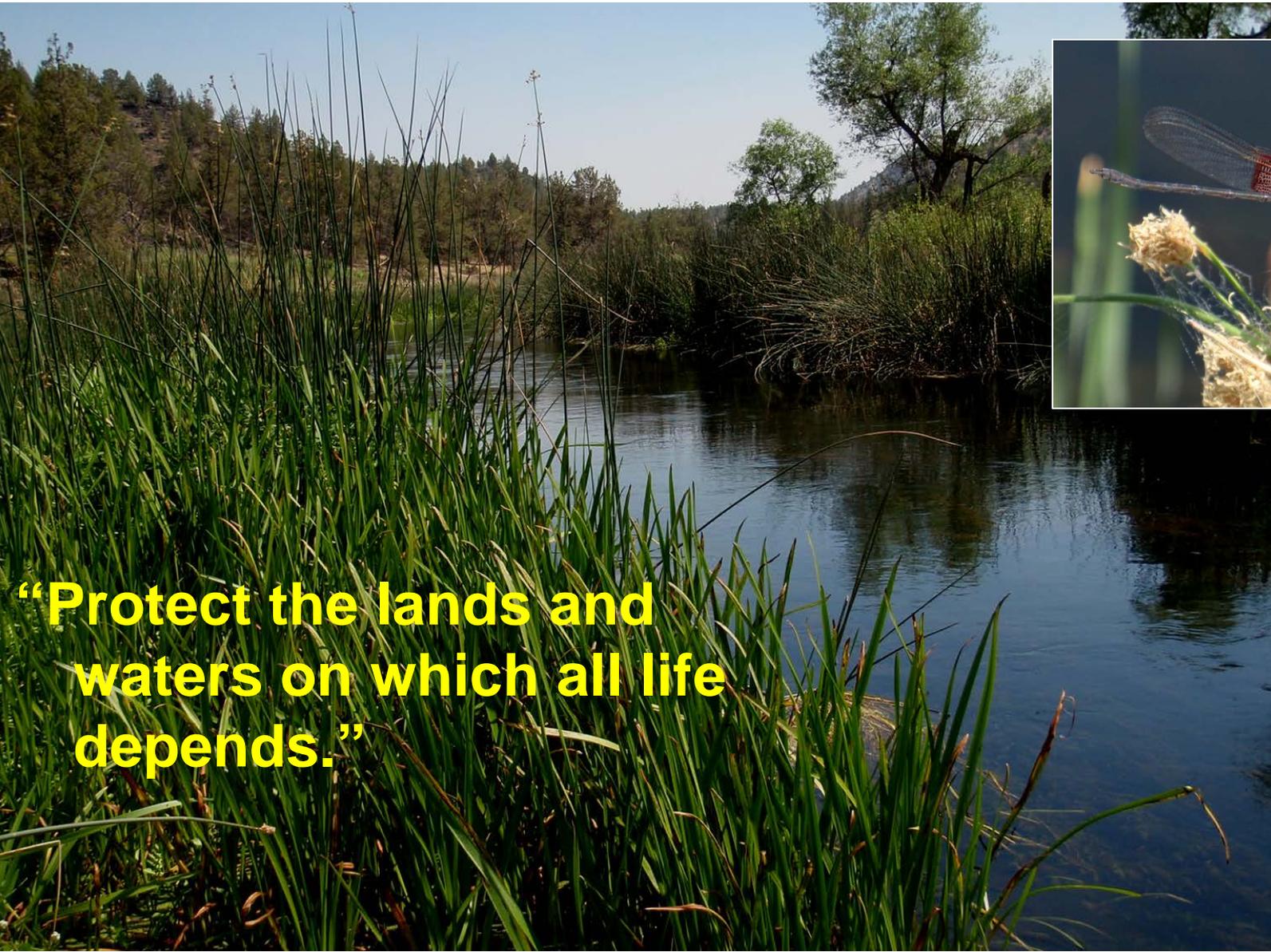
Managing Water for California's People and Nature:

Maximizing Opportunities with Integrated Storage Solutions

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California Water Program



The Nature Conservancy Mission



**“Protect the lands and
waters on which all life
depends.”**

A New Angle on Integrated Water Management

- Explicitly Build Ecosystem Needs into Water System
 - Shape
 - Facilities
 - Operations
 - Governance
 - Policies
- Meet Nature's Needs and Provide Benefits for People



Genesis of Integrated Storage Pilot

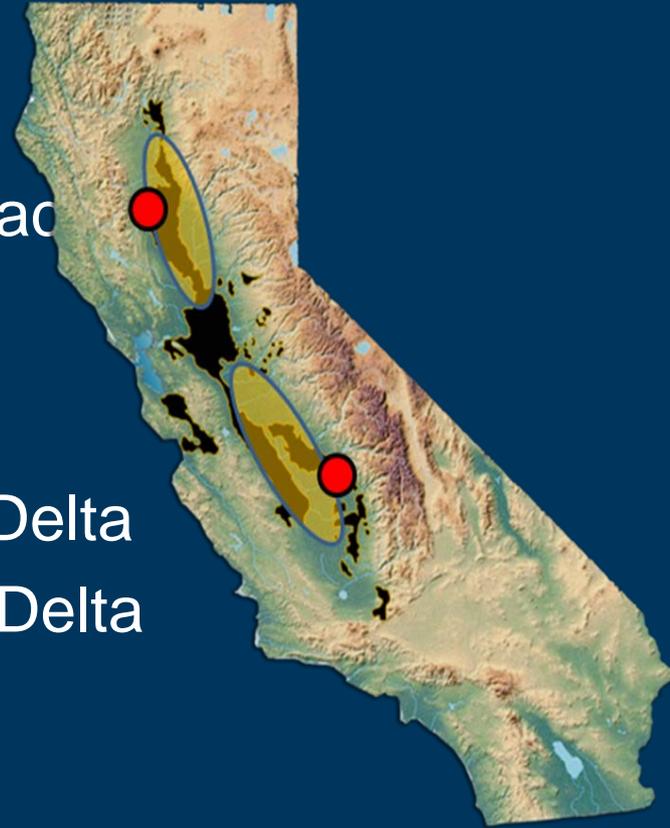
- What Storage Projects Make the Most Sense?
- Can we shape storage that:
 - Is cost-effective for California 
 - Meets multiple needs
 - Is good for nature
 - Proactively meets nature's needs 
 - Better than the status quo
 - Reduces the conflict
 - Helps address the drought years 
 - Reduce conflict

Pilot Analysis Project Purposes

- Provide basic clarity on how storage works in California
- Develop an analytic method that evaluates storage as part of an integrated system
- Conduct a Pilot Analysis to test methodology

Pilot Analysis Project Basic Assumptions

- 4 storage projects
 - 2 groundwater storage (2 maf each)
 - 2 surface storage locations (2 maf each)
- Integrate projects
 - Surface and groundwater North of Delta
 - Surface and groundwater South of Delta
- With and without new Delta Conveyance

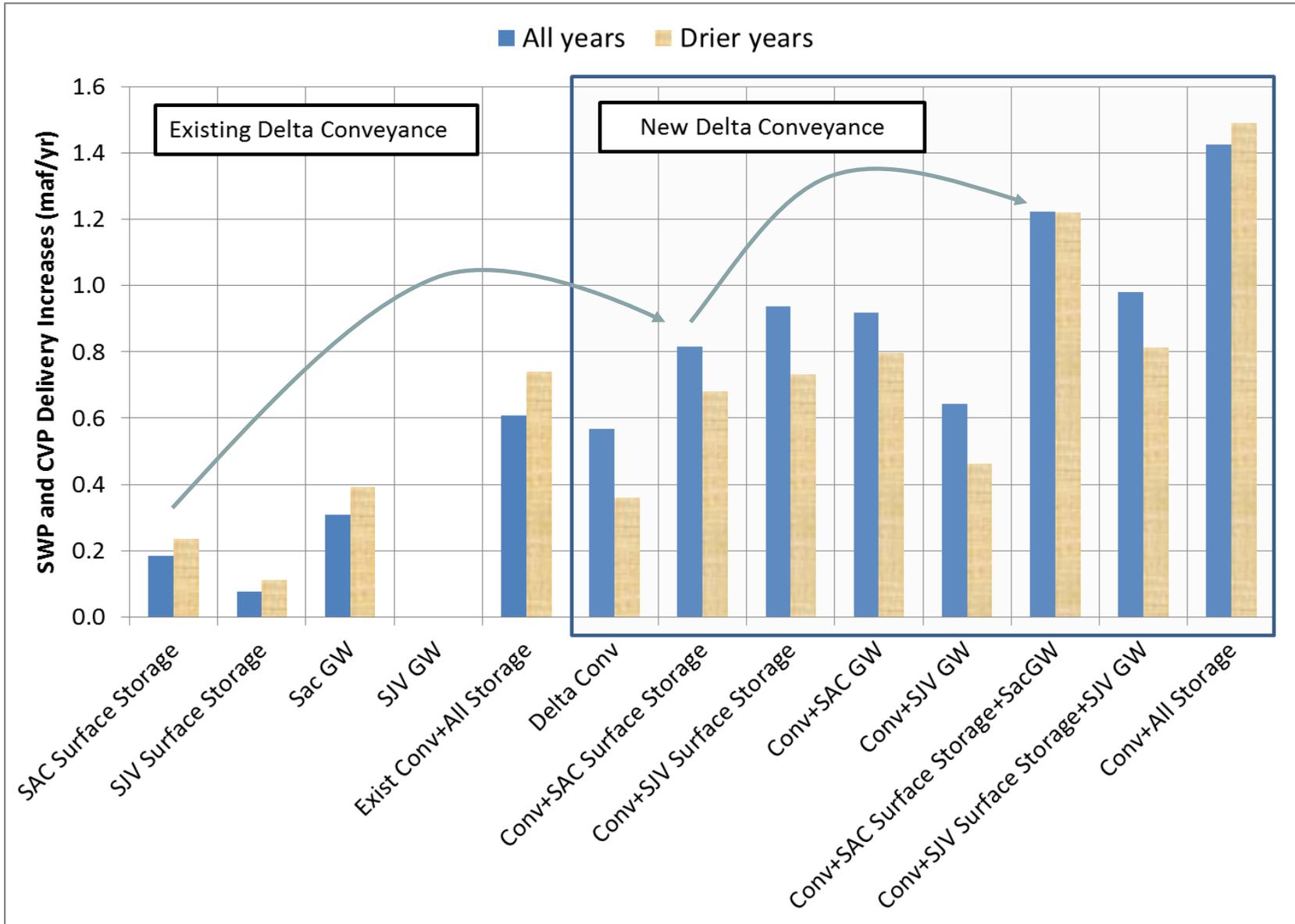


Pilot Analysis Basic Assumptions

- Simple Water Supply Objectives
 - Dry year deliveries
- Simple Environmental Objectives
 - Improve meeting delta outflows
 - Improve meeting Sac River Temperature
- CalLite screening model
 - Integrated Ground and Surface Water

Pilot Analysis Results

Summary of Water Delivery Increases



Pilot Study - Primary Conclusions

- Formally integrate surface and groundwater storage to maximize the water supply and environmental objectives
- Use a systems-based analytical approach to identify the most promising storage programs for meeting multiple objectives

- Water infrastructure studies should explicitly consider integrating:
 - Surface and groundwater storage
 - Conveyance Improvements
 - Water demand management
- More explicitly consider ecological benefits in water management analysis
 - Involve environmental advocates and agencies
 - Consider nature's needs up-front

