

Quantifying Scenarios and Response Packages for the California Water Plan



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Deliverables for Update 2009

Using WEAP

- DWR is using WEAP platform for Update 2009 to quantify future scenarios and water management responses
 - Successful WEAP application for IEUA
 - Contracting mechanism and expertise in place
 - Graphical nature supports collaboration
 - Shorter learning curve than alternatives



Overview of This Afternoon

- Summarize recent activities for scenarios, response packages, and outreach
- Introduce WEAP tool and work for Update 2009
 - David Groves, RAND Corp
- Describe using WEAP to quantify management strategies
 - Brian Joyce, Stockholm Environment Institute



Recent Activities

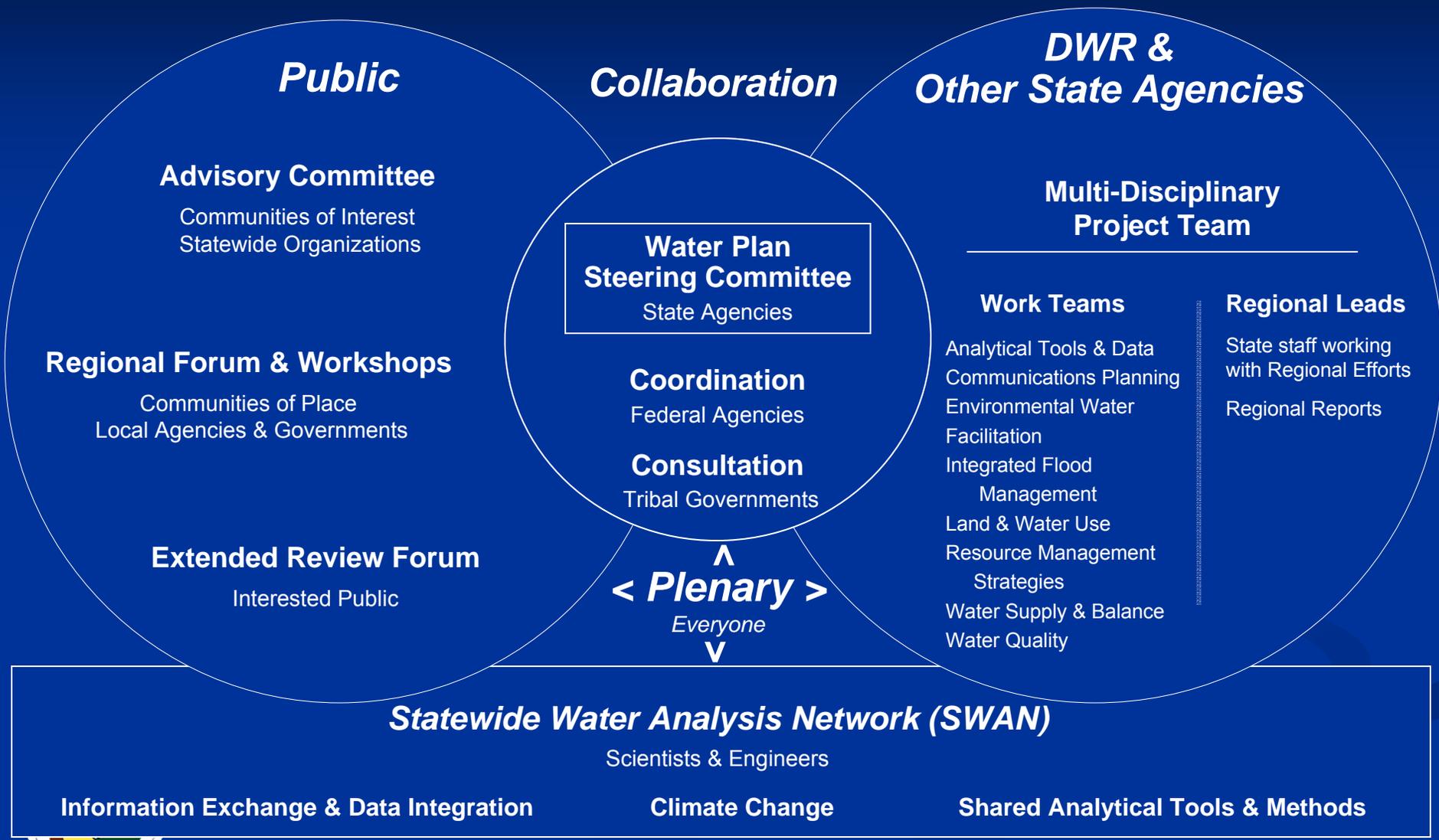
- Outreach and collaboration
- Showing uncertainty and use of scenarios
- Describing and evaluating resource management strategies



Outreach and Collaboration



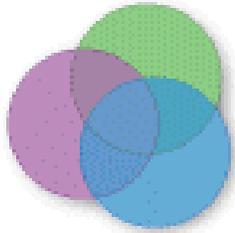
California Water Plan Update 2009 Process Guide



Many Water Plan Activities Require Data / Data Integration

- Water portfolios of current conditions
- Multiple future baseline scenarios
- Response packages / evaluation criteria
- Climate change adaptation strategies
- Flood management
- Regional water planning





Shared Vision Planning

- PLANNING PRINCIPLES
- SYSTEMS MODELING
- COLLABORATION

Integrates planning principles, systems modeling and collaboration into a practical forum for making resource management decisions;

*SVP means **involving stakeholders in the technical analysis** – in the data and technical relationships*

www.SharedVisionPlanning.us



Showing Uncertainty and Use of Scenarios

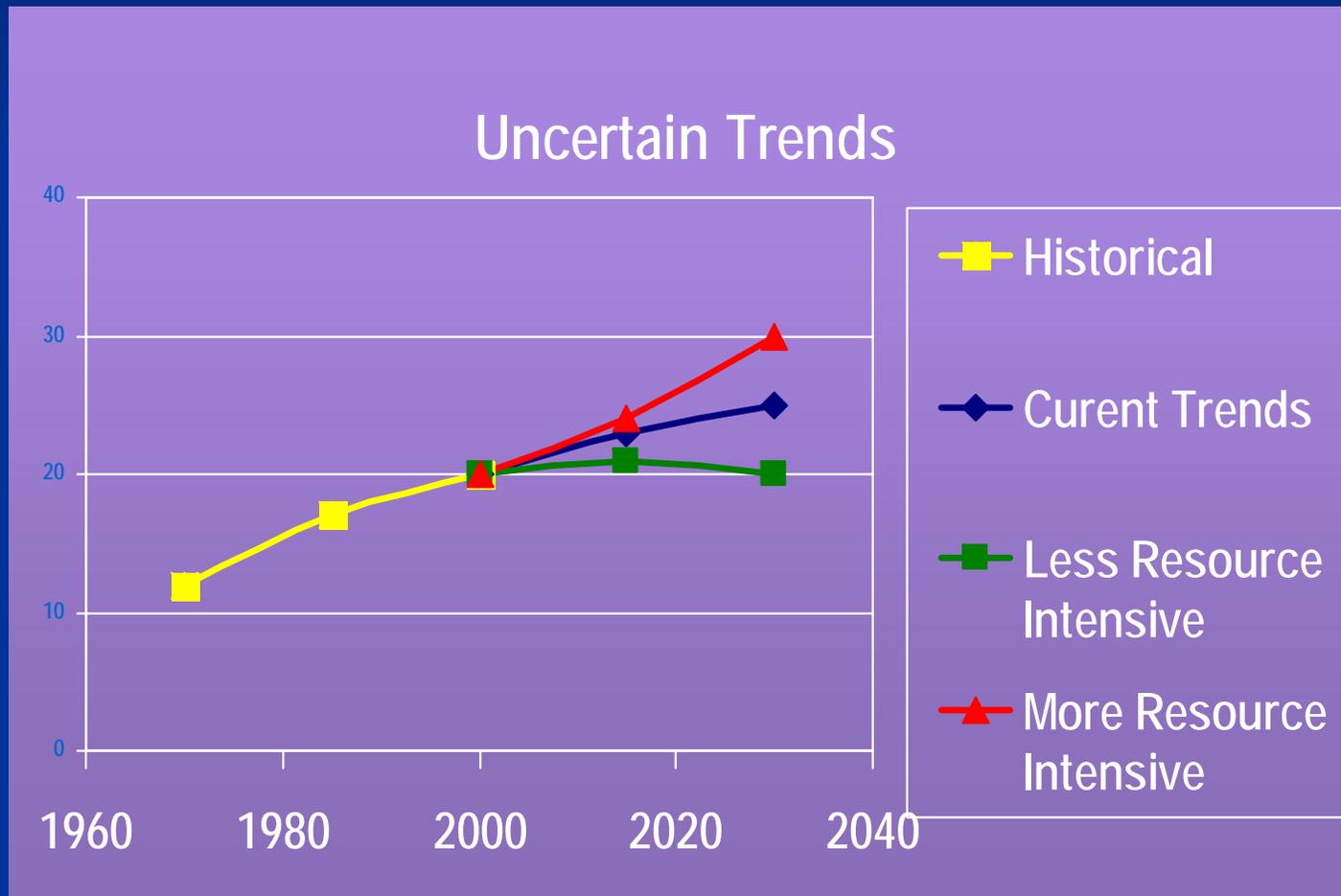


Uncertainties Affecting California Water Management

- Future climate change
- Vulnerable flood management system
- Severity of the next drought
- Collapsing Delta ecosystem
- Growing population
- Invasive species



Using Scenarios in the California Water Plan



Water Plan Scenarios Represent Baseline Conditions

- Plausible during planning horizon under consideration
- Influence future water management decisions
- The water community has little control over



Scenarios Organized Around Uncertainty

**Economic
and Financial**

**Institutional
and Political**

**Natural
Systems**

Technology

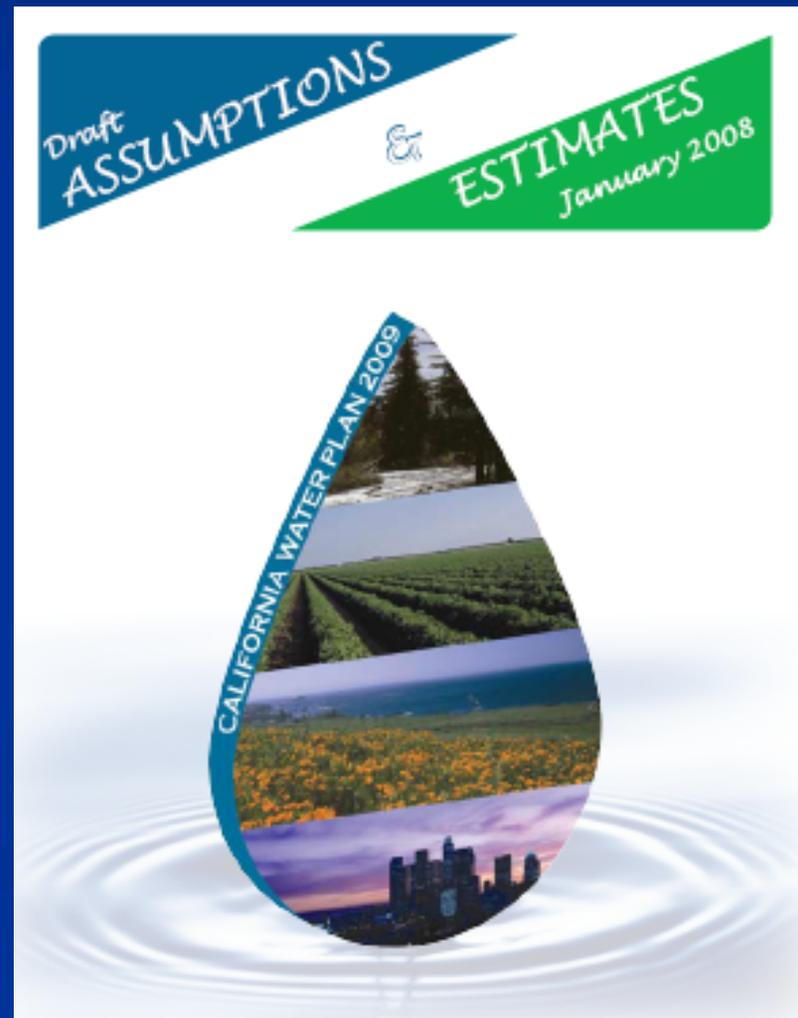
**Social
Practices**



Draft Assumptions and Estimates Report

- <http://www.waterplan.water.ca.gov/cwpu2009/ae>

**Includes
narratives for 3
scenarios**



Quantifying Climate Change Impacts & Recommending Adaptation Actions



- Established Climate Change Technical Advisory Group
- Collaborating with Governor's Water-Energy Climate Action Team (WET CAT)
- Incorporated climate factors in Update 2009 Scenarios
- Developing climate change mitigation & adaptation strategies



Describing and Evaluating Resource Management Strategies

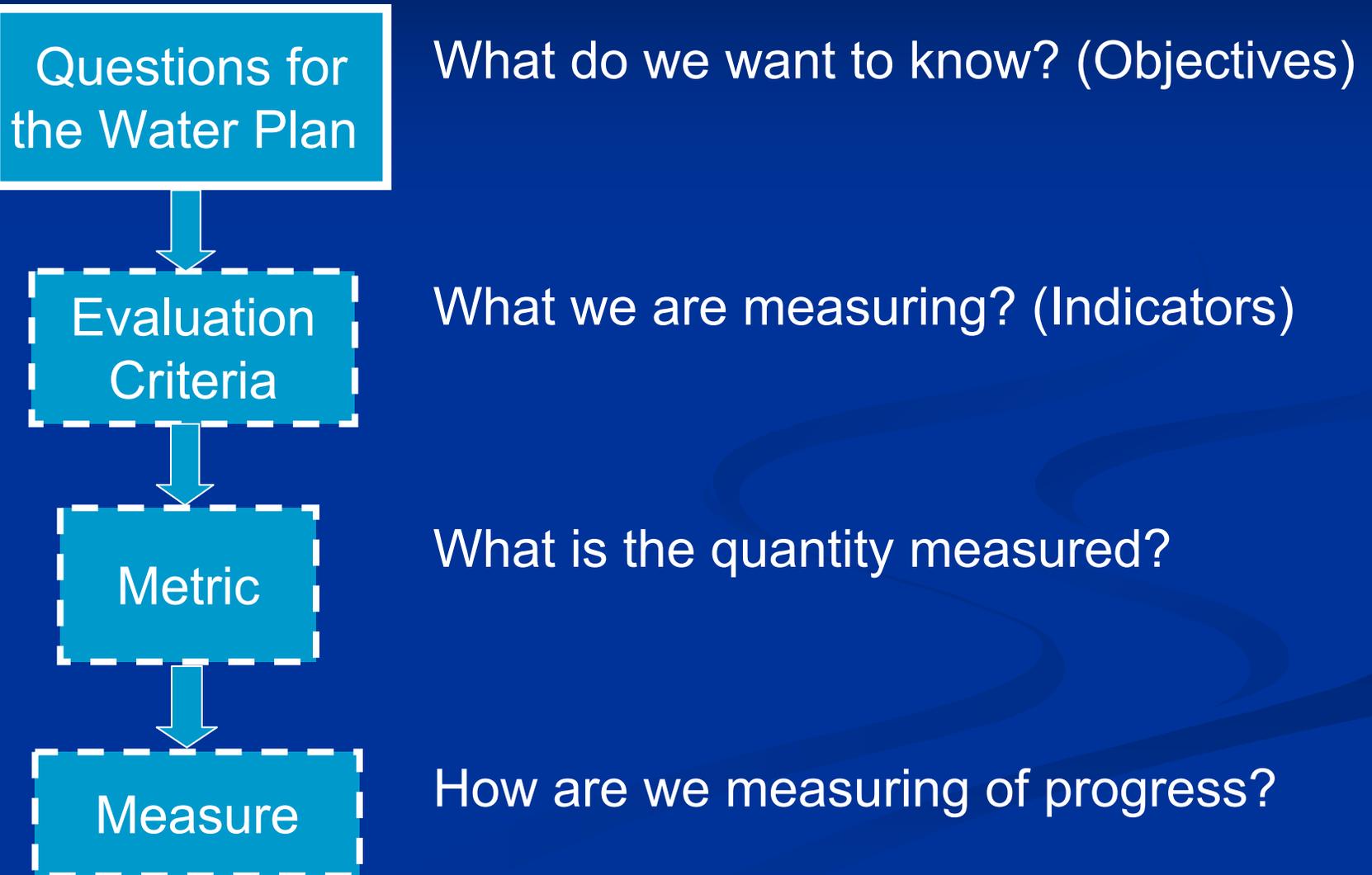


Resource Management Strategies

- Reduce water demand
- Improve operational efficiency
- Increase water supply
- Improve water quality
- Practice resource stewardship
- Improve flood management
- Other strategies



Evaluation Framework from Update 2005



Reference Information

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