

# **California Water Plan Update 2013**

## **California Water Sustainability Indicators**

**Water Plan  
Public Advisory  
Committee Meeting  
March 30, 2011**

# A Recurring Question

“How can we ascertain that the resource management strategies and objectives of the CA Water Plan are providing sustainable water uses and reliable supplies for the State and its various hydrologic regions?”

# In Water Plan Update 2009

One of the guiding principles established for decision-making:

“Determine values for economic, environmental, and social benefits, costs, and tradeoffs to base investment decisions on sustainability indicators.”

# Water Plan Update 2013

## California Water Sustainability Indicators

- ❑ Objective
- ❑ Challenges
- ❑ Work Plan
- ❑ Process
- ❑ Participation
- ❑ Schedule
- ❑ Contact Information

# Water Plan Update 2013

## CA Water Sustainability Indicators

### Objective

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Develop an analysis framework and identify, compute, and evaluate a set of sustainability indicators to monitor progress towards water resources sustainability through meeting the objectives of California Water Plan

# Water Plan Update 2013

## CA Water Sustainability Indicators

### Challenges

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- ❑ No consistent terminologies & definitions
- ❑ No systematic analytic framework or methods for quantifying indicators
- ❑ Limited data

# Water Plan Update 2013

## CA Water Sustainability Indicators

### Work Plan

#### □ Develop analytical framework:

- Identify goals and objectives.
- Identify indicators.
- Identify targets or desired future conditions.
- Ensure vision and vision alignment.
- Prepare Framework Document.

#### □ Conduct quantitative analysis:

- Calculate condition/status and trends.
- Report indicators relative to desired future conditions.
- Evaluate indicators towards water resources sustainability.

#### □ Identify issues and data gaps.

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## CA Water Sustainability Indicators

### Learning from Other Efforts

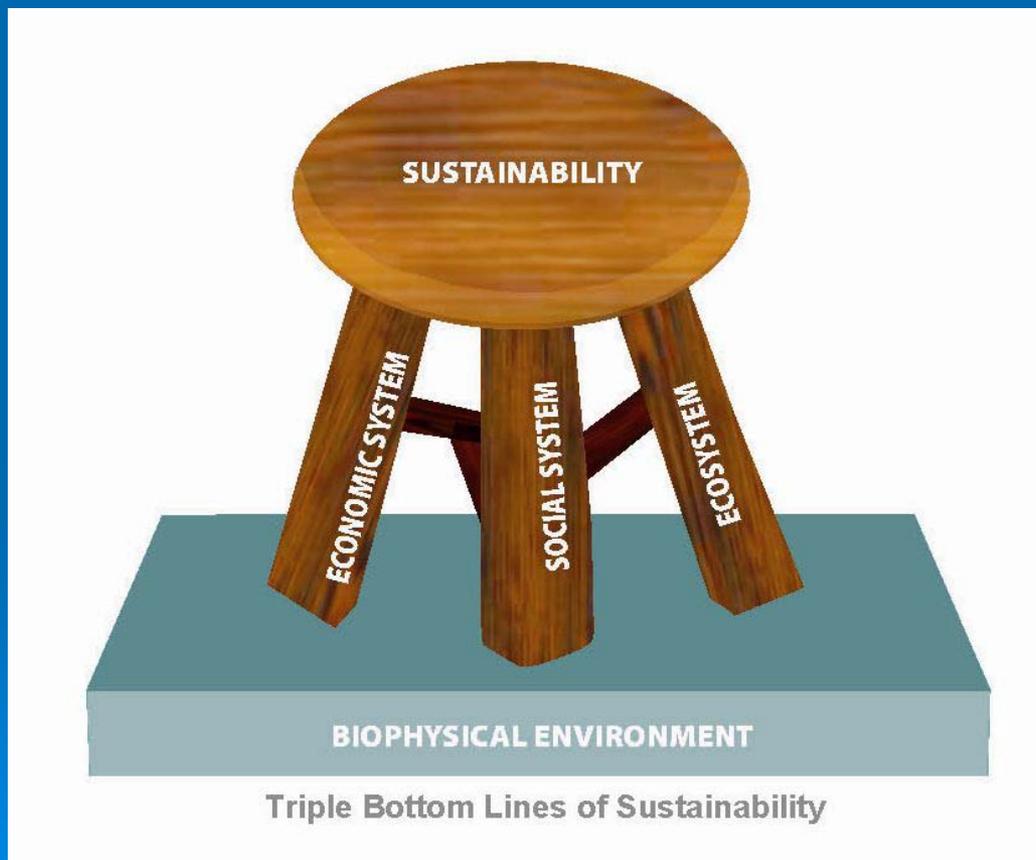
- ❑ Objective
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- ❑ The Sustainable Water Resources Roundtable (SWRR)
- ❑ The Sacramento River Basin Report Card
- ❑ The Bay Institute Ecological Score Card
- ❑ The State of the Great Lakes
- ❑ 2010 Environmental Performance Index (EPI) – CIESIN, Columbia University
- ❑ Others

# Water Plan Update 2013

## CA Water Sustainability Indicators

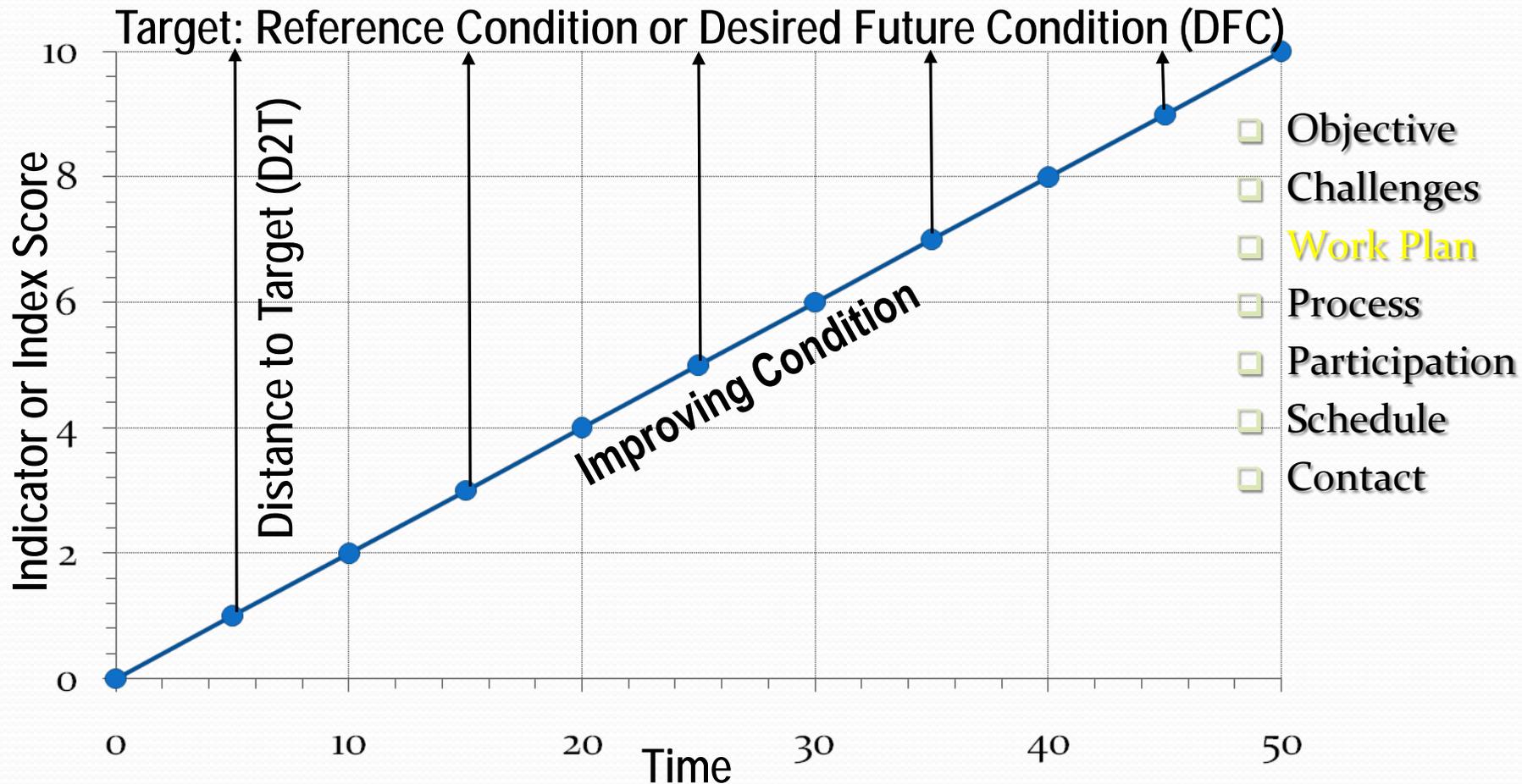
### Essential Attributes of Sustainability



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# Water Plan Update 2013

## CA Water Sustainability Indicators Indicator Evaluation Framework



# Water Plan Update 2013

## CA Water Sustainability Indicators

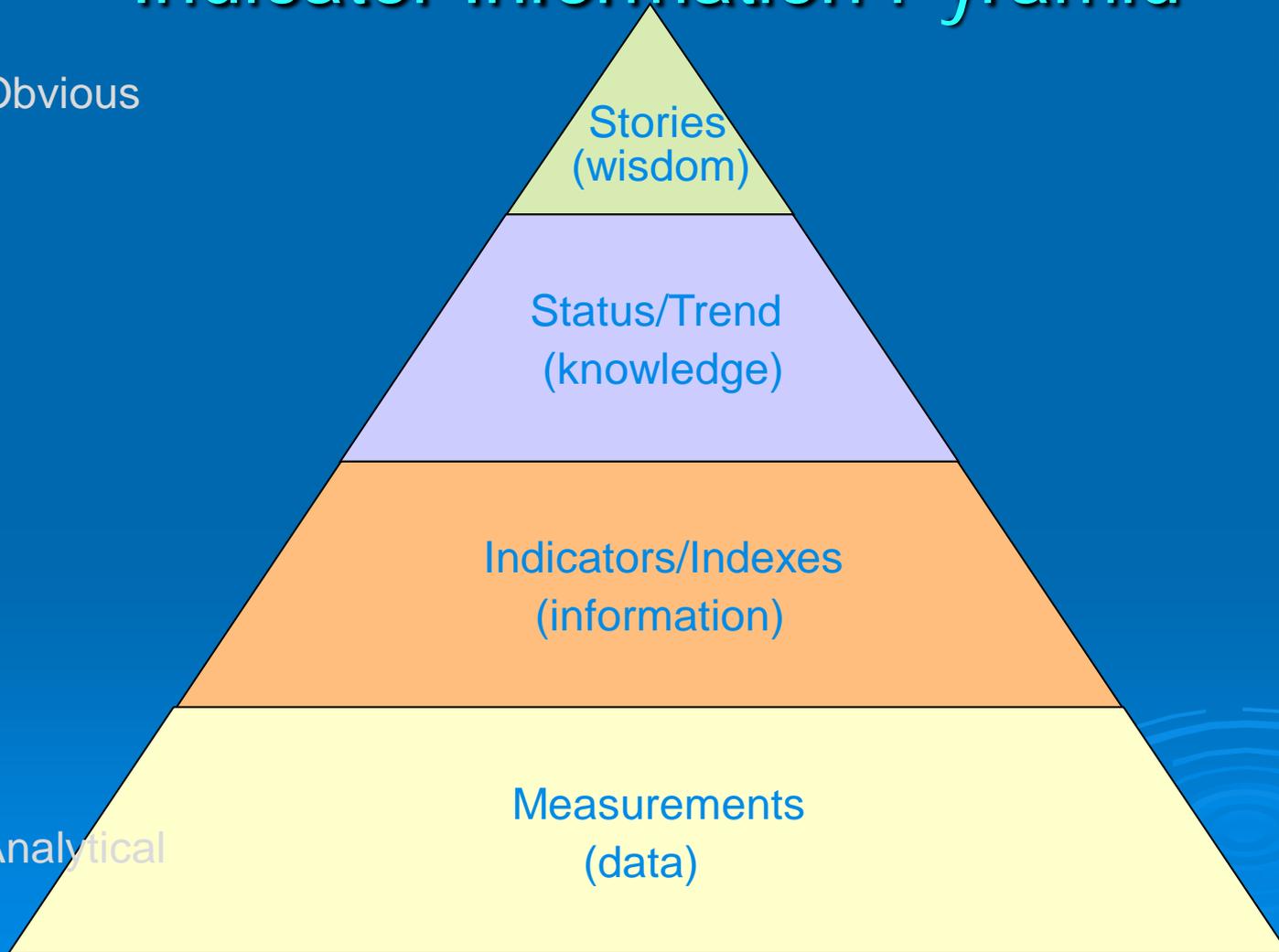
### Indicator Information Pyramid

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Intuitive/Obvious



Technical/Analytical



# Water Plan Update 2013

## CA Water Sustainability Indicators

### Process

- ❑ Stakeholder driven.
- ❑ Collaborative.
- ❑ Transparent.
- ❑ Science based.

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# Water Plan Update 2013

## CA Water Sustainability Indicators

### Anticipated Participation

- ❑ Local agencies and regional water entities/groups.
- ❑ Delta Stewardship Council.
- ❑ Sacramento River Watershed Program/Basin Report Card.
- ❑ The Bay Institute's Ecological Score Card Effort.
- ❑ State Water Resources Control Board.
- ❑ The Sustainable Water Resources Roundtable (SWRR).
- ❑ U.S. EPA.
- ❑ U.S. Bureau of Reclamation.
- ❑ U.S. Geological Survey.
- ❑ Association of California Water Users (ACWA).
- ❑ California Native American Tribes.
- ❑ Others.

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#### Phase 1:

- ❑ Workshop 1: Straw Proposal:
  - Goals/objectives/indicators review Spring/2011
- ❑ Sustainability indicator analysis framework Fall/2011

#### Phase 2:

- ❑ Detailed scoping for quantitative analysis Fall/2011
- ❑ Workshop 2: Proposal on a Pilot analysis Late/2011
- ❑ Workshop 3: Pilot results &
  - a proposal for extended analysis Summer/2012
- ❑ Workshop 4: Results from extended analysis Summer/2013
- ❑ Final analysis and documentation Fall/2013

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Thank You!

Questions?