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Managing Water in the West

Sacramento and San Joaquin Basins Study Public Meeting #1

May 30, 2013

U.S. Department of the Interior
Bureau of Reclamation

Meeting Agenda

- Introduction
- Basin Studies Program Overview
- Sacramento and San Joaquin Basins Study Overview
- Basin Study Elements
- Public Participation
- Study Schedule and Key Milestones
- Outreach Plan and Coordination

Meeting Logistics

- Participants will be on “silent” mode
- Participants can ask questions using webinar tool
- Question-and-answer session following presentation
- Reclamation will respond to questions and post responses on Basins Study website

Basin Studies Program Overview

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WaterSMART Program

- **Implements SECURE Water Act, Public Law 111-11**

- **Established in 2010 by Secretary Salazar to…**
  - **Help water resource managers make sound decisions about water use**
  - **Develop strategies to ensure sufficient future water supplies for multiple uses**
  - **Develop adaptive measures to future climate change**
  - **Improve water conservation**
  - **Promote sustainability**

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Basin Study Program

- **West-Wide Climate Risk Assessments**

- **Basin Studies**
  - **Basin Studies**
  - **Secure Water Act follow up Feasibility or Special Studies**

- **Landscape Conservation Cooperatives**

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West-Wide Climate Risk Assessments

- Conducted by Reclamation
- Reconnaissance-level water supply and demand analyses in eight Reclamation river basins
- Projections of climate change impacts to water supply and demand and baseline risk assessments to evaluate impacts of climate change to water uses
- Baseline for more in-depth analyses performed through Basin Studies

SECURE Water Act Section 9503(c) – Reclamation

Climate Change and Water – April 2011

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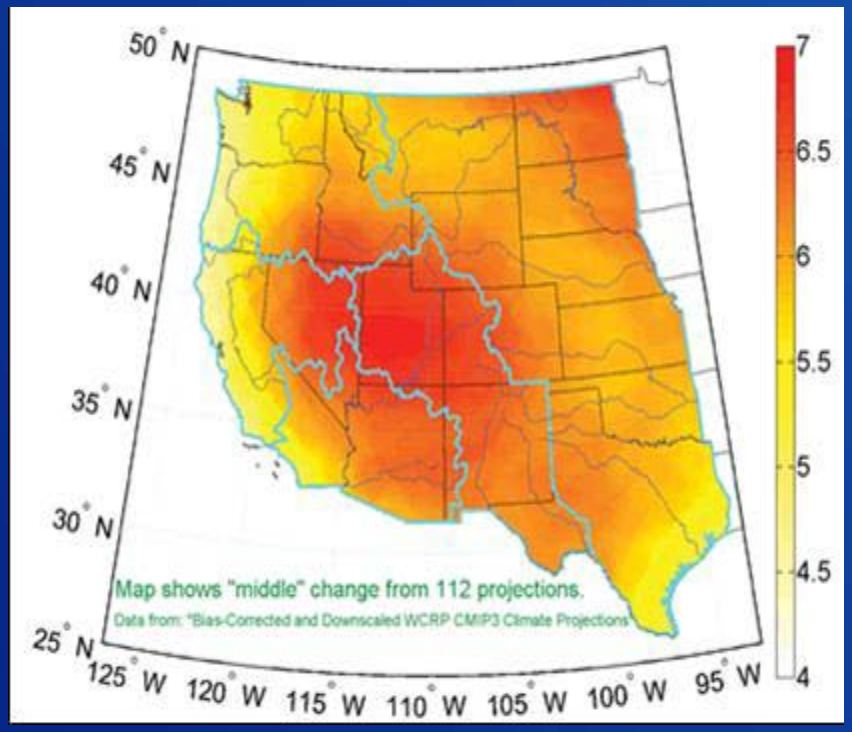
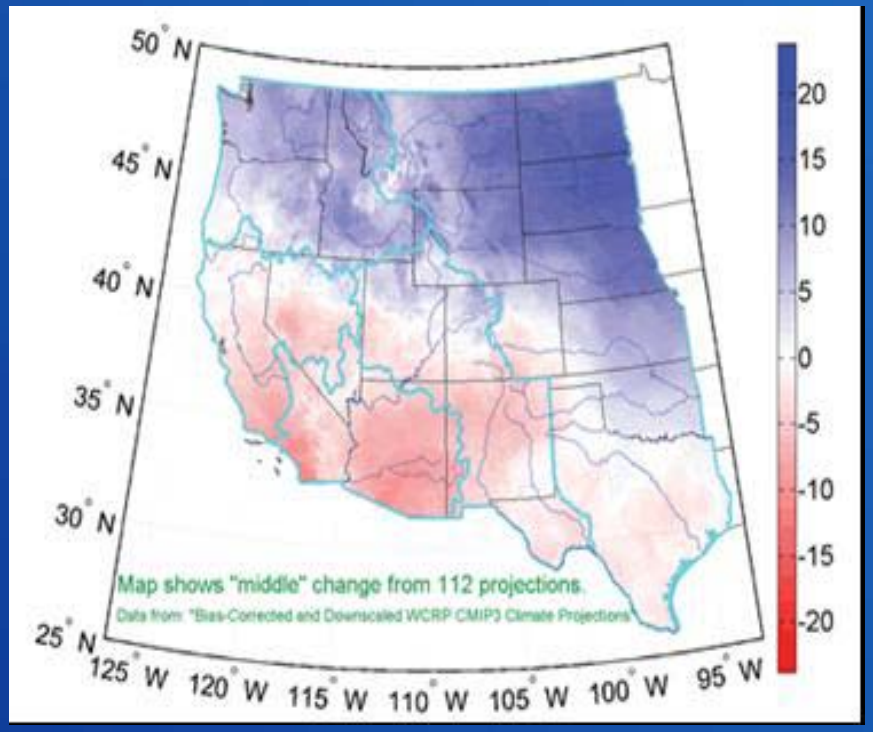
SECURE Water Act Section 9503(c) – Reclamation Climate Change and Water – April 2011





Projected median temperature (°F) and precipitation (%) changes at the end of 21st century (2070–2099) relative to historic conditions (1950–1979)

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Basin Studies

- **Purpose**
  - Work with state and local partners in 17 Western States to evaluate future water supply and demand imbalances in a changing climate
- **Basin Studies Include:**
  - Assessments of the risks and impacts of climate change on water resources, and
  - Development of potential mitigation and adaptation strategies to meet future demands
  - Potential subsequent Feasibility-Level Investigations

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Sacramento and San Joaquin Basins Study Overview

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Plan of Study outlines Study Purpose

- ***Conduct a comprehensive assessment of the Sacramento, San Joaquin, and Tulare Lake Basins***
  - ***Current and future imbalances in water supply and demand,***
  - ***Evaluate impacts of climate change on water delivery, hydropower generation, water quality, flood control, recreational, and ecological resources***
- ***Assessment will be used to develop, evaluate, and recommend adaptation strategies to reduce future risks to water and related resources***

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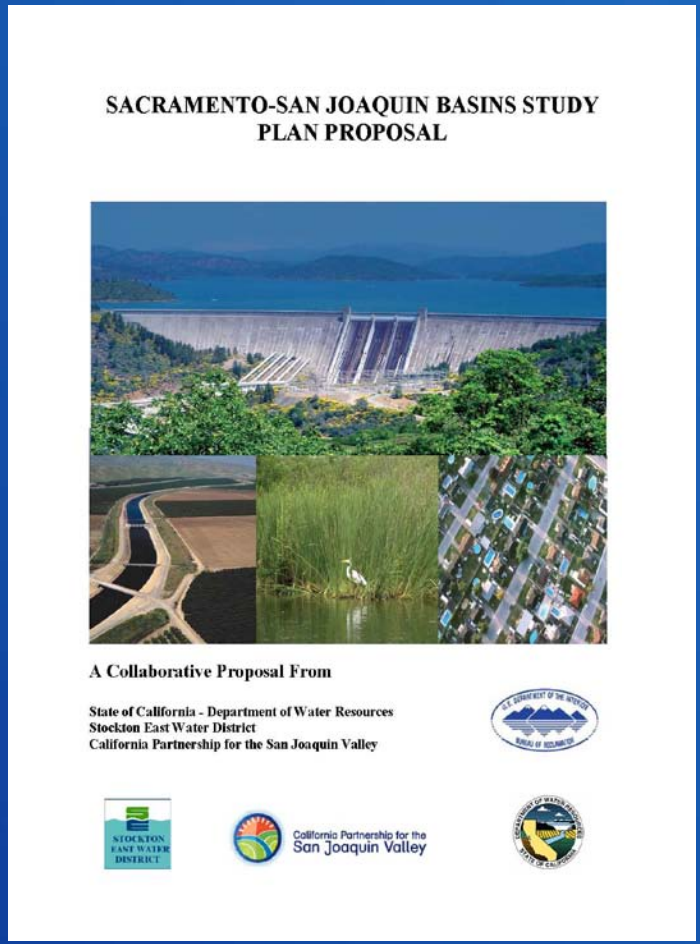
Sacramento and San Joaquin Basins Study

- Phase 1 Plan of Study Proposal
  - Phase 1 Awarded in August 2011
  - Plan of Study Completed in December 2011
- Phase 2 – Basin Study
  - Application Process / Letters of Interest from non-federal partners – Nov 2011
  - Basin Study Funding Proposal – Feb 2012
  - Funding Announced – March 2012
  - CH2M HILL team selected – September 2012
- Basin Study Timeline
  - Partners completed MOA in June 2012
  - Study started October 2012
  - Complete within 24 months



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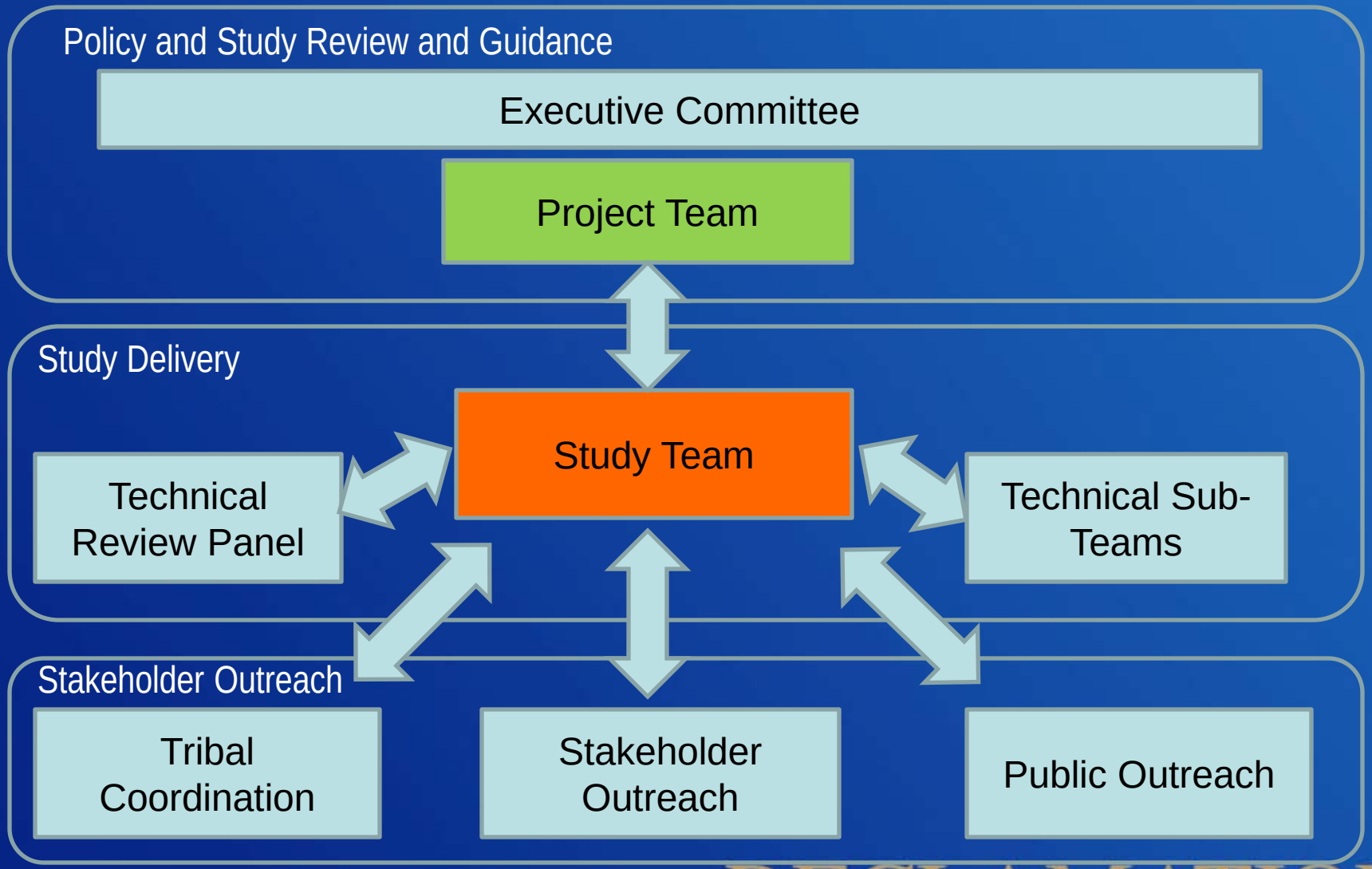
Study Management Structure



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Basins Study Partnership

- Cost-Share Partners include:
  - Reclamation
  - California DWR
  - Stockton East Water District
  - California Partnership for San Joaquin Valley
  - El Dorado County Water Agency
  - Madera County Resource Management Agency
  - Friant Water Authority
  - Mountain Counties Water Resources Association
- Partner contributions include ongoing studies, information, and outreach efforts
  - DWR's Water Plan 2013
  - Reclamation's CVP IRP
  - BDCP and DHCCP
  - Storage investigations
  - Others

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Basins Study Elements

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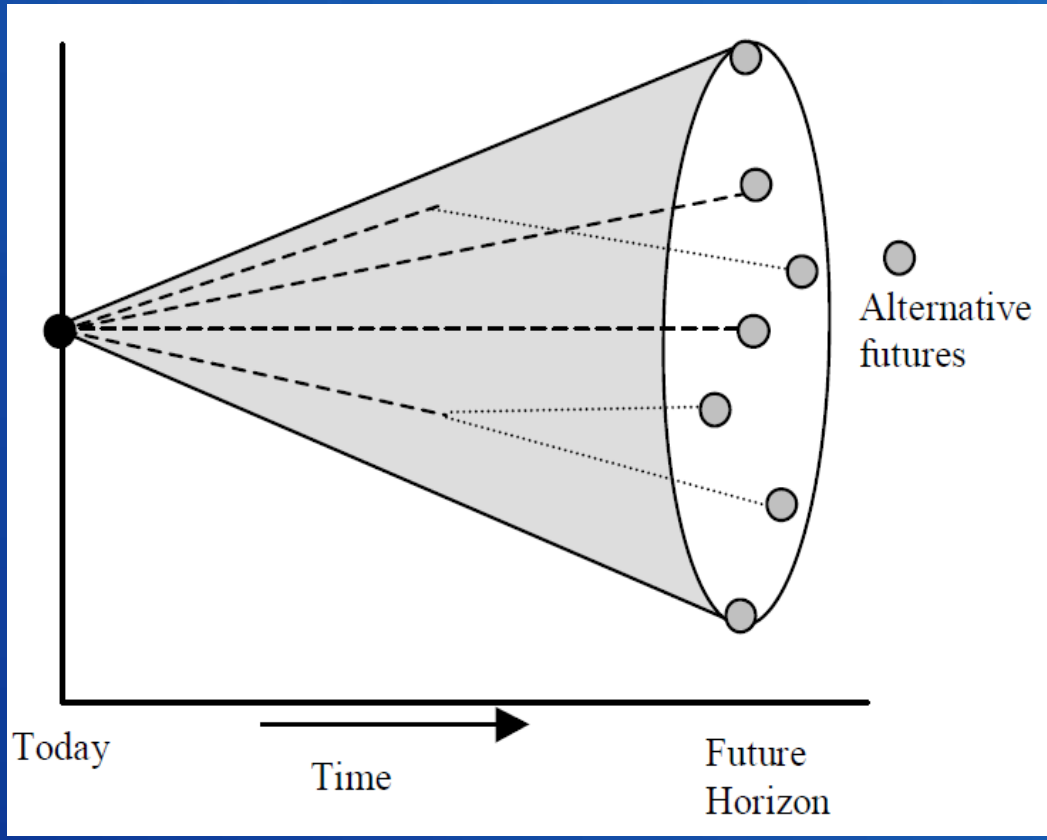
Key Elements Included in Study

- Scenario Development
- Water Supply Assessment
- Water Demand Assessment
- System Reliability and Risk Assessment
- Development and Evaluation of Adaptation Strategies

Scenario Development

- **Effective treatment of uncertainty is key to project success**
- **Uncertainty is being addressed through a Scenario Approach**



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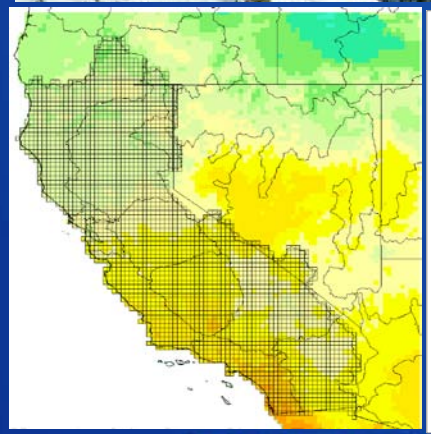
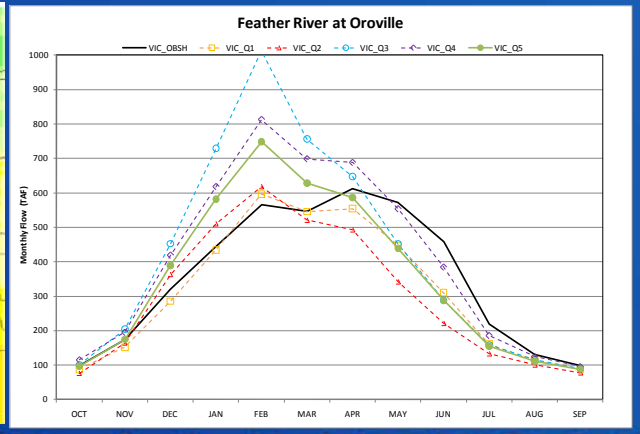
Water Supply Assessment

- Assess current supplies
- Develop future climate scenarios
- Assess future water supply under differing scenarios





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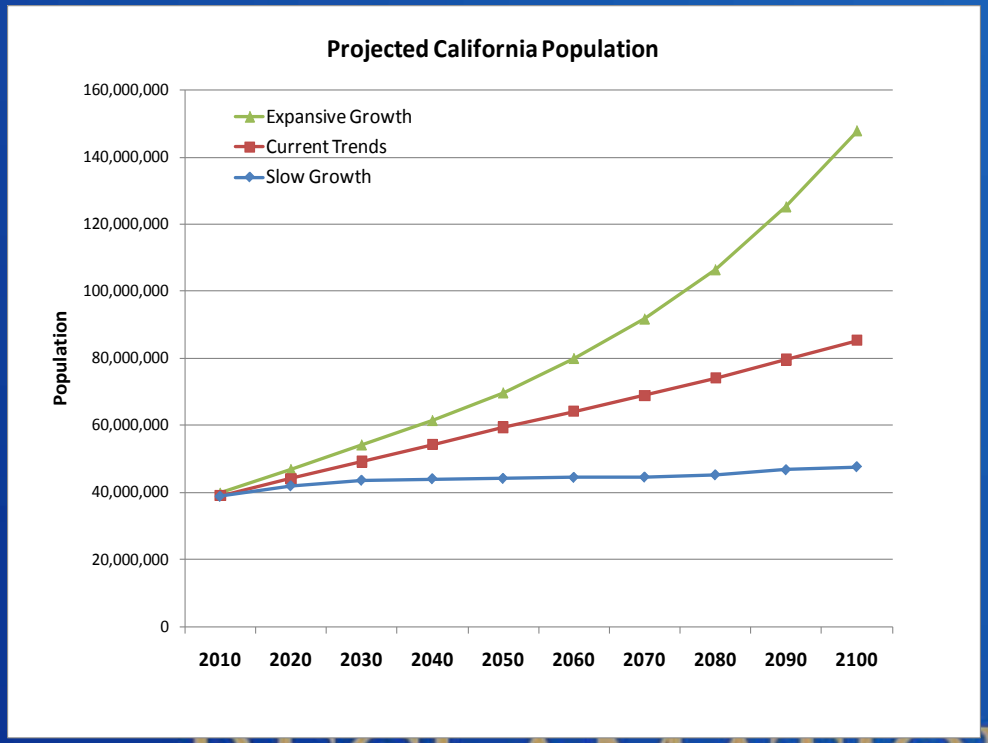
Water Demand Assessment

- Assess current demands
- Develop future population and land use scenarios
- Assess future demands under differing scenarios



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System Reliability and Risk Assessment

- Identify system reliability metrics
- Develop and apply an analytical framework for evaluating reliability
- Assess system reliability and risk under multiple socioeconomic-climate scenarios

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Development and Evaluation of Adaptation Strategies

- Identify and screen potential actions
- Assess the multi-resource reliability of each short-listed action
- Evaluate the relative benefits of each action and portfolios of actions

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Study Schedule and Key Milestones

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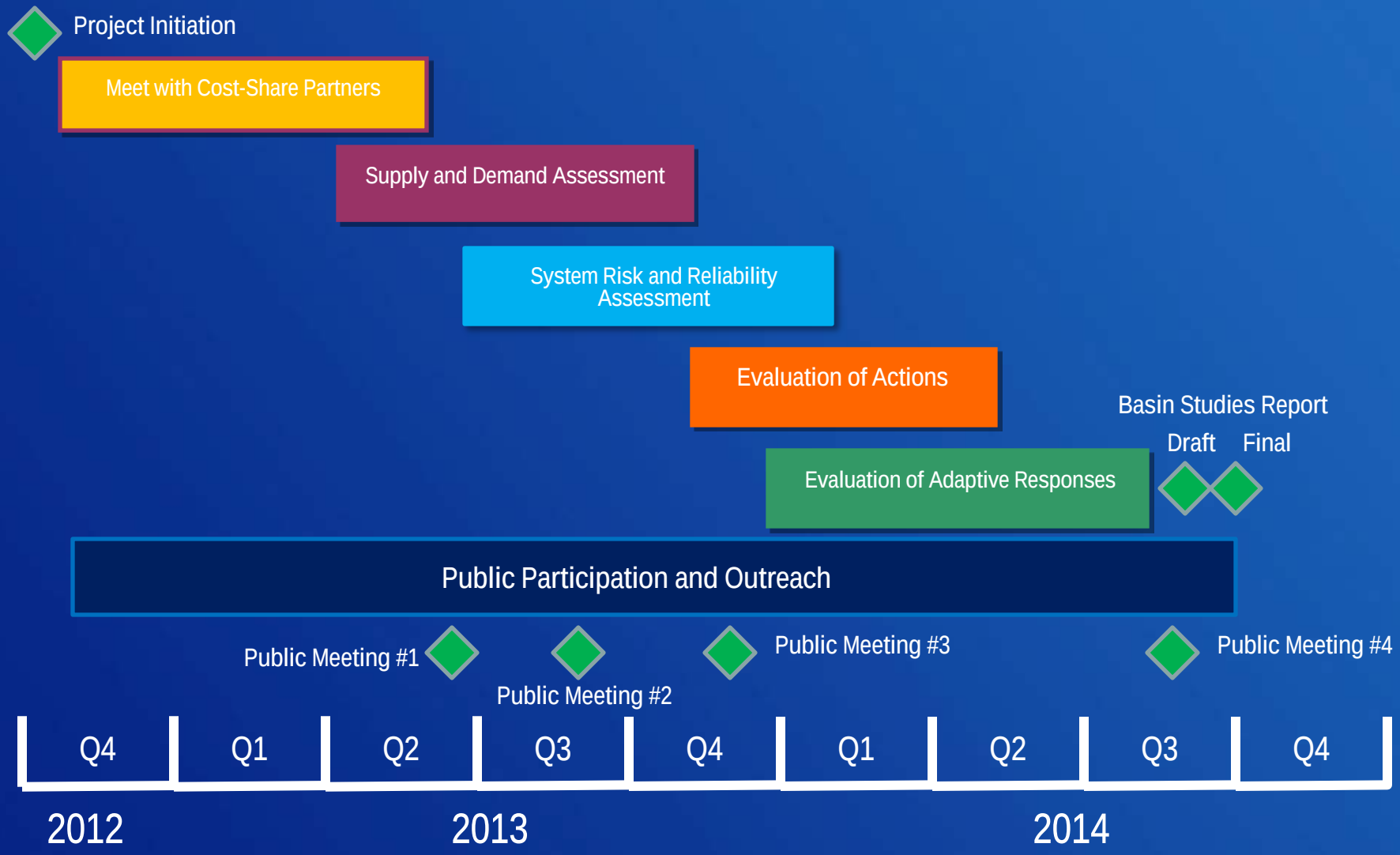
Basins Study Schedule



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Preliminary Study Activities

- **Outreach**
  - Met with all current Basin Study partners to assess objectives and technical information
- **Study Planning**
  - Developed technical work plan and public participation and outreach plan
- **Water Supply Assessment**
  - Updating climate and hydrologic data, approaches, and modeling
- **Water Demand Assessment**
  - Updating hydrologic modeling to include consistent agricultural crop water demand estimates
- **System Reliability Metrics**
  - Developed initial list of metrics and methods for assessment of each resource category

Outreach Plan and Coordination

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Outreach and Coordination

- Outreach will involve:
  - Basin Study Partners
  - Tribes
  - Environmental organizations
  - Other interested stakeholder groups
  - General public
- Basin Study Partner coordination will occur through Executive Committee and Project Team meetings (quarterly)
- Outreach to stakeholder groups will occur through individual meetings (quarterly or as needed)
- Public outreach will occur through web-based meetings (semi-annual)

Anticipated Public Meetings

- **Public Meeting #1**
  - **Today**
  - **Overview of Basins Study**
- **Public Meeting #2**
  - **August/September 2013**
  - **Present results of supply and demand assessments**
- **Public Meeting #3**
  - **November/December 2013**
  - **Present results of system risk and reliability assessment**
  - **Solicit potential adaptation strategies**
- **Public Meeting #4**
  - **September 2014**
  - **Present final results of Basin Study**

Tribal Outreach

- 38 Federally-Recognized Tribes in the Sacramento and San Joaquin basins study area
- Tribal outreach being coordinated with Reclamation's Native American Affairs Officer
- Letters sent to each tribe in May 2013 to invite input in the basins study process
- For interested tribes, future meetings with each will be scheduled to determine specific issues

Study Information

- Reclamation's Basin Study Program Website
  - http://www.usbr.gov/WaterSMART/bsp/studies.html
- Sacramento and San Joaquin Basins Study Website
  - http://www.usbr.gov/mp/SSJBasinStudy.html
  - Public information related to Study
  - Public meetings will be archived on the site
- Additional Information, Questions, and/or Comments
  - Arlan Nickel phone: 916-978-5061 or
    Sharon McHale phone: 916-978-5086
  - email: sha-mpr-ssjbasinstudy@usbr.gov

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