Next Steps for the Sacramento and San Joaquin Basins Study

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Next Steps – Drivers

Of all climate impacts identified in this Basins Study, two impacts have the greatest potential consequences for water management

Earlier runoff. Warming conditions cause earlier runoff in mountain regions surrounding the Central Valley forcing earlier discharge due to the flood rule curves in effect for each reservoir.

Sea Level Rise. Sea level rise has been called a "slow emergency" and may significantly impact the Sacramento –San Joaquin Delta by increasing risks to water delivery, water quality and Delta ecosystems.

Current & Ongoing Activities

> WaterSMART

 Reclamation's WaterSMART program, grants to water districts have been made to increase water use efficiency and water recycling.

> Planning Studies

• Work with partners to share Basins Study result and tools to address climate impacts and develop adaptation strategies.

California Landscape Conservation Cooperative

 Work with the USFWS and other Federal, State, and stakeholder partners to develop a comprehensive framework identifying knowledge gaps, research priorities and new information on climate changes impacts on ecological resources.

Next Steps – Improving Data & Information

- Refine and analyze the portfolio management actions to identify and resolve any uncertainties regarding effectiveness and efficiency.
- Explore and pursue opportunities to climate projections and enhance planning tools
- Further investigate costs, permitting issues, and energy needs relating to potential water management actions.
- Participate in a long-term cooperative framework with stakeholders, partners and other agencies that sustains a wide-range of activities that benefit water users by addressing climate changes.

Next Steps - Water Management Actions

- Institutional Flexibility Work cooperatively with the Army Corps of Engineers to evaluate adaptive management of flood rule curves for reservoirs.
- Water Demand Investigate continued improvements in water use efficiencies to support Reclamation programs such as WaterSMART Grants and Title XVI projects.
- Water Quality Develop and refine of modeling tools to improve water management responses to meet State and Federal water quality criteria as climate changes.
- Forest Health Work with Western Watershed Enhancement Partnership (WWEP) and the U.S. Forest Service to reduce wildfires, preserve forest health and assist in forest thinning to augment snowpack retention and runoff.
- Groundwater & Conjunctive Use Improve analyses of current and future groundwater conditions, including recently initiated state groundwater regulations.
- Water Deliveries Cooperate with the State of California in their investigation and planiing for the California WaterFix.

Climate Change Adaptation Strategies and Insights Sacramento-San Joaquin Basins Study

Discussion

Study Information

- Reclamation's Basin Study Program Website
 - <u>http://www.usbr.gov/watersmart/bsp/</u>
 - Sacramento-San Joaquin Basins Study
 - **o Summary Report, Technical Report & Appendices**
 - Sacramento-San Joaquin Climate Impact Assessment
- Sacramento and San Joaquin Basins Study Website
 - <u>http://www.usbr.gov/mp/SSJBasinStudy.html</u>
 - Public information related to Study
 - Downloadable reports available
 - Public meetings are archived on the site
- Additional Information, Questions, and/or Comments

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