

Project Name:

Climate Change Technical Advisory Group (CCTAG)

Sponsor/Program Manager	California Department of Water Resources/John Andrew
Project Manager	Elissa Lynn

Project Objective Statement: *What must the project do? By When? Keep this statement to 25 words or less. Make it SMART (Specific, Measurable, Achievable, Relevant, and Time-based).*

The CCTAG will advise DWR on the scientific aspects of climate change, its impacts on water resources, the use and creation of planning approaches and analytical tools, and the development of adaptation responses.

Triple Constraint Trade-off

Resources	S	<i>Select a different flexibility letter for each constraint N= Not Flexible S= Somewhat Flexible M= Most Flexible</i>
Schedule	M	
Scope	N	

Estimated Start Date:	March 2012	Estimated End Date:	March 2015
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Project Deliverables: *What is the project going to produce? Create a list of tangible products that will result from project.*

- ◆ Analysis and recommendations of climate scenarios for DWR planning studies ("Framework" Team)
- ◆ Analysis and recommendations of climate scenarios for the California Water Plan Update 2013 (in conjunction with the Statewide Water Analysis Network)
- ◆ Development of adaptation strategies (update of the California Climate Adaptation Strategy)
- ◆ Recommendations for including climate change in Integrated Regional Water Management (IRWM)
- ◆ Recommendations for climate change considerations for statewide flood management (FloodSAFE)

Strategic Fit: *What is the Strategic Initiative Identifier for this project?*

N/A; this refers to DWR internal goals and objectives

Customer: *Who are you doing the project for?*

In general, the Department of Water Resources is the customer. Specific customers within DWR include: 1) the Climate Change Framework Team, which is developing guidance on the selection of climate change scenarios, approaches and project-level analytical tools; 2) the California Water Plan Update 2013 Statewide Water Analysis Network, which is selecting climate change scenarios; 3) other groups, including IRWM, Flood Management, and the Natural Resources Agency, on the incorporation and consistency of climate change in planning studies and projects.

Customer Benefits: *What customer requirements does this project address? Relate these to: increase revenue, avoid costs, improve service, and/ or comply with a mandate? Create a short list of customer benefits.*

A standing technical advisory group on climate change impacts and adaptation serving all DWR programs provides external guidance and support for a variety of climate-related issues, including scientific review of climate change models and scenarios, interpretation of scientific information produced by the National Climate Assessment and the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, and informing DWR's climate change adaptation policies. Benefits include consistency in the scientific advice the Department receives on climate change, and the administrative efficiency of not having redundant climate change advisory groups across the Department.

Success Determination Factors *How will the success of the project be determined from the customer's perspective? Make criteria measurable so there is no doubt as to the project's success. Create a short list.*

- Near-term success determined by the following.
- ◆ Development of future planning scenarios with respect to climate change for use in the California Water Plan Update 2013'

- ◆ Development of project-level guidance
- ◆ Update of adaptation strategies

Project Background: *What is the primary motivation for this project? Include a brief high level description of the business area, the current situation, the desired situation, and the gaps that exist. This summary builds on your description in the Project Initiation form.*

In support of the *California Water Plan Update 2009*, the Department assembled an external advisory group to provide technical support and feedback for climate change issues. Known as the Climate Change Technical Advisory Group (CCTAG), the nominally 28-member expert panel advised DWR on the scientific aspects of climate change, its impacts on water resources, the use and creation of planning approaches and analytical tools, and the development of adaptation responses for California's water sector. For example, the CCTAG advised the Department on the white paper *The State of Climate Change Science for Water Resources Operations, Planning, and Management*, authored by State Climatologist Michael Anderson (and included in Update 2009). The group also consulted on *Managing an Uncertain Future; Climate Change Adaptation Strategies for California's Water* (2008), which eventually expanded to become the *California Climate Adaptation Strategy* (2009). A subgroup of the CCTAG was also formed to advise the Central Valley Flood Protection Plan on climate change. At the conclusion of the Update 2009 process, the initial CCTAG activities generally ceased.

Project Scope:

In Scope: <i>List areas and functionality included in project.</i>	Out of Scope: <i>List areas and functionality <u>not</u> included in project.</i>
Technical support and advice regarding climate change impacts, analyses, and adaptation strategies.	Technical support for GHG (greenhouse gas) emissions mitigation

Dependent Projects: *What projects must be referenced for this project to be successful?*

California Energy Commission Vulnerability and Adaptation Study
 National Research Council Sea Level Rise study
 Fifth Assessment Report of the Intergovernmental Panel on Climate Change
 National Climate Assessment

Risks: *What characteristics or situations could cause this project to fail? Identify those items which are outside the jurisdiction of project and could result in a "show-stopper" to the project success. Create a short list.*

- ◆ DWR individual planning project funding available for climate change analysis
- ◆ State budget deficit actions affecting CCTAG staff support
- ◆ Downscaled climate data availability
- ◆ California Water Plan Update 2013 scope limitations for use by the Water Evaluation and Planning System (WEAP) Model.
- ◆ Advisory member engagement/availability
- ◆ Political

Assumptions and Constraints: *What assumptions were made in defining project? Are there constraints to the execution of project? List assumptions and constraints.*

The 15 member expert panel will work with DWR on incorporating climate change into water resources planning and management. Acceptance of CCTAG recommendations are at the discretion of DWR.

This Project Should Have:

Project Management Plan <input checked="" type="checkbox"/>	Environmental Stewardship Plan <input type="checkbox"/>	Work Breakdown Structure <input checked="" type="checkbox"/>	Communications Plan <input checked="" type="checkbox"/>	Procurement Plan <input type="checkbox"/>	Human Resources Plan <input checked="" type="checkbox"/>
Quality Management Plan <input type="checkbox"/>	Stakeholder Register <input type="checkbox"/>	Risk Register <input checked="" type="checkbox"/>	Project Budget <input checked="" type="checkbox"/>	Project Schedule <input checked="" type="checkbox"/>	DWR Form 1498 <input type="checkbox"/>

Major High-Level Milestone Targets: *What events measure progress? E.g. Initiation Approved, Analysis Complete.*

Milestone	Target Date
California Water Plan Update climate change scenarios selection	Mid-2012
DWR Framework guidance climate change approach recommendations	Late-2012
Other, TBD	2013-2015

Project Core Team Members

Team Member	Phone/E-mail	Role
Holly Alpert, Inyo-Mono Integrated Regional Water Management Program	holly@inyomonowater.org	CCTAG Panel Member
Michael Anderson, California State Climatologist	manderso@water.ca.gov	CCTAG Panel Member
Barney Austin, Intera, Inc.	baustin@intera.com	CCTAG Panel Member
Dan Cayan, Scripps Institution of Oceanography	dcayan@ucsd.edu	CCTAG Panel Member
David Curtis, WEST Consultants, Inc.	dcurtis@westconsultants.com	CCTAG Panel Member
Mike Dettinger, Scripps Institution of Oceanography	mddettin@usgs.gov	CCTAG Panel Member
Guido Franco, California Energy Commission	gfranco@energy.state.ca.us	CCTAG Panel Member
Konstantine Georgakakos, Hydrologic Research Center	kgeorgakakos@hrc-lab.org	CCTAG Panel Member
John Gyakum, McGill University	john.gyakum@mcgill.ca	CCTAG Panel Member
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Lev Kavvas, University of California, Davis	mlkavvas@ucdavis.edu	CCTAG Panel Member
Ruth Langridge, University of California, Santa Cruz	rlangrid@ucsc.edu	CCTAG Panel Member
Kelly Redmond, Western Regional Climate Center	kelly.redmond@dri.edu	CCTAG Panel Member

Project Charter

Date: 5-15-12

Sarah Young, Santa Clara Valley Water District	syoung@valleywater.org	CCTAG Panel Member
DWR Climate Change Program: John Andrew, Elissa Lynn and Michael Healey	jandrew@water.ca.gov elynn@water.ca.gov mhealey@water.ca.gov	Project coordinators and admin support
DWR Climate Change Framework: Abdul Khan and Andrew Schwarz	akhan@water.ca.gov , aschwarz@water.ca.gov	Guidance on incorporating climate change into planning documents
DWR California Water Plan Scenarios: Rich Juricich, Chas Grant	juricich@water.ca.gov cgrant@water.ca.gov	Scenarios support for California Water Plan; admin support
DWR Bay Delta Office: Jamie Anderson	jameia@water.ca.gov	Technical support

Charter Version Number: FINAL	
Updated By: Elissa Lynn/John Andrew	Date: March 13, 2012
Approved By: John Andrew	Date: May 15, 2012

Funding Information

Project Budget:	\$300,000
Fund Center Title	P84 SO Update CWP, Climate Change- Update California Water Plan (combo fund for cc)
Fund Center Number	3860101001001100
Organization	DSIWM
DWR Contacts	Elissa Lynn, climate change program / Michael Healey, climate change support Andrew Schwarz, DWR Framework Group / Rich Juricich, Statewide Water Analysis Network
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