



DWR CCTAG Scenarios Subgroup Meeting



April 18, 2014

**California Department of Water Resources
Climate Change Technical Advisory Subgroup Meeting**

April 18, 2014

10:00 am-12:00 pm

DWR Fishbowl Conf Room, 2nd floor, Bonderson

<https://resources.webex.com/resources/j.php?ED=229264172&UID=491358787&RT=MiM0>

Provide your phone number when you join the meeting to receive

a call back. Alternatively, you can call:

Call-in toll-free number (Verizon): 1-877-923-1522 (US)

Host access code: 679 474 0

Attendee access code: 295 056 7

AGENDA:

Update on Model Screening/Culling

Cayan

Recommendations paper

Lynn, Cayan

Discussion: Stress test scenarios continued (see spreadsheet)

All

Discussion: Downscaling

M. Anderson

Presentation: Climate change impact on water year type designation

J. Wang

Climate Change and Extreme Conditions Analysis in DWR Planning Activities

Program	Periodicity	Capability/Applicability of Conducting General Climate Change Impacts Analysis	Extreme Conditions Analysis Conducted to Date	Capability/Applicability of Conducting Extreme Conditions Analysis	Agency	Reviewer/Expert
California Water Plan Update	5-years	Wide capability and applicability, but results must be communicated on a statewide and regional basis	Analysis of historical hydrology adjusted with climatological trends, repeat of historical hydrology with projected temperatures, and extended drought conditions ('76,'77, '77), and ensemble informed scenarios.	Wide capability and applicability, but results must be communicated on a statewide and regional basis	DWR	Jurcich
Periodic Climate Change specific studies	Varies	Wide capability and applicability	Analysis of historical hydrology adjusted with climatological trends	Wide capability and applicability	DWR	Chung
Environmental Impacts Analysis under CEQA*	None	Limited capability, large projects may evaluate reasonably expected future condtions.	None	Limited applicability, this type of analysis is not explicitly required by CEQA or NEPA	DWR	Schwarz
SWP Delivery Reliability Report	2-years	Wide capability and applicability	Analysis of historical hydrology adjusted with climatological trends	Wide capability and applicability	DWR	Chung
Environmental Impacts Analysis under FERC Relicensing	50-years	Limited, this type of analysis is not explicitly required by FERC	None	Limited, this type of analysis is not explicitly required by FERC	DWR	Craddock
Environmental Impacts Analysis for Project Operations (SWP and CVP)	None	Moderate capability, past analysis have explored a limited selection of scenarios	None	This type of analysis would not typically be undertaken	DWR/USBR	Chung

Programs not Performed by DWR but which may be influenced by DWR

Central Valley Flood Protection Planning	5-years	Limited applicability, flood protection vulnerabilities and impacts are predominantly driven by extreme events	Pilot study of Theshold Analysis (flood)	In Development	DWR staff under auspices of CVFPB	Anderson
Urban Water Management Planning	5-years	Limited, this type of analysis is not explicitly required of UWMP	Worst 3-year drought on record	Varies by local water district	Local water districts	
Agricultural Water Management Planning	5-years	Required to "include an analysis, based upon available information, of the effect of climate change on future water supplies" ([Water Code §10826 (c)]). Interpretation of this requirement left to DWR and AWMP groups. Capacity to conduct analysis varies between AWMPs.	No requirement	Varies by local water district	Local agricultural water suppliers	
Integrated Regional Water Management Planning	Varies- Depends on Funding cycles	Required to evaluate "the adaptability to climate change of water management systems in the region". Interpretation of this requirement left to DWR and RWMGs. Capacity to conduct analysis varies between RWMGs.	No requirement	Varies by RWMG	Regional Water Management Groups	Billington
Regional Flood Management Planning	No requirement	Limited, this type of analysis is not a focus of the funding	Rely on existing studies, no new analysis	Limited, this type of analysis is not a focus of the funding	Regional Flood Management Groups	Conrad
Groundwater Management Planning	No requirement	Limited, this type of analysis is required in legislation and not a focus of the funding	No requirement	Limited, this type of analysis is not a focus of the funding	Local Groundwater Management Groups	

STRESS TEST SCENARIOS

Drought

Duration	Severity	Extent	Recurance		
1-3 years	Paleo/extreme	Statewide	3-7 years		
3-7 years	Paleo-Historic	Statewide- Westwide	5-10 years		
10-20 years	Paleo-Historic	Statewide- Westwide	50 years		
Paleo drought	Paleo	Westwide	-		
Variability of precipitation beyond historical levels (inter and intra annual)					

Wet/Flood

THANK YOU!

5/16 Next Subgroup

