DWR
CCTAG
Subgroup - Scenarios

July 10, 2013
MEETING GOALS and OBJECTIVES:
Delve further into specifics for road map for establishing general planning climate change scenarios. Set up future subgroup meetings.

• Review Scenarios selection flow chart
• Open Discussion: Step 2
  Vulnerabilities and Variables charts
  Decision Support Tool approach?
• Flood separate (Mike A. leading, not available at today’s meeting)
• Plan for CCTAG full meeting report-out and work session (Aug 23 or Sept 4)
• Next meeting, and frequency of Subgroup (standing?) meetings
Eg. Step 3 table indicates that 15 GCMs are effective for evaluating vulnerability X. However agency A doesn’t have the resources to run 15 x 3 emissions scenarios. For their purpose, evaluating the likely range of potential futures and median impact are most useful. How can they compress the 15x3 runs down to 3-5?

Step 1.
Filter latest suite of GCMs* for those that do not produce reasonable regional climatologies and distributions of regional anomalies for temperature and precipitation.

Step 2.
Attempt to further refine suite of GCMs for each specific type of water manage analysis using:
1) a decision support tool comparing observed historical and simulated historical periods or
2) selecting GCMs that do the best job of simulating the most important variables for the specified analysis.

Identify the most important variables for a given management analysis/climate vulnerability and select GCMs that provide best performance for those variables.

Step 3.
Develop matrix table of vulnerabilities and GCMs

Water management vulnerabilities to climate
Or
Climate vulnerabilities to water management

Step 4.
Develop recommendations/ methodologies for compressing or reducing the number of individual GCM runs for specific applications

*Coupled Model Intercomparison Project Phase 5 (CMIP5)
## GCM/Rainfall-Runoff Model Output Variables

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<th>Climate Change Vulnerabilities</th>
<th>Streamflow</th>
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# Water Mgmt Vulnerabilities to Climate Change

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<th>Key GCM Output Needed</th>
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## Analyses of Secondary Importance

| Wildfire | Wildfire model | Downscaled T, P, H, W, etc. |
| Ag Productivity | Ag Productivity | Downscaled T<sub>ave</sub>, T<sub>max</sub>, T<sub>min</sub>, P, H, etc. |

## Others

| Maximum flows (3, 7, 10 day) | Multiple | Varies |

## Ecosystem Services

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| Ecosystem Services | |
Climate Scenarios Subgroup

Set next Webinar date

And Frequency of Meetings
THANK YOU!