Instructions:

1. For this test run, please create study plans for a 2030 planning horizon by checking off a range for each factor. For a few factors, it may be possible to choose more than one range. (Note that the list of building blocks has been expanded to incorporate suggestions from the September 7 meeting. AC members will have a chance to discuss these suggestions at the 10.3 meeting.)

2. Using the legend in the "Basis" box set out on each page, indicate what served as the basis for each range you selected. (You may indicate more than one basis.)

3. In the first narrative box on the last page, explain your thinking as you assembled the particular study plan that you did. E.g., what theme or themes does your study plan represents? What makes this particular combination of factors and ranges a useful plan for the Advisory Committee as a whole to consider?

Do not skip this narrative; these insights are absolutely vital to our work.

4. In the second box on the last page, please answer the following question: As you assemble your plan, did you find any factor/range combinations that were mutually exclusive? I.e., does selecting a range for one factor preclude certain ranges for another factor? If so, please identify the particular linkages that you discovered.

5. After you have completed a study plan, please reflect on the process you used to develop it. For example, some individuals will focus on an anticipated water portfolio, then consider what water management options are associated with that. Others will think about what a desired future would look like, then describe it through the ranges. Think about how you worked through this exercise and be prepared to share that.

Note: The "factors of special concern," e.g., drought, earthquakes, flooding, levee failure, terrorist attacks, toxic spills, subsidence, and wildfires, have not been dropped from the planning process. They have not been included here because they do not lend themselves easily to "ranges."

Return Completed Study Plans to:
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pmassera@water.ca.gov

Study Plan Playsheet

Name:

	Factors	Possible Ranges: Qualitative	Study Plan: Range	Study Plan: Basis
GROUP A	*Hydrology*	Essentially a repeat of history		
		Greater Inter-Annual Variability		
		Extended drought period (beyond historical periods)		
	Climate Change	*Essentially a repeat of history*		
		Changes in Snowfall/Rainfall Relationships and Changes in Sea Levels (w/o Changes in Total Precipitation)		
		Changes in Long-Term Annual Precipitation		
	Colorado River Supply	Greater than California's 4.4 plan		
		Equal to California's 4.4 plan		
		Less than California's 4.4 plan		
	Colorado River Allocation (Under "Less Than 4.4 Plan")	*Full Deliveries to MWD*		
		Full Deliveries to Desert Communities		
		Partial Deliveries to MWD		
		Partial Deliveries to Desert Communities		
	Energy Costs	Substantially higher		
		As projected from current trends		
		Substantially Lower		
GROUP B	Drinking Water Standards	Tougher standards and new classes of contaminants are regulated		
		Current and planned standards		
		Lower standards than existing (e.g. many suspected contaminants are found to be less toxic than currently believed)		
	Agricultural Discharge Requirements	Tougher standards and new classes of contaminants are regulated		
		Current and planned standards		
		Lower standards the existing (e.g. many suspected contaminants are found to be less toxic than currently believed)		
	Environmental Water (Land-Based)	*Additional water for environmental use (Managed Wetlands, Native Vegetation, CALFED ERP, etc)*		
		Current water dedication remains in effect		
		Less overall environmental water use		
	Environmental Water (Flow-Based)	Additional water for in-stream uses (CALFED ERP, timing, temperature, volume of flows)		
		Current water dedication remains in effect		
		Less stringent requirements coupled with flexible application and tradeoffs (e.g. CALFED Environmental Water Account)		
		Less overall environmental water use		

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Basis Legend:

(1) This range is used by another planning process. (2) A "What if" that provides useful insights, even if not likely.
(3) What the Historical Trend Will Likely Lead to. (4) A plausible future, even if not trend-based or most likely.
(5) Otherwise needed to be included to meet an interest group's needs.

Caveat: The future is inherently uncertain. Proposed factors, considerations and ranges are included here only as candidates for the study of the potential impacts and consequences of plausible possible circumstances. The inclusion of any factor, consideration or range as a candidate for possible study does not imply that either DWR or any of the Advisory Committee members is either "endorsing," "predicting," "assuming" or "preferring" any particular vision of the future.

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Study Plan Playsheet

Name:

	Factors	Possible Ranges	Study Plan	
		Qualitative	Range	Basis
GROUP C	Overall Population and Demographic Profile	Higher than the Department of Finance projections		
		As projected by the Department of Finance		
		Lower than the Department of Finance projections		
	Population Distribution	Greater inland growth (than DOF Projections)		
		DOF Projections		
		Greater coastal growth (than DOF Projections)		
		Greater Northern CA concentration (than DOF Projections)		
		Greater Southern CA concentration (than DOF Projections)		
		Greater Central Valley concentration (than DOF Projections)		
	Population Density	Relatively greater density		
		DOF Projections		
		Relatively lower density		
	Per Capita Income	Higher per capita		
		Current trends		
		Lower than current trends		
	Agricultural Acreage	Leveling out at current acreage		
		Continued slow decline due to water availability and urban encroachment		
		Sharper decline		
		Increase in agricultural acreage		
	Crop Shifts	Shifts to permanent crops		
		Same cropping patterns		
	Agricultural Land Retirement	Additional land retirement		
		Currently planned land retirement (e.g. CALFED, or Westside S.J. Valley)		
		Less than currently planned retirement		
GROUP D	Urban Water Use Efficiency	Substantial increase in efficiency (e.g. saturation or technology)		
		As projected using currently anticipated cost-effective Best Management Practices		
		Reduced efficiency (e.g. Plumbing Code Repealed)		
		Urban MOU's Implemented		
	Ag Water Use Efficiency	Maximum achievable efficiency based on either: (1) an agreement upon a list of technologies; or (2) an upper cost limit.		
		As projected using currently anticipated cost-effective EWMP's (CALFED ROD Implemented Statewide)		
		As projected using currently anticipated cost-effective EWMP's (CALFED ROD implemented in solution area only)		
		Less than currently anticipated		
	Water Pricing	Market-Based System		
		Current contracts and water rights system		

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Study Plan Playsheet

Name:

	Factors	Possible Ranges Qualitative	Study Plan Range	Basis
GROUP E	Desalting	Significant increase in production		
		Current level of growth (planned projects such as Huntington Beach, Long Beach, or Monterey Bay)		
		Significant decrease in production		
	Recycled Water (Treated)	Substantial increase in reuse projects		
		Existing and currently projected reuse projects (e.g. CALFED Stage 1)		
		Less than currently projected		
	Water Transfers (Sales and Exchanges)	Substantial increase in water sales and exchanges (Free Market)		
		Currently approved plus planned transfers (e.g. CALFED Stage 1, IID/MWD, other)		
		Currently approved transfers		
		Less than currently approved		
	Integrated Surface /Groundwater Management	Statewide (integrated) re-operation to maximize yield		
		Existing and currently planned integrated management (e.g. CALFED Integrated Storage Program)		
		Existing levels of integration		
		Less than existing levels of integration		
	Groundwater Storage Facilities	Substantial increase in groundwater storage		
		Existing and currently planned groundwater storage		
		Only existing storage		
		Less than existing storage due to infrastructure decay, aging facilities, etc		
GROUP E	Surface Storage Facilities	Additional storage implemented(e.g.CALFED ROD, local, other)		
		Maintain existing surface storage capacity/yield		
		Diminished storage capacity due to infrastructure decay, Siltation, etc		
		Several reservoirs phased out of use		
	Conveyance Facilities	Additional facilities (e.g. CALFED ROD, local, other)		
		Existing and currently planned facilities (e.g. CALFED Stage 1)		
		Reoperation of Existing Facilities		
		Less than existing facilities due to infrastructure decay, aging facilities, etc		
Candidate Factors	*Urban/Stormwater Runoff Management*			
	Flood Management	*Substantial reoperation of existing storage facilities*		
		Current flood management practices and operations		
	Recreation	*Increase recreational opportunities (e.g. reservoir levels, fisheries, channel flows, water quality, etc)*		
		Existing recreational opportunities		
		Reduced recreational opportunities		

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Study Plan Narrative (Use a separate sheet of paper if necessary):

Name:

Correlation of Factors/Range (Are any mutually exclusive? IF so, please identify the linkages that you've found) (Use a separate sheet of paper if necessary)

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