

Delta Risk Management Strategy, Phase 2  
Building Blocks and Scenarios Matrix

Type	No.	Building Blocks	Option	Incorporate in Phase 2 Analysis	Scenarios		
					Improved Levees	Armored Pathway	Isolated Conveyance
1 - Conveyance/Flood Risk Reduction	1.1	Improved Delta/Suisun Marsh Levee Maintenance	a. Delta Levee Subventions/SM maintenance increased to 2 x current level ~(\$12 million/year)	Y	●	●	●
			b. Delta Levee Subventions/SM maintenance increased to 4 x current level (~\$25 million/year)	Y			
	1.2	Upgraded Delta Levees	a. All Central Delta Levees (~500 miles) upgraded to HMP	Y		●	●
			b. All Central Delta Levees (~500 miles) upgraded to PL84-99	Y	●		
			c. All Central Delta Levees (~500 miles) upgraded to Urban Project Levees	Y			
			d. Selected Delta islands (say Sherman, Twitchell, Brannan, Bradford, Webb, Jersey, and Bethel) have their Delta levees upgraded/replaced with seismically resistant levees (say 300-year earthquake)	Y			
	1.3	Enhanced Emergency Preparedness/Response	a. Spend ~\$50 million for pre-positioning rock, sheetpiles, etc...	Y	●	●	●
			b. Spend ~\$100 million for pre-positioning rock, sheetpiles, etc...	Y			
	1.4	Pre-flooding of Selected Western Islands	a. Sherman, Twitchell, Brannan, Bradford, Webb, and Jersey	Y			
	1.5	Land Use Changes to Reduce Island Subsidence	a. Change land use from farming to wetlands/carbon seq. (rice growing, fish food farm, etc.) for all islands projected to have more than 3 feet of additional subsidence by 2100	Y	●	●	●
	1.6	Armored "Pathway" Through Delta Conveyance (modified PPIC "Armored Island" Concept)	a. Upgraded levees along "Pathway" (say to at least Urban Project levees)	Y		●	
			b. Channel operable barriers (say Obermeyer Gates)	Y		●	
			c. Channel dredging	Y		●	
	1.7	Isolated Conveyance Alternatives	a. Dual isolated conveyance (say 5,000 cfs capacity)	Y			
			b. Intermediate isolated conveyance (say 10,000 cfs capacity)	Y			
			c. Full isolated conveyance(16,000 cfs? capacity)	Y			●
	1.8	Alternative Conveyance	a. Dual isolated conveyance (say 5,000 cfs capacity)	Y			
			b. Intermediate isolated conveyance (say 10,000 cfs capacity)	Y			
c. Full isolated conveyance(16,000 cfs? capacity)			Y				
2 - Infrastructure Risk Reduction	2.1	Raise State Highways and Place on Piers (similar to I-80 across Yolo Bypass)	a. Highway 4	Y			●
			b. Highway 12	Y	●	●	●
			c. Highway 160	Y	●	●	●
	2.2	Construct Armored Infrastructure Corridor Across Central Delta	a. Mokelumne Aqueduct	Y	●	●	
			b. Burlington-Northern Santa Fe Rail Line	Y	●	●	
			c. Highway 4	Y	●	●	
		d. Natural Gas Pipelines	Y	●	●		
		e. Protect selected water/waste water treatment plants	Y				
3 - Environmental Risk Mitigation	3.1	Breach dikes in Suisun Marsh	a. Breach dikes in Suisun Marsh	Y	●	●	●
	3.2	Cache Slough Restoration	a. Cache Slough Restoration	Y	●	●	●
	3.3	Fish Screens	a. Delta Cross Channel	Y	●	●	
			b. Clifton Court Intake	Y	●	●	
			c. Tracy Pumping Plant	Y	●	●	
			d. River diversions	Y	●	●	●
	3.4	Set back levees to Restore Shaded Riverine Habitat	a. 10 miles	Y	●	●	●
			b. 20 miles	Y			
			c. 50 miles	Y			
	3.5	Reduce water export from the Delta	a. 10 percent	Y			
b. 25 percent			Y				
c. 40 percent			Y				

Note: ● block belongs to that scenario