

San Joaquin River Restoration Program

Water Management Group
Technical Feedback Meeting

October 3, 2008



Agenda

- Introductions / Purpose of Meeting
- Recovered Water Account (RWA) discussion
- Paragraph 16(b) Discussion
- Next Steps



Recovered Water Account

- Accounting tool to allow Reclamation to sell wet year water at \$10/af
- Must account for impacts to Friant Division long-term contractors from Interim and Restoration Flows
- Offset impacts by deliveries under 16a or 16b, or to projects funded by Title III or other sources to reduce delivery impacts



Basic Elements of RWA Process

- Quantify RWA Credits (impacts)
- Quantify offsets from 16a and 16b deliveries
- Quantify supplies from projects funded by Title III or other sources
- Allocation of Net RWA Credit to Individual Long-Term Contractors



How to Quantify Total Impacts?

- Alternatives to estimate annual impact
 - Non-flood releases made according to Restoration Flow schedule
 - Daily, parallel accounting process with & without Restoration (shadow environment)
 - Annual, back-casting process using known hydrology and baseline model results
- Allocation of annual impact to Class 1 and Class 2
- Allocation of Class 2 impacts among Friant contractors



Paragraph 16b

Status of 16(b) Analysis
Opportunity Assessment of Friant-Kern Canal, Revision

"Implement a Recovered Water Account that will make wet year water at Friant Dam available to impacted long-term Friant water users at \$10/af"



Status of 16(b) Opportunity Assessment

- Revised Friant-Kern Canal assessment presented at September meeting
- Received data for Madera Canal and conducting analysis



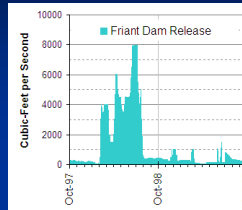
16(b) Is Common to All PEIS Alternatives

- All program alternatives will include a common 16(b) component
 - Opportunities will be based on existing and additional delivery capability to identified banking and local conveyance projects
- PEIS evaluation provides coverage for reasonable upper limit of projects
 - Address system effects, not specific projects

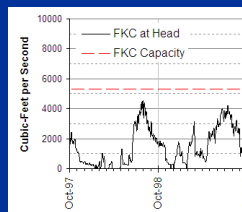


Opportunities Occur when Water and Canal Capacity are Available

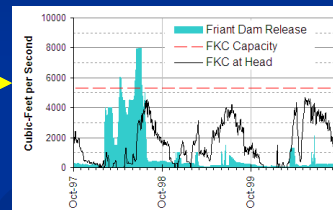
Available water



Available capacity



Opportunities?



Assumptions

- Available water: Historical flood releases minus Restoration Flows
- Available capacity: Historical deliveries within existing, corrected and upgraded FKC capacity



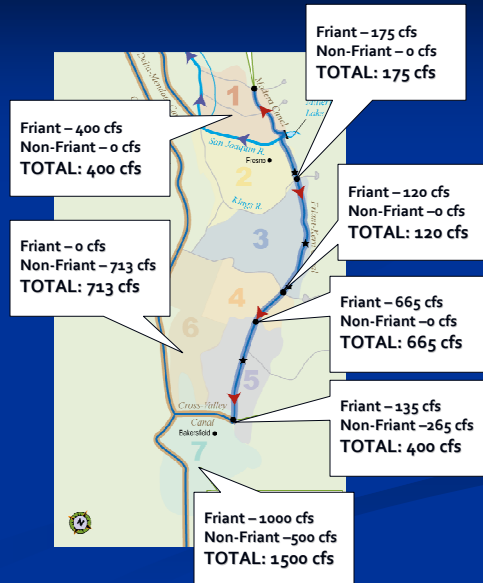
Revised 16(b) Opportunity Assessment for Friant-Kern Canal

- Corrected accounting of deliveries into lower canal reaches
- Increased subdivision of WMA's and canal reaches to replicate canal neck downs with higher precision
- Adjusted canal reaches to better represent where deliveries are made for the districts within each WMA
- Results presented in monthly format with 4,000 cfs recharge capacity assumption



Potential Groundwater Banking Projects

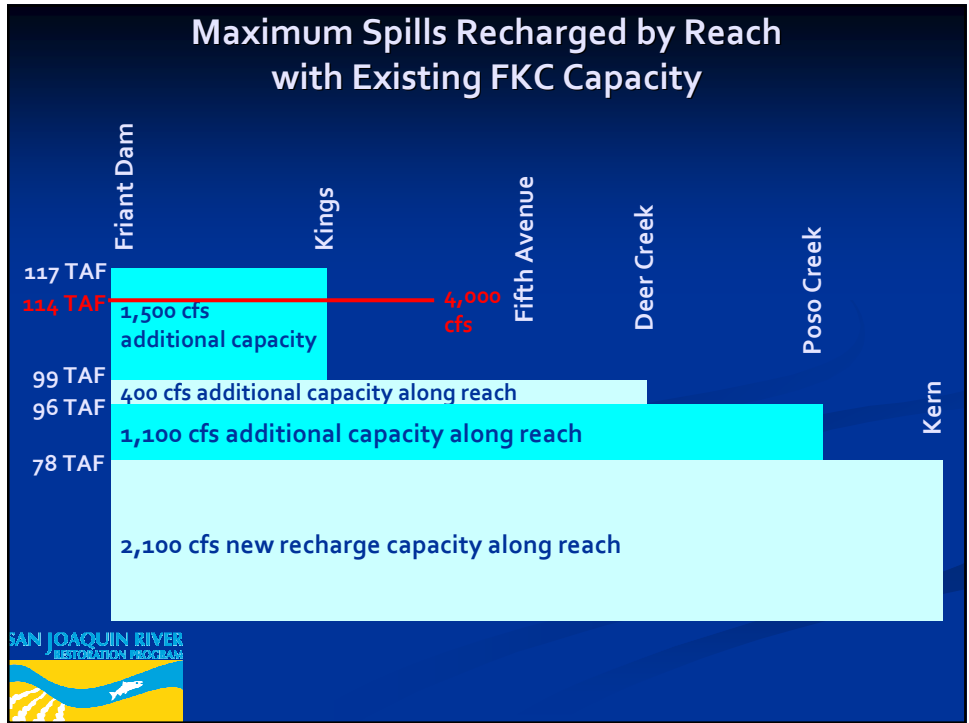
SJRRP Water Management Areas		Direct (cfs)	In-Lieu (cfs)	TOTAL (cfs)
1	Friant	400	0	400
	Non-Friant	0	0	
2	Friant	130	45	175
	Non-Friant	0	0	
3	Friant	110	10	120
	Non-Friant	0	0	
4	Friant	75	590	665
	Non-Friant	0	0	
5	Friant	100	35	400
	Non-Friant	25	240	
6	Friant	0	0	713
	Non-Friant	250	463	
7	Friant	0	1000	1500
	Non-Friant	500	0	
TOTAL	Friant	815	1680	3,973
	Non-Friant	775	703	



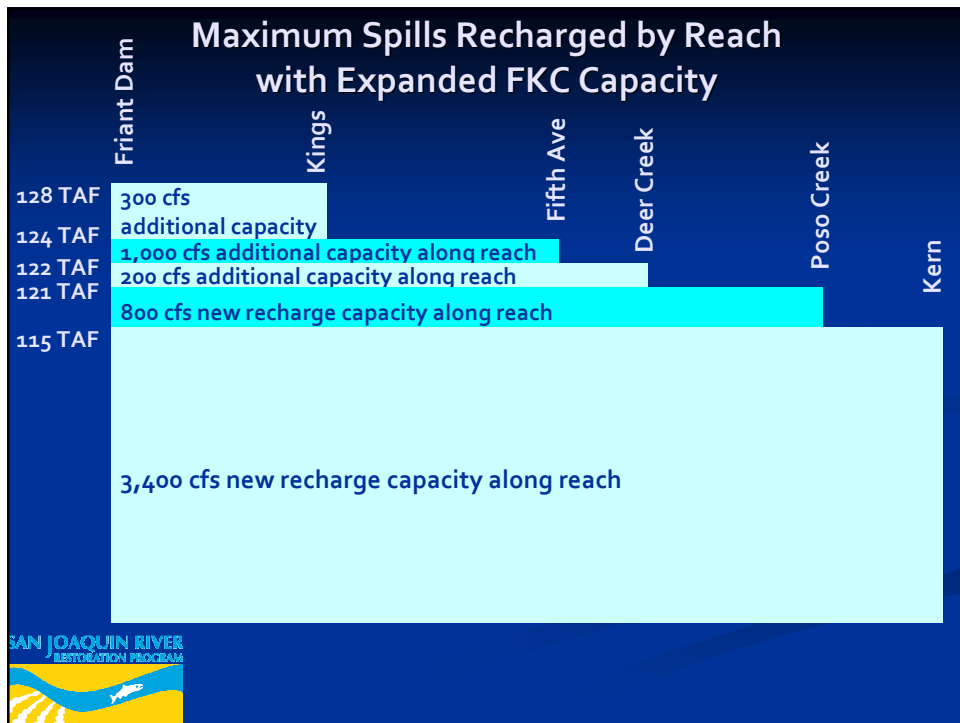
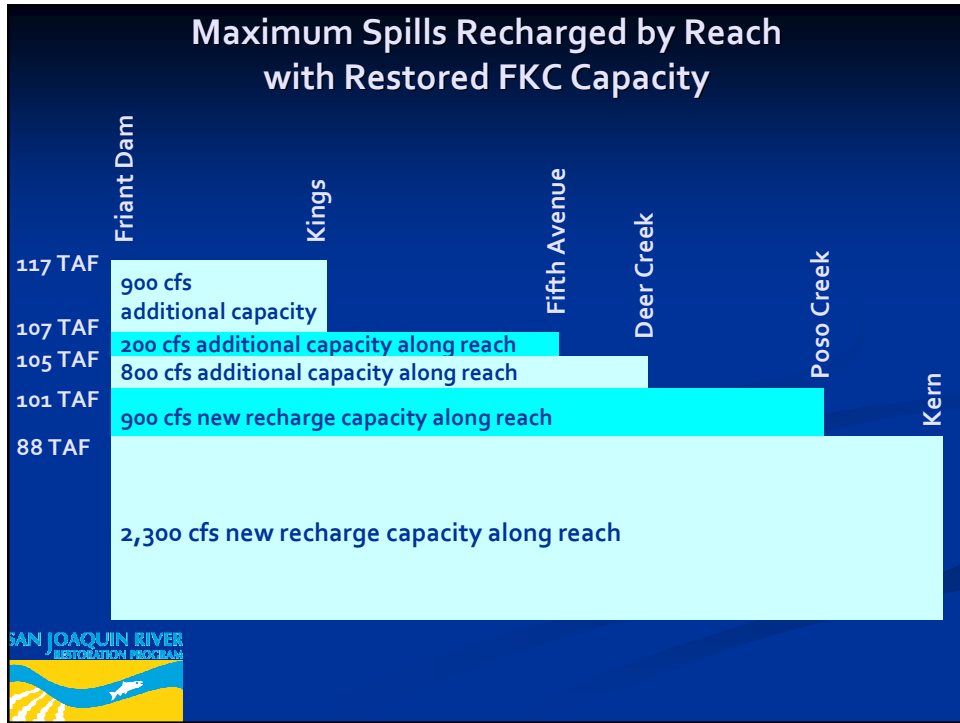
Analysis of 16(b) potential

- Three canal capacities were evaluated
 - Existing FKC
 - Restored FKC (Design capacity)
 - Expanded FKC (Design capacity plus 1,000 cfs)
- Identified recharge (or delivery) capacity needed to take full advantage of the conveyance capacity of each reach of the canal (range of capacity)
- Estimated the potential average annual delivery of 16(b) water supplies





Revised 16(b) FKC Opportunity Assessment			
Water Management Area	Friant-Kern Canal Reach	Friant Contractors	Limiting Canal Reach Capacity (cfs)
2	Friant Dam to Kings River Check	GARFIELD WD	5300
		INTERNATIONAL WD	
		FRESNO ID	
3	Kings River Check to Fifth Avenue Check	ORANGE COVE ID	4105
		CITY OF ORANGE COVE	
		STONE CORRAL ID	
		IVANHOE ID	
		TULARE ID	
		EXETER ID	
		LEWIS CREEK WD	
		LINDSAY-STRATHMORE ID	
		CITY OF LINDSAY	
		LINDMORE ID ³	
		4	
PORTERVILLE ID			
TEA POT DOME WD			
SAUCELITO ID ⁴			
TERRA BELLA ID ⁴			
5N	Deer Creek Check to Poso Creek Check	DELANO-EARLIMART ID ⁵	3500
		SOUTHERN SAN JOAQUIN MUD	
5S	Poso Creek Check to Shafter-Wasco Check	SHAFTER-WASCO ID	2170
7	Shafter-Wasco Check to Kern River Check	ARVIN-EDISON WSD	2170



Next Steps for 16B

- Complete Madera Canal analysis
- Integrate canal and banking assumptions into system-wide analysis (CalSim)



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