

State of California
Department of Fish and Game

Memorandum

Date: April 13, 2009

To: Anne Short
State Water Resources Control Board
Division of Water Rights
P.O. Box 2000
Sacramento, CA 95812-2000

From: 
Carl Wilcox, Chief
Water Branch
Department of Fish and Game

Subject: Comments on the Notice of Public Workshop Concerning Potential Amendments to the Bay-Delta Plan Relating to Southern Delta Salinity and San Joaquin River Flow Objectives

The Department of Fish and Game (Department) appreciates the opportunity to provide information for the above referenced notice. The Department's comments are focused on the San Joaquin River (SJR) flows portion of the notice.

In a memorandum dated March 19, 2009, the Department recommended several options or alternatives for the State Water Resources Control Board (State Water Board) to consider in developing SJR flow objectives. The Department is preparing, using the factors identified in the March 19 memorandum, an analysis of alternate flow recommendations. The recommendations are being developed using relevant information including, but not limited to, the recently updated empirically data based SJR Salmon Escapement Model version 1.5. This alternatives assessment will be provided to the State Water Board staff before July 31, 2009.

On the enclosed Compact Disc you will find a preliminary compilation of studies, data, information, previous Department submittals, recommendations, and scientific literature that could be used to form the basis for new SJR flow objectives. At present, the Department is not prepared to make specific recommendations on specific flows needed to protect salmon populations. However, based upon already established information (enclosed) and our September 17, 2008 statements before the State Water Board, the Department continues to hold the well documented position that declines in Chinook salmon populations in the tributaries to the SJR are directly related to declines in spring water flow (magnitude, duration, and frequency) both in the east-side tributaries and at Vernalis.

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related to declines in spring water flow (magnitude, duration, and frequency) both in the east-side tributaries and at Vernalis.

The Department is committed to working with the State Water Board staff over the coming months to develop SJR flow objectives that are protective of SJR and Delta fish species.

Should you have any questions or require clarification regarding the information we have provided, please contact me at (916) 445-1231.

Enclosure (1)

cc: Victoria Whitney, Deputy Director
Les Grober
Division of Water Rights
State Water Resources Control Board
1001 I Street, Floor 14
Sacramento, CA 95814

General Background	Salmonid Background	San Joaquin River Information	Other Beneficial Uses	Flow Setting Processes	List of Relevant Prior Testimony, Memorandums, Reports, and Articles				
					Author(s)	Year	Title	FileName	Notes
X		X		X	Bauer et al.	2008	The San Joaquin River Settlement: Analysis and Implications for Future Negotiations and Funding	Bauer et al 2008 SanJoaquinRiverReport[1].pdf	
	X				Bjornn and Reiser	1991	Chapter 4 Habitat Requirements of Salmonids in Streams	Bjornn and Reiser 1991.pdf	From: Influences of Forest and Rangeland Management on Salmonid Fishes and Their Habitats. pp. 83-138. American Fisheries Society Special Publication [Am. Fish. Soc. Special Pub.], no. 19.
			X		Bolton and Shellberg	2001	Ecological Issues in Floodplains and Riparian Corridors	Bolton and Shellberg 2001.pdf	
X			X	X	Booth, Mount, and Viers	2006	Hydrologic Variability of the Cosumnes River Floodplain	Booth Mount and Viers 2006 Characterizing_hydrologic_variability.pdf	
X			X		Brown and Michniuk	2007	Littoral Fish Assemblages of the Alien-dominated Sacramento–San Joaquin Delta, California, 1980–1983 and 2001–2003.	Brown and Michniuk 2007 ESTU2007_30_1_186_200.pdf	
	X	X	X		Brown, Larry R.	2000	Fish communities and their associations with environmental variables, lower San Joaquin River drainage, California	Brown 2000.pdf	
X		X			Brown, Randall L.	2001	Contributions to the Biology of Central Valley Salmonids.	Brown 2001 Contributions to biology of salmonids.pdf	
X				X	Brugnach et al.	2008	Toward a Relational Concept of Uncertainty: about Knowing Too Little, Knowing Too Differently, and Accepting Not to Know.	Brugnach et al 2008 ES-2008-2616.pdf	
X			X		Buijse et al.	2002	Restoration strategies for river floodplains along large lowland rivers in Europe.	Buijse et al 2002.pdf	
X	X	X	X		CalFed Bay-Delta Program	2000	CalFed Programmatic Record of Decision	CalFed 2000 ROD.pdf	
X	X	X	X		CalFed Bay-Delta Program	2000	Multi-Species Conservation Strategy	CalFed ERP 2000 MSCS.pdf	
X	X	X	X		CalFed Bay-Delta Program	2000	Ecosystem Restoration Program Plan Volume I: Ecological Attributes of the San Francisco Bay-Delta Watershed	CalFed ERP 2000 ERPP_Vol_1.pdf	
X	X	X	X		CalFed Bay-Delta Program	2000	Ecosystem Restoration Program Plan Strategic Plan for Ecosystem Restoration	CalFed ERP 2000 ERPP_Vol_3.pdf	
	X	X	X		CALFED Science	2005	Key Uncertainties in Gravel Augmentation: Geomorphological and Biological Research Needs for Effective River Restoration	CALFED Science 2005 SP_workshop_gravel_final_report_060105.pdf	

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	X	X	X		California Trout	2008	SOS: California's Native Fish Crisis Status of and Solutions for Restoring Our Vital Salmon, Steelhead and Trout Populations	California Trout 2008 SoS-Californias-Native-Fish-Crisis.pdf	
X	X	X	X		CDFG	2005	Comments of the California Department of Fish and Game Concerning the Ten Year Summary Report Filed by Turlock Irrigation District and Modesto Irrigation District as Joint Licensees	DFG 2005 Don Pedro FERC 10 year rvw.pdf	
X	X				Crozier et al.	2008	Potential responses to climate change in organisms with complex life histories: evolution and plasticity in Pacific salmon	Crozier et al 2008 Evol Appl.pdf	
X		X	X		CVRWQCP	2009	Central Valley Regional Water Quality Control Board Clean Water Act Section 305(B) and 303(D) Integrated Report for the Central Valley Region January 2009 Public Review Draft	CVRWQCB 2009 app_a_303d_changes_3 0jan091.pdf	
X				X	Deas and Lowney	2000	Water Temperature Modeling Review Central Valley	Deas and Lowney 2000.pdf	
		X	X		Deas, M., Bartholow, J., Hanson, C., Myrick, C.	2004	Peer Review of Water Temperature Objectives Used as Evaluation Criteria for the Stanislaus – Lower San Joaquin River Water Temperature Modeling and Analysis	StanislausTemperaturePeerReviewFinal.pdf	Stan H2O Tem Peer Report
	X	X			Demko and Cramer	1996	Effects of Pulse Flows on Juvenile Chinook Migration in the Stanislaus River 1996 Annual Report	Demko and Cramer 1996.pdf	
	X	X			Demko et al.	1998	Evaluation of Juvenile Chinook Behavior, Migration Rate and Location of Mortality in the Stanislaus River Through the Use of Radio Tracking	Demko et al 1998 radrepo_fnldd[1].pdf	
X		X			Dettinger and Culberson	2008	Internalizing Climate Change—Scientific Resource Management and the Climate Change Challenges	Dettinger and Culberson 2008 Climate_change_Science_Strategies.pdf	
			X		EPA	2003	EPA Region 10 Guidance for Pacific Northwest State and Tribal Temperature Water Quality Standards.	EPA 2003 epa_reg10_final_temp_guidance.pdf	
X	X		X		Fausch et al.	2002	Landscapes to Riverscapes: Bridging the Gap between Research and Conservation of Stream Fishes	Fausch et al 2002.pdf	

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X	X	X	X		Feyrer and Healey	2003	Fish community structure and environmental correlates in the highly altered southern Sacramento-San Joaquin Delta	Feyrer and Healey 2003.pdf	
		X	X		Feyrer Sommer and Hobbs	2007	Living in a Dynamic Environment: Variability in Life History Traits of Age-0 Splittail in Tributaries of San Francisco Bay	Feyrer Sommer and Hobbs 2007.pdf	
X			X		Feyrer, Fredrick	2004	Ecological Segregation of Native and Alien Larval Fish Assemblages in the Southern Sacramento–San Joaquin Delta	Feyrer 2004 Ecological Segregation of Native and Alien.pdf	
		X	X		Feyrer, Sommer and Baxtor	2005	Spatial-Temporal Distribution and Habitat Associations of Age-0 Splittail in the Lower San Francisco Estuary Watershed	Feyrer Sommer and Baxter 2005.pdf	
X	X		X		Feyrer, Sommer and Harrell	2006	Importance of Flood Dynamics versus Intrinsic Physical Habitat in Structuring Fish Communities: Evidence from Two Adjacent Engineered Floodplains on the Sacramento River, California	Feyrer Sommer and Harrell 2006 Importanc of Flood dynamics.pdf	
X			X		Feyrer, Sommer and Harrell	2006	Managing floodplain inundation for native fish: production dynamics of age-0 splittail (<i>Pogonichthys macrolepidotus</i>) in California's Yolo Bypass	Feyrer Sommer and Harrell 2006 Managing floodplain inundation.pdf	
X	X		X		Freeman et al.	2001	Flow and Habitat Effects on Juvenile Fish Abundance in Natural and Altered Flow Regimes.	Freeman et al 2001.pdf	
	X				Geist and Dauble	1998	Redd Site Selection and Spawning Habitat Use by Fall Chinook Salmon: The Importance of Geomorphic Features in Large Rivers	Geist and Dauble 1998.pdf	
			X		Golet et al.	2008	Wildlife Response to Riparian Restoration on the Sacramento River	Golet et al 2008 Wildlife_Response_to_R estoration.pdf	
	X	X			Gordus, Andy	2009	Temperature Water Quality Standards for the Protection of Anadromous Fish in the Stanislaus River, Merced River, Stanislaus River, Tuolumne River and the San Joaquin River	cdfig_303d.pdf	

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		X	X		Grimaldo Miller Peregrin and Hymanson	2004	Spatial and Temporal Distribution of Native and Alien Ichthyoplankton in Three Habitat Types of the Sacramento–San Joaquin Delta	Grimaldo Miller Peregrin and Hymanson 2004 Spatial and temporal distribution of ichthyoplankton.pdf	Recommend Spring and Fall pulses to wetlands to avoid non-native fish
			X		Gurevitch and Padilla	2005	Are Invasive Species a Major Cause of Extinctions?	Gurevitch and Padilla 2005 Are invasive species a major cause of extinctions.pdf	
X	X				Healey, Michael	2009	Resilient Salmon, Resilient Fisheries for British Columbia, Canada	Healey 2009 ES-2008-2619.pdf	Comprehensive discussion of requirements for a resilient salmonid fishery including variable flow regimes.
X		X	X		Healey, Michael	2008	Delta Vision Context Memorandum: Delta Ecosystem	Healey 2008 Ecosystem_iteration1.pdf	
	X	X			Hedgecock et al.	2001	Applications of Population Genetics to Conservation of Chinook Salmon Diversity in the Central Valley	Hedgecock et al 2001 Salmon Genetics.pdf	
X	X			X	Jager and Rose	2003	Designing Optimal Flow Patterns for Fall Chinook Salmon in a Central Valley, California, River	Jager and Rose 2003 NAJFMChinook03.pdf	
X			X	X	Jager and Smith	2008	Sustainable Reservoir Operation: Can We Generate Hydropower And Preserve Ecosystem Values?	Jager and Smith 2008 SustainableReservoir.pdf	
X			X		Jassby and Van Nieuwenhuyse	2005	Low dissolved oxygen in an estuarine channel (San Joaquin River, California): mechanisms and models based on long-term time series	Jassby and Nieuwenhuyse 2005 Low dissolved oxygen in an estuarine channel San Joaquin River California.pdf	
X			X		Jassby, Alan D.	2008	Phytoplankton in the Upper San Francisco Estuary: Recent Biomass Trends, Their Causes and Their Trophic Significance	Jassby 2008 Recent_Phytoplankton_Trends_in_Upper_San_Francisco_Estuary.pdf	
X			X		Jassby, Alan D.	2005	Phytoplankton regulation in a eutrophic tidal river (San Joaquin River, California).	Jassby 2005 Phytoplankton_regulation_in_a_eutrophic_tidal_river.pdf	
	X				Kareiva et al.	2000	Recovery and Management Options for Spring/Summer Chinook Salmon in the Columbia River Basin	Kareiva et al 2000 Science 977.pdf	
	X	X	X		Kimmerer	2002	Effects of freshwater flow on abundance of estuarine organisms: physical effects or trophic linkages?	Kimmerer 2002 Effects of freshwater.pdf	

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		X	X		Kimmerer	2002	Physical, Biological, and Management Responses to Variable Freshwater Flow into the San Francisco Estuary	Kimmerer 2002 Physical Biological and Management Responses.pdf	
X			X		Kimmerer, Murphy and Angermeier	2007	A Landscape-level Model for Ecosystem Restoration in the San Francisco Estuary and its Watershed	Kimmerer Murphey and Angermeier 2007 A_landscape_level_model_for_ecosystem_restoration.pdf	
	X	X			Kondolf et al.	1996	Salmon Spawning Habitat Rehabilitation on the Merced River, California: An Evaluation of Project Planning and Performance	Kondolf et al 1996.pdf	
X	X	X			Lave et al.	2004	Gravel Augmentation Report: Biological And Geomorphological Perspectives	CalFed Science and ERP 2004 Final Draft Gravel Augmentation Report 120104.pdf	
					Lindley et al.	2007	Framework for Assessing Viability of Threatened and Endangered Chinook Salmon and Steelhead in the Sacramento-San Joaquin Basin	Lindley et al 2007 Framework.pdf	
	X	X			Lindley et al.	2004	Population Structure of Threatened and Endangered Chinook Salmon ESUs in California's Central Valley Basin.	Lindley et al 2004 Population Structure.pdf	
X	X	X			Lindley et al.	1996	Historical Population Structure of Central Valley Steelhead and its Alteration by Dams	Lindley et al 1996 Historical population structure of Central Valley steelhead.pdf	
	X	X	X		Loudermilk, William	2008	Response to Comments San Joaquin River Group Authority's Written Comments to Proposal by Central Valley Regional Water Quality Control Board to List the San Joaquin, Tuolumne, Merced and Stanislaus Rivers as Impaired Bodies of Water for Temperature Pursuant to Section 303(d).	Loudermilk 2008 Response to comment letter SJRG final.pdf	
		X	X		Loudermilk, William	2007	Memo re: Public Solicitation of Water Quality Data and Information for 2008 Integrated Report -- List of Impaired Waters and Surface Water Quality Assessment [303(d)/305(b)]	DFG 2009 Temperature Proposal Final cover letter.pdf	
X			X		Lytle and Poff	2004	Adaptation to Natural Flow Regimes.	Lytle and Poff 2004 AdaptationToNaturalFlow Regimes.pdf	

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					Author(s)	Year	Title	FileName	Notes
X		X			Malamud-Roan et al.	2007	Holocene Climates and Connections between the San Francisco Bay Estuary and its Watershed: A Review	Malamud-Roan 2007 Holocene Climates and Connections between San Francisco Estuary and its Watershed.pdf	
	X	X		X	Marston, Dean	2005	Final Draft 11-28-05 San Joaquin River Fall-run Chinook Salmon Population Model	Marston 2005 FinalDraftCDFGVNSModelReport11-28-05[1].pdf	
	X	X			Merz and Setka	2004	Evaluation of a Spawning Habitat Enhancement Site for Chinook Salmon in a Regulated California River	Merz and Setka 2004.pdf	
X	X	X	X		Mesick and Cramer	2002	Initial Working Document A Plan To Restore Anadromous Fish Habitat In The Lower Stanislaus River	Mesick and Cramer 2002 Stan River Restoration Plan.pdf	
X		X	X		Monsen, Cloern and Burau	2007	Effects of Flow Diversions on Water and Habitat Quality: Examples from California's Highly Manipulated Sacramento-San Joaquin Delta	Monsen Cloern and Burau 2007 Effects_of_Flow_Diversions_on_Water_and_Habitat_Quality.pdf	
		X	X		Moyle Baxter Sommer Foin and Matern	2004	Biology and Population Dynamics of Sacramento Splittail (Pogonichthys macrolepidotus) in the San Francisco Estuary: A Review	Moyle Baxter Sommer Foin and Matern 2004 Biology_and_Population_Dynamics_of_Sacramento_Splittail.pdf	
			X		Moyle, Crain, and Whitner	2007	Patterns in the Use of a Restored California Floodplain by Native and Alien Fishes.	Moyle Crain and Whitner 2007 Patterns in the Use of a Restored California Floodplain.pdf	
	X	X			Moyle, Israel and Purdy	2008	Salmon, Steelhead and Trout in California: Status of an Emblematic Fauna	Moyle Isreal and Purdy 2008 SOS-Californias-Native-Fish-Crisis-Final-Report.pdf	
X			X	X	Murchie et al.	2008	Fish Response to Modified Flow Regimes in Regulated Rivers: Research Methods, Effects and Opportunities.	Murchie et al 2008 River Research Apps.pdf	
	X	X			Myrick, C.A. and J.J. Cech	2001	Bay-Delta Modeling Forum Technical Publication 01-1. Temperature Effects on Chinook Salmon and Steelhead: a Review Focusing on California's Central Valley Populations	CBDA 2001 TempReview.pdf	

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	X	X			Newman, Ken B.	2008	An evaluation of four Sacramento-San Joaquin River Delta juvenile salmon survival studies	Newman 2008 PSP_CalFed_FWS_salmon_studies_final_033108[1].pdf	
X			X	X	Nilsson, C., C. A. Reidy, M. Dynesius, C. Revenga		Fragmentation and Flow Regulation of the World's Large River Systems	Nilsson 2005 Science 405.pdf	
X	X	X			NMFS	2006	Biological and Conference Opinion: Stockton Deep Water Ship Channel Maintenance Dredging and Levee Satbilization Project.	NMFS 2006 BO Stockton Deep Water Ship Channel.pdf	
	X	X		X	NMFS	2005	National Marine Fisheries Service Comments and Recommendation Regarding Ten-Year Summary Report, Don Pedro Project, Federal Energy Regulatory Commission No. 2299-057	NMFS 2005 Don Pedro FERC 10 year rww.pdf	
X	X				Obegi et al.	2008	Fish Out of Water: How Water Management in the Bay-Delta Threatens the Future of California's Salmon Fishery	Obegi et al 2008 Fish out of Water NRDC.pdf	
X		X			Peterson, Stewart and Murphy	2008	Principal Hydrologic Responses to Climatic and Geologic Variability in the Sierra Nevada, California	Peterson Stewart and Murphy 2008 Hydrologic_Responses_to_Climatic_and_Geologic_Variability_in_the_Sierra_Nevada.pdf	
X			X	X	Poff et al.	2003	River Flows and Water Wars: Emerging Science for Environmental Decision Making	Poff et al 2003.pdf	
X	X	X	X		Reed et al.	2007	Bay Delta Conservation Plan Independent Science Advisors Report	Reed et al 2007 BDCP_ISA_Report_Final.pdf	
X	X				Reiman and Dunham	2000	Metapopulations and Salmonids: A Synthesis of Life History Patterns and Empirical Observations	Rieman et al 2000.pdf	
X		X	X	X	Rich, Alice	2007	Impacts of Water Temperature on Fall-Run Chinook Salmon (Oncorhynchus tshawytscha) and Steelhead (O. mykiss) in the San Joaquin River System	Rich 2007 SJR H20 Temp Report.pdf	Testimony and Reports
X			X	X	Richter et al.	2003	Ecologically Sustainable Water Management: Managing River Flows for Ecological Integrity	Richter et al 2003 Ecologically Sustainable Water Mangement.pdf	

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X			X	X	Richter, Warner, Meyer and Lutz	2006	A Collaborative and Adaptive Process for Developing Environmental Flow Recommendations	Richter et al 2006.pdf	
X	X		X		Rieman, Dunham, and Clayton	2006	Emerging Concepts for Management of River Ecosystems and Challenges to Applied Integration of Physical and Biological Sciences in the Pacific Northwest, USA	Rieman et al 2006.pdf	
X			X	X	Roni et al.	2002	A Review of Stream Restoration Techniques and a Hierarchical Strategy for Prioritizing Restoration in Pacific Northwest Watersheds	Roni et al 2002.pdf	
X	X				Ruckelshaus et al.	2002	The Pacific salmon wars: what science brings to the challenge of recovering species.	Ruckelshaus et al 2002.pdf	
	X	X	X		Salmonid Restoration Federation	2008	Salmonid Restoration Federation's 26th Salmonid Restoration Conference: Salmonid Restoration and Recovery in the California Heartland.	SRF 2008 Proceeding_complete.pdf	Multiple papers that cover various issues relating to Salmonids
	X	X		X	San Joaquin River Group Authority	2008	2008 Annual Technical Report On implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan	San Joaquin River Group Authority 2008 Annual Report.pdf	
	X	X		X	San Joaquin River Group Authority	2007	2007 Annual Technical Report, San Joaquin on Implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan	San Joaquin River Group Authority 2007 Annual Report.pdf	
	X	X		X	San Joaquin River Group Authority	2006	2006 Annual Technical Report, San Joaquin on Implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan	San Joaquin River Group Authority 2006 Annual Report.pdf	
	X	X		X	San Joaquin River Group Authority	2005	2005 Annual Technical Report, San Joaquin on Implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan	San Joaquin River Group Authority 2005 Annual Report.pdf	
	X	X		X	San Joaquin River Group Authority	2004	2004 Annual Technical Report on Implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan.	San Joaquin River Group Authority 2004 Annual Report.pdf	

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	X	X		X	San Joaquin River Group Authority	2003	2003 Annual Technical Report on Implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan.	San Joaquin River Group Authority 2003 Annual Report.pdf	
	X	X		X	San Joaquin River Group Authority	2002	2002 Annual Technical Report, San Joaquin on Implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan	San Joaquin River Group Authority 2002 Technical Report.pdf	
	X	X		X	San Joaquin River Group Authority	2001	2001 Annual Technical Report, San Joaquin on Implementation and Monitoring of the San Joaquin River Agreement and the Vernalis Adaptive Management Plan	San Joaquin River Group Authority 2001 Technical Report.pdf	
	X	X		X	San Joaquin River Group Authority	2000	The San Joaquin River Agreement 2000 Technical Report, Vernalis Adaptive Management Plan (VAMP)	San Joaquin River Group Authority 2000 Technical Report.pdf	
X			X		Schlosser and Angermeier	1995	Spatial Variation in Demographic Processes of Lotic Fishes: Conceptual Models, Empirical Evidence, and Implication for Conservation	Schlosser and Angermeier 1995.pdf	
	X				Smith et al.	2002	Factors Associated with Travel Time and Survival of Migrant Yearling Chinook Salmon and Steelhead in the Lower Snake River	Smith et al. 2002.pdf	
			X		Sommer et al.	2008	Habitat Associations and Behavior of Adult and Juvenile Splittail (Cyprinidae: Pogonichthys macrolepidotus) in a Managed Seasonal Floodplain Wetland	Sommer et al 2008 Habitat_Use_of_Adult_and_Juvenile_Splittail.pdf	
			X		Sommer, Baxter and Herbold	1997	Resilience of Splittail in the Sacramento-San Joaquin Estuary	Sommer et al 1997[1] Resilience of Splittail.pdf	
X			X	X	Stanford et al.	1996	A General Protocol for Restoration of Regulated Rivers	Stanford et al 1996.pdf	
	X	X			Stillwater Sciences	2002	Merced River Corridor Restoration Plan Baseline Studies Volume I: Identification of Social, Institutional, and Infrastructural Opportunities and Constraints; Final Report	Stillwater 2001 Volume I.pdf	
	X	X			Stillwater Sciences	2001	Merced River Restoration Baseline Studies Volume II: Geomorphic and Riparian Vegetation Investigations Report, Final Report	Stillwater 2001 Volume II.pdf	

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	X	X			Stillwater Sciences	2000	February 2, 2000 Stillwater Ecosystem, Watershed & Riverine Sciences Technical Memorandum Re: Calaveras River Spawning Gravel Assessment	Stillwater 2000 calaveras.pdf	
	X				Tobias, Vanessa D.	2006	Groundwater Sources and their Influence on the Distribution of Steelhead in Topanga Creek, Topanga, California	Tobias 2006 Steelhead and Groundwater thesis.pdf	
X				X	Tomkins, Claire D.	2006	Environmental Decision Analysis: Meeting the Challenges of Making Good Decisions at CALFED	Tomkins 2006 Environmental_Decision_Analysis_at_CALFED.pdf	
X			X		Tompkins and Kondolf	2001	Integrating Geomorphic Process Approach in Riparian and Stream Restoration: Past Experience and Future Opportunities	Tompkins and Kondolf 2001.pdf	
		X	X	X	USFWS	2004	June 17, 2004 USFWS Memorandum re: Draft Upper San Joaquin River Conceptual Restoration Phase 2, Task 1: Identifying Restoration Water Needs for Biological Resources	USFWS 2004 comments to RMC SJR Conceptual Plan.pdf	
				X	Walker et al.	2002	Resilience Management in Social-ecological Systems: a Working Hypothesis for a Participatory Approach	Walker et al 2002 Resili10s.pdf	
	X			X	Waples et al.	2009	Evolutionary History, Habitat Disturbance Regimes, and Anthropogenic Changes: What Do These Mean for Resilience of Pacific Salmon Populations?	Waples et al 2009 ES-2008-2626.pdf	
	X			X	Wheaton et al.	2004	Spawning Habitat Rehabilitation – I. Conceptual Approach and Methods	Wheaton et al 2004 - SHIRA1.pdf	
	X	X			Williams, John G.	2006	Central Valley Salmon: A Perspective on Chinook and Steelhead in the Central Valley of California.	Williams 2006 Central_Valley_Salmon.pdf	
	X	X			Williamson and May	2005	Homogenization of Fall-Run Chinook Salmon Gene Pools in the Central Valley of California, USA	Williamson and May 2005 homogenization of CV fall run chinook.pdf	
X			X		Woolsey et al.	2007	A Strategy to Assess River Restoration Success	Woolsey et al 2007 freshwater.bio_07.pdf	