

From: Staples, Rose on behalf of Devine, John
Sent: Friday, April 08, 2011 8:07 PM
To: Alves, Jim - City of Modesto; Asay, Lynette - N-R; Aud, John - SCERD; Beuttler, John - CSPA; Bond, Jack - City of Modesto; Boucher, Allison - TRC; Boucher, Dave - Allison - TRC; Bowes, Stephen - NPS; Bowman, Art - CWRMP; Brewer, Doug - TetraTech; Brochini, Anthony - SSMN; Buckley, John - CSERC; Burt, Charles - CalPoly; Canaday, Jim - DFG; Carlin, Michael - SFPUC; Catlett, Kelly - FOR; Charles, Cindy - GWWF; Cory, Philip - TNC; Costa, Jan - Chicken Ranch; Cowan, Jeffrey; Cox, Stanley Rob - TBMWI; Cranston, Peggy - BLM; Cremeen, Rebecca - CSERC; Day, P - MF; Devine, John; Dixie, Yakima K - CVMT; Donaldson, Milford Wayne - OHP; Dowd, Maggie-SNF; Drekmeier, Peter - TRT; Edmondson, Steve - NOAA; Eicher, James - BLM; Findley, Timothy - Hanson Bridgett; Freeman, Beau - CalPoly; Fuller, Reba - TMTC; Furman, Donn W - SFPUC; Ganteinbein, Julie - NHI; Giglio, Deborah - USFWS; Goode, Ron - NFMT; Gorman, Elaine - SC; Gutierrez, Monica - NOAA-NMFS; Hannaford, Margaret - CCSF; Hastreiter, James L - FERC; Hatch, Jenny - CT; Hayat, Zahra - MF; Hellam, Anita - HH; Hersh-Burdick, Rachael - USACE; Heyne, Tim - CDFG; Holden, James ; Horn, Jeff - BLM; Horn, Tini; Hughes, Noah; Hughes, Robert - CDFG; Jackman, Jerry ; Jackson, Zac - USFWS; Jennings, William - CSPA; Jensen, Art - BAWSCA; Jensen, Laura - TNC; Johannis, Mary; Johnson, Brian - CalTrout; Kanz, Russ - SWRCB; Kempton, Kathryn - NOAA-MNFS; Kinney, Teresa; Koepele, Patrick - TRT; Lein, Joseph; Levin, Ellen - SFPUC; Lewis, Reggie - PRCI; Linkard, David - TRT /RH; Loy, Carin; Lyons, Bill - MR; Manji, Annie; Marko, Paul ; Marshall, Mike - RHH; Martin, Michael - MFFC; Mathiesen, Lloyd - CRRMW; McDaniel, Dan -CDWA; McDevitt, Ray - BAWSCA; McLain, Jeffrey - NOAA-NMFS; Means, Julie - CDFG; Mills, John - TUD; Morningstar Pope, Rhonda - BVR; Motola, Mary - CT; O'Brien, Jennifer - CDFG; Orvis, Tom - SCFB; Ott, Bob; Ott, Chris; Pinhey, Nick - City of Modesto; Porter, Ruth - RHH; Powell, Melissa - CRRMW; Puccini, Stephen - CDFG; Raeder, Jessie - TRT; Ramirez, Tim - SFPUC; Rea, Maria - NOAA-NMFS; Reed, Rhonda - NOAA-NMFS; Richardson, Kevin - USACE; Robbins, Royal; Romano, David O - N-R; Roos-Collins, Richard - NHI; Roseman, Jesse; Rothert, Steve - AR; Sandkulla, Nicole - BAWSCA; Schutte, Allison - HB; Sears, William - SFPUC; Shumway, Vern - SNF; Shutes, Chris - CSPA; Slay, Ronn - CNRF/AIC; Smith, Jim - MPM; Staples, Rose; Steindorf, Dave - AW; Stork, Ron - FOR; Taylor, Mary Jane - CDFG; TeVelde, George A ; Thompson, Larry - NOAA-MNFS; Verkuil, Colette - TRT/MF; Walters, Eric - MF; Wantuck, Rick - NOAA-NMFS; Wesselman, Eric - TRT; Wheeler, Dan; Wheeler, Dave; Wheeler, Douglas - RHH; Williamson, Harry (NPS); Wilson, Bryan - MF; Wood, Dave - FR; Wooster, John -NOAA; Workman, Michelle - USFWS; Yoshiyama, Ronald M ; Zipser, Wayne - SCFB
Subject: Don Pedro April 19-20 RWG Meetings AGENDAs
Attachments: DonPedro Relicensing_April 19-20 RWG Meetings AGENDAs_110408.pdf

Please find attached agendas for our upcoming meetings on April 19 and 20 in Modesto. These dates reflect the feedback received on availability from the doodle poll conducted on March 2, 2011. The Districts thought it would be of value to relicensing participants to have a thorough review of all the studies that have been undertaken over the past 40 years, and especially since the 1995 Settlement

Agreement. While the PAD provides an overview of these site-specific investigations, the number and depth of these studies precluded an in-depth coverage of all the material, especially as related to water and aquatic resource studies. The April meetings, therefore, would be used to provide a more thorough coverage. We can also use the meetings to discuss the Preliminary Assessment of Project Effects prepared by the Districts. Finally, it is also another opportunity for relicensing participants to identify and summarize any other site-specific studies related to the Don Pedro relicensing.

The full agendas are attached, and we look forward to seeing you all on April 19 and 20.

John Devine

HDR | DTA

970 Baxter Boulevard #301 | Portland ME | 04103

Office: 207-775-4495 | (Direct: 207-239-3860 | Fax: 207-775-1742

Email john.devine@hdrinc.com



Don Pedro Relicensing RWG Meetings

April 19-20, 2011

MID Offices – Modesto CA

Tuesday, April 19 – Recreation Work Group

9:00 a.m.- 9:15 a.m.	Introductions
9:15 a.m.-10:00 a.m.	Overview of Existing Information and Prior Studies
10:00 a.m.-10:15 a.m.	Comments on Districts' Preliminary Assessment of Project Effects
10:15 a.m.-10:30 a.m.	Review of PAD Study Plans
10:30 a.m.-11:30 a.m.	Relicensing Participants' Assessment of Data Gaps and Additional Study Needs
11:30 a.m.-Noon	Path Forward and Action Items

Tuesday, April 19 – Cultural Work Group

1:00 p.m.- 1:15 p.m.	Introductions
1:15 p.m.- 2:00 p.m.	Overview of Existing Information and Prior Studies
2:00 p.m.- 2:15 p.m.	Comments on Districts' Preliminary Assessment of Project Effects
2:15 p.m.- 3:00 p.m.	Review of PAD Study Plans
3:00 p.m.- 4:00 p.m.	Relicensing Participants' Assessment of Data Gaps and Additional Study Needs
4:00 p.m.- 4:30 p.m.	Path Forward and Action Items



Don Pedro Relicensing RWG Meetings

April 19-20, 2011

MID Offices – Modesto CA

Wednesday, April 20 – Aquatic, Water & Terrestrial Work Group

- | | |
|-----------------------|---|
| 9:00 a.m. - 9:15 a.m. | Introductions |
| 9:15 a.m.-11:15 a.m. | Overview of Existing Information and Prior Studies <ul style="list-style-type: none">(a) Water Quality Data and Studies(b) Fisheries and Aquatic Resources (Reservoir and lower Tuolumne River)(c) Terrestrial Resource |
| 11:15 a.m.-12:00 p.m. | Comments on Districts' Preliminary Assessment of Project Effects |
| 12:00 p.m.- 1:15 p.m. | Lunch (on your own) |
| 1:15 p.m.- 2:00 p.m. | Review of PAD Study Plans |
| 2:00 p.m.- 4:00 p.m. | Relicensing Participants' Assessment of Data Gaps and Additional Study Needs <ul style="list-style-type: none">(a) Water Quality Data and Studies(b) Fisheries and Aquatic Resources (Reservoir and lower Tuolumne River)(c) Terrestrial Resource |
| 4:00 p.m.- 4:30 p.m. | Path Forward and Action Items |

From: Staples, Rose
Sent: Friday, April 08, 2011 9:17 PM
To: Alves, Jim - City of Modesto; Asay, Lynette - N-R; Aud, John - SCERD; Beuttler, John - CSPA; Bond, Jack - City of Modesto; Boucher, Allison - TRC; Boucher, Dave - Allison - TRC; Bowes, Stephen - NPS; Bowman, Art - CWRMP; Brewer, Doug - TetraTech; Brochini, Anthony - SSMN; Buckley, John - CSERC; Burt, Charles - CalPoly; Carlin, Michael - SFPUC; Catlett, Kelly - FOR; Charles, Cindy - GWWF; Cory, Philip - TNC; Costa, Jan - Chicken Ranch; Cowan, Jeffrey; Cox, Stanley Rob - TBMWI; Cranston, Peggy - BLM; Cremeen, Rebecca - CSERC; Day, P - MF; Devine, John; Dixie, Yakima K - CVMT; Donaldson, Milford Wayne - OHP; Dowd, Maggie-SNF; Drekmeier, Peter - TRT; Edmondson, Steve - NOAA; Eicher, James - BLM; Findley, Timothy - Hanson Bridgett; Freeman, Beau - CalPoly; Fuller, Reba - TMTC; Furman, Donn W - SFPUC; Ganteinbein, Julie - Water-Power Law Grp; Giglio, Deborah - USFWS; Goode, Ron - NFMT; Gorman, Elaine - SC; Gutierrez, Monica - NOAA-NMFS; Hannaford, Margaret - CCSF; Hastreiter, James L - FERC; Hatch, Jenny - CT; Hayat, Zahra - MF; Hellam, Anita - HH; Hersh-Burdick, Rachael - USACE; Heyne, Tim - CDFG; Holden, James ; Horn, Jeff - BLM; Horn, Tini; Hughes, Noah; Hughes, Robert - CDFG; Jackman, Jerry ; Jackson, Zac - USFWS; Jennings, William - CSPA; Jensen, Art - BAWSCA; Jensen, Laura - TNC; Johannis, Mary; Johnson, Brian - CalTrout; Kanz, Russ - SWRCB; Kempton, Kathryn - NOAA-MNFS; Kinney, Teresa; Koepele, Patrick - TRT; Lein, Joseph; Levin, Ellen - SFPUC; Lewis, Reggie - PRCI; Linkard, David - TRT /RH; Loy, Carin; Lyons, Bill - MR; Manji, Annie; Marko, Paul ; Marshall, Mike - RHH; Martin, Michael - MFFC; Mathiesen, Lloyd - CRRMW; McDaniel, Dan -CDWA; McDevitt, Ray - BAWSCA; McLain, Jeffrey - NOAA-NMFS; Means, Julie - CDFG; Mills, John - TUD; Morningstar Pope, Rhonda - BVR; Motola, Mary - CT; O'Brien, Jennifer - CDFG; Orvis, Tom - SCFB; Ott, Bob; Ott, Chris; Pinhey, Nick - City of Modesto; Porter, Ruth - RHH; Powell, Melissa - CRRMW; Puccini, Stephen - CDFG; Raeder, Jessie - TRT; Ramirez, Tim - SFPUC; Rea, Maria - NOAA-NMFS; Reed, Rhonda - NOAA-NMFS; Richardson, Kevin - USACE; Robbins, Royal; Romano, David O - N-R; Roos-Collins, Richard - Water-Power Law Grp for NHI; Roseman, Jesse; Rothert, Steve - AR; Sandkulla, Nicole - BAWSCA; Schutte, Allison - HB; Sears, William - SFPUC; Shumway, Vern - SNF; Shutes, Chris - CSPA; Slay, Ronn - CNRF/AIC; Smith, Jim - MPM; Staples, Rose; Steindorf, Dave - AW; Stork, Ron - FOR; Taylor, Mary Jane - CDFG; TeVelde, George A ; Thompson, Larry - NOAA-MNFS; Verkuil, Colette - TRT/MF; Walters, Eric - MF; Wantuck, Rick - NOAA-NMFS; Wesselman, Eric - TRT; Wheeler, Dan; Wheeler, Dave; Wheeler, Douglas - RHH; Williamson, Harry (NPS); Wilson, Bryan - MF; Wood, Dave - FR; Wooster, John -NOAA; Workman, Michelle - USFWS; Zipser, Wayne - SCFB

Subject: April 1 Don Pedro Relicensing Meeting Participation Confirmation; Recent Website Postings; FERC Scoping Document Issued

FERC Scoping Document 1 and Notice of Commencement of Proceedings Posting on Website

FERC has released its **Scoping Document 1** today, along with the **Notice of Commencement of Proceedings**. Both documents have been uploaded to www.donpedro-relicensing.com. Upon accessing the website, click on the DOCUMENTS tab. It is also available on FERC's E-Library at www.ferc.gov. **The**

Notice of Commencement of Proceedings also includes details on the May 10th FERC Site Visit and the May 11th Scoping Meetings (Turlock 9:00 a.m.; Modesto 7:00 p.m.)

April 19-20 RWG Meetings Agendas

The agendas for the upcoming April 19-20th Resource Work Group Meetings, being held at the MID Offices in Modesto, have been forwarded to you today via an email from John Devine. They are also posted on the website, in the INTRODUCTION Announcement Section and on the MEETINGS calendar.

Recent Website Postings

The three PowerPoint presentations made at the April 1 Relicensing Participants Meeting have been uploaded to the www.donpedro-relicensing.com website. Click on MEETINGS, Meetings Calendar, and then on the April 1st meeting date. You should then have access to the documents attached to the meeting announcement.

April 1 Relicensing Participants Meeting Participation Confirmation

Before I upload to the website the list of participants in the April 1 Don Pedro Relicensing meeting, I wanted to confirm that I have all of you listed. The following information is a combination of the sign-in list and those who sent me e-mails before, during and/or after the meeting concluded. Thank you.

In Person

Alves, Jim (City of Modesto)
Bond, Jack (_____)
Boucher, Allison (TRC)
Buckley, John (CSERC)
Canaday, Jim (DFG) – ***need email address***
Charles, Cindy (GWWF)
Costa, Jan (Chicken Ranch)
Cranston, Peggy (BLM) – ***need email address***
Creeman, Rebecca (CSERC)
Day, P (Morrison & Foerster)
Drekmeier, Peter (TRT)
Findley, Timothy (Hanson Bridgett)
Fuller, Reba (Tuolumne Band of Me-Wuk Indians)
Hannaford, Margaret (CCSF)
Hayat, Zahra (Morrison & Foerster)
Horn, Jeff (BLM)
Hughes, Bob (DFG)
Jackman, Jerry (_____)
Kanz, Russ (SWRCB)
Lyons, Bill (Mages Ranch)
Manji, Annie (DFG)
Marston, Dean (_____)
Martin, Michael (MFFC)
Morris, Lee (TRC)
O'Brien, Jennifer (DFG)
Ott, Chris (Ott Farms)
Passalaquot, Mike (ERCD) *please confirm spelling as I was not sure; thank you*
Raeder, Jessie (TRT)

Reyes, Martin (EORCD) *or is it ERCD?*
Roseman, Jesse
Shutes, Chris (CSPA)
Wheeler, Dan (_____)
Wheeler, Dave (_____)
Yoshiyama, Ronald (_____) – *need email address*

By Phone

Bowes, Stephen (NPS)
Hatch, Jenny (CalTrout)
Johannis, Mary (BOR)
Koepele, Patrick (TRT)
Roos-Collins, Richard (NHI)
Sandkulla, Nicola (BAWSCA)
Schutte, Allison (Hanson Bridgett for BAWSCA)

Had Advised Prior to the Meeting They Would be Calling In; Please Confirm:

Heyne, Tim (DFG)
Means, Julie (DFG)

Thank you

Rose Staples CPS CAP

Executive Assistant

HDR | DTA

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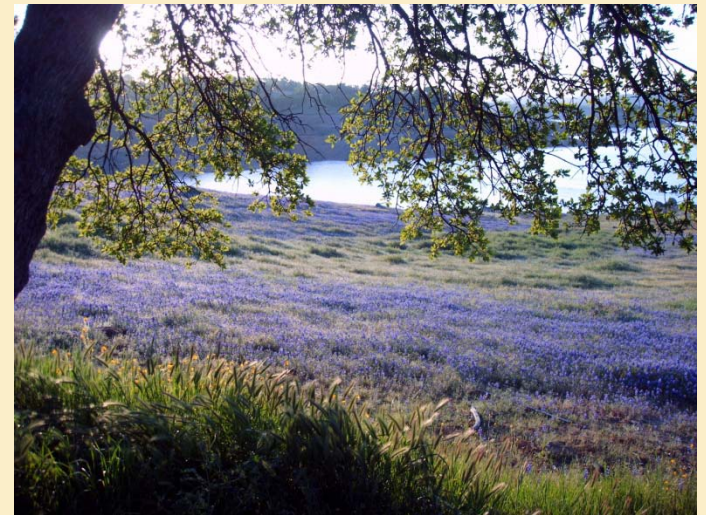
Don Pedro Project Relicensing



MODESTO IRRIGATION DISTRICT | TURLOCK IRRIGATION DISTRICT



FERC
PROJECT
No. 2299



PURPOSE & SCOPE



April 1, 2011

Relicensing Participants Meeting

- Describe Don Pedro operations to develop common understanding of key factors affecting Project operations
- Focus on inflows and outflows from Don Pedro
- Explain annual and seasonal factors

HISTORICAL CONTEXT



- Raker Act
- 4th Agreement between Districts and CCSF
- ACOE Flood Control Manual
- 1995 Settlement Agreement

RAKER ACT



- In 1913 Congress grants CCSF rights of way over public lands necessary for the construction of water supply and power production facilities
- Congress requires CCSF to recognize the Districts' water rights
- Districts to receive no less than 2,350 cfs year-round and 4,000 cfs for 60 days starting April 15 of each year, or natural flow measured at La Grange, whichever is less
- Per the 4th Agreement, Districts also receive 66 cfs year-round to meet the La Grange Ditch water right

4TH AGREEMENT

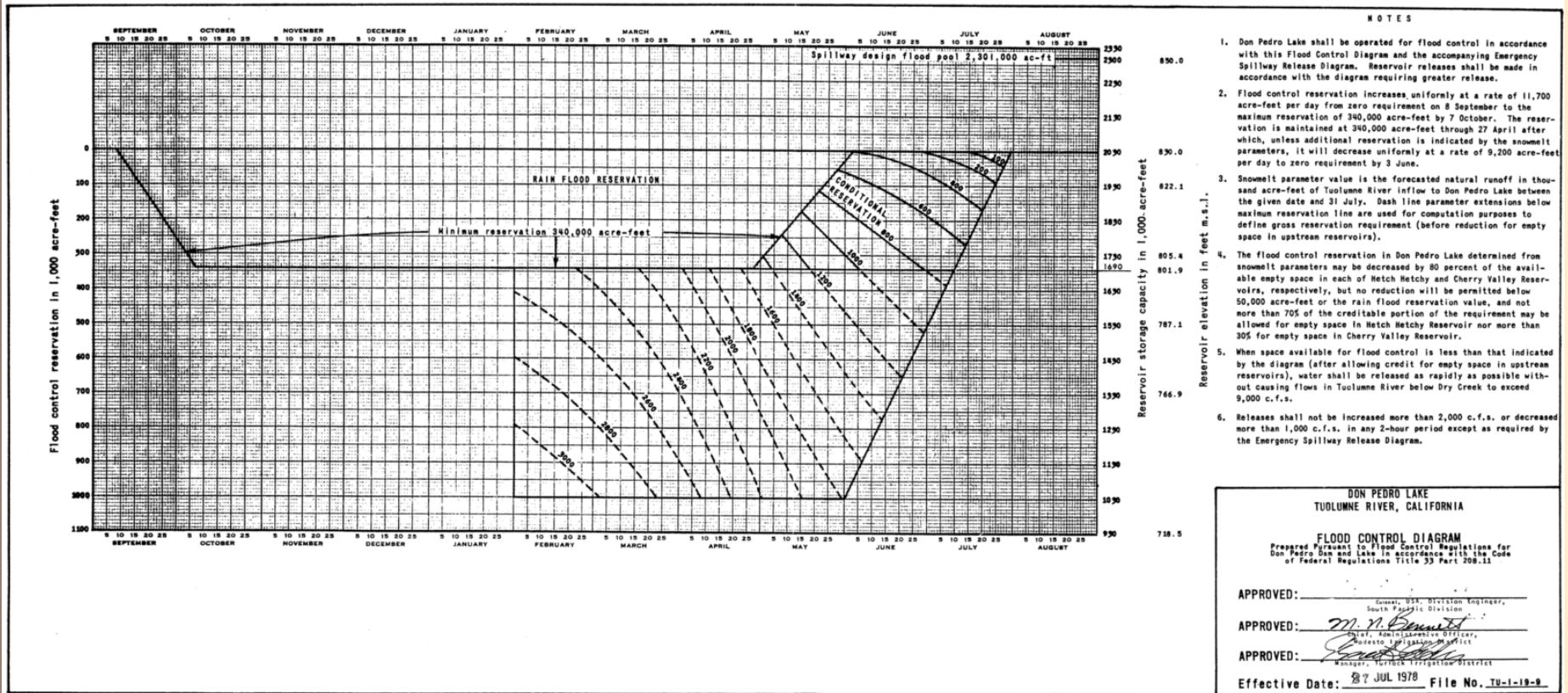


- In 1964, Districts and CCSF enter into 4th Agreement to construct New Don Pedro
- Increases water storage and hydropower for CCSF, MID, TID
- Relieves CCSF of flood control responsibilities at Hetch Hetchy Project facilities
- Watershed flood control responsibility shifted to Don Pedro
- ACOE participates financially
- Flood control reservation is 340,000 AF
- CCSF water bank is 570,000 AF (plus one-half of flood space encroachment during non-flood season)

ACOE FLOOD CONTROL MANUAL



• Flood Control Rule Curve (Figure 3.6.3-1 Don Pedro PAD)



1995 SETTLEMENT AGREEMENT



- Provides for substantial increase in flows over original license for Lower Tuolumne fishery
- Establishes 10 distinct release schedules depending on Tuolumne hydrology
- Hydrology defined in accordance with 60-20-20 San Joaquin Index
- Hydrologic year is October 1 to September 30
- Fishery release “year” is April 15 through April 14
- Initial decision of year type is made in early April

YEAR TYPES



- **Schedule of flow releases at La Grange Dam to the lower Tuolumne River by water year type contained in FERC's 1996 order (Table 3.6.7-2 from the PAD):**

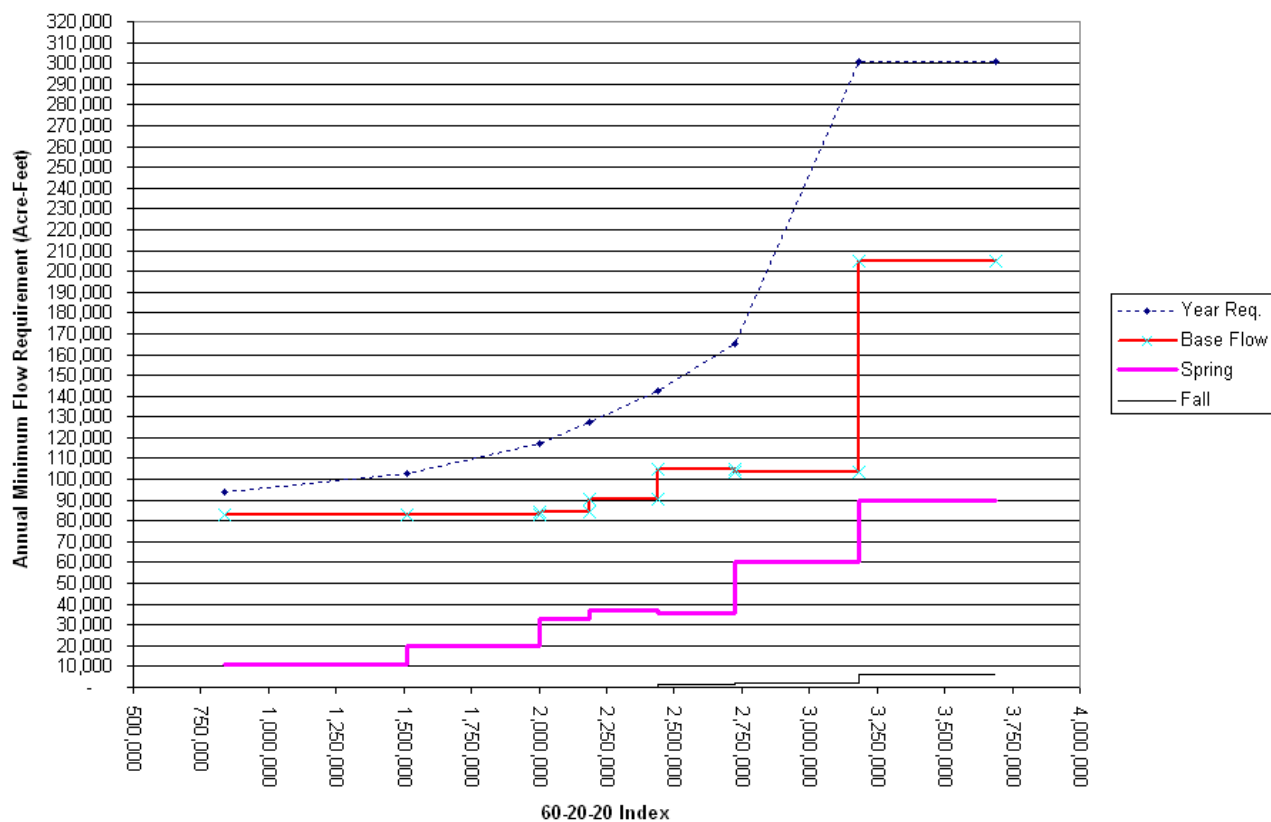
	Units	# of Days	CRITICAL WATER YEAR AND BELOW	MEDIAN CRITICAL WATER YEAR	INTERMEDIAT E C-D WATER YEAR	MEDIAN DRY	INTERMEDIATE D-BN	MEDIAN BELOW NORMAL	INTERMEDIATE BN-AN	MEDIAN ABOVE NORMAL	INTERMEDIATE AN W	MEDIAN WET/ MAXIMUM
Occurrence	%		6.4%	8.0%	6.1%	10.8%	9.1%	10.3%	15.5%	5.1%	15.4%	13.3%
October 1-15	cfs	15	100	100	150	150	180	200	300	300	300	300
	ac-ft		2,975	2,975	4,463	4,463	5,355	5,950	8,926	8,926	8,926	8,926
Attraction Pulse	ac-ft		none	none	none	none	1,676	1,736	5,950	5,950	5,950	5,950
October 16-May 31	cfs	228	150	150	150	150	180	175	300	300	300	300
	ac-ft		67,835	67,835	67,835	67,835	81,402	79,140	135,669	135,669	135,669	135,669
Outmigration Pulse Flow	ac-ft		11,091	20,091	32,619	37,060	35,920	60,027	89,882	89,882	89,882	89,882
June 1-Sept 30	cfs	122	50	50	50	75	75	75	250	250	250	250
	ac-ft		12,099	12,099	12,099	18,149	18,149	18,149	60,496	60,496	60,496	60,496
Volume (total)	ac-ft	365	94,000	103,000	117,016	127,507	142,502	165,002	300,923	300,923	300,923	300,923

Between a Median Critical Water Year and an Intermediate Below Normal-Above Normal Water Year, the precise volume of flow to be released by the Districts each fish flow year is to be determined using accepted methods of interpolation between index values.

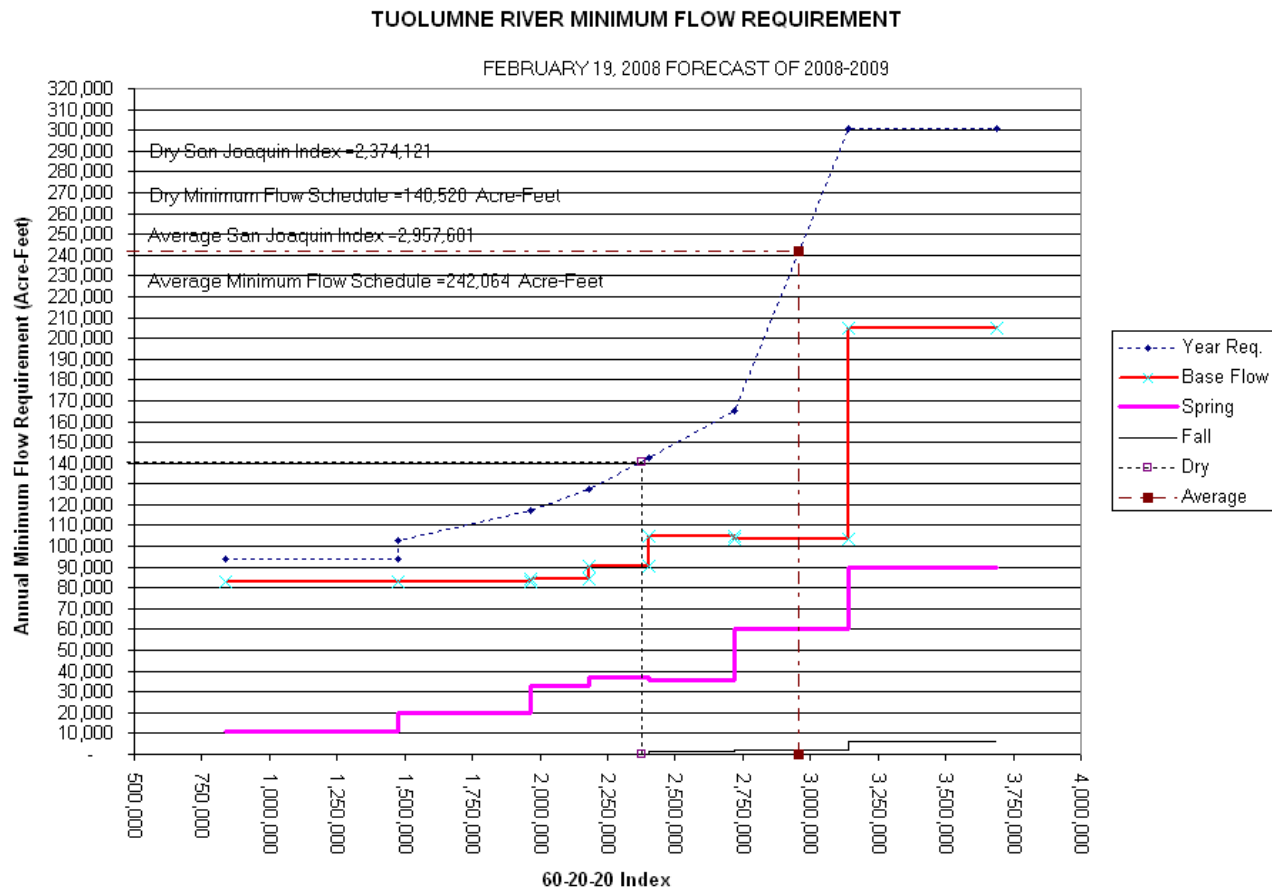
YEAR TYPES



TUOLUMNE RIVER MINIMUM FLOW REQUIREMENT



YEAR TYPES-Example Feb. 2008



ANNUAL OPERATIONS



- “Water First” policy
- Primary factor for reservoir management is water supply, not power

SEPTEMBER 8 – OCTOBER 7



- Flood Control Rule Curve – reservoir no higher than 801.9 feet by October 7
- Irrigation deliveries from Don Pedro are normally sufficient to bring reservoir elevation to at least 801.9 feet
- For example, July to October inflow of 60,000 AF; irrigation, M&I, and fishery flows 500,000 ; evap of about 50,000 AF ; net outflow of 360 TAF

OCTOBER 7 – NOVEMBER 30



- Flood management season – maintain water levels below 801.9 feet
- Pulse flow to attract upstream migrants depending on water year type (occurs approximately 70% of the years)
- 45-Day Period (typically October 17 through November 30):
 - Fluctuations controlled so as not to exceed 10 inches daily
 - For 2 hours per day, less than 18-inch increase
- Stable flows is a goal for this period; therefore may leave some buffer between actual reservoir elevation and 801.9 feet
- Irrigation deliveries can extend into November
- M&I delivery requirements

DECEMBER 1 – MARCH 31



- Flood management season – maintain water levels below 801.9 feet
- Monitoring snowpack, weather patterns, and projecting runoff on a daily and sub-daily basis
- Consider need for carryover storage and effects of CCSF water bank
- Maintain flows at the Modesto gage below 9,000 cfs
- If encroachment occurs, elevate storage above 801.9 feet within 12 days if possible and within Corps-suggested release targets
- May “pre-release” flows based on inflow forecasts
- M&I deliveries
- Irrigation deliveries begin as early as February (infrequently there are January deliveries) depending on winter conditions
- Fill Turlock Lake and Modesto Reservoir

APRIL – JUNE



- Flood management season and reservoir filling above 801.9 feet starting on April 27, if water is available and there is no snowmelt parameters in effect
- Monitoring snowpack, weather patterns, and projecting runoff on a daily and sub-daily basis
- Pulse flow for outmigrants (all years; varies from 11,000 AF to 90,000 AF)
- Irrigation deliveries
- M&I deliveries
- Calculate water year type circa April 10 for upcoming fishery year flows (April 15 thru April 14); defines both pulse flows and continuous flows

JULY 1 (+/-) – SEPTEMBER 8

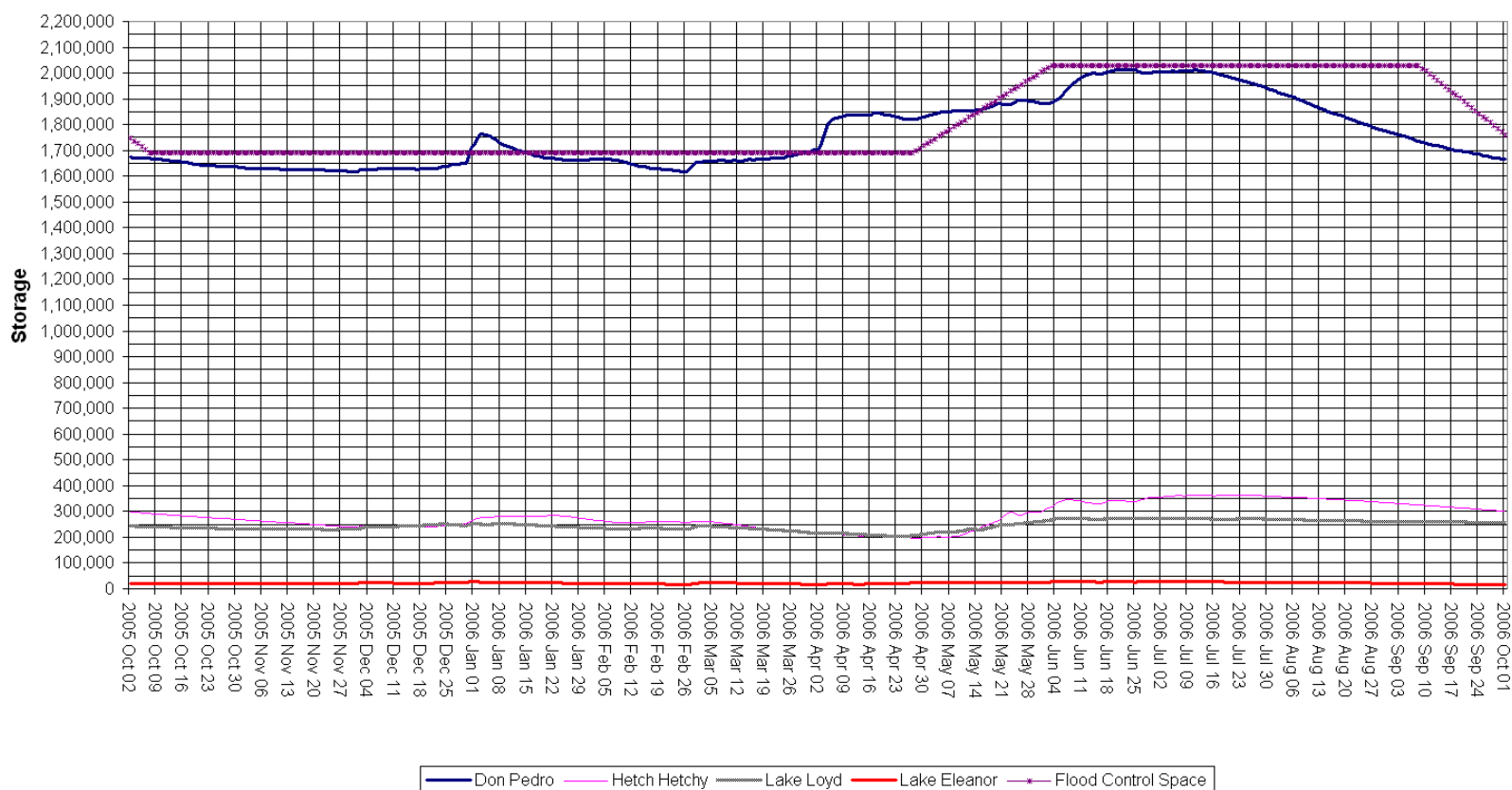


- Post-flood season - reservoir level can be as high as 830 feet
- Irrigation deliveries peak
- M&I delivery requirements

Tuolumne River Storage- 2006 WY



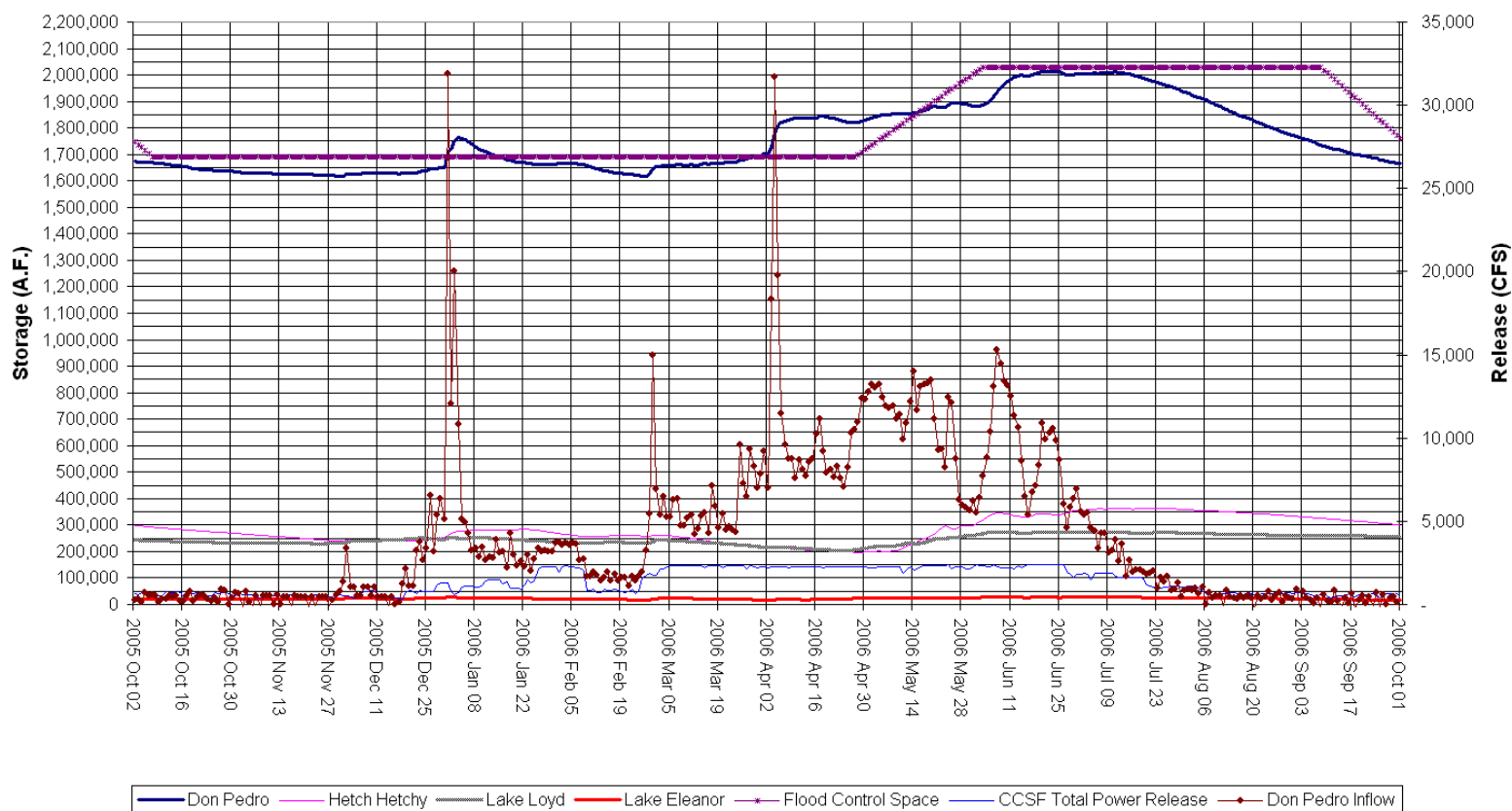
Don Pedro and CCSF Storage



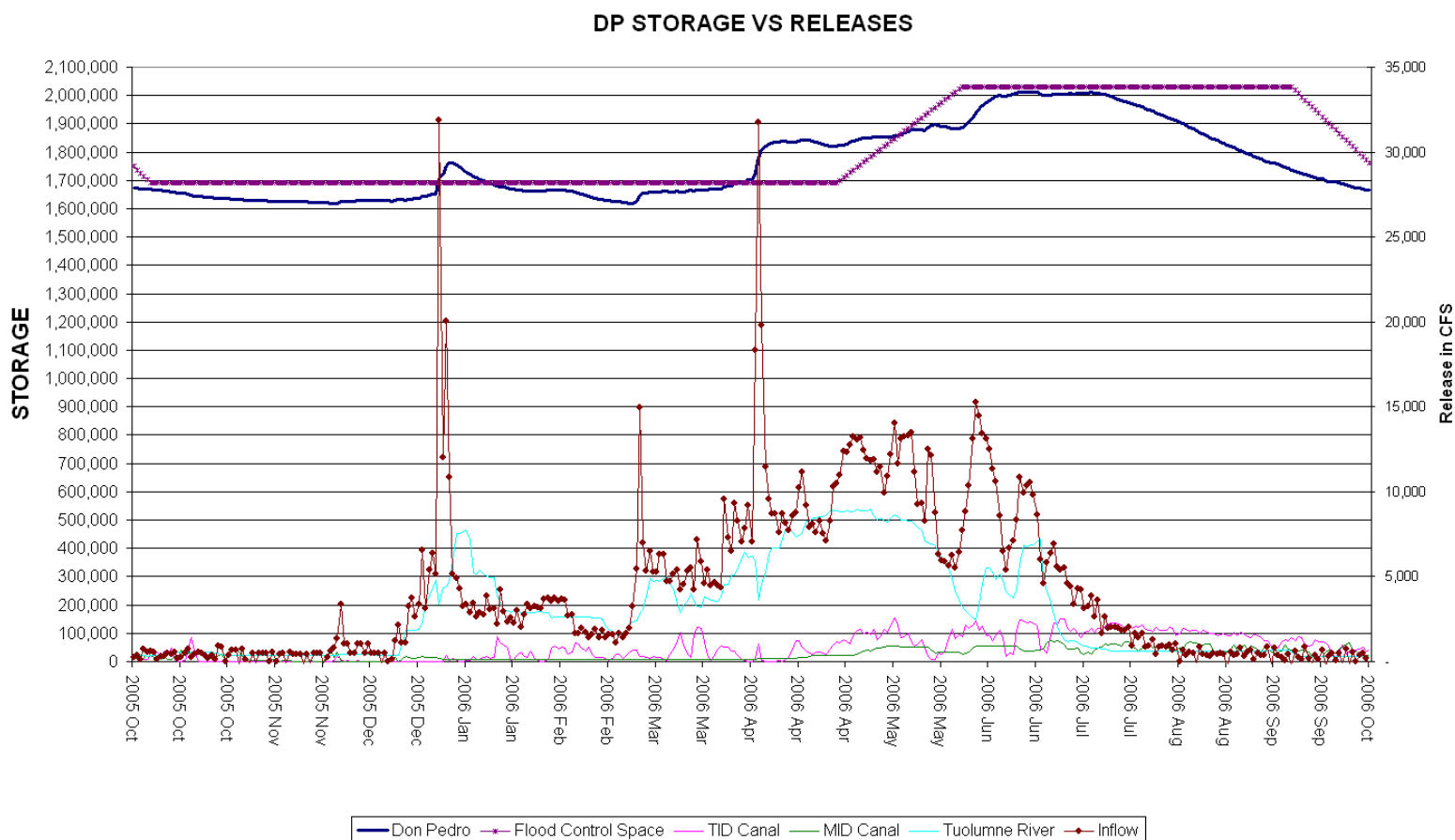
Inflow Into Don Pedro- 2006



Don Pedro and CCSF Storage



Releases During a Wet Year-2006



LA GRANGE DAM



- Constructed in 1893 to divert irrigation water to TID and MID
- Normal water surface elevation of about 295 feet
- TID canal capacity = 3,000 cfs; currently limited to 2,500 cfs for canal safety reasons
- MID canal capacity = 2,000 cfs
- TID canal restricts flow fluctuations to 18 MW/hr or 500 cfs/hr
- Turlock Lake actual capacity 36,000 AF; normally operated between 28 TAF and 32 TAF
- Modesto Reservoir capacity 28,000 AF
- Turlock Lake and Modesto Reservoir operations balance demand (“calls”) for irrigation deliveries with timing of supply; canal operations require ability to fluctuate the reservoir to a degree

LA GRANGE OPERATIONS



- Structure allows the Districts to divert water from the Tuolumne River into the TID and MID canals
- Reservoir storage less than about 100 AF, so reservoir fluctuations are minimal
- Canal flows controlled by gates at the entrances to each canal

Background of on-going FERC studies for Chinook salmon and *O. mykiss*

- July 31, 1996 FERC Order
 - 2005 Ten Year Summary Report
 - 2006-2007 FERC Hearings
 - 2007 Study Plan (flow, restoration, fry survival, steelhead, predator control, water temperature)
- April 3, 2008 FERC Order
 - On-going Chinook salmon escapement surveys
 - ***O. mykiss* Monitoring (anadromy, population, estimates, tracking)**
 - 2008 Re-Hearing and 2009 ALJ Process
- May 2, 2010 FERC Order
 - **Instream Flow Studies**
 - **Water Temperature Modeling Study**

Tuolumne River Instream Flow Study



Tuolumne River Instream Flow Studies

Task or Activity	Work Schedule
Study Planning and Site Selection	Completed Aug and Oct 2010
Revised Mesohabitat Mapping	Completed September 16, 2010
Cross Section Placement	Completed November 18, 2010
HSC Consultation	In progress
Field Data Collection (Hydraulic)	June – August 2011*
Habitat Suitability Criteria Field Data Collection (Fry and Juveniles)	February – June 2011*
PHABSIM Data Analysis	July – December 2011
High Flow Stage Discharge Data Collection	January – June 2011
Pulse Flow Study Data Analysis and Modeling	September 2010 – June 2011
<i>Draft Report for Resource Agency Review</i>	<i>February 2012</i>
Final Report to Commission	April 28, 2012

* Pending flow conditions.

**HSC validation surveys for fry were not possible in 2011 due to high run-off levels. Juvenile observations in floodplain habitats are scheduled for April/May 2012; however, in-channel surveys may not be possible until 2012 due to high flows in 2011.

Overbank Flow Study

- Three primary study sites selected (RM 49R, RM 48L, RM 45R (Zanker/Bobcat))
- Six Pressure transducers installed
- 2D Hydraulic Modeling and species habitat suitability



Tuolumne River Water Temperature Modeling Study

Task or Activity	Work Schedule
Validate Existing Water Temperature Model	Completed August 10, 2010
Initial Scenario Development and Evaluation	Completed September 9, 2010
Model Simulations and Analysis	Completed October 25, 2010
Progress Report	Completed November 9, 2010
Agency Review Draft Report Preparation	Completed December 10, 2010
Agency Review Comment Period	Completed January 10, 2011
Final Report to Commission	Completed March 12, 2011
<i>Instream Flow and Effective Habitat Evaluations*</i>	<i>January – June 2011</i>

- Pending instream study completion

Water Temperature Modeling Study

- Model Calibration/Validation
- Simulation of flows meeting seasonal temperature objectives in the lower Tuolumne River
- IFIM Effective Weighted Usable Area Ests.

***O. Mykiss* Assessment**

- 2008-2009 Winter Spring Population Estimates
- 2008-2011 Summer Population estimates
- 2010-2011 Acoustic Tracking Study
- Anadromy study

Hetch Hetchy Water and Power

- Who is Hetch Hetchy Water and Power (HHWP)?
- HHWP is a division of the San Francisco Public Utilities Commission (SFPUC)
- SFPUC a Department of the City and County of San Francisco (CCSF or City)



SFPUC Customers and Resources

- SFPUC provides water to about 2.4 million people
- Current water demand is about 265 mgd or 300,000 acre-feet
- System storage is about 1,460,000 acre-feet
 - Local Reservoirs: 227,000 acre-feet
 - Tuolumne Reservoirs: 660,000 acre-feet
 - City's Water Bank storage in Don Pedro Reservoir: 570,000 acre-feet

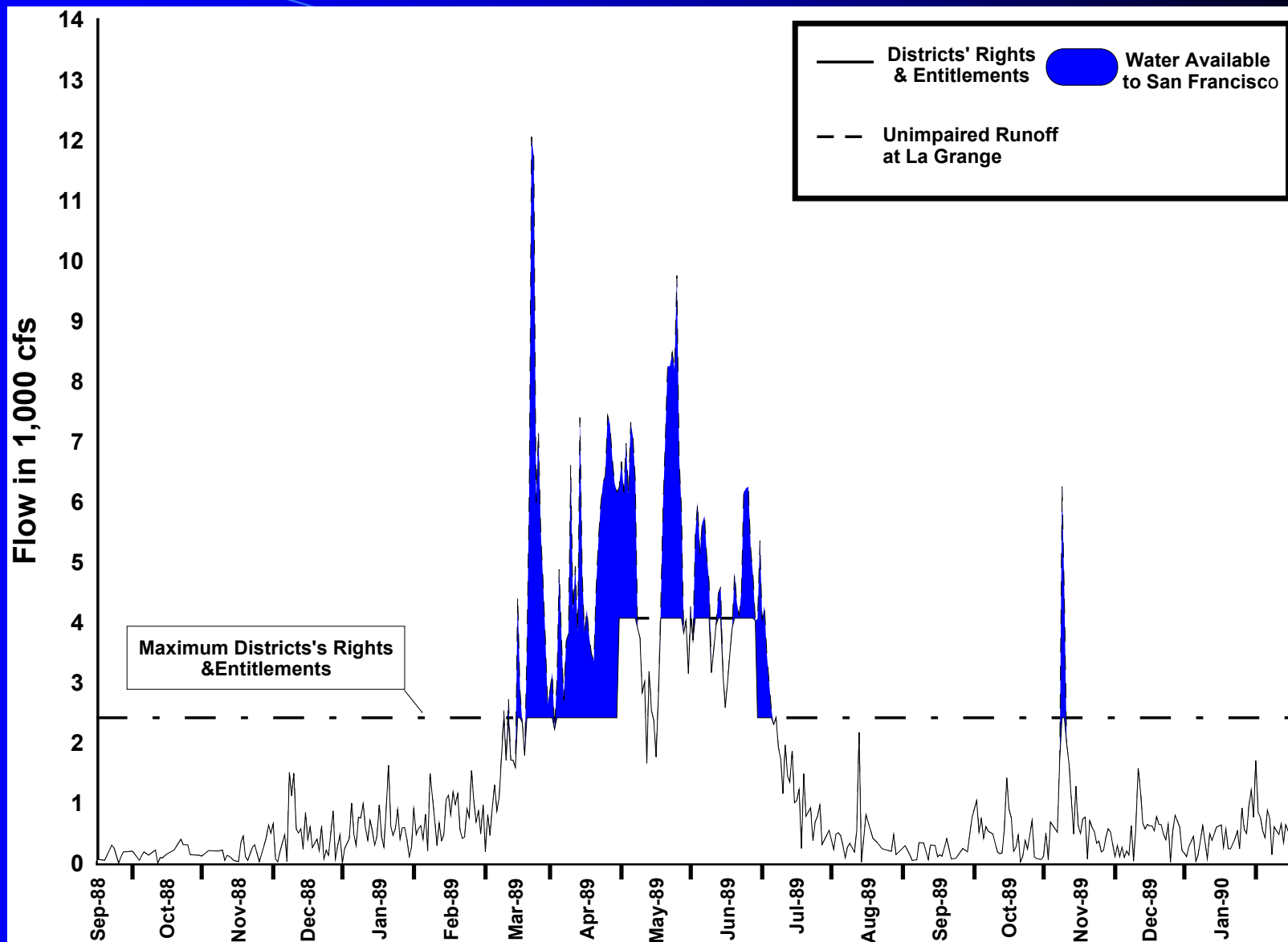


HHWP Reservoir Operations

- How is the HHWP reservoir system operated?
- How is the storage in Water Bank incorporated in HHWP Operations?

Allocation of Tuolumne River Flows

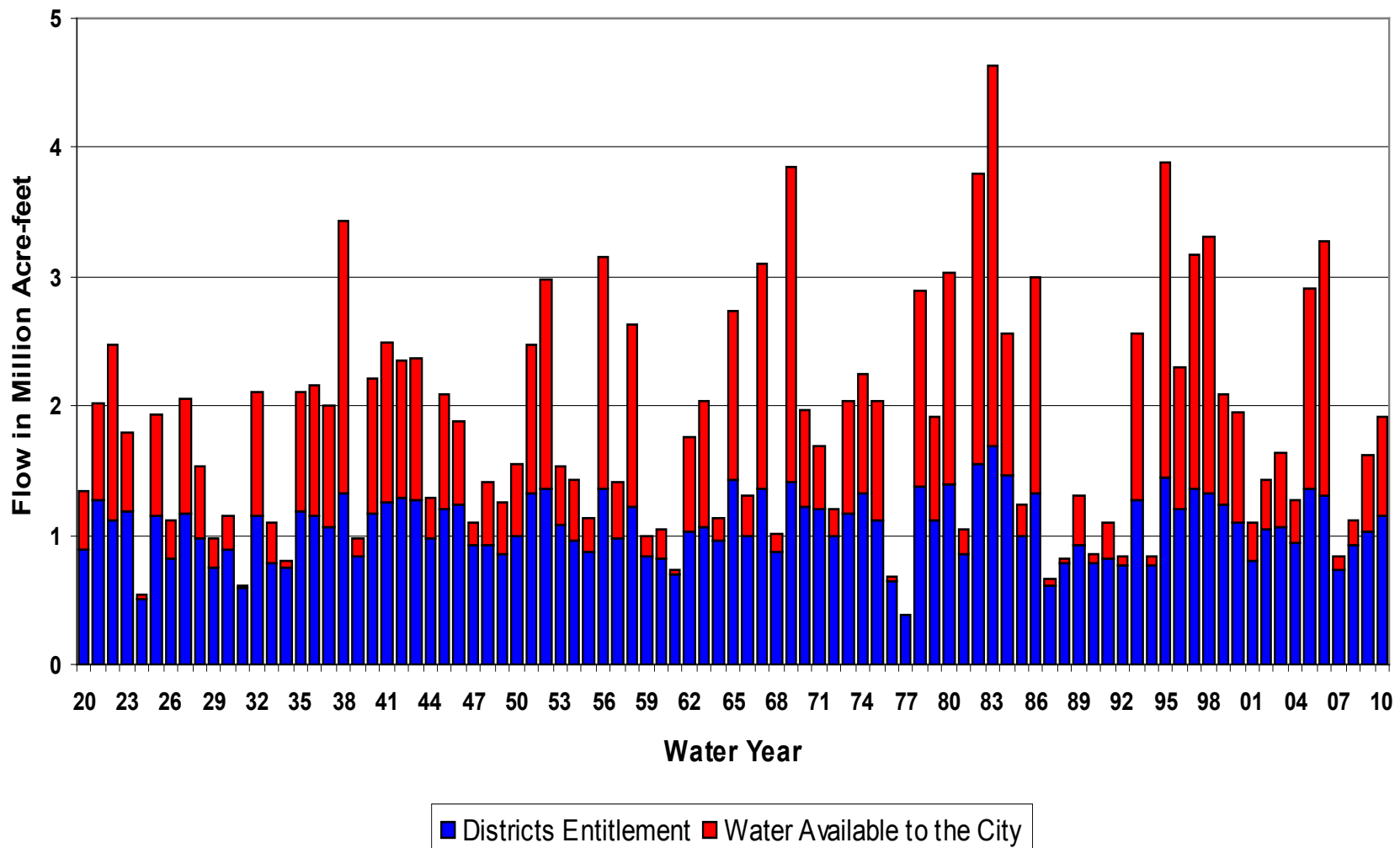
- Raker Act is the document used to allocate flows on the Tuolumne River between the Districts and the City
- Based on natural flow at LaGrange



Allocation of Tuolumne River Flows

- Average flow at La Grange is 1,800,000 acre-feet
 - 40% of the flow is allocated to the Districts
 - 60% to the City. Slightly over 1 million acre-feet per year.
- The SFPUC demand is about 265 mgd, which is about 300,000 acre-feet





Allocation During Dry Sequences

- In 1987-92, the Districts received 85% of the allocation on the Tuolumne River
- The SFPUC 15%, averaging about 150,000 acre-feet per year which is about half of the SFPUC current demand.
- The SFPUC must rely on storage through droughts.

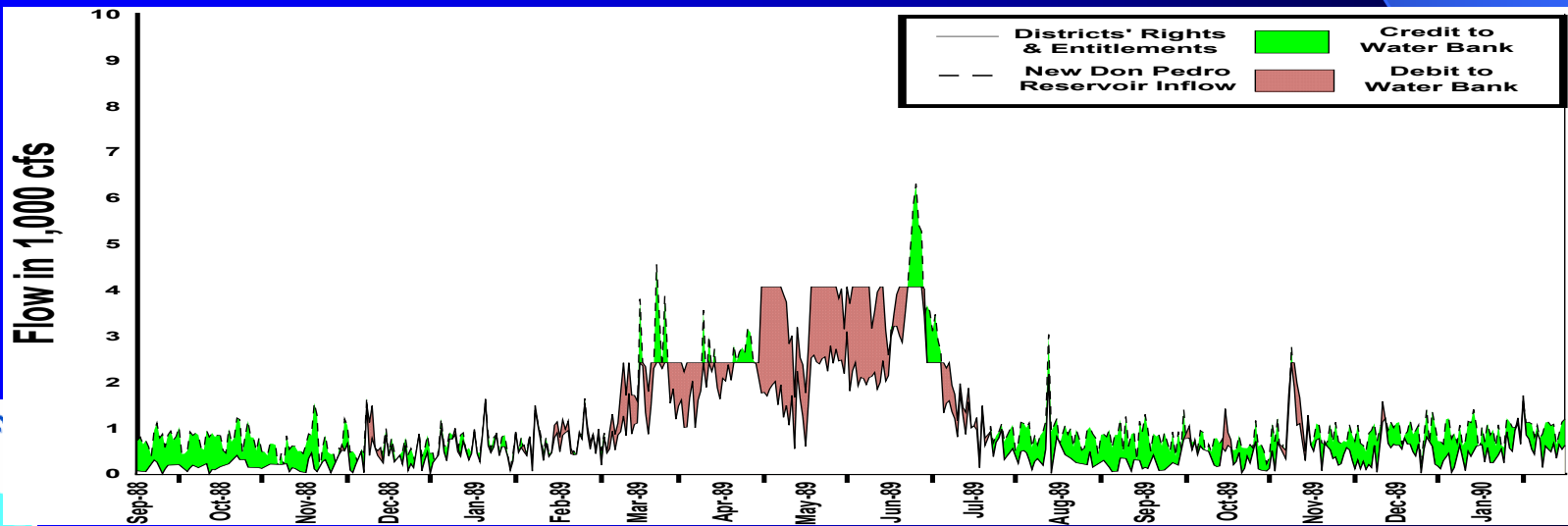
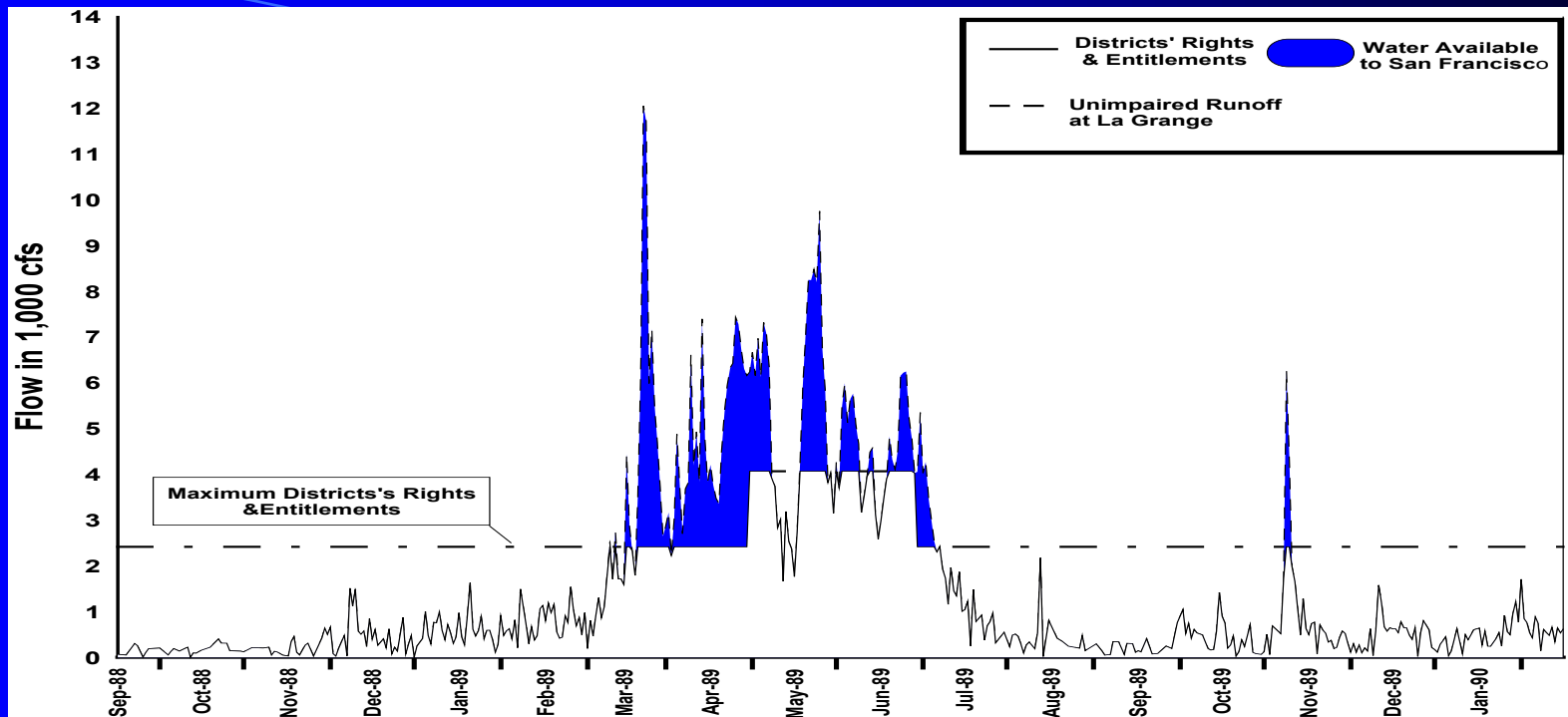


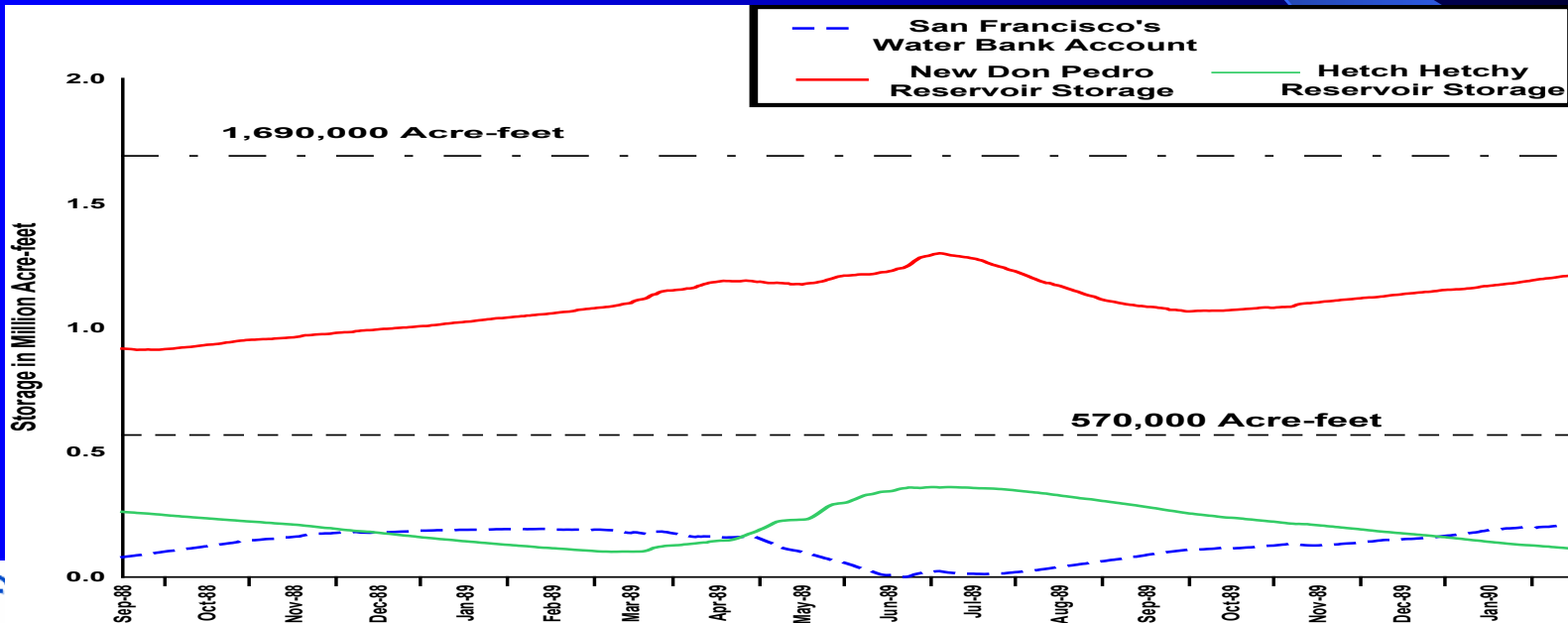
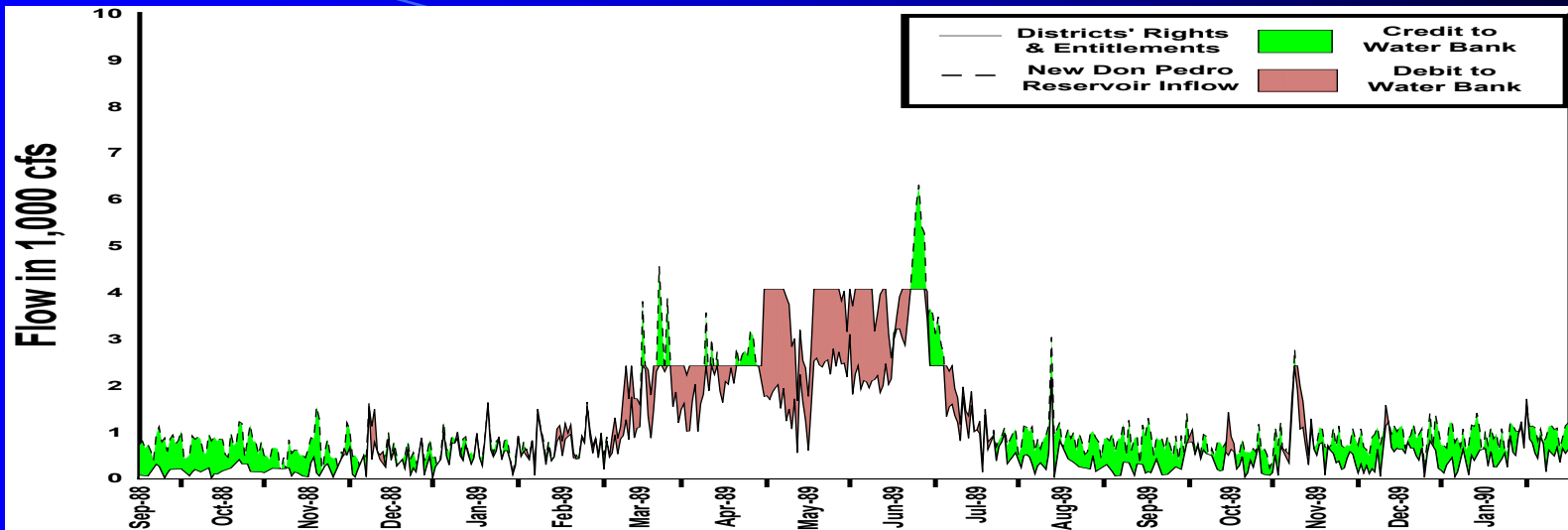
Value of Water Bank

- SFPUC has about 1,500,000 acre-feet total storage between local storage, upcountry storage and the Water Bank.
- The SFPUC does not divert water directly from the Water Bank, however, the storage provides us with up to 25% of our water supply during multiple-year droughts.

How does the SFPUC access that storage?



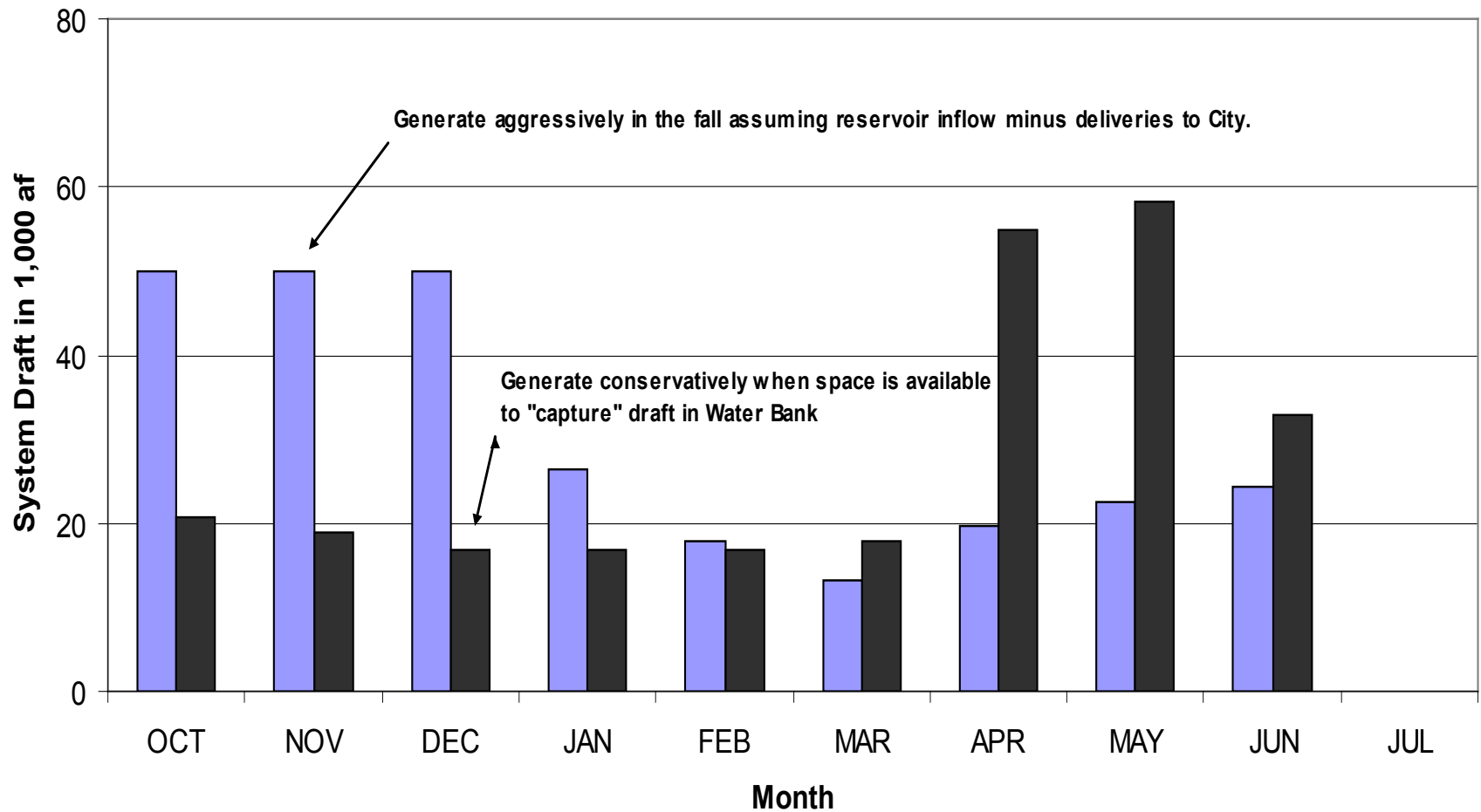




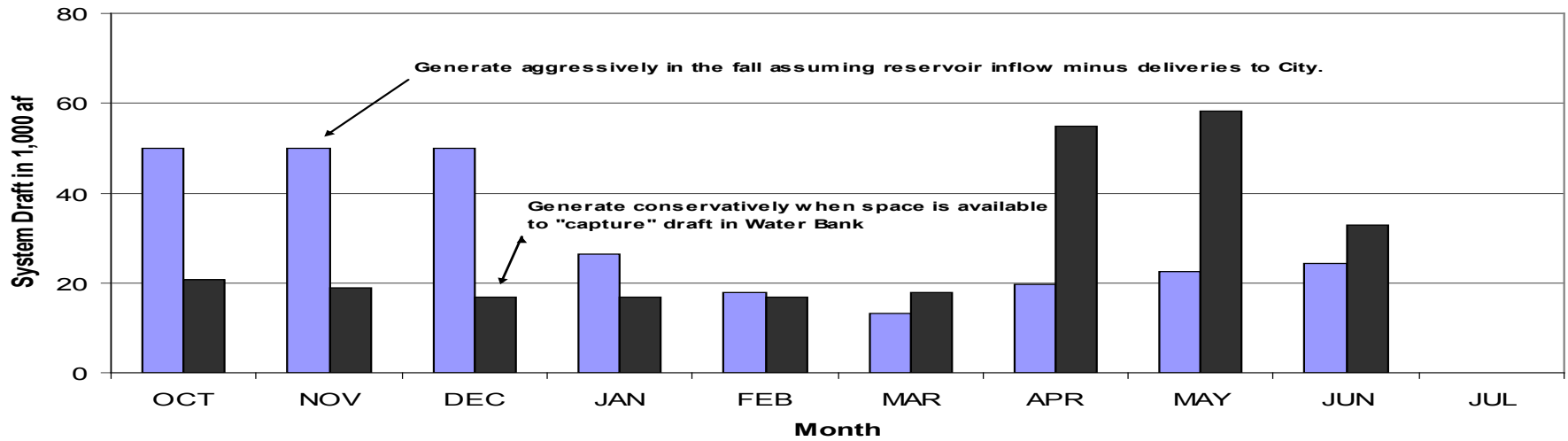
Optimizing Water Supplies

- How is the HHWP reservoir system operated?
- We operate to optimize reservoir carryover storage to minimize the probability of water rationing for customers.

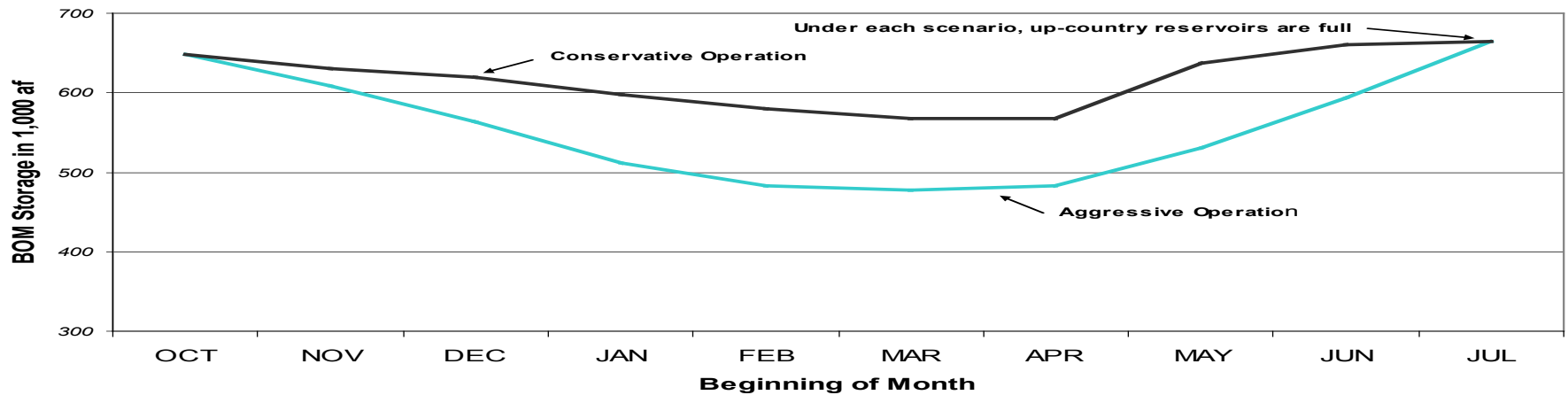
System Draft



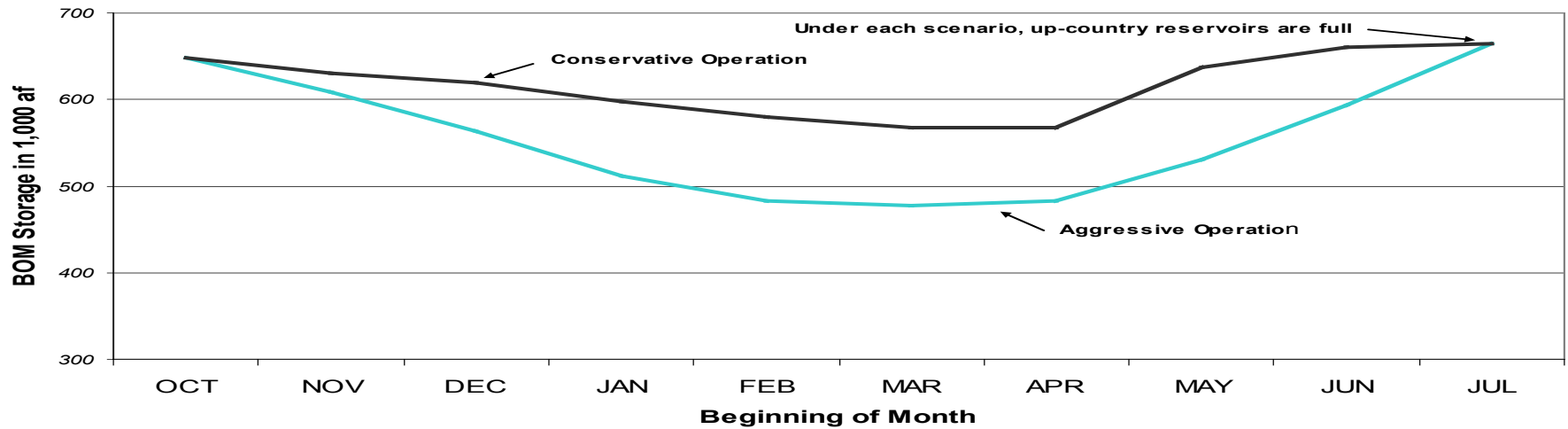
System Draft



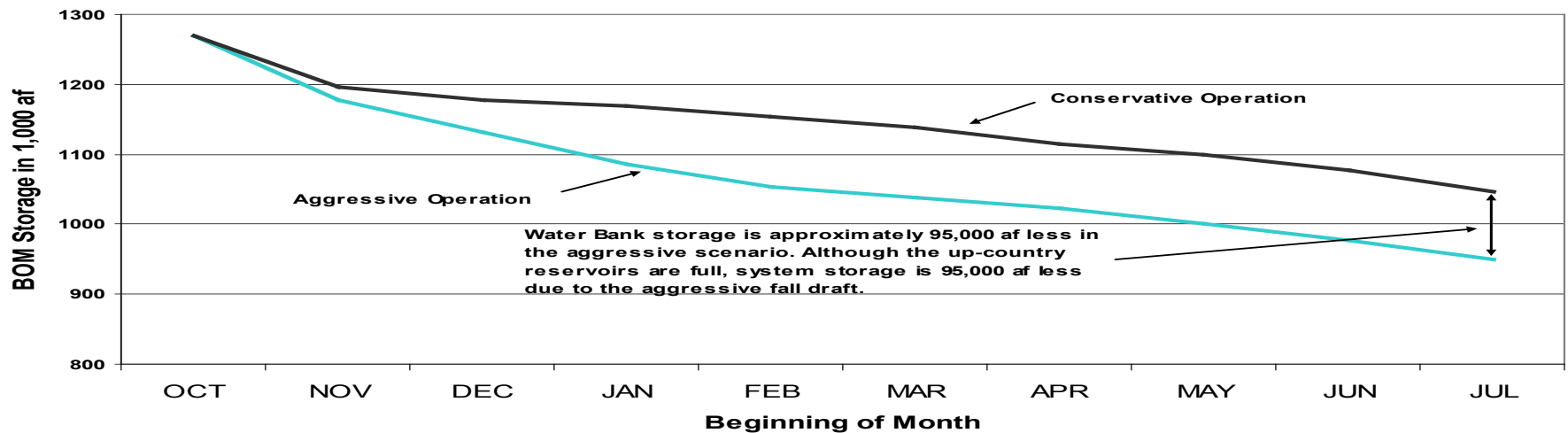
Up-country Storage, Beginning-of-month(BOM)



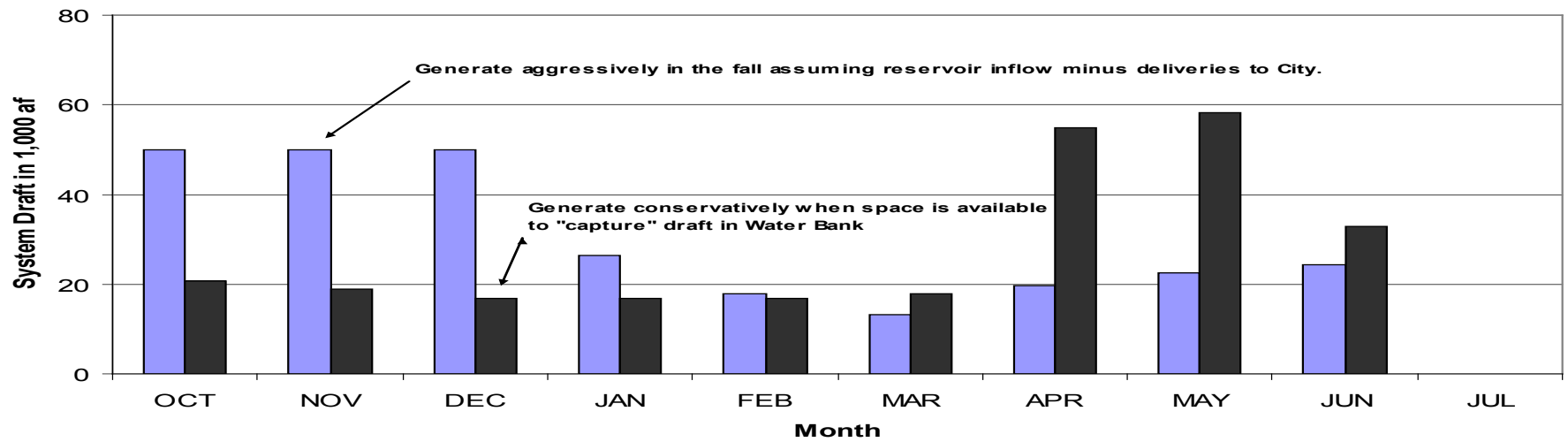
Up-country Storage, Beginning-of-month(BOM)



Hetch Hetchy System Storage, Beginning-of-month(BOM)



System Draft



From: Staples, Rose

Sent: Monday, April 11, 2011 9:26 PM

To: Alves, Jim - City of Modesto; Asay, Lynette - N-R; Aud, John - SCERD; Beuttler, John - CSPA; Bond, Jack - City of Modesto; Boucher, Allison - TRC; Boucher, Dave - Allison - TRC; Bowes, Stephen - NPS; Bowman, Art - CWRMP; Brewer, Doug - TetraTech; Brochini, Anthony - SSMN; Buckley, John - CSERC; Burt, Charles - CalPoly; Carlin, Michael - SFPUC; Catlett, Kelly - FOR; Charles, Cindy - GWWF; Cory, Philip - TNC; Costa, Jan - Chicken Ranch; Cowan, Jeffrey; Cox, Stanley Rob - TBMWI; Cranston, Peggy - BLM; Cremeen, Rebecca - CSERC; Day, P - MF; Devine, John; Dixie, Yakima K - CVMT; Donaldson, Milford Wayne - OHP; Dowd, Maggie-SNF; Drekmeier, Peter - TRT; Edmondson, Steve - NOAA; Eicher, James - BLM; Findley, Timothy - Hanson Bridgett; Freeman, Beau - CalPoly; Fuller, Reba - TMTC; Furman, Donn W - SFPUC; Ganteinbein, Julie - Water-Power Law Grp; Giglio, Deborah - USFWS; Goode, Ron - NFMT; Gorman, Elaine - SC; Gutierrez, Monica - NOAA-NMFS; Hannaford, Margaret - CCSF; Hastreiter, James L - FERC; Hatch, Jenny - CT; Hayat, Zahra - MF; Hellam, Anita - HH; Hersh-Burdick, Rachael - USACE; Heyne, Tim - CDFG; Holden, James ; Horn, Jeff - BLM; Horn, Tini; Hughes, Noah; Hughes, Robert - CDFG; Jackman, Jerry ; Jackson, Zac - USFWS; Jennings, William - CSPA; Jensen, Art - BAWSCA; Jensen, Laura - TNC; Johannis, Mary; Johnson, Brian - CalTrout; Kanz, Russ - SWRCB; Kempton, Kathryn - NOAA-MNFS; Kinney, Teresa; Koepele, Patrick - TRT; Lein, Joseph; Levin, Ellen - SFPUC; Lewis, Reggie - PRCI; Linkard, David - TRT /RH; Loy, Carin; Lyons, Bill - MR; Manji, Annie; Marko, Paul ; Marshall, Mike - RHH; Martin, Michael - MFFC; Mathiesen, Lloyd - CRRMW; McDaniel, Dan -CDWA; McDevitt, Ray - BAWSCA; McLain, Jeffrey - NOAA-NMFS; Means, Julie - CDFG; Mills, John - TUD; Morningstar Pope, Rhonda - BVR; Motola, Mary - CT; O'Brien, Jennifer - CDFG; Orvis, Tom - SCFB; Ott, Bob; Ott, Chris; Pinhey, Nick - City of Modesto; Porter, Ruth - RHH; Powell, Melissa - CRRMW; Puccini, Stephen - CDFG; Raeder, Jessie - TRT; Ramirez, Tim - SFPUC; Rea, Maria - NOAA-NMFS; Reed, Rhonda - NOAA-NMFS; Richardson, Kevin - USACE; Robbins, Royal; Romano, David O - N-R; Roos-Collins, Richard - Water-Power Law Grp for NHI; Roseman, Jesse; Rothert, Steve - AR; Sandkulla, Nicole - BAWSCA; Schutte, Allison - HB; Sears, William - SFPUC; Shumway, Vern - SNF; Shutes, Chris - CSPA; Slay, Ronn - CNRF/AIC; Smith, Jim - MPM; Staples, Rose; Steindorf, Dave - AW; Stork, Ron - FOR; Taylor, Mary Jane - CDFG; TeVelde, George A ; Thompson, Larry - NOAA-MNFS; Verkuil, Colette - TRT/MF; Walters, Eric - MF; Wantuck, Rick - NOAA-NMFS; Wesselman, Eric - TRT; Wheeler, Dan; Wheeler, Dave; Wheeler, Douglas - RHH; Williamson, Harry (NPS); Wilson, Bryan - MF; Wood, Dave - FR; Wooster, John -NOAA; Workman, Michelle - USFWS; Zipser, Wayne - SCFB

Subject:For Confirmation of Questions/Info Requests Made at April 1 Don Pedro Relicensing Meeting

Please find below the list of your questions/information requests made at the April 1 meeting in Modesto. We ask that you review these for accuracy and send me any changes by the end of the day Wednesday, April 13th. Thank you.

Recorded by CCSF:

- [1] Is there a document(s) that describe the operations of the HHWP?
- [2] What is the projected future water demand estimated by CCSF? Are new water storage resources being planned to meet the demand?
- [3] Provide documentation on water bank accounting – background and method of accounting
- [4] Explain how the Don Pedro FERC relicensing process can affect CCSF

Recorded by TID/MID:

- [5] Provide a copy of this year's snow surveys used for forecasting
- [6] Provide an historical account of the times and duration since project commencement that the reservoir has been into the flood conservation pool during the applicable period – frequency; number of occurrences; duration; and water year type
- [7] Where and when is riparian water used and how is it separated from storage? Is riparian water the water used on lands that meet the definition of "riparian lands"?
- [8] How long does the reservoir normally stay at the peak elevation it reaches in any year?
- [9] Provide the unimpaired flows at La Grange and the historical flows at La Grange since the Project began operating
- [10] Have the Districts filed for their pre-1914 appropriative rights in the appropriate counties?
- [11] Provide pre-settlement, post-new Don Pedro flows and reservoir elevations similar to what is provided in the PAD for post-settlement
- [12] What model will be used to develop the Project Operations Model?

Rose Staples CPS CAP

Executive Assistant

HDR|DTA

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Email rose.staples@hdrinc.com

From: Staples, Rose

Sent: Friday, April 15, 2011 7:34 PM

To: Alves, Jim - City of Modesto; Asay, Lynette - N-R; Aud, John - SCERD; Barnes, James - BLM; Beuttler, John - CSPA; Bond, Jack - City of Modesto; Boucher, Allison - TRC; Boucher, Dave - Allison - TRC; Bowes, Stephen - NPS; Bowman, Art - CWRMP; Brewer, Doug - TetraTech; Brochini, Anthony - SSMN; Buckley, John - CSERC; Burt, Charles - CalPoly; Carlin, Michael - SFPUC; Catlett, Kelly - FOR; Charles, Cindy - GWWF; Cory, Philip - TNC; Costa, Jan - Chicken Ranch; Cowan, Jeffrey; Cox, Stanley Rob - TBMWI; Cranston, Peggy - BLM; Cremeen, Rebecca - CSERC; Day, P - MF; Devine, John; Dixie, Yakima K - CVMT; Donaldson, Milford Wayne - OHP; Dowd, Maggie-SNF; Drekmeier, Peter - TRT; Edmondson, Steve - NOAA; Eicher, James - BLM; Findley, Timothy - Hanson Bridgett; Freeman, Beau - CalPoly; Fuller, Reba - TMTC; Furman, Donn W - SFPUC; Ganteinbein, Julie - Water-Power Law Grp; Giglio, Deborah - USFWS; Goode, Ron - NFMT; Gorman, Elaine - SC; Gutierrez, Monica - NOAA-NMFS; Hastreiter, James L - FERC; Hatch, Jenny - CT; Hayat, Zahra - MF; Hellam, Anita - HH; Hersh-Burdick, Rachael - USACE; Heyne, Tim - CDFG; Holden, James ; Horn, Jeff - BLM; Horn, Tini; Hughes, Noah; Hughes, Robert - CDFG; Jackman, Jerry ; Jackson, Zac - USFWS; Jennings, William - CSPA; Jensen, Art - BAWSCA; Jensen, Laura - TNC; Johannis, Mary; Johnson, Brian - CalTrout; Kanz, Russ - SWRCB; Kempton, Kathryn - NOAA-MNFS; Kinney, Teresa; Koepele, Patrick - TRT; Lein, Joseph; Levin, Ellen - SFPUC; Lewis, Reggie - PRCI; Linkard, David - TRT /RH; Loy, Carin; Lyons, Bill - MR; Manji, Annie; Marko, Paul ; Marshall, Mike - RHH; Martin, Michael - MFFC; Mathiesen, Lloyd - CRRMW; McDaniel, Dan -CDWA; McDevitt, Ray - BAWSCA; McLain, Jeffrey - NOAA-NMFS; Means, Julie - CDFG; Mills, John - TUD; Morningstar Pope, Rhonda - BVR; Motola, Mary - CT; O'Brien, Jennifer - CDFG; Orvis, Tom - SCFB; Ott, Bob; Ott, Chris; Pinhey, Nick - City of Modesto; Porter, Ruth - RHH; Powell, Melissa - CRRMW; Puccini, Stephen - CDFG; Raeder, Jessie - TRT; Ramirez, Tim - SFPUC; Rea, Maria - NOAA-NMFS; Reed, Rhonda - NOAA-NMFS; Richardson, Kevin - USACE; Robbins, Royal; Romano, David O - N-R; Roos-Collins, Richard - Water-Power Law Grp for NHI; Roseman, Jesse; Rothert, Steve - AR; Sandkulla, Nicole - BAWSCA; Schutte, Allison - HB; Sears, William - SFPUC; Shumway, Vern - SNF; Shutes, Chris - CSPA; Slay, Ronn - CNRF/AIC; Smith, Jim - MPM; Staples, Rose; Steindorf, Dave - AW; Stork, Ron - FOR; Stratton, Susan - CA SHPO; Taylor, Mary Jane - CDFG; TeVelde, George A ; Thompson, Larry - NOAA-MNFS; Verkuil, Colette - TRT/MF; Walters, Eric - MF; Wantuck, Rick - NOAA-NMFS; Wesselman, Eric - TRT; Wheeler, Dan; Wheeler, Dave; Wheeler, Douglas - RHH; Williamson, Harry (NPS); Wilson, Bryan - MF; Winchell, Frank - FERC; Wood, Dave - FR; Wooster, John -NOAA; Workman, Michelle - USFWS; Zipser, Wayne - SCFB

Subject: Don Pedro RWG Meeting Draft Documents to be Uploaded to Website
Saturday April 16

A quick advisory that several documents will be uploaded to the www.donpedro-relicensing website tomorrow, April 16th, including draft PowerPoint presentations to be used during the Cultural and the Water/Aquatic/Terrestrial RWG meetings Tuesday and Wednesday. The draft Recreation RWG Meeting

PowerPoint will probably not be ready for uploading until Monday. Please access these documents through the MEETINGS tab; and then click on MEETINGS Calendar and click on the respective date of each meeting. You will find the draft documents attached to the meeting announcements.

On Saturday I will also be uploading the list of attendees at the April 1, 2011 Relicensing meeting—thank you all for your emails in confirmation of your participation; as well as a copy of the Progress Tracking List updated with notes on the actions taken in response to the February 28th questions/requests. An updated list of questions/requests from the April 1st meeting is still pending, as responses to my email seeking verification of the questions continue to be received.

The AGENDA for next week's RWG meetings has been posted on the website, with the April 19-20 meeting announcements. And the draft itinerary for FERC's May 10 site visit has been posted, both on the Announcement section of the INTRODUCTION tab as well as attached to the May 10th announcement on the calendar.

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Don Pedro Relicensing RWG Meetings

April 19-20, 2011

MID Offices – Modesto CA

Tuesday, April 19 – Recreation Work Group

9:00 a.m.- 9:15 a.m.	Introductions
9:15 a.m.-10:00 a.m.	Overview of Existing Information and Prior Studies
10:00 a.m.-10:15 a.m.	Comments on Districts' Preliminary Assessment of Project Effects
10:15 a.m.-10:30 a.m.	Review of PAD Study Plans
10:30 a.m.-11:30 a.m.	Relicensing Participants' Assessment of Data Gaps and Additional Study Needs
11:30 a.m.-Noon	Path Forward and Action Items

Tuesday, April 19 – Cultural Work Group

1:00 p.m.- 1:15 p.m.	Introductions
1:15 p.m.- 2:00 p.m.	Overview of Existing Information and Prior Studies
2:00 p.m.- 2:15 p.m.	Comments on Districts' Preliminary Assessment of Project Effects
2:15 p.m.- 3:00 p.m.	Review of PAD Study Plans
3:00 p.m.- 4:00 p.m.	Relicensing Participants' Assessment of Data Gaps and Additional Study Needs
4:00 p.m.- 4:30 p.m.	Path Forward and Action Items



Don Pedro Relicensing RWG Meetings

April 19-20, 2011

MID Offices – Modesto CA

Wednesday, April 20 – Aquatic, Water & Terrestrial Work Group

- | | |
|-----------------------|---|
| 9:00 a.m. - 9:15 a.m. | Introductions |
| 9:15 a.m.-11:15 a.m. | Overview of Existing Information and Prior Studies <ul style="list-style-type: none">(a) Water Quality Data and Studies(b) Fisheries and Aquatic Resources (Reservoir and lower Tuolumne River)(c) Terrestrial Resource |
| 11:15 a.m.-12:00 p.m. | Comments on Districts' Preliminary Assessment of Project Effects |
| 12:00 p.m.- 1:15 p.m. | Lunch (on your own) |
| 1:15 p.m.- 2:00 p.m. | Review of PAD Study Plans |
| 2:00 p.m.- 4:00 p.m. | Relicensing Participants' Assessment of Data Gaps and Additional Study Needs <ul style="list-style-type: none">(a) Water Quality Data and Studies(b) Fisheries and Aquatic Resources (Reservoir and lower Tuolumne River)(c) Terrestrial Resource |
| 4:00 p.m.- 4:30 p.m. | Path Forward and Action Items |

From: Staples, Rose
Sent: Saturday, April 16, 2011 7:07 PM
To: Alves, Jim - City of Modesto; Asay, Lynette - N-R; Aud, John - SCERD; Barnes, James - BLM; Beuttler, John - CSPA; Bond, Jack - City of Modesto; Boucher, Allison - TRC; Boucher, Dave - Allison - TRC; Bowes, Stephen - NPS; Bowman, Art - CWRMP; Brewer, Doug - TetraTech; Brochini, Anthony - SSMN; Buckley, John - CSERC; Burt, Charles - CalPoly; Carlin, Michael - SFPUC; Catlett, Kelly - FOR; Charles, Cindy - GWWF; Cory, Philip - TNC; Costa, Jan - Chicken Ranch; Cowan, Jeffrey; Cox, Stanley Rob - TBMWI; Cranston, Peggy - BLM; Cremeen, Rebecca - CSERC; Day, P - MF; Devine, John; Dixie, Yakima K - CVMT; Donaldson, Milford Wayne - OHP; Dowd, Maggie-SNF; Drekmeier, Peter - TRT; Edmondson, Steve - NOAA; Eicher, James - BLM; Findley, Timothy - Hanson Bridgett; Freeman, Beau - CalPoly; Fuller, Reba - TMTC; Furman, Donn W - SFPUC; Ganteinbein, Julie - Water-Power Law Grp; Giglio, Deborah - USFWS; Goode, Ron - NFMT; Gorman, Elaine - SC; Gutierrez, Monica - NOAA-NMFS; Hastreiter, James L - FERC; Hatch, Jenny - CT; Hayat, Zahra - MF; Hellam, Anita - HH; Hersh-Burdick, Rachael - USACE; Heyne, Tim - CDFG; Holden, James ; Horn, Jeff - BLM; Horn, Tini; Hughes, Noah; Hughes, Robert - CDFG; Jackman, Jerry ; Jackson, Zac - USFWS; Jennings, William - CSPA; Jensen, Art - BAWSCA; Jensen, Laura - TNC; Johannis, Mary; Johnson, Brian - CalTrout; Kanz, Russ - SWRCB; Kempton, Kathryn - NOAA-MNFS; Kinney, Teresa; Koepele, Patrick - TRT; Lein, Joseph; Levin, Ellen - SFPUC; Lewis, Reggie - PRCI; Linkard, David - TRT /RH; Loy, Carin; Lyons, Bill - MR; Manji, Annie; Marko, Paul ; Marshall, Mike - RHH; Martin, Michael - MFFC; Mathiesen, Lloyd - CRRMW; McDaniel, Dan -CDWA; McDevitt, Ray - BAWSCA; McLain, Jeffrey - NOAA-NMFS; Means, Julie - CDFG; Mills, John - TUD; Morningstar Pope, Rhonda - BVR; Motola, Mary - CT; O'Brien, Jennifer - CDFG; Orvis, Tom - SCFB; Ott, Bob; Ott, Chris; Pinhey, Nick - City of Modesto; Porter, Ruth - RHH; Powell, Melissa - CRRMW; Puccini, Stephen - CDFG; Raeder, Jessie - TRT; Ramirez, Tim - SFPUC; Rea, Maria - NOAA-NMFS; Reed, Rhonda - NOAA-NMFS; Richardson, Kevin - USACE; Robbins, Royal; Romano, David O - N-R; Roos-Collins, Richard - Water-Power Law Grp for NHI; Roseman, Jesse; Rothert, Steve - AR; Sandkulla, Nicole - BAWSCA; Schutte, Allison - HB; Sears, William - SFPUC; Shumway, Vern - SNF; Shutes, Chris - CSPA; Slay, Ronn - CNRF/AIC; Smith, Jim - MPM; Staples, Rose; Steindorf, Dave - AW; Stork, Ron - FOR; Stratton, Susan - CA SHPO; Taylor, Mary Jane - CDFG; TeVelde, George A ; Thompson, Larry - NOAA-MNFS; Verkuil, Colette - TRT/MF; Walters, Eric - MF; Wantuck, Rick - NOAA-NMFS; Wesselman, Eric - TRT; Wheeler, Dan; Wheeler, Dave; Wheeler, Douglas - RHH; Williamson, Harry (NPS); Wilson, Bryan - MF; Winchell, Frank - FERC; Wood, Dave - FR; Wooster, John -NOAA; Workman, Michelle - USFWS; Zipser, Wayne - SCFB
Subject: Postings on Don Pedro Relicensing Website Today - Logistics for April 19-20 RWG Meetings

APRIL 16 POSTINGS ON DON PEDRO RELICENSING WEBSITE

The following documents have been posted on www.donpedro-relicensing.com for your viewing. These documents are accessible via the MEETINGS tab on the website's home

page. Then click on MEETINGS CALENDAR and go to the date of the meeting. Click on the date and you will find the documents attached to the meeting announcement.

- (1) **Draft PowerPoint Presentations** (Recreation, Cultural, Water Quality/Temp, Aquatics, and Terrestrial). The Recreation and Cultural draft presentations are attached to the meeting announcement for April 19. The Water Quality/Temp, Aquatics, and Terrestrial draft presentations are attached to the meeting announcement for April 20.
- (2) **Attendance list for the April 1, 2011 Relicensing Participants Meeting** (attached to the meeting announcement for April 1)
- (3) **Updated Progress Tracking List for the February 28th Relicensing Participations Meeting questions/requests** (attached to the meeting announcement for February 28th)

APRIL 19 & APRIL 20 - DON PEDRO RELICENSING RWG MEETINGS

Tuesday, April 19: 9:00 a.m. to Noon for Recreation Work Group; 1:00 to 4:30 p.m. for Cultural Work Group

Wednesday, April 20: 9:00 a.m. to 4:30 p.m. for Aquatic, Water, and Terrestrial Work Group

Location: MID Offices, 1231 11th Street, Modesto (2nd Floor Multi-Purpose Room)

Purpose: Overview of Existing Information and Prior Studies / Review of PAD Draft Study Plans

If unable to attend in person:

Phone Conferencing

Call-In Number 866-994-6437

Conference Code 5424697994

Please advise me if you intend to call in to the meeting.

Web Conferencing

LIVE MEETING web conferencing may be available for the meeting (testing of the system will be finalized on April 18th). If you are interested in participating via web conferencing, please advise me in advance (by Monday, April 18th) at rose.staples@hdrinc.com.

Rose Staples CPS CAP

Executive Assistant

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Email rose.staples@hdrinc.com

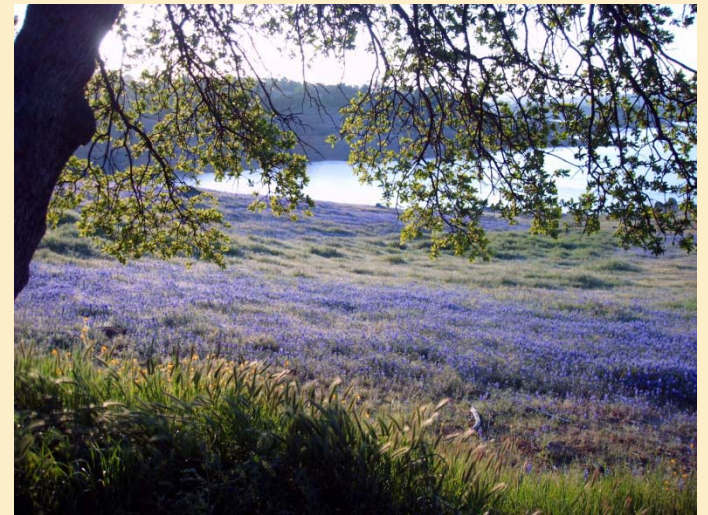
Don Pedro Project Relicensing



MODESTO IRRIGATION DISTRICT | TURLOCK IRRIGATION DISTRICT



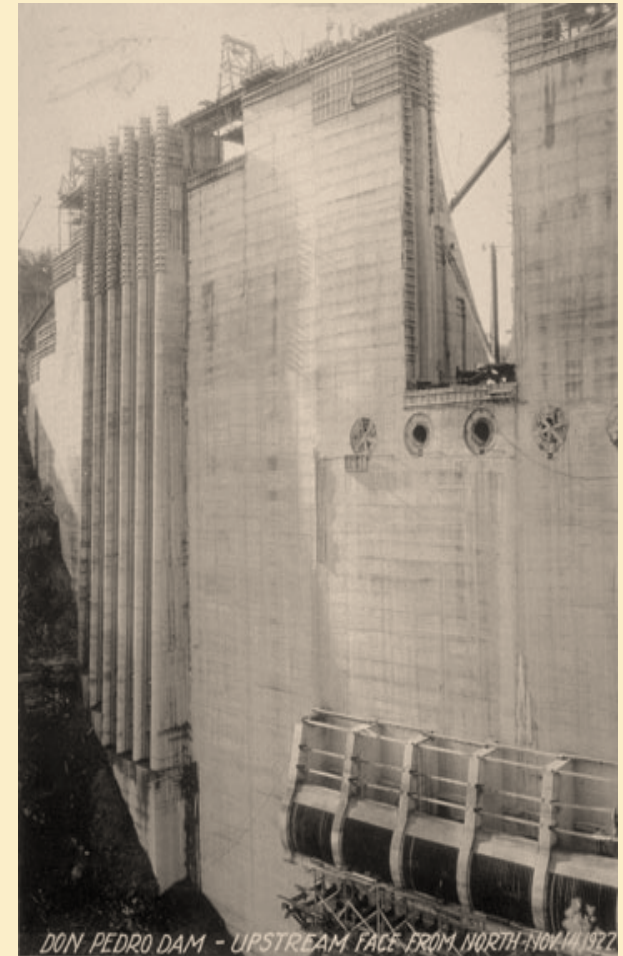
FERC
PROJECT
No. 2299



Cultural Resources



- **An Overview of Existing Information and Prior Studies**
 - A records search at the Central California Information Center Identified:
 - 43 previous cultural resources investigations within 0.25- mile
 - 18 previous culture investigations within APE
 - 146 Previously recorded resources within 0.25-mile
 - 61 previously recorded resources within APE
 - Over 50 historic features identified from historic maps



Cultural Resources



Previous Cultural Resources Investigations

The 43 previous cultural resources investigations date from the 1690s to 2009

Two of the previous investigations are the articles from *The Quarterly of the Tuolumne Historical Society*, and one is comprised of documentation of monuments and plaques of the E Clampus Vitus organization



Water fills between the original and new dam, c. 1971

Cultural Resources



Previous Recorded Cultural Investigations

Of the 146 resources within the 0.25-mile:

- 1 prehistoric/protohistoric
- 5 prehistoric/historic
- 6 unknown
- 57 prehistoric
- 77 historic

Of the 61 resources in the APE:

- 2 prehistoric/historic
- 6 unknown
- 21 historic
- 32 prehistoric

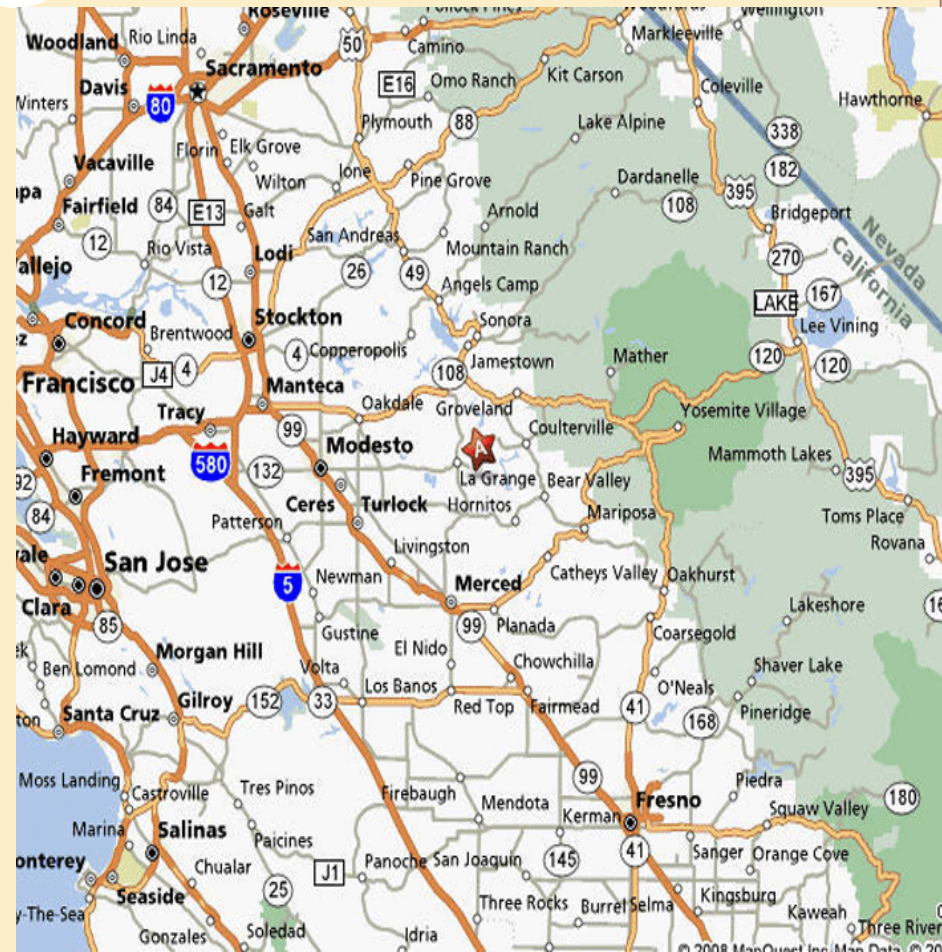


The prehistoric components typically include flaked stone with and without milling stations, with both short term and long term occupation sites represented. The historic components are predominantly represented by refuse scatters and/or remains of habitation structures/buildings.

Cultural Resources

Potential Historic Resources from Historic Maps

Historic Period USGS topographic quadrangles and general land office (GLO) plats were reviewed to identify locations of potential historic-era sites and features within the project APE. This resulted in the identification of over 50 locations of unrecorded historic period sites or features may be present within the APE. These potential sites and features include roads and trails, the town site of Jacksonville, buildings, mines, ditches, the Hetch-Hetchy Railroad/Yosemite short line Railroad, the Hetch-Hetchy Aqueduct, and other features



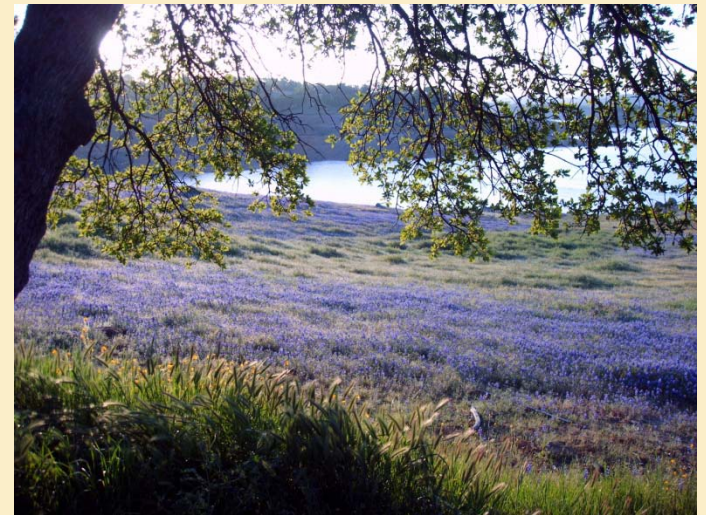
Don Pedro Project Relicensing



MODESTO IRRIGATION DISTRICT | TURLOCK IRRIGATION DISTRICT



FERC
PROJECT
No. 2299



Land and Recreation Resources

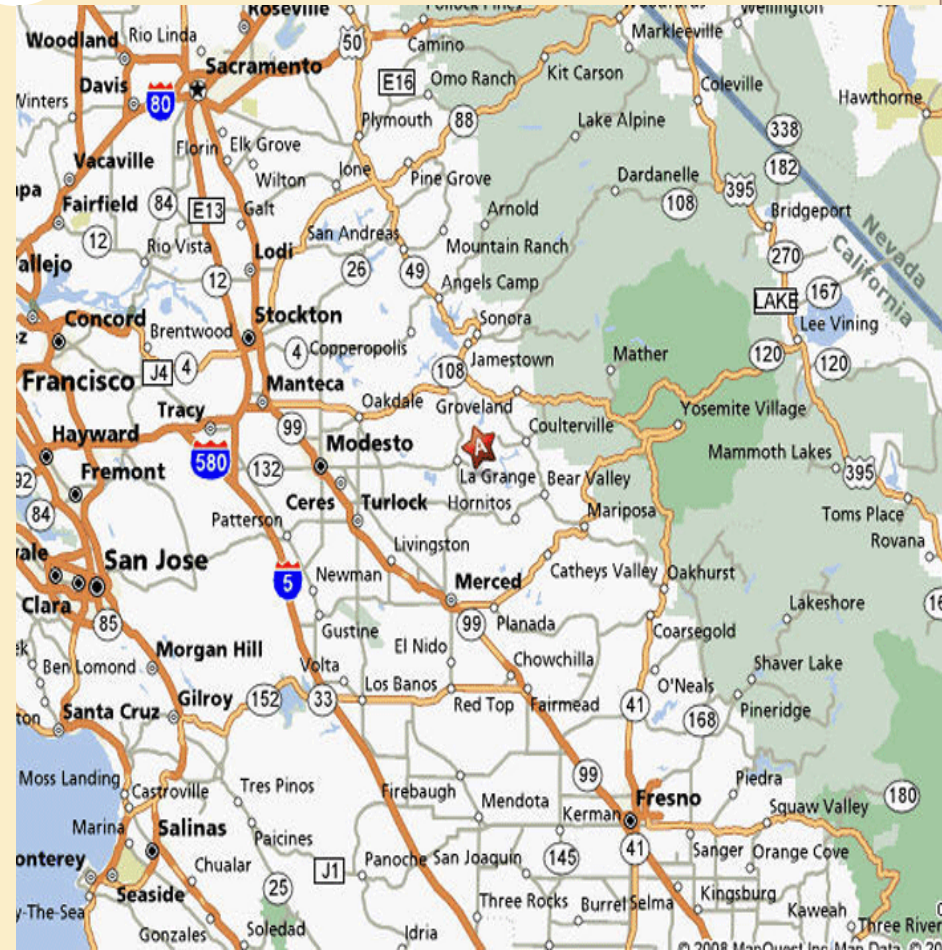


24 mile-long reservoir, surface area of 12,960 acres; shoreline length of approximately 160 miles.

Districts own in fee title approximately 78 percent, remaining 22 percent are federal lands.

Over 90 percent of the Don Pedro shoreline is undeveloped and in its natural state.

Plentiful recreation opportunities at the Project and in the general vicinity of the Project.



Land and Recreation Resources



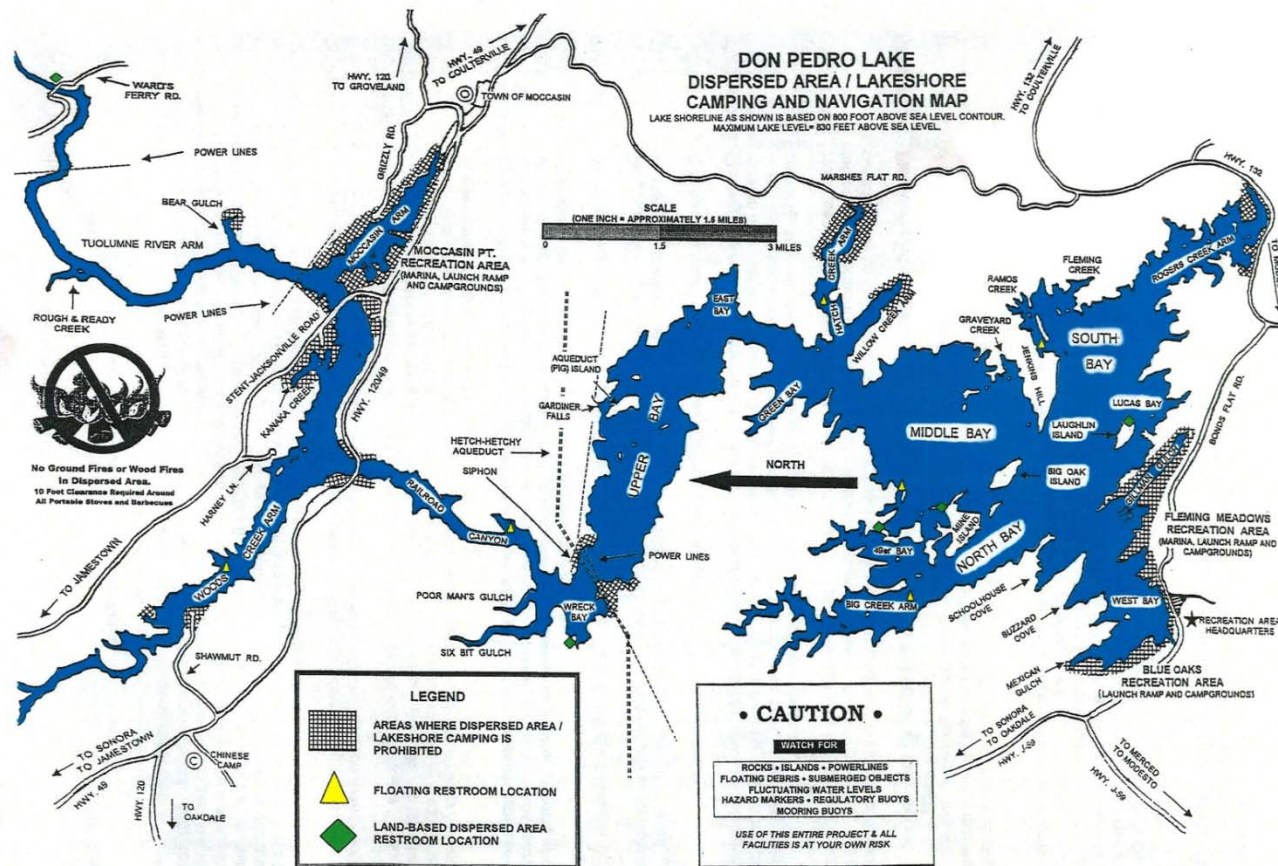
- BLM's Sierra Resource Management Plan goals include
 - ensure the continued availability of outdoor recreational opportunities while protecting other resources and uses
 - ensure adequate river flows for boating, fishing, swimming, etc
- Red Hills Area of Critical Environmental Concern (ACEC) managed by BLM, partially within the Project area
 - To protect the rare plant species; unusual serpentine soils; and habitat for unique flora, the Red Hills roach, and wintering bald eagles
 - 17.3 miles of hiking and biking trails

Land and Recreation Resources



- Don Pedro Recreation Agency (DPRA) Rules and Regulations
 - A detailed and extensive land use policy consisting of rules and regulations governing uses of Project lands and waters
 - Prohibits any placement of developed improvement along the Don Pedro shoreline and prohibits all vehicular access across Project lands
 - Results in over 90 percent of the Don Pedro shoreline in its natural state

Land and Recreation Resources



Recreation Resources



- Don Pedro Reservoir supports year-round fishing
- Other popular activities are water skiing and wake boarding, jet skiing, canoeing, flat water kayaking, windsurfing, sailing, and whitewater rafting and kayaking take-out, houseboating, picnicking, hiking, and camping.
- DPRA operates three major recreation areas with 559 campsites, 43 picnic sites, three boat launch facilities, two full-service marinas, a houseboat dock and repair yard, and one swimming lagoon.

Recreation Resources



- Summary of recreation facilities and other on-site amenities at Don Pedro Project developed recreation areas:

Amenities	Moccasin Point RA	Blue Oaks RA	Fleming Meadows RA
<i>Project Recreation Facilities</i>			
Camping Units - Total	68	195	263
With water and electric hookups	18	34	91
Picnic Areas -Total	2	1	2
Group Picnic Sites	1	1	1
Boat Launch Ramp	1	1	1
Fish Cleaning Stations	2	1	2
Comfort Stations - Total	6	9	12
With hot showers	1	4	5
<i>Additional On-Site Recreation Amenities</i>			
Concession Store	Yes	No	Yes
Swimming Lagoon	No	No	Yes
Volleyball / Softball Area	No	No	Yes
Marina	Yes	No	Yes
Amphitheatre	No	No	Yes
Houseboat Mooring	Yes	No	Yes
Boat Rentals	Yes	No	Yes
Houseboat Rentals	Yes	No	Yes
Boat Repair Yard	No	Yes	No
Gas and Oil	Yes	No	Yes
Sewage Dump Station	Yes	Yes	Yes

Source DPRA, 2010

Recreation Resources



- The DPRA collects visitor use data
- Annual use of the various recreation opportunities and sites operated and maintained at Don Pedro exceeds 400,000 visitor-days per year

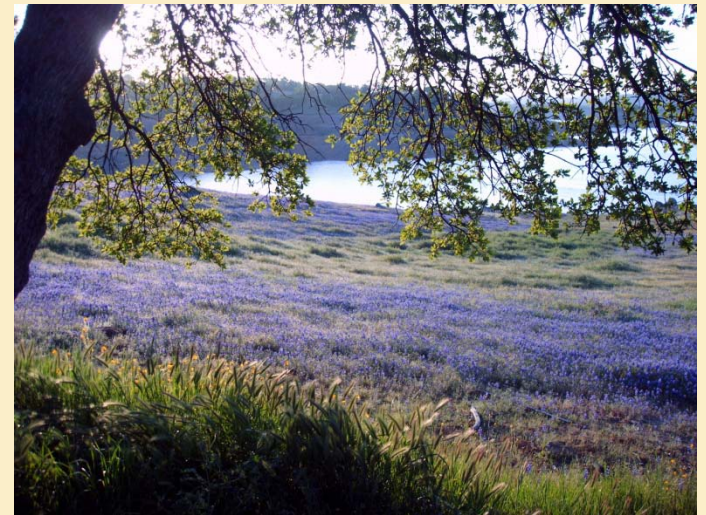
Don Pedro Project Relicensing



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Botanical Resources



- **USFWS CalVeg analysis showed that the Project area has four vegetation types:** Water (22%) Blue Oak (31%) Annual Grasses and Forbs (20%) Chamise (10%)
- **Special-status plants defined as one of the following:**
 - Occurring in Project area
 - Found on CDFG's list of proposed or candidate species for listed under the CESA
 - Found on the CNPS inventory of rare and endangered plants
 - Listed as a BLM sensitive species
- **41 special-status plants known to occur or with the potential to occur in the Project area. Thirteen plants (32 percent) are listed as BLM-S**
- **Special-Status Plants Study to provide field verified information regarding population locations and Project effects, to be completed December 2012**
- **29 noxious weed species known to occur or have the potential to occur in the Project area**

Wildlife and Associated Habitats



- **California Wildlife Habitat Relationships (CWHR) analysis of wildlife habitat types in Project boundary:** Lacustrine (58.6%) Blue Oak Woodland (19.1%) Annual Grasslands (12.4%) Blue Oak-Foothill Pine (2.4%) Mixed Chaparral (1.5%)
- **32 Special-Status Wildlife Species:** 1 reptile, 19 birds, 12 mammals.
 - 7 species listed as BLM sensitive, 8 listed as BLM sensitive and CDFG species of concern, 15 listed as species of concern only
- **Special-Status Amphibians Study: Foothill Yellow-Legged Frog and Western Pond Turtle surveys, and potential habitat mapping** Scheduled completion March 2013
- **Special-Status Wildlife – Bats Study:** Long-eared Myotis, Fringed Myotis, Western Small-Footed Myotis, Western Red Bat, Spotted Bat, Townsend's Big-Eared Bat, Pallid Bat, and Western Mastiff Bat surveys of Roosts and Hibernacula. Scheduled completion February 2013

Wetlands and Riparian Areas



- **National Wetland Inventory (NWI) data for Project area:**
 - Palustrine emergent marsh (27.2%)
 - Palustrine Scrub-Shrub (1.4%)
 - Palustrine Unconsolidated Bottom (12.7%)
 - Palustrine Unconsolidated Shore (0.5%)
 - Riverine Unconsolidated Bottom (37.7%)
 - Riverine Unconsolidated Shore (2.1%)
 - Riverine Streambed (48.1%)
- **No NWI Palustrine Forested wetlands in Project area**
- **Current riparian vegetation in Lower Tuolumne River (downstream of La Grange Dam) consists of 22 series types (McBain & Trush 2000). Most common is Valley Oak, Narrow-Leaf Willow, Fremont Cottonwood and Black Willow**

ESA/CESA Listed Species



- 15 Federally listed species potentially occur in the Project Vicinity (4 Endangered, 11 Threatened) – USFWS, August 2010 list
- CESA species: 8 plants, 1 bird, 1 amphibian
- CESA species are listed as CESA Endangered, Threatened, Rare, or Fully Protected
- ESA-Listed Wildlife Study - Valley Elderberry Longhorn Beetle Study: Surveys of elderberry shrubs for beetle presence. Scheduled completion December 2012
- ESA-Listed Wildlife Study – California Tiger Salamander (Threatened) and California Red-Legged Frog (Threatened). Scheduled completion February 2013
- ESA-and CESA-Listed Plants Study – Field survey for presence of 10 plant species. Scheduled completion December 2012

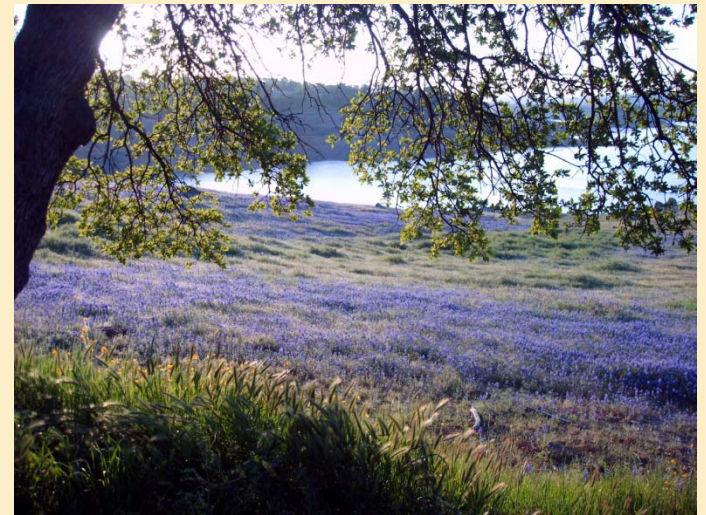
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Aquatic Resources



Resident Fish in Don Pedro Reservoir

- **Don Pedro Reservoir Fish Stocking (1971-Present)**
 - CDFG stocks hatchery-origin trout and salmon
 - Don Pedro Recreation Agency stocks Florida strain of black bass
 - Remaining fishery consists of introduced, non-native species from varying sources
- **Central Valley *O. mykiss* genetics (2005)**
 - 2002 analysis of rainbow trout samples for regional genetics studies by Nielsen et al (2005)
- **Fish contaminant assessments**
 - 2007-2008 SWAMP/SFEI report on sportfish contaminants
 - 2009 TID-MID Fish Mercury Study (rainbow trout, largemouth bass, spotted bass, and channel catfish)

Aquatic Resources



Resident Fish Below Don Pedro Dam

- **MID Canal Sampling (2004)**
 - Dip net sampling of rainbow trout during annual dewatering and inspection of MID Canal siphon
- **Summer flow surveys (1988-1994)**
 - Sampling of resident fishery from La Grange dam to confluence using a variety a gear types to assess impacts of low flow conditions on species composition and relative abundance
- **Predator species abundance (1988-1989)**
 - Mark-recapture methods used to estimate the population of predator species found in run-pool habitats

Aquatic Resources



Resident Fish Below Don Pedro Dam

- **Predation assessments**

- 1988-1989 stomach content analyses indicated largemouth and smallmouth bass were the primary predators on Chinook salmon fry and juveniles
- 1999-2003 baseline assessment of predator habitat use at SRPs 9 and SRP 10 using electrofishing
- 2006 radio-tracking of habitat use at SRP 9 and in-channel locations and 2D modeling of predator habitat

- **Fish Mercury Study (2009)**

- Tissue data in largemouth bass, spotted bass, and channel catfish

Aquatic Resources



Chinook salmon – spawning

- **Spawning gravel quantity**
 - Pre-1997 Flood: 1988-1989 spawning habitat mapping, utilization (redd mapping, superimposition), emergence, and egg loss modeling
 - Post-1997 Flood: 1999-2001 spawning habitat mapping, sediment supply and transport, gravel augmentation designs and planning
- **CDFG spawner surveys (1971-present)**
 - Interannual variations in escapement, timing of spawning activity, redd counts, locations, age composition
- **TID-MID counting weir (2009-present)**
 - Interannual variations in escapement, arrival timing
- **IFIM Modeling (1991, 1995, 2011)**

Aquatic Resources



Chinook salmon – egg incubation

- **Gravel quality (Pre 1997 Flood)**
 - 1988-1989 gravel studies: size distribution in riffles, as well as redds before and after spawning, rates of fine sediment intrusion, fry emergence trapping, survival to emergence modeling
 - 1991-1993 spawning gravel cleaning methodologies
 - 1993 CDWR spawning gravel assessment
- **Gravel quality (Post 1997 Flood)**
 - 1998-1999 TRTAC riverwide permeability study, method development, and survival to emergence modeling
 - 2001-2002 CALFED Fine sediment management program: Fine sediment sources, sand mapping, 1993 gravel cleaning re-evaluation, gravel cleaning methods, 2001 survival to emergence study

Aquatic Resources



Chinook salmon – Fry/Juvenile

- **Stranding surveys (1986-1992 and 2002-2004)**
 - Occurrence with flow, ramping rate, substrate and topography
- **Floodplain Habitat Use**
 - USFWS (2008) GIS Analysis
 - 2005-2007 Big Bend restoration project monitoring (TRT)
 - 2011 FERC Ordered high flow study
- **Seine/snorkel surveys (1986-present)**
 - Fry/juvenile distribution (spring/summer) and relative density
- **Rotary screw trapping (1995-present)**
 - Fry production and timing

Aquatic Resources



Chinook salmon – Fry/Juvenile (cont.)

- **Aquatic invertebrate studies**
 - 1986 Drift-net studies and stomach analyses of fry
 - 1988-2008 Hess sampling at Riffle 4A
 - 2001-2008 CSBP/CMAP (RBP longitudinal kick-net sampling)
- **IFIM Modeling (1991, 1995, 2011)**

Aquatic Resources



Chinook salmon – Smolt/Outmigrants

- **Coded-Wire-Tag (CWT) evaluations (1986-2002)**
 - Paired release survival experiments as a function of flow
- **Rotary screw trapping (RST)**
 - 1995-present smolt production estimates
 - 1998-2000 Multiple-mark-recapture estimates

Aquatic Resources



Chinook salmon – Adult

- **Population Models**

- 1987-1991 EACH Model: San Joaquin basin tributary populations as a function of flow
- 1995 Stock-Recruit Model: Multi-stage stock production model as a function of flow, Delta exports, and harvest
- Agency Population Models (CDFG, FERC-ORNL)

- **San Joaquin River basin genetics**

- Lindley et al (2007) viable salmonid population criteria development
- Mesick (2009) Tuolumne River extinction risk analysis

Aquatic Resources



O. mykiss – Fry/juvenile

- **Seine/snorkel surveys (1986-present)**
 - Incidental seine capture of fry beginning in March of most years
 - Juvenile distribution by snorkel observation (summer)
- **Rotary screw trapping (1995-present)**
 - Incidental capture of fry
- **FERC Ordered Population Estimates (2008-2011)**
 - Habitat mapping and snorkel counts in Spring and Summer
- **IFIM Modeling (1991, 1995, 2011)**

Aquatic Resources



O. mykiss – Smolt/Outmigrants

- **Rotary screw trapping (1995-present)**
 - Incidental capture of smolt-sized *O. mykiss*

Aquatic Resources



O. mykiss – Adult

- **Rotary screw trapping (1995-present)**
 - Incidental capture of adult-sized *O. mykiss*
- **TID-MID counting weir (2009-present)**
 - Incidental detection of adult-sized *O. mykiss* passage
- **FERC Ordered Population Estimates (2008-2011)**
 - Habitat mapping and snorkel counts in Spring and Summer
- **FERC Ordered Tracking Study (2010-2011)**
 - Mobile and fixed station acoustic tracking of adult *O. mykiss*
- **IFIM Modeling (1991, 1995, 2011)**

Aquatic Resources



O. Mykiss – Adult (cont.)

- **Anadromy studies**

- Zimmerman et al (2009) analysis of Tuolumne River samples
- FERC Ordered anadromy study (*No Section 10 permit*)

- **Central Valley *O. mykiss* genetics**

- 2000-2001 analysis of *O. mykiss* samples for regional genetics studies by Nielsen et al (2005)

Aquatic Resources



Habitat Restoration

- **TRTAC Habitat Restoration Plan (2000)**
 - Process based plan that links:
 - ✦ **Physical inputs** (e.g., flow, sediment) and processes (e.g., sediment transport, erosion, deposition),
 - ✦ **Habitat structure** (e.g., shallow-gradient riffles, sorted and clean spawning gravels), and
 - ✦ **Biological responses** (e.g., spawning use, increased incubation success, lower density-dependent mortality, etc.)
 - Identified 10 High Priority restoration projects

Aquatic Resources



Habitat Restoration (Cont.)

- **Restoration Project Implementation**

- **Channel and Riparian Restoration:** Gravel Mining Reach (GMR) Phase I - 7-11 Segment (completed 2003); GMR Phases II and III (design only); GMR Phase IV (no funding identified)
- **Predator Isolation:** Special Run Pool (SRP) 9 (completed 2001); SRP 10 Hydraulic (modeling and design only)
- **Sediment Management:** RM 43 Gravel augmentation (completed 2005), Coarse Sediment Management Plan and Design Manual (2006), Gasburg Creek sediment basin (completed 2007), Riffle Cleaning (no methodology adopted)

Aquatic Resources



Habitat Restoration (Cont.)

- **Restoration Project Implementation (Cont.)**
 - 1999-2003 CDWR/CDFG La Grange gravel additions for spawning enhancement
 - 2000 Grayson River Ranch floodplain reconstruction and riparian planting
 - 2006 Bobcat Flat riffle reconstruction, floodplain reconstruction and riparian planting
 - 2006 Big Bend Floodplain Restoration

Aquatic Resources



Habitat Restoration (Cont.)

- **Restoration Project Assessments**
 - 1998-1999 Pre-Project Monitoring (GMR Phase I, SRP 9/10)
 - 2001 CALFED Adaptive Management Forum Report
 - 2006 Bobcat Flat/RM 43 Post-Project Monitoring
 - 2006 SRP 9 and 7-11 Reach Post-Project Monitoring
 - 2007 CDWR/CDFG La Grange gravel augmentation post-project monitoring
 - 2008 Big Bend post-project monitoring

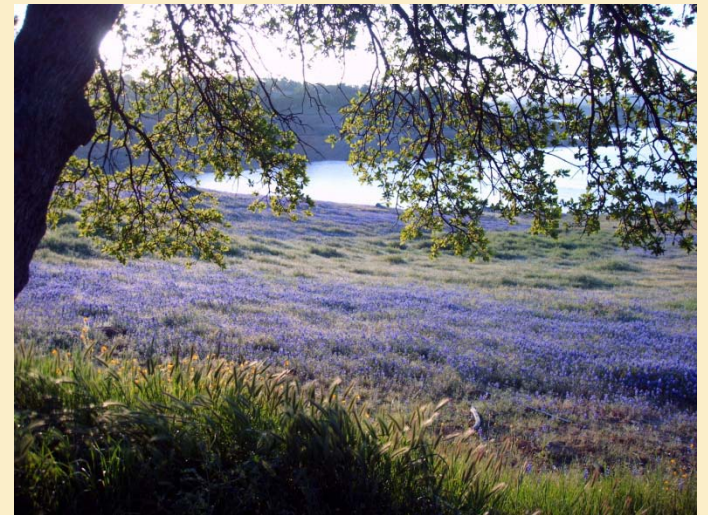
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Water Quality



- **The Districts found more than 29 sources of published water quality data from the following sources**
 - CDWR data
 - City of Modesto storm water compliance water quality sampling on Dry Creek and the lower Tuolumne River
 - City and County of San Francisco reports
 - CVRWQCB reports prepared for the Surface Water Ambient Monitoring Program (SWAMP)
 - Environmental Defense Fund's *Paradise Regained: Solutions for Restoring Yosemite's*
 - EPA Storage and Retrieval (STORET) data and reports
 - East San Joaquin Water Quality Coalition data collection on Dry Creek
 - *Hetch-Hetchy Valley*, Appendix B
 - MID & TID water quality monitoring data within Don Pedro Reservoir and in the lower Tuolumne River
 - MID & TID fish tissue data collection
 - National Park Service (NPS) report on Yosemite National Park
 - TID 's Regional Surface Water Supply Project proposed intake surface water on the lower Tuolumne River
 - U.S. Geological Survey Water Resources (USGS) Data Reports and data collected for the National Water Quality Assessment (NAWQA) Program

Water Quality



- **Water quality data were predominantly collected in the 1990's and 2000's:**
 - Constituents studied include general chemistry, bacteria, toxicity, pesticides (carbarnates, organochorines, and organophosphates), herbicides, metals, and nutrients
 - Within the granitic terrain of the upper watershed, surface water exhibits low primary productivity, low turbidity, and low nutrient loads
 - Water diverted from the Tuolumne River serves the CCSF, Don Pedro Recreation Area, and City of Modesto needs for drinking water
 - Alkalinity, specific conductance, and hardness values remain low as water flows down the watershed
 - Don Pedro Reservoir is mesotrophic
 - Don Pedro stratifies from approximately May through November
 - Turbidity measured in the lower Tuolumne River is generally low, ranging from less than one to about 10 NTU, except during periods with high storm runoff

Water Quality



- The lower Tuolumne River is on the 303(d) list for bacteria, pesticides, and toxicity
- PCBs have been found in fish tissue collected in the Tuolumne River at Shiloh (RM 3.4)
- **The 2006 303(d) list identifies Don Pedro Reservoir as impaired for mercury and the lower Tuolumne River (Don Pedro Reservoir to San Joaquin River) as impaired for Diazinon, Group A Pesticides, and unknown toxicity**
- **The EPA is expected to add mercury, chlorpyrifos, and temperature to the 303(d) list later this year**

Water Temperature



- **Water temperature monitoring data are available for the following general areas:**
 - Upstream of Don Pedro Reservoir: Seven stream temperature loggers were installed in Cherry Creek, South Fork Tuolumne River and Mainstream Tuolumne River from approximately 2005 – 2008. Temperatures ranged from 0 C to 24 C
 - Don Pedro Reservoir: Monthly reservoir profiles have been collected by CDFG from 2004 – 2010 at six locations throughout the reservoir. Thermal stratification is well established by May and extends into November
 - Downstream of Don Pedro Reservoir: Thirty five stream temperature loggers were installed in the Tuolumne River below LaGrange Dam as early as 1977 at some locations through 2008. Temperatures ranged from 4 C to 29 C
- **The Districts and CDFG continue to monitor water temperature at stream locations and CDFG takes monthly reservoir profiles in Don Pedro Reservoir**
- **The Districts recently completed a water temperature model for the lower Tuolumne River and plan to complete a 3D water temperature model of Don Pedro Reservoir**

Don Pedro Relicensing

Organizational Meeting Participants List

HDR|DTA MID Offices, Modesto CA – April 1, 2011

<i>Participant</i>	<i>Representing</i>	<i>In Person</i>	<i>Via Conf Call</i>
Jim Alves	City of Modesto	x	
Jack Bond		x	
Allison Boucher	TRC	x	
Stephen Bowes	NPS		x
John Buckley	CSERC	x	
Jim Canaday	DFG	x	
Cindy Charles	GWWF	x	
Jan Costa	Chicken Ranch	x	
Peggy Cranston	BLM	x	
Rebecca Creeman	CSERC	x	
Peter Day	Morrison & Foerster	x	
Peter Drekmeier	TRT	x	
Timothy Findley	Hanson Bridgett	x	
Reba Fuller	Tuolumne Band of the Me-Wuk Indians	x	
Donn Furman	CCSF	x	
Margaret Hannaford	HHWP	x	
Jennie Hatch	CalTrout		x
Zahra Hayat	Morrison & Foerster	x	
Jeff Horn	BLM	x	
Bob Hughes	DFG	x	
Noah Hume	Stillwater Science	x	
Jerry Jackman		x	
Mary Johannis	BOR		x
Russ Kanz	SWRCB	x	
Patrick Koepele	TRT		x
Bill Lyons	Mapes Ranch	x	
Annie Manji	DFG	x	
Dean Marston		x	
Michael Martin	Merced FFC	x	
Lee Morris	TRC	x	
Jennifer O'Brien	DFG	x	
Chris Ott	Ott Farms	x	
Mike Passalagot*	ERCD*	x	
Jessie Raeder	TRT	x	
Martin Reyes	EORCD*	x	
Jesse Roseman	Citizen	x	
Richard Roos-Collins	Water Power & Law Group, for NHI		x
Nicole Sandkulla	BAWSCA		x
Allison Schutte	Hanson Bridgett, for BAWSCA		x
Chris Shutes	CSPA	x	
Dan Wheeler		x	
Dave Wheeler		x	
Ronald Yoshiyama		x	

*please advise correct spelling

Don Pedro Progress Tracking List

Items to be closed are shaded in gray; will be moved to CLOSED ITEM worksheet after the next Relicensing Participants' meeting.
 Red Text indicates items added since the last update of the Progress Tracking List (PTL).
 (RP = Relicensing Participant)

<i>Item No.</i>	<i>Source of Item</i>	<i>Item</i>	<i>Date Requested</i>	<i>Date Due</i>	<i>Responsible Party</i>	<i>Action Taken/Status</i>	<i>Date Closed</i>
1	RP	Poll of RPs for meeting availability and resource area interests.	2/28/2011	3/8/2011	Districts	Created Doodle Poll questionnaire and sent it to RPs via email on 3/2/2011. Responses due 03/07/2011. Poll completed 03/07/2011; 2011 meeting dates announced to RPs via email on 03/15/2011 and have been posted on website calendar.	
2	CSPA; CDFG; and TRT	Use of an independent facilitator.	2/28/2011	n/a	n/a	Request documented; Districts' response emailed to RPs on 03/07/2011.	
3	Several RPs	Alternating the meeting locations for future meetings.	2/28/2011	3/11/2011	Districts	Request for alternating meeting locations to be considered. Districts' response emailed to RPs on 03/15/2011.	
4	Several RPs	Use of web conferencing as part of future meetings.	2/28/2011	3/11/2011	Districts	Request for web conferencing as part of the meeting to be considered. Districts' response emailed to RPs on 03/15/2011.	
5	NGOs	RPs not to have to pay for PAD reproduction costs.	2/28/2011	3/11/2011	Districts	Request for RPs not to have to pay for PAD reproduction costs to be considered. Districts' response emailed to RPs on 03/15/2011.	

Don Pedro Project Tracking List

6	Several RPs	Procedure for managing study plan revisions on the Don Pedro website.	2/28/2011	3/18/2011	Districts	Process for sharing study plan revisions on the Don Pedro website to be described to RPs.	
7	Several RPs	Exhibit G or other Project Boundary Maps for tailwater and Gasburg Creek areas.	2/28/2011	3/11/2011	Districts	Project Boundary Maps to be uploaded to the Don Pedro website. Two Project Boundary maps (showing area below the Don Pedro Dam) have been uploaded and RPs advised via email 03/15/2011.	
8	Districts	RP review of Relicensing Participants List in PAD (Appendix B) to identify additional parties interested in the relicensing.	2/28/2011	3/18/2011	RPs	RPs to advise Districts of additional interested parties and their contact information, if known. Additional names have been received and added to the Contact List.	
9	NHI	"Discussion of Cumulative Impacts" to be an agenda item for the April 19-20 meeting.	2/28/2011	04/19-20/2011	Districts	"Discussion of Cumulative Impacts" to be added to the agenda for the April 19-20 RP meeting.	
10	RPs	Uploading of Meeting Slides to the Don Pedro ebsite.	2/28/2011	3/11/2011	Districts	Slides used at the Feb 28 RP meeting to be uploaded to the Don Pedro website. Meeting presentation slides have been uploaded and RPs advised via email 03/15/2011.	

HAVE REMOVED HOME EMAILS

From: Devine, John
Sent: Wednesday, April 20, 2011 11:38 PM
To: Tom Terpstra; Staples, Rose
Cc: jalves@modestogov.com; lynette@newman-romano.com; jaud@envres.org;
 jbeuttler[REDACTED]; jbond@modestogov.com;
 aboucher[REDACTED]; anadromous[REDACTED]
 Stephen_Bowes@nps.gov; artbow[REDACTED]
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 wsears@sflower.org; vshumway@fs.fed.us; blancapaloma[REDACTED];
 CNRP[REDACTED]; jpsmithgm[REDACTED]; Staples, Rose;
 dave@americanwhitewater.org; rstork@friendsoftheriver.org;
 mtaylor@dfg.ca.gov; gatevelde[REDACTED]; larry.thompson@noaa.gov;
 cverkuil@mofo.com; ewalters@mofo.com; richard.wantuck@noaa.gov;
 eric@tuolumne.org; dan.wheelerhay[REDACTED]
 dave.wheelerhay[REDACTED]; douglas.wheeler@hoganlovells.com;

hbwillia44[REDACTED]; bwilson@mofo.com; davewood@ldpmarina.com;
john.wooster@noaa.gov; michelle_workman@fws.gov;
wayne@stanfarmbureau.org
Subject: RE: Don Pedro Relicensing

Welcome to the relicensing of Don Pedro. I look forward to working with you.

From: Tom Terpstra [<mailto:tterpstra@thtlaw.com>]

Sent: Tuesday, April 19, 2011 7:11 PM

To: Staples, Rose

Cc: jalves@modestogov.com; lynette@newman-romano.com; jaud@envres.org; jbeuttler@modestogov.com; aboucher@modestogov.com; anadromous@modestogov.com; Stephen_Bowes@nps.gov; artbow@nps.gov; douglas.brewer@tetrattech.com; tony.brochini@nps.gov; johnb@cserc.org; cburt@calpoly.edu; mcarlin@swater.org; kelly@friendsoftheriver.org; cindy@pccory@tnc.org; chixrnch@mlode.com; J.cowan@mlode.com; receptionist@mlode.com; pcranston@ca.blm.gov; rebeccac@cserc.org; Pday@mofo.com; Devine, John; administration@californiavalleymiwok.com; mwdonaldson@parks.ca.gov; mdowd@fs.fed.us; Peter@tuolumne.org; steve.edmondson@noaa.gov; james_eicher@BLM.gov; TFindley@hansonbridgett.com; bfreeman@calpoly.edu; rfuller@mlode.com; donn.w.furman@sfgov.org; jgantenbein@waterpowerlaw.com; Deborah_Giglio@fws.gov; rwgoode911@fws.gov; goford@fws.gov; monica.gutierrez@noaa.gov; mhannaford@swater.org; James.Hastreiter@FERC.gov; jhatch@caltrout.org; Zhayat@mofo.com; anitajhellam@fws.gov; [Rachael.Hersh-Burdick@USACE.army.mil](mailto: Rachael.Hersh-Burdick@USACE.army.mil); theyne@dfg.ca.gov; holden2j@dfg.ca.gov; jhorn@ca.blm.gov; timihorn@noahnsa@dfg.ca.gov; rwhughes@dfg.ca.gov; jjackmar@fws.gov; zachary_jackson@fws.gov; deltakeep@fws.gov; ajensen@bawsca.org; Laura_Jensen@tnc.org; mjohannis@usbr.gov; bjohnson@tu.org; rkanz@waterboards.ca.gov; kathryn.kempton@noaa.gov; tkinney86@tuolumne.org; patrick@tuolumne.org; Mortalis46@fws.gov; elevin@swater.org; prci.info@chukchansi.net; dslinkard@fws.gov; Loy, Carin; maperanch@dfg.ca.gov; amanji@dfg.ca.gov; Dmarko@hetchhetchy.org; mike@hetchhetchy.org; mmartin@fws.gov; chixrnch2@mlode.com; damplo@fws.gov; rncdevitt@hansonbridgett.com; jeff.mclain@noaa.gov; jmeans@dfg.ca.gov; sixbit@fws.gov; rhonda@buenavistatribe.com; mary.motola@chukchansi.net; JKO'Brien@dfg.ca.gov; TomO@stanfarmbureau.org; rsce@fws.gov; ottfarms@fws.gov; npinhey@modestogov.com; ruth.porter@hoganlovells.com; chixrnch@lodelink.com; spuccini@dfg.ca.gov; jessie@tuolumne.org; tramirez@swater.org; maria.rea@noaa.gov; rhonda.reed@noaa.gov; Kevin.A.Richardson@USACE.army.mil; royalrobbins@fws.gov; dave@newman-romano.com; rrcollins@waterpowerlaw.com; jessetrosemar@fws.gov; strothert@americanrivers.org; nsandkulla@bawsca.org; aschutte@hansonbridgett.com; wsears@swater.org; vshumway@fs.fed.us; [REDACTED]; CNRF@fws.gov; jpsmithgm@fws.gov; Staples, Rose; dave@americanwhitewater.org; rstork@friendsoftheriver.org; mtaylor@dfg.ca.gov; gatevelde@fws.gov; larry.thompson@noaa.gov; cverkuil@mofo.com; ewalters@mofo.com; richard.wantuck@noaa.gov; eric@tuolumne.org; dan@hoganlovells.com; dave.wheelerhay@fws.gov; douglas.wheeler@hoganlovells.com; hbwillia44@fws.gov; bwilson@mofo.com; davewood@ldpmarina.com; john.wooster@noaa.gov; michelle_workman@fws.gov; wayne@stanfarmbureau.org

Subject: Don Pedro Relicensing

Dear Ms. Staples:

Please be advised that this office represents Farmers On The Tuolumne ("FOTT"). My clients are interested in the ongoing proceedings, and would like to be included on all future mailings and

notices pertaining to the Don Pedro Relicensing. For convenience, you may send all such notices and mailings to the undersigned. Thank you for your assistance in this matter.

Tom Terpstra

Attorney-at-Law

Law Office of Thomas H. Terpstra

A Professional Corporation

578 N. Wilma Avenue, Suite A

Ripon, California 95366

Phone: (209) 599-5003

Facsimile: (209) 599-5008

Email: tterpstra@thtlaw.com

From: Staples, Rose
Sent: Wednesday, April 27, 2011 9:06 PM
To: Alves, Jim - City of Modesto; Asay, Lynette - N-R; Aud, John - SCERD; Barnes, James - BLM; Beuttler, John - CSPA; Bond, Jack - City of Modesto; Boucher, Allison - TRC; Boucher, Dave - Allison - TRC; Bowes, Stephen - NPS; Bowman, Art - CWRMP; Brewer, Doug - TetraTech; Brochini, Anthony - SSMN; Buckley, John - CSERC; Burt, Charles - CalPoly; Carlin, Michael - SFPUC; Catlett, Kelly - FOR; Charles, Cindy - GWWF; Cory, Philip - TNC; Costa, Jan - Chicken Ranch; Cowan, Jeffrey; Cox, Stanley Rob - TBMWI; Cranston, Peggy - BLM; Cremeen, Rebecca - CSERC; Day, P - MF; Devine, John; Dixie, Yakima K - CVMT; Donaldson, Milford Wayne - OHP; Dowd, Maggie-SNF; Drekmeier, Peter - TRT; Edmondson, Steve - NOAA; Eicher, James - BLM; Findley, Timothy - Hanson Bridgett; Freeman, Beau - CalPoly; Fuller, Reba - TMTC; Furman, Donn W - SFPUC; Ganteinbein, Julie - Water-Power Law Grp; Giglio, Deborah - USFWS; Goode, Ron - NFMT; Gorman, Elaine - YSC; Gutierrez, Monica - NOAA-NMFS; Hastreiter, James L - FERC; Hatch, Jenny - CT; Hayat, Zahra - MF; Hellam, Anita - HH; Hersh-Burdick, Rachael - USACE; Heyne, Tim - CDFG; Holden, James ; Horn, Jeff - BLM; Horn, Tini; Hughes, Noah; Hughes, Robert - CDFG; Jackman, Jerry ; Jackson, Zac - USFWS; Jennings, William - CSPA; Jensen, Art - BAWSCA; Jensen, Laura - TNC; Johannis, Mary; Johnson, Brian - CalTrout; Kanz, Russ - SWRCB; Keating, Janice; Kempton, Kathryn - NOAA-MNFS; Kinney, Teresa; Koepele, Patrick - TRT; Lein, Joseph; Levin, Ellen - SFPUC; Lewis, Reggie - PRCl; Linkard, David - TRT /RH; Loy, Carin; Lyons, Bill - MR; Manji, Annie; Marko, Paul ; Marshall, Mike - RHH; Martin, Michael - MFFC; Mathiesen, Lloyd - CRRMW; McDaniel, Dan -CDWA; McDevitt, Ray - BAWSCA; McDonnell, Marty - SMRT; McLain, Jeffrey - NOAA-NMFS; Means, Julie - CDFG; Mills, John - TUD; Morningstar Pope, Rhonda - BVR; Motola, Mary - CT; O'Brien, Jennifer - CDFG; Orvis, Tom - SCFB; Ott, Bob; Ott, Chris; Pinhey, Nick - City of Modesto; Porter, Ruth - RHH; Powell, Melissa - CRRMW; Puccini, Stephen - CDFG; Raeder, Jessie - TRT; Ramirez, Tim - SFPUC; Rea, Maria - NOAA-NMFS; Reed, Rhonda - NOAA-NMFS; Richardson, Kevin - USACE; Robbins, Royal; Romano, David O - N-R; Roos-Collins, Richard - Water-Power Law Grp for NHI; Roseman, Jesse; Rothert, Steve - AR; Sandkulla, Nicole - BAWSCA; Schutte, Allison - HB; Sears, William - SFPUC; Shumway, Vern - SNF; Shutes, Chris - CSPA; Slay, Ronn - CNRF/AIC; Smith, Jim - MPM; Staples, Rose; Steindorf, Dave - AW; Stork, Ron - FOR; Stratton, Susan - CA SHPO; Taylor, Mary Jane - CDFG; TeVelde, George A ; Thompson, Larry - NOAA-MNFS; Verkuil, Colette - TRT/MF; Walters, Eric - MF; Wantuck, Rick - NOAA-NMFS; Welch, Steve - ARTA; Wesselman, Eric - TRT; Wheeler, Dan; Wheeler, Dave; Wheeler, Douglas - RHH; Williamson, Harry (NPS); Wilson, Bryan - MF; Winchell, Frank - FERC; Wood, Dave - FR; Wooster, John -NOAA; Workman, Michelle - USFWS; Zipser, Wayne - SCFB

Subject: Revised Itinerary for Don Pedro May 10 FERC Site Visit Posted to the Relicensing Website

I have just posted the **revised** itinerary for the Don Pedro Project May 10th FERC Site Visit. It can be found on both the INTRODUCTION/ANNOUNCEMENT section of the website as well as attached to the May 10th Meeting Announcement on the MEETINGS/MEETINGS CALENDAR.

If you plan to participate in this site visit, you will need to notify James Hastreiter at FERC by Monday, May 2nd either via email at james.hastreiter@FERC.gov or by calling him direct at 503-552-2760.

Thank you.

Rose Staples CPS CAP

Executive Assistant

HDR | DTA

970 Baxter Boulevard | Portland ME | 04103

Office: 207-775-4495 | Direct: 207-239-3857 | Fax: 207-775-1742

Email rose.staples@hdrinc.com

FERC Site Visit Itinerary
May 10, 2011

- 9:00 a.m. Meet at DPRA Headquarters Building (**Restrooms Available**)
(Note: 31 Bonds Flat Road, La Grange, CA is the US Postal Service address for DPRA; however, **for GPS or online mapping services the address is 10200 Bonds Flat Road**)
- 9:10 a.m. Introduce the Day
- 9:20 a.m. Depart for Don Pedro Powerhouse
- 9:45 a.m. Assemble at Powerhouse (view exterior of powerhouse, dam, and switchyard)
- 10:15 a.m. Depart for Spillway
- 10:30 a.m. Assemble at Spillway overlook
- 10:45 a.m. Depart via Red Hills Road for Moccasin Recreation Area (stopping at vista point north of Tuolumne River Bridge to view lake)
- 11:45 p.m. Arrive Moccasin Recreation Area and tour facilities (**Restrooms Available**)
- 12:15 p.m. Lunch at the Moccasin Marina (**Bring sack lunch or purchase at Marina Snack Bar**)
- 1:15 p.m. Depart for Fleming Meadows Recreation Area via Marshs Flat Road
- 2:00 p.m. Arrive Fleming Meadows for drive-thru tour of facilities
- 2:15 p.m. Depart for La Grange Dam
- 2:30 p.m. Arrive MID vantage point to view La Grange Dam and Tuolumne River
- 3:00 p.m. Depart for Old La Grange Bridge
- 3:15 p.m. Arrive and assemble on Bridge and view River
- 3:30 p.m. Depart for MID Water Treatment Plant via Roberts Ferry Bridge
- 4:00 p.m. Arrive and assemble at Water Treatment Plant
- 4:15 p.m. Depart for Fox Grove
- 4:30 p.m. Arrive Fox Grove and view River (**Restrooms Available**)
- 5:00 p.m. Tour Ends

From: Staples, Rose
Sent: Thursday, April 28, 2011 2:31 PM
To: Alves, Jim - City of Modesto; Asay, Lynette - N-R; Aud, John - SCERD; Barnes, James - BLM; Beuttler, John - CSPA; Bond, Jack - City of Modesto; Boucher, Allison - TRC; Boucher, Dave - Allison - TRC; Bowes, Stephen - NPS; Bowman, Art - CWRMP; Brewer, Doug - TetraTech; Brochini, Anthony - SSMN; Buckley, John - CSERC; Burt, Charles - CalPoly; Carlin, Michael - SFPUC; Catlett, Kelly - FOR; Charles, Cindy - GWWF; Cory, Philip - TNC; Costa, Jan - Chicken Ranch; Cowan, Jeffrey; Cox, Stanley Rob - TBMWI; Cranston, Peggy - BLM; Cremeen, Rebecca - CSERC; Day, P - MF; Devine, John; Dixie, Yakima K - CVMT; Donaldson, Milford Wayne - OHP; Dowd, Maggie-SNF; Drekmeier, Peter - TRT; Edmondson, Steve - NOAA; Eicher, James - BLM; Findley, Timothy - Hanson Bridgett; Freeman, Beau - CalPoly; Fuller, Reba - TMTC; Furman, Donn W - SFPUC; Ganteinbein, Julie - Water-Power Law Grp; Giglio, Deborah - USFWS; Goode, Ron - NFMT; Gorman, Elaine - YSC; Gutierrez, Monica - NOAA-NMFS; Hastreiter, James L - FERC; Hatch, Jenny - CT; Hayat, Zahra - MF; Hellam, Anita - HH; Hersh-Burdick, Rachael - USACE; Heyne, Tim - CDFG; Holden, James ; Horn, Jeff - BLM; Horn, Tini; Hughes, Noah; Hughes, Robert - CDFG; Jackman, Jerry ; Jackson, Zac - USFWS; Jennings, William - CSPA; Jensen, Art - BAWSCA; Jensen, Laura - TNC; Johannis, Mary; Johnson, Brian - CalTrout; Kanz, Russ - SWRCB; Keating, Janice; Kempton, Kathryn - NOAA-MNFS; Kinney, Teresa; Koepele, Patrick - TRT; Lein, Joseph; Levin, Ellen - SFPUC; Lewis, Reggie - PRCl; Linkard, David - TRT /RH; Loy, Carin; Lyons, Bill - MR; Manji, Annie; Marko, Paul ; Marshall, Mike - RHH; Martin, Michael - MFFC; Mathiesen, Lloyd - CRRMW; McDaniel, Dan -CDWA; McDevitt, Ray - BAWSCA; McDonnell, Marty - SMRT; McLain, Jeffrey - NOAA-NMFS; Means, Julie - CDFG; Mills, John - TUD; Morningstar Pope, Rhonda - BVR; Motola, Mary - CT; O'Brien, Jennifer - CDFG; Orvis, Tom - SCFB; Ott, Bob; Ott, Chris; Pinhey, Nick - City of Modesto; Porter, Ruth - RHH; Powell, Melissa - CRRMW; Puccini, Stephen - CDFG; Raeder, Jessie - TRT; Ramirez, Tim - SFPUC; Rea, Maria - NOAA-NMFS; Reed, Rhonda - NOAA-NMFS; Richardson, Kevin - USACE; Robbins, Royal; Romano, David O - N-R; Roos-Collins, Richard - Water-Power Law Grp for NHI; Roseman, Jesse; Rothert, Steve - AR; Sandkulla, Nicole - BAWSCA; Schutte, Allison - HB; Sears, William - SFPUC; Shumway, Vern - SNF; Shutes, Chris - CSPA; Slay, Ronn - CNRF/AIC; Smith, Jim - MPM; Staples, Rose; Steindorf, Dave - AW; Stork, Ron - FOR; Stratton, Susan - CA SHPO; Taylor, Mary Jane - CDFG; TeVelde, George A ; Thompson, Larry - NOAA-MNFS; Verkuil, Colette - TRT/MF; Walters, Eric - MF; Wantuck, Rick - NOAA-NMFS; Welch, Steve - ARTA; Wesselman, Eric - TRT; Wheeler, Dan; Wheeler, Dave; Wheeler, Douglas - RHH; Williamson, Harry (NPS); Wilson, Bryan - MF; Winchell, Frank - FERC; Wood, Dave - FR; Wooster, John -NOAA; Workman, Michelle - USFWS; Zipser, Wayne - SCFB

Subject: Schedule for Responding to April 19-20 Study Requests

Several ideas for studies were put forward at the April 19 and April 20 Work Group meetings. The Districts are considering these and will respond to relicensing participants on these ideas/requests on or before Thursday, May 5. We appreciate your continuing interest in the relicensing of the Don Pedro Project. Thank you.