### RECLAMATION

Managing Water in the West

CVP/SWP OCAP and Biological Assessment Public Information Meeting

December 6, 2004 2 p.m. – 4 p.m.



### Meeting Agenda

- Welcome & Introduction
- Recap October 7, 2004 Public Information Meeting
- Follow-up on Comments from last Meeting
- Open Discussion

### Meeting Agenda Oct 7th

- OCAP & ESA Consultation
- Biological Assessment
- Related Public Processes

# Operations Criteria and Plan (OCAP) Purpose

- Documents CVP operations
- Provides basis for BA project description
  - Developed in 1992 for the winter-run
     Chinook salmon BA
- Documents changes since 1992

#### **OCAP Document**

- Not a NEPA/CEQA decision document
- Provides detailed project description of CVP/SWP
- Explains regulatory and legal requirements
- Includes project operations constraints and objectives
- Presents historic modeling (1991 to present)
- Explains forecasting process

### Biological Assessment

- Consultation information document
- Not a NEPA/CEQA decision document
- Identification of existing and potential actions
- Analyses of effects on listed species from CVP/SWP operations

### Reason for Consultation

- CVP/SWP operations affect listed species
  - Primarily coho salmon, winter-run and spring-run Chinook salmon, steelhead, and Delta smelt
- Long-Term BOs date from 1993 & 1995
- Interim BO on spring-run/steelhead

### **ESA Consultation Chronology**

- 2002 decision to do a comprehensive ESA consultation
- June 16, 2003 public information meeting, draft documents available
- November 25, 2003 public information meeting & status for BA, SDIP, EWA & other CALFED activities
- February 2004 BA modeling posted

### **ESA Consultation Chronology**

- Informal consultation Feb 13, 2004
- Initiate consultation March 15, 2004
- Public release of BA March 22, 2004
- Public release of revised OCAP & BA –
   June 30, 2004
- Received FWS BO July 30, 2004
- Received NOAA Fisheries BO Oct 22, 2004

# Follow up on comments from last meeting

- Formal and Early Consultation activities
- Sacramento River Temperature Control
- American River Issues
- Other items

### Related Public Processes Formal Consultation

Action	Public Process	Status
On-going CVP/SWP Operations	CALFED Ops Group	On-going
Water Transfers	NEPA/CEQA & SWRCB Approval	As needed
Joint Point of Diversion	CEQA & SWRCB Approval	Completed EIR
EWA (through 2007)	NEPA/CEQA	Completed EIR/S 2004
New Projects		
Trinity River Flows	NEPA/CEQA	Completed EIR/S 2000 ROD
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- Water right permits, existing pumping capabilities
  - CCFB intake at 6680 cfs
    - but can be higher from mid-Dec mid-Mar
  - Tracy Pumping at 4600 cfs

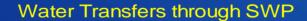
- Water right permits, existing pumping capabilities, and environmental programs
  - CVPIA

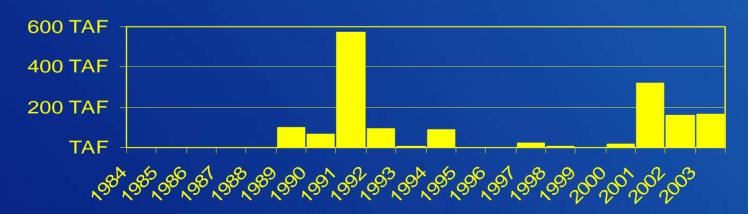
- CVP/SWP coordinated operations
  - Coordinated Operations Agreement
  - CALFED Ops Group Process
    - Data Assessment Team
    - Operations and Fisheries Forum
    - B2IT
    - EWA Team
    - Water Operations Management Team

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- Water transfers
  - 60 460 TAF per year in 80% of years; up to 1
     MAF in driest 20% of years.
  - Most transfers occur July through September.

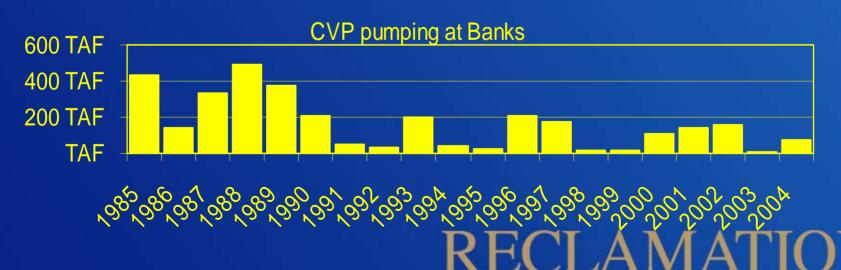




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- Joint Point of Diversion
  - Mostly CVP use of Banks Pumping Plant
  - Uses include CVC, Refuge deliveries, CVP yield augmentation, outages
  - Amounts vary with availability of capacity at Banks PP. Typically July through October.



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Nov 29, 2004

- Environmental Water Account
  - Purchase 200-240 TAF per year
  - Use extra 500 cfs in summer
  - Flex E/I ratio
  - 200 TAF of "stored" water
  - Portion of AFRP releases when not used by CVP
  - Use excess capacity
  - Source shifting (bridge loan)

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**DMC/CA Intertie** 

2004, ROD pending

NEPA/CEQA

Draft EA/IS was released
Nov 29, 2004

### Related Public Processes Early Consultation (cont)

	<u> </u>	
Action	Public Process	Status
Intermediate Integrated Operations	NEPA/CEQA	EA/IS to be completed 2005
JPOD for 50 TAF of CVP Wheeling		
CVP to cover 37.5 TAF additional inbasin demands		
Source shifting agreements to bolster San Luis storage		
Use of Shasta storage	NEPA/CEQA	TBD
Long-Term EWA	NEPA/CEQA	EIR/S to be completed

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# Shasta storage borrowing is not about...

- Raising Shasta Dam
- Water transfer from CVP to SWP
- To happen any time soon.
  - (Only 2 out 73 years would the opportunity arise)

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### Long-term EWA

- Same amount of fixed assets (200-240)
- 90 TAF of conveyance during summer
- Same costs in fall and early winter
- Higher costs during spring
- Greater change of spilling debt

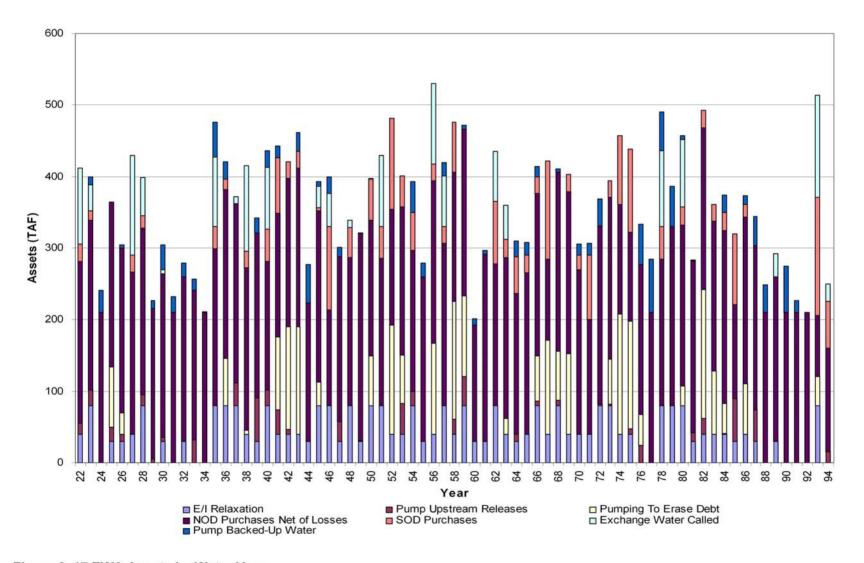


Figure 8-17 EWA Assets by Water Year

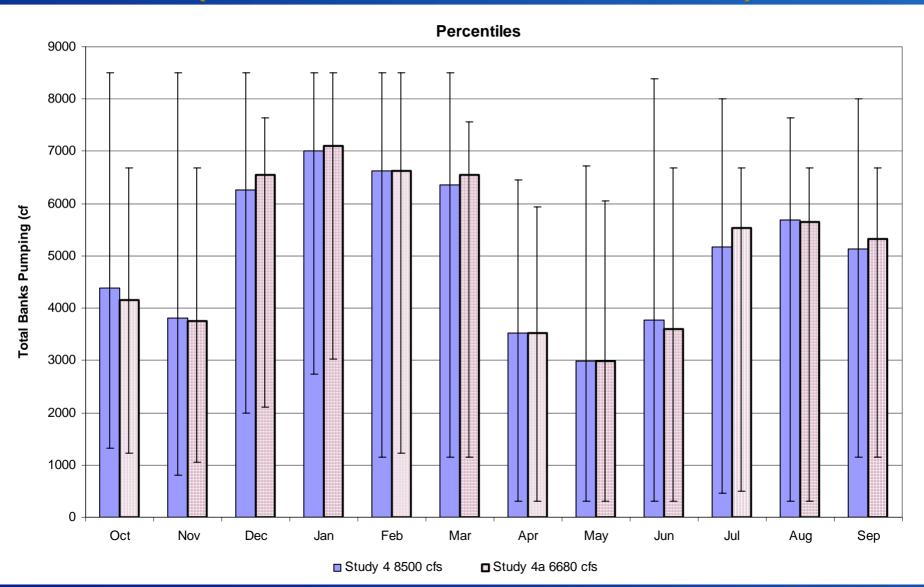
### Related Public Processes Early Consultation

Action	Public Process	Status
South Delta Improvement Program	NEPA/CEQA	EIR/S to be completed 2005
8500 cfs at Banks Pumping Plant		
Permanent Barrier Operations		
Wheel 100 TAF of refuge water for CVP		
Shift up to 75 TAF of inbasin demands to CVP		

# Average Annual Banks Exports 6680 vs 8500 (no EWA Pumping)

	Study 4	Study 4a	Percent
	8500 cfs	6680 cfs	Difference
Average	3493	3371	3.6%
Wet	4440	4235	4.8%
Above Normal	4038	3941	2.5%
Below Normal	3768	3664	2.8%
Dry	2958	2864	3.3%
Critical	1616	1571	2.9%

### Monthly Banks Pumping 6680 vs 8500



# Operational Changes since Winter Run, NOAA B.O.1993

- Implementation of CVPIA 3406 (b)(2)
- Implementation of SWRCB 1995 WQCP
- Implementation of Trinity River ROD
- Installation of Shasta TCD in 1997
- Improved fish passage at Red Bluff Diversion Dam and Anderson-Cottonwood I.D. Diversion Dam

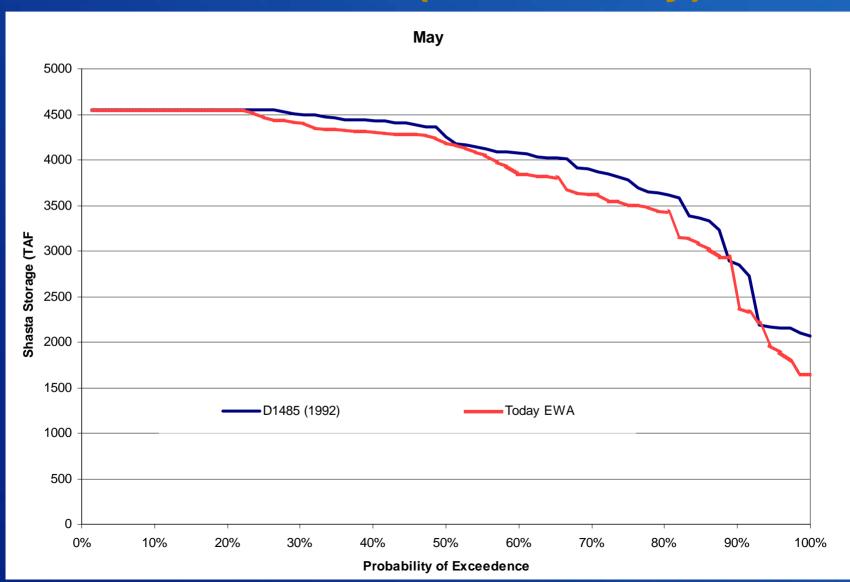
### Reconsultations since 1993

		Reclamation letters	
	Starting		Change in
	Compliance		Compliance
Water Year	Point	Date	Point
1993	Bend Bridge		
1994	Jelly's Ferry		
1995	Bend Bridge	7/13/1995	Jelly's Ferry
1996	Bend Bridge	7/18/1996	Jelly's Ferry
		8/28/1996	Ball's Ferry
		9/23/1996	Clear Creek
1997	Bend Bridge	8/8/1997	Jelly's Ferry
1998	Bend Bridge	9/18/1998	Jelly's Ferry
1999	Bend Bridge		
2000	Bend Bridge	7/14/2000	Jelly's Ferry
		8/29/2000	Ball's Ferry
2001	Jelly's Ferry		
2002	Jellys' Ferry		
2003	Bend Bridge	8/28/2003	Ball's Ferry

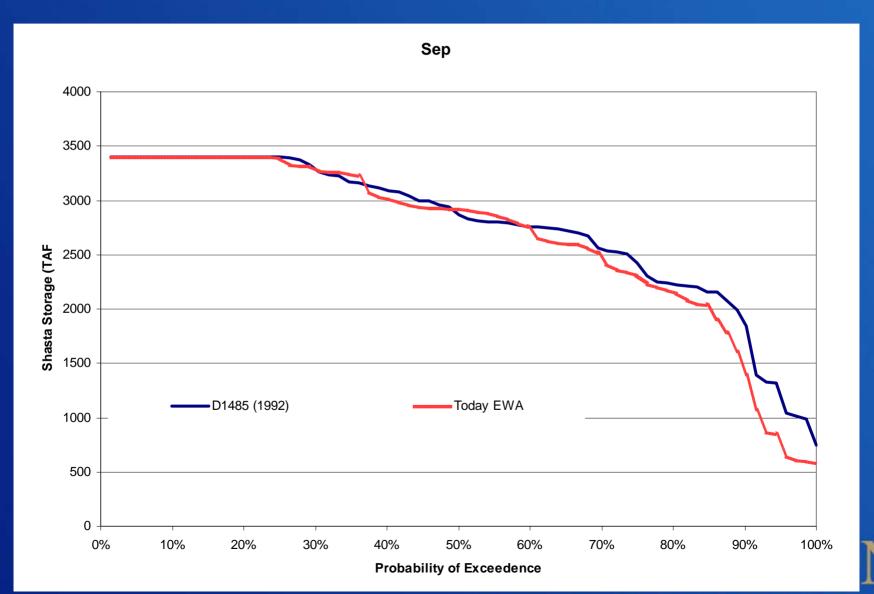
# Sacramento River Temperature Control

- Less cold water available from Trinity River
- Winter run spawning distribution is mostly above Balls Ferry
- Proposed to move temperature target upstream to Balls Ferry
- Results in little change in effect on winter run spawning/incubation success, which is high survival
- Provides more efficient utilization of cold water under SWRCB 90-5 and 91-1

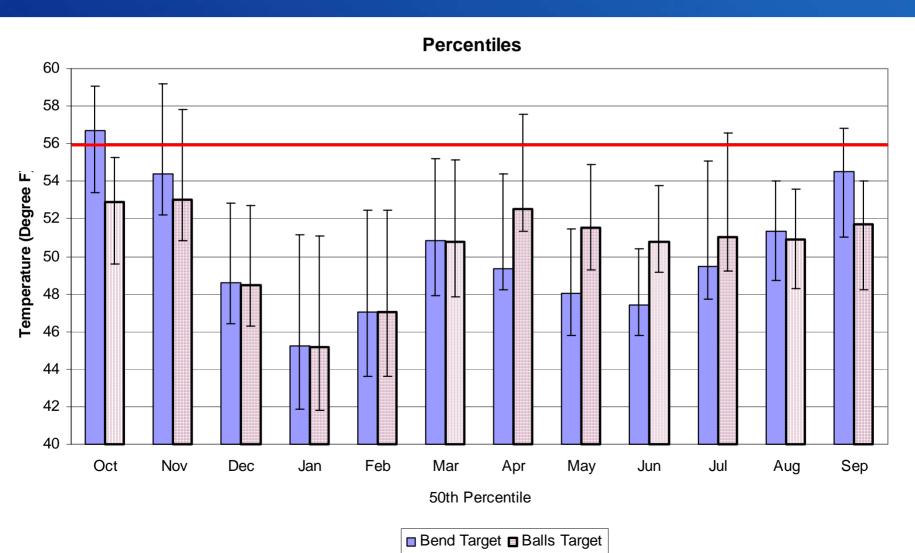
# Shasta End of May Storage from OCAP runs (1992/Today)



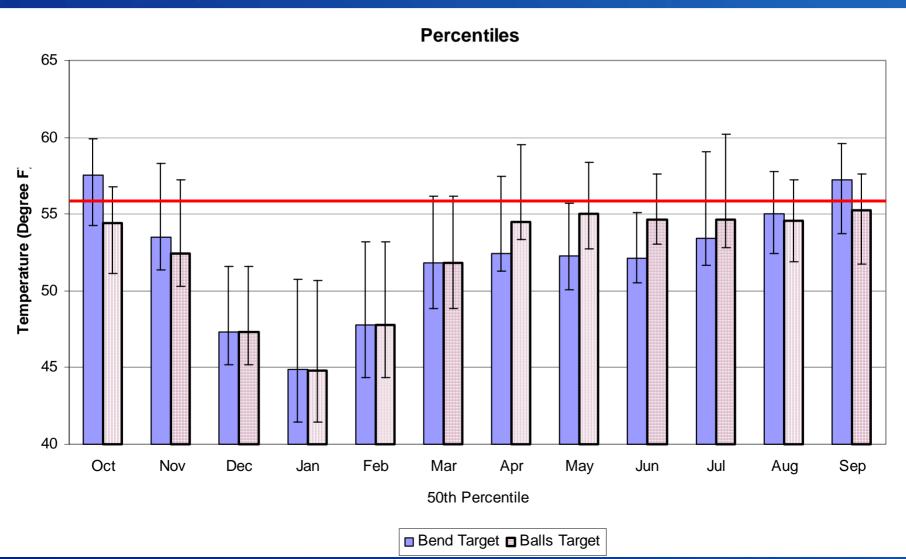
# Shasta End of September from OCAP runs



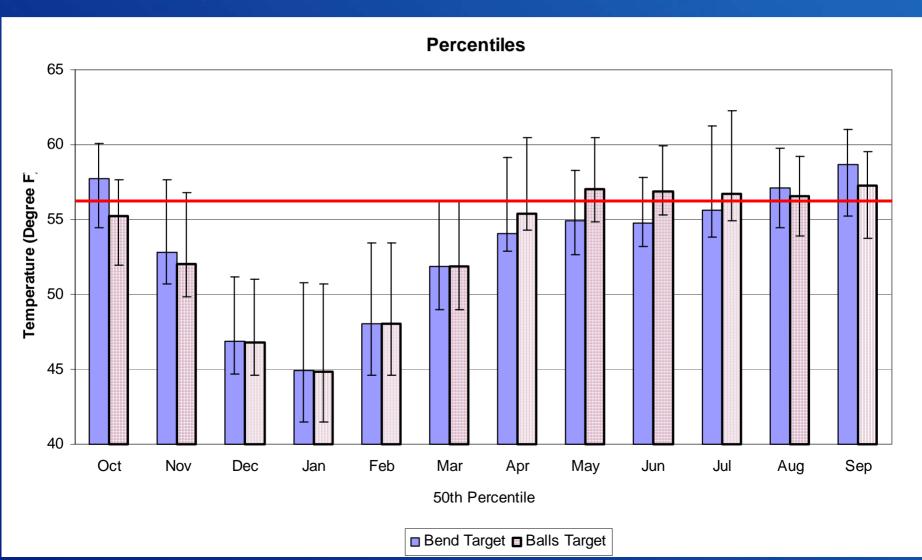
#### Monthly Temperature Percentiles at Keswick



### Monthly Temperature Percentiles at Balls Ferry



### Monthly Temperature Percentiles at Bend Bridge



#### **Red Bluff Diversion Dam**

- Gates in May 15 through September 15
- Small proportion of winter run, spring run, and steelhead populations encounter closed gates so need to use fish ladders
  - Winter run population increasing with current gate operations
  - Spring run are mostly in tribs downstream of RBDD, but the small proportion upstream are affected
  - Steelhead migrate mostly after gates are up

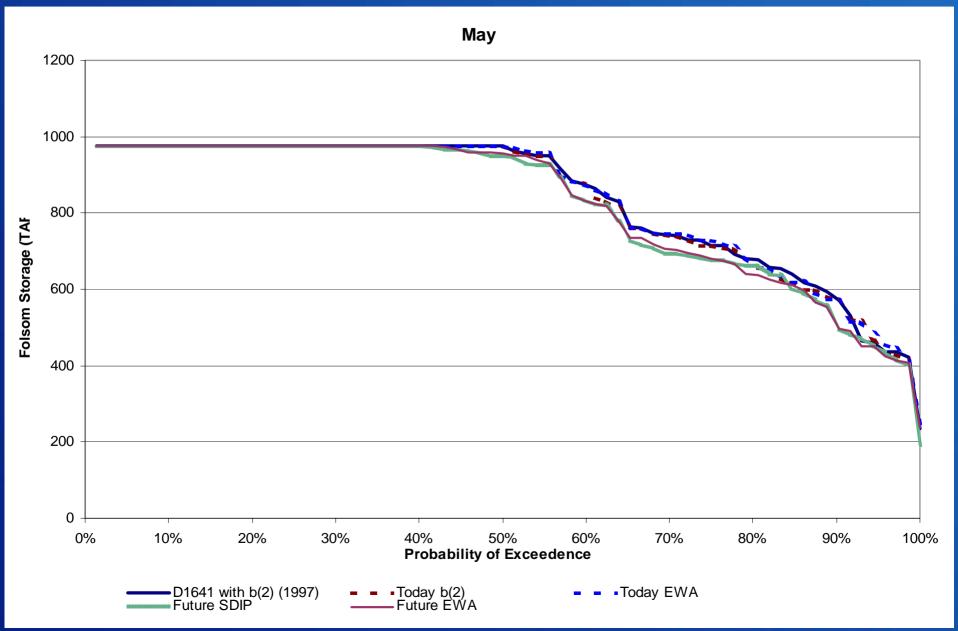
### **American River**

- Increased water demands in the future result in lower flows and increased temperatures
- Monitoring has shown American River steelhead with good condition factors rearing through the summer in high water temperatures
- The combined effect of temperature and predation likely limits in-river steelhead production
- The large American River steelhead run is produced mostly by Nimbus hatchery

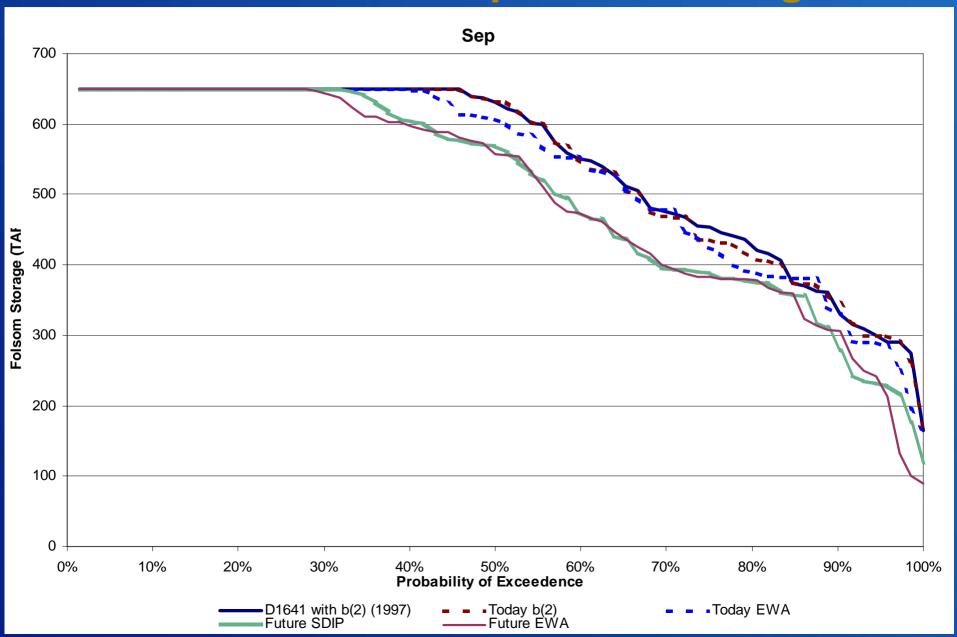
### **American River**

	Current Demands	Future Demands
Water Rights	50,850	311,250
M&I	205,000	376,300
Total	255,850	687,550

### Folsom End of May Storage



#### Folsom End of September Storage



### Thank You