

ENVIRONMENTAL WATER
ACCOUNT (EWA)

TECHNICAL SCIENCE REVIEW
PANEL

USE OF (B)(2)
ENVIRONMENTAL WATER

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October 15, 2003

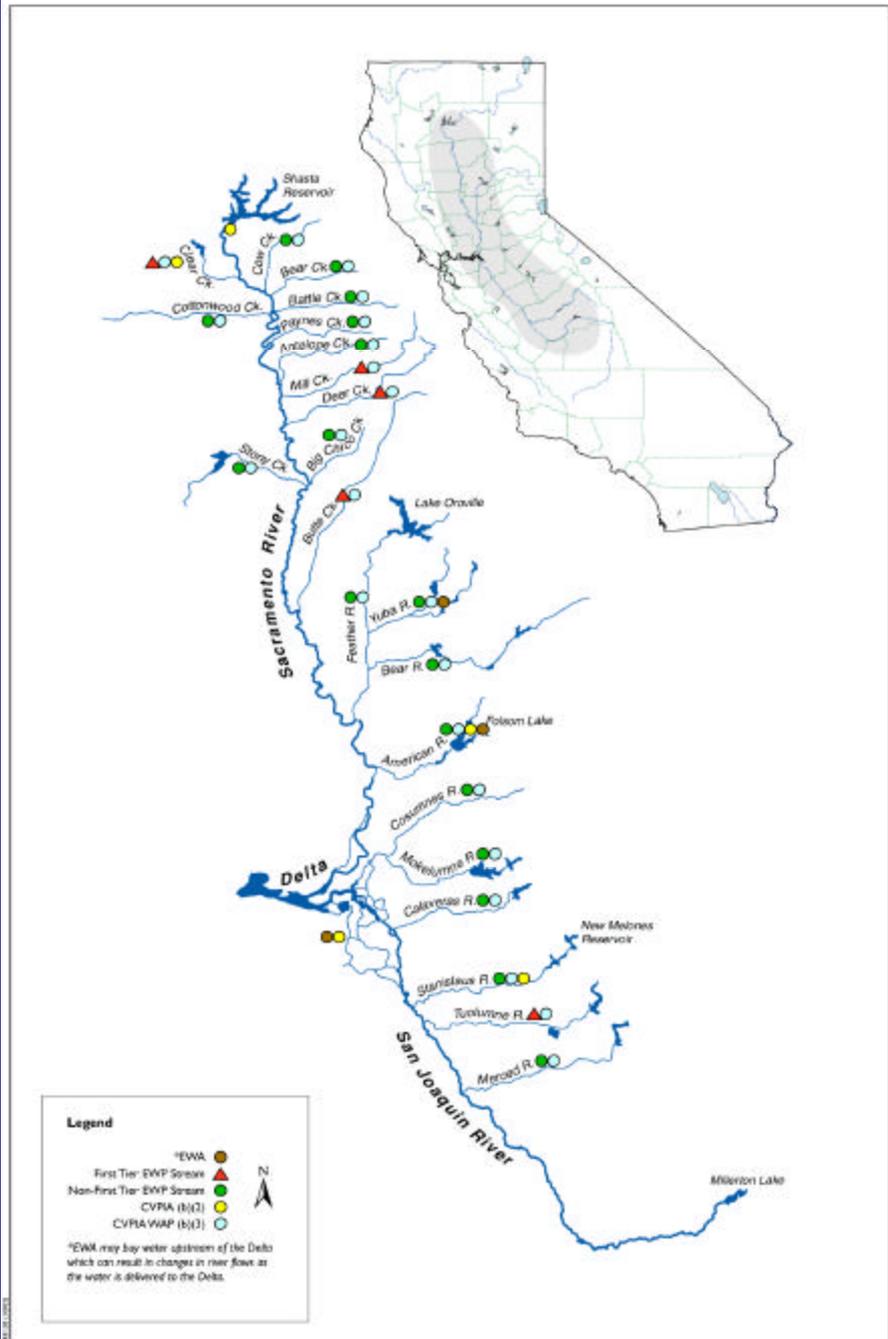
“CALFED must ensure that all federal and state environmental water programs, including EWA, work as an integrated unit in meeting environmental needs...”

2002 EWA Review Panel's Report

3.5.2 Maximizing Available Water Resources

These programs include:

- CVPIA (b)(3) Water Acquisition Program (WAP)
- CALFED Environmental Water Program (EWP)
- CVPIA (b)(2) Water
- CALFED Environmental Water Account (EWA)



CVPIA Water Acquisition Program (WAP)

- Section 3406(b)(3) of the CVPIA, October, 1992, directs Interior to develop and implement a program for acquisition of water to supplement (b)(2) dedicated CVP water for anadromous fish restoration and to provide level 4 water supplies for the wetland habitat areas identified in the Refuge Water Supply Report and the San Joaquin Basin Action Plan.

Water Acquired by WAP for Instream Flows for Anadromous Fish (1994 – 2002)

To Improve Salmonid Habitat

- Battle Creek – 86,600 AF (1995-2000)
- Merced River – 73,000 AF (1994-1998)
- Stanislaus River – 148,000 AF (1994-1998)
- Tuolumne River – 5,000 AF (1997)
- San Joaquin River Agreement (SJRA) – 438,000 AF on the Stanislaus, Tuolumne and Stanislaus Rivers (1999-2002) to improve salmonid habitat and implement the Vernalis Adaptive Management Plan (VAMP)

Coordination with EWA

Coordinate the efforts of WAP with EWA to improve salmonid habitat

- Merced River, Fall 2001, coordinated EWA and WAP acquisition
- 2001-2003, coordinated upstream releases of acquired water from the San Joaquin River tributaries with the :
 - SWP export reductions using EWA, and
 - CVP export reductions using (b)(2) water,
 - To implement the VAMP (April 15-May 15).

CALFED Environmental Water Program (EWP) established in the CALFED ROD August 2000

- “Improve salmon spawning and juvenile survival in upstream tributaries as defined by the Ecosystem Restoration Program (ERP) and Strategic Plan, by purchasing up to 100,000 AF per year.”
- “Some of these ERP flows may contribute to the EWA.”

EWP is Exploring Opportunities on these Priority Watersheds

- Clear Creek
- Mill Creek
- Deer Creek
- Butte Creek
- Tuolumne River

Coordination with EWA

Coordinate the efforts of EWP with EWA
to improve salmonid habitat

- Joint acquisitions - funds contributed both by the EWA and EWP
- Sequential acquisitions - assets acquired by one program are then sold to the other programs
- EWP could contribute funds to influence timing of EWA acquisitions
- EWP could also coordinate with (b)(2) water use

Section 3406(b)(2) of the CVPIA, October 1992

"...dedicate and manage annually 800,000 acre-feet of Central Valley Project yield for the primary purpose of implementing the fish, wildlife, and habitat restoration purposes and measures...

...and to help meet WQCP and ESA obligations."

800,000 acre-feet

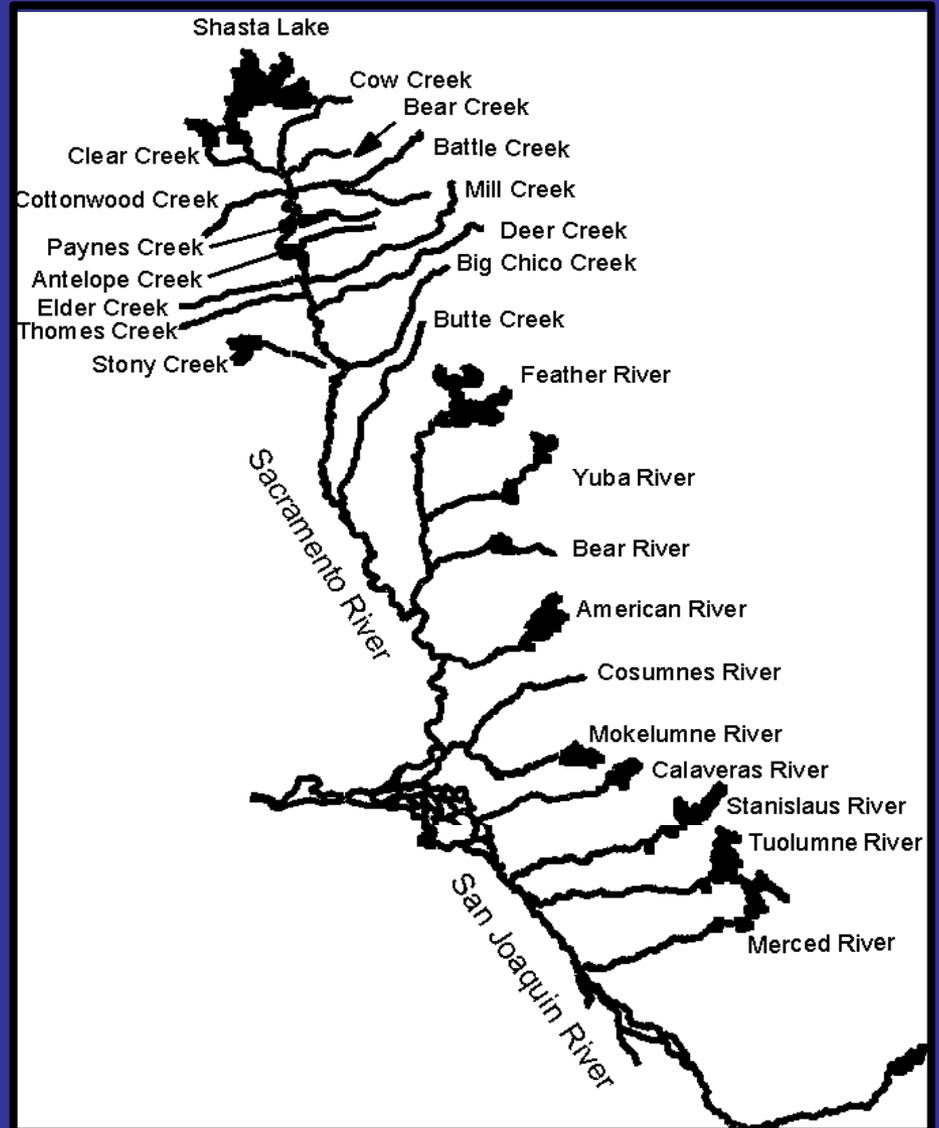


Anadromous Fish Restoration Program's Doubling Goals and Flow Objectives

“Develop within three years of enactment and implement a program which makes all reasonable efforts to ensure that, by the year 2002, natural production of anadromous fish in Central Valley rivers and streams will be sustainable on a long-term basis, at levels not less than twice the average levels attained during the period of 1967-1991...”

“...Provide flows of suitable quality, quantity, and timing to protect all life stages of anadromous fish...”

Central Valley Rivers and Streams



Anadromous Fish Restoration Program

Summary of Flow-Related Limiting Factors

- Inadequate timing and/or magnitude of flow to provide suitable conditions for one or more life stage
- Water temperatures that exceed tolerances of one or more life stage
- Direct and indirect impacts of Central Valley Project (CVP) and State Water Project (SWP) Delta pumping

Flow-Related Habitat Objectives

- Improve flows in CVP-controlled streams
 - ? Clear Creek
 - ? Sacramento River
 - ? American River
 - ? Stanislaus River
- Improve habitat conditions in the Delta
- Reduce CVP exports



(b)(2) Background

- Oct 1999 - Interior released final decision on implementation and accounting of 800,000 AF of CVP yield
- August 2000 – CALFED ROD included full use of 800,000 AF of (b)(2) water per Interior's October 1999 Decision as a component of the regulatory baseline (Tier 1)
- Oct 2001 and Mar 2002 - Federal District Court ruled against several elements of Interior's October, 1999 accounting methodology
- May 2003 – Interior released its Modified (b)(2) Decision

(b)(2) is a component of most Bay-Delta Activities

- Part of project description for the biological opinions issued by the Service and NMFS on operations
- Part of the underlying operation for the WQCP
- Vernalis Adaptive Management Program (VAMP) is dependent on (b)(2) implementation
- CALFED regulatory (ESA) commitments are dependent upon (b)(2) implementation as a component of Tier 1

Establishment of (b)(2) Interagency Team

- U.S. Bureau of Reclamation
 - U.S. Fish and Wildlife Service
 - National Marine Fishery Service
 - California Department of Fish and Game
 - California Department of Water Resources
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- Communicates with the Data Assessment Team (DAT), Operations and Fisheries Forum (OFF) and CALFED Ops Group.
 - Coordinates with the EWA Team and Water Operations Management Team (WOMT).
 - WOMT communicates with CALFED Management Team, ERP Implementing Agencies, and the Interagency Ecological Program (IEP).

Upstream (b)(2) Fish Actions



- ✓ Improve flows (October-January) to improve spawning and incubation habitat for salmon and steelhead
- ✓ Improve flows (February-September) to improve habitat for salmon and steelhead, and other anadromous fish,
- ✓ Will also benefit delta smelt and other estuarine species



Delta (b)(2) Fish Actions



- Improve habitat conditions (December-June) by reducing CVP exports

Objectives

(December – June)

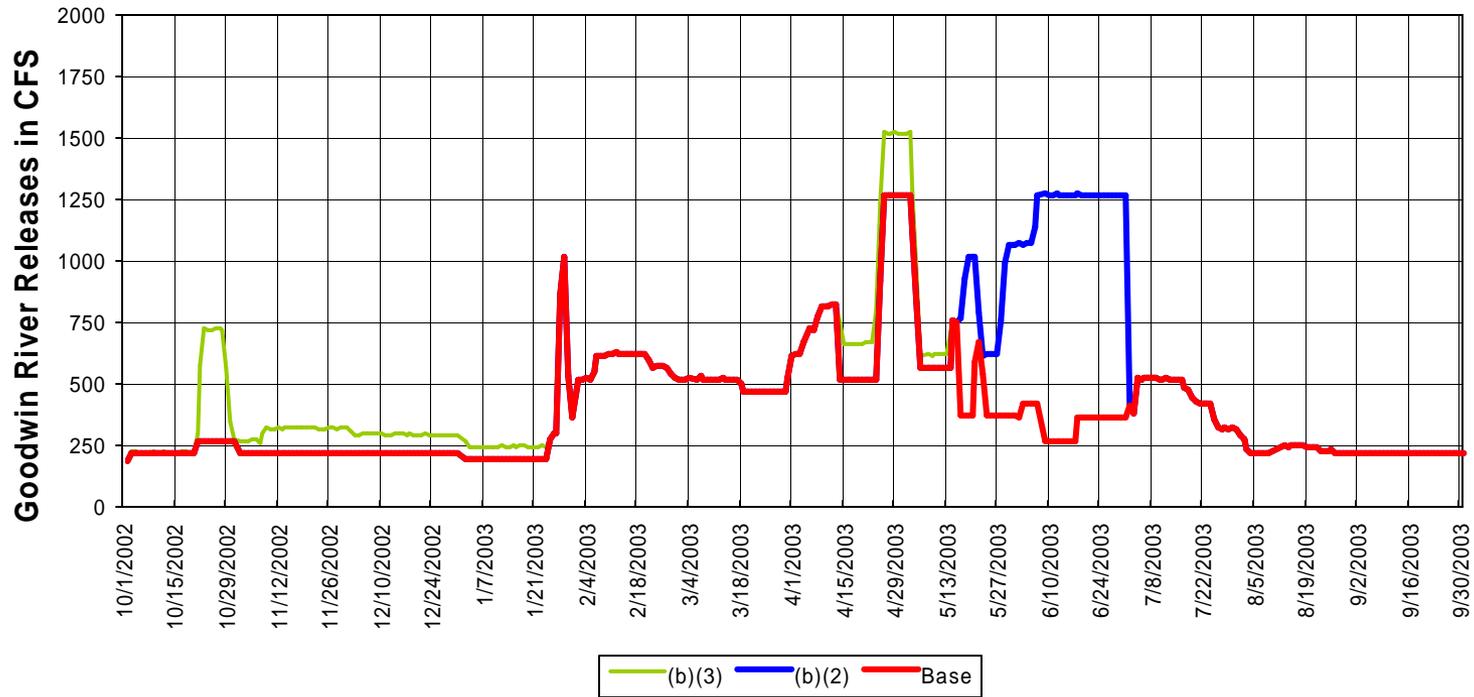
- To provide added protection for delta smelt, juvenile salmonids and other species
- To conduct evaluations to further define the relationship between juvenile salmon survival and exports

Coordination of (b)(2) fish actions with EWA and WAP to improve salmonid habitat

- Stanislaus River, 1994 – 2002, coordinated releases of WAP acquisitions and (b)(2) water
- American River, 2001 – 2002, coordinated releases of EWA acquisitions and (b)(2) water
- 2001 – 2003, coordinated releases of WAP acquisitions on San Joaquin tributaries and (b)(2) water with the:
 - SWP export reductions using EWA, and
 - CVP export reductions using (b)(2) water
 - To implement the VAMP (April 15 – May 15)

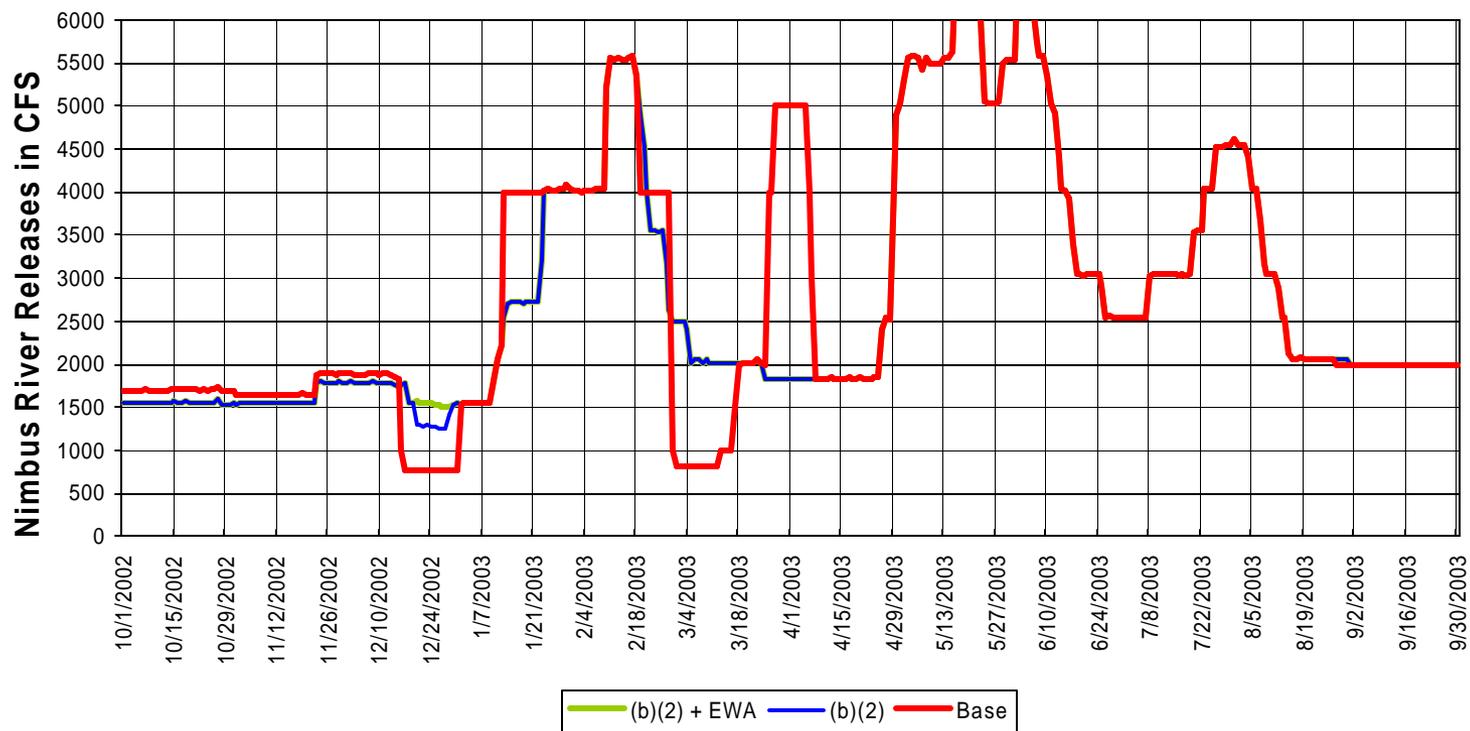
WY 2003 Stanislaus River Operations

(Data from 09/10/03 USBR DRAFT Daily Accounting)



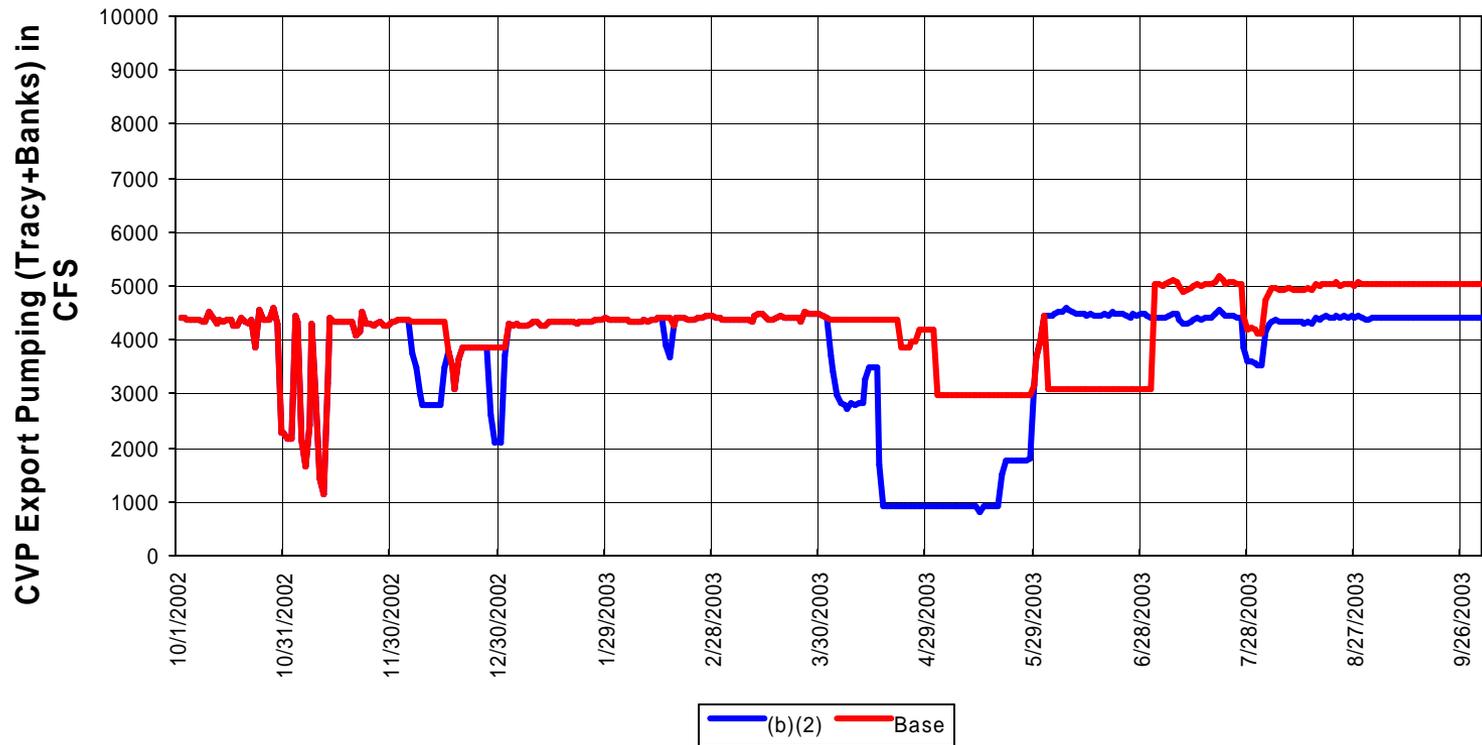
WY 2003 American River Operations

(Data from 09/10/03 USBR DRAFT Daily Accounting)



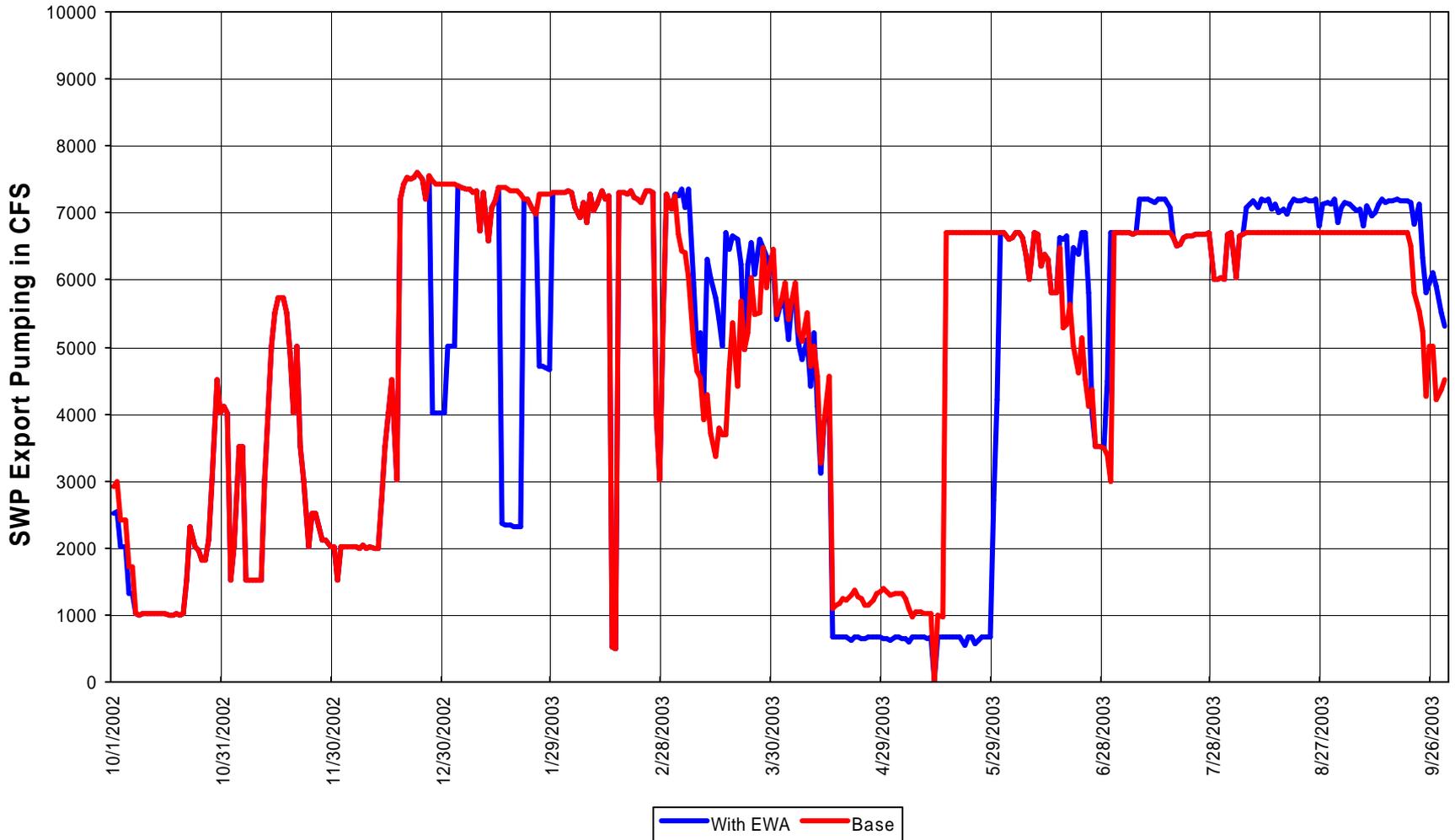
WY 2003 CVP Delta Export Operations

(Data from 09/10/03 USBR DRAFT Daily Accounting)



WY 2003 SWP Delta Export Operations

(Data from 10/01/03 SWPO DRAFT Daily Accounting)



DRAFT (b)(2) Accounting Water Year 2003													
	Oct	Nov	Dec	Jan	Feb*	Mar	Apr	May**	Jun	Jul	Aug	Sep	Sum
Release Metric (Oct 1-Sep 30) (positive value is debit)	0	0	36	12	187	112	8	21	58	3	2	5	443
Export Metric (Oct 1-Sep 30) (positive value is debit)	0	0	39	0	2	0	137	69	0	37	38	36	358
Total (b)(2) Expenditures (positive value is debit)	0	0	74	12	189	112	145	90	58	40	40	41	801

Oct - Aug monthly summary is based on preliminary daily (b)(2) accounting.

Revised Sep 03

Sep monthly summary is based on USBR gross projection.

* Feb Release charge includes an adjustment of 65 TAF for COA imbalance during the month.

* May Export charge includes an adjustment of 26 TAF for EWA sponsoring the May18-27 Tracy curtailment.

DRAFT EWA Accounting Water Year 2003													
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Sum
Release Changes (Oct 1-Sep 30) (positive value is debit)	0	0	0	0	0	0	0	0	0	0	0	0	0
Export Changes (Oct 1-Sep 30) (positive value is debit)	0	0	32	89	0	0	19	26 CVP 182 SWP	0	0	0	0	348
Total EWA Expenditures (positive value is debit)	0	0	32	89	0	0	19	208	0	0	0	0	348

Started water year with 20 TAF of EWA assets in Oroville and 11 TAF of EWA assets in San Luis.

Oct - Sep monthly summary is based on latest available DWR monthly EWA accounting table.

- Not everything that can be counted counts, and not everything that counts can be counted.”

»Albert Einstein