

EWA

Development of OCAP Proposal



Where to From Here
Jerry Johns, DWR

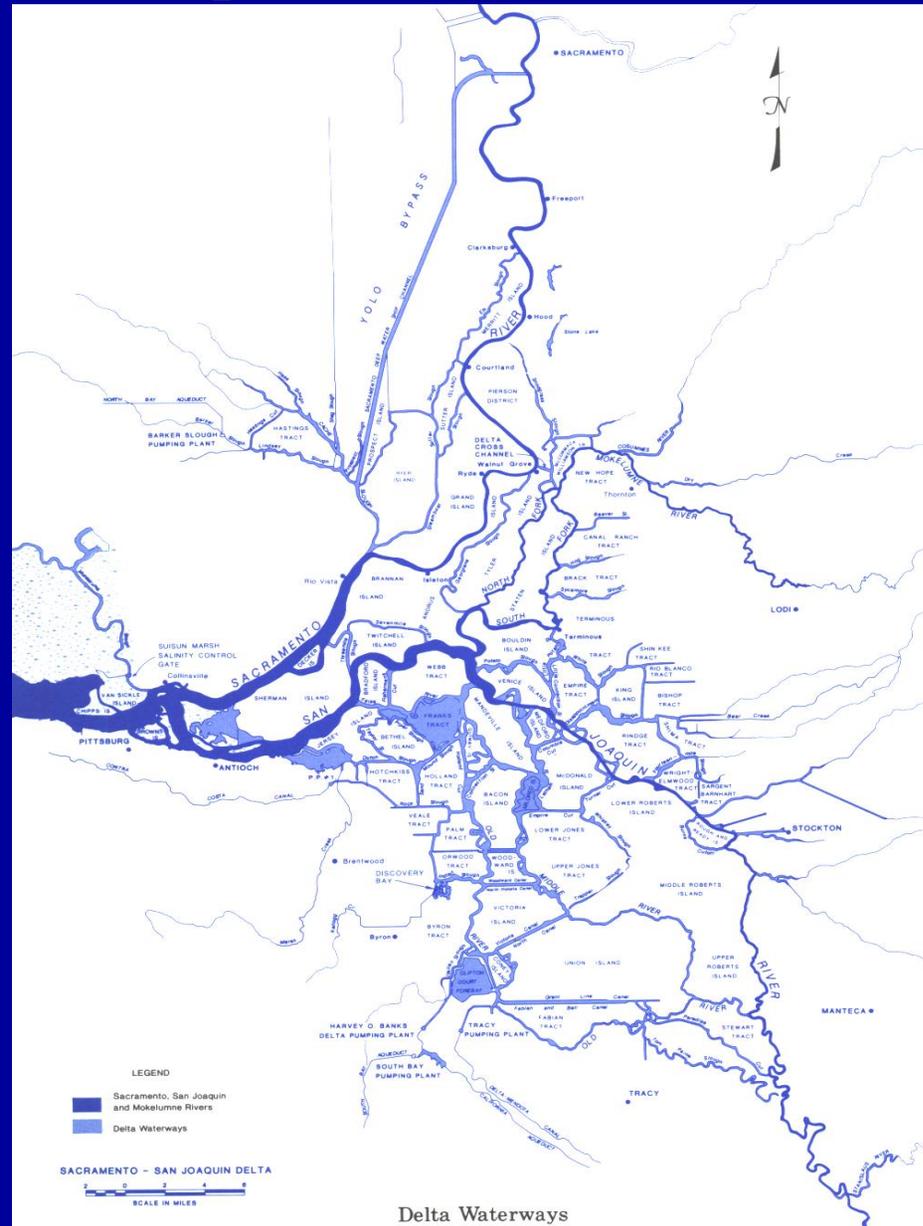
Sacramento-San Joaquin River Delta (Delta)

CALFED
Bay-Delta
Program

Record of
Decision
August 2000

EWA First
Year

2000-01



EWA Topics

- What Is EWA?
- Summary of First 3 Years
 - Fish actions
 - Water Purchases
 - Dollars
- Development of EWA OCAP Proposal

What is EWA

- Cooperative Management Program
 - to provide protection to fish of the B/D
 - by changes in operation of the CVP & SWP
 - at no uncompensated costs to project users
 - Four year program extendable by EWA Agencies
- ESA Water Supply Commitments = Regulatory Baseline + Functioning EWA + Tier III + \$150 Million for ERP actions

Management of EWA

- Management Agencies - DFG, USFWS, NMSF
- Project Agencies - DWR, USBR
- Water Operations Management Team (WOMT)
- EWA Team (EWAT)

EWA Assets In CALFED ROD

- Fixed – Water Purchase Targets 185 TAF
 - UOD 35 TAF SOD 150 TAF
- Variable - operational tools
 - E/I relaxation (est. 30 TAF)
 - SWP Pumping of b(2) releases (est. 40 TAF)
 - SWP pumping capability (125 TAF – W 75, S 50)
- Total EWA 380 TAF SOD Actions
- Source shift – Obtain 100 TAF
 - (bridge loan to get past low point in San Luis Reservoir)
- Borrowing - Obtain 200 TAF SOD
 - Within years and between years

Summary Of EWA First Three Years

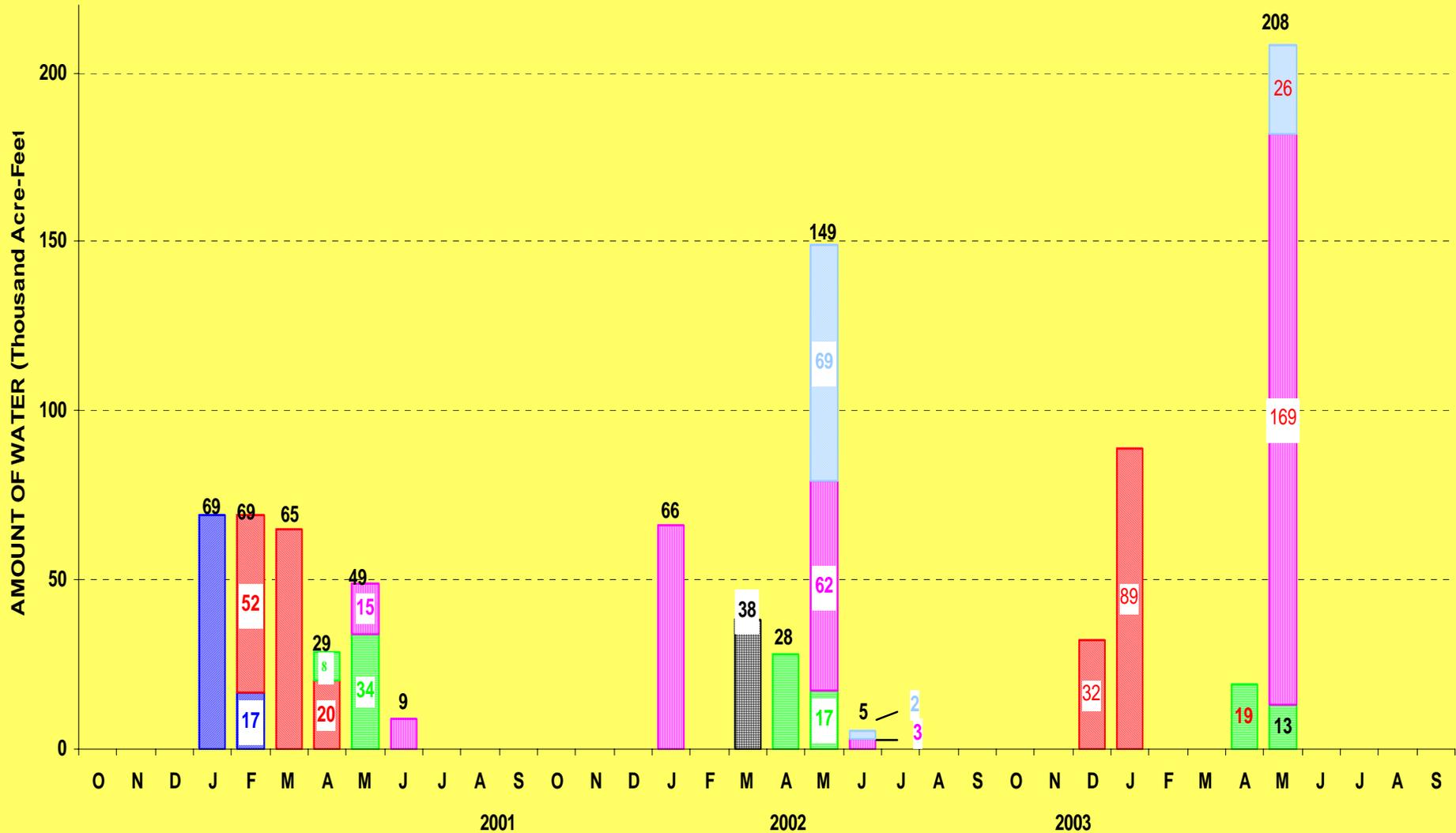
Observations on EWA over the First Three Years

- EWA is working. 2 Dry years, 1 Above Normal
no big fights
- Fish have benefited – Stable water supply
- 2002 70 % CVP and SWP allocation in a dry year
- Focused on Delta with coordinated upstream
benefits
 - Yuba, Merced, American (Power Bypass)
- Approx. 900 TAF in fish actions - \$120 Million
- Average: Actions 296 TAF, Purchases 264 TAF
SOD Deliveries 248 TAF
- What Price Peace

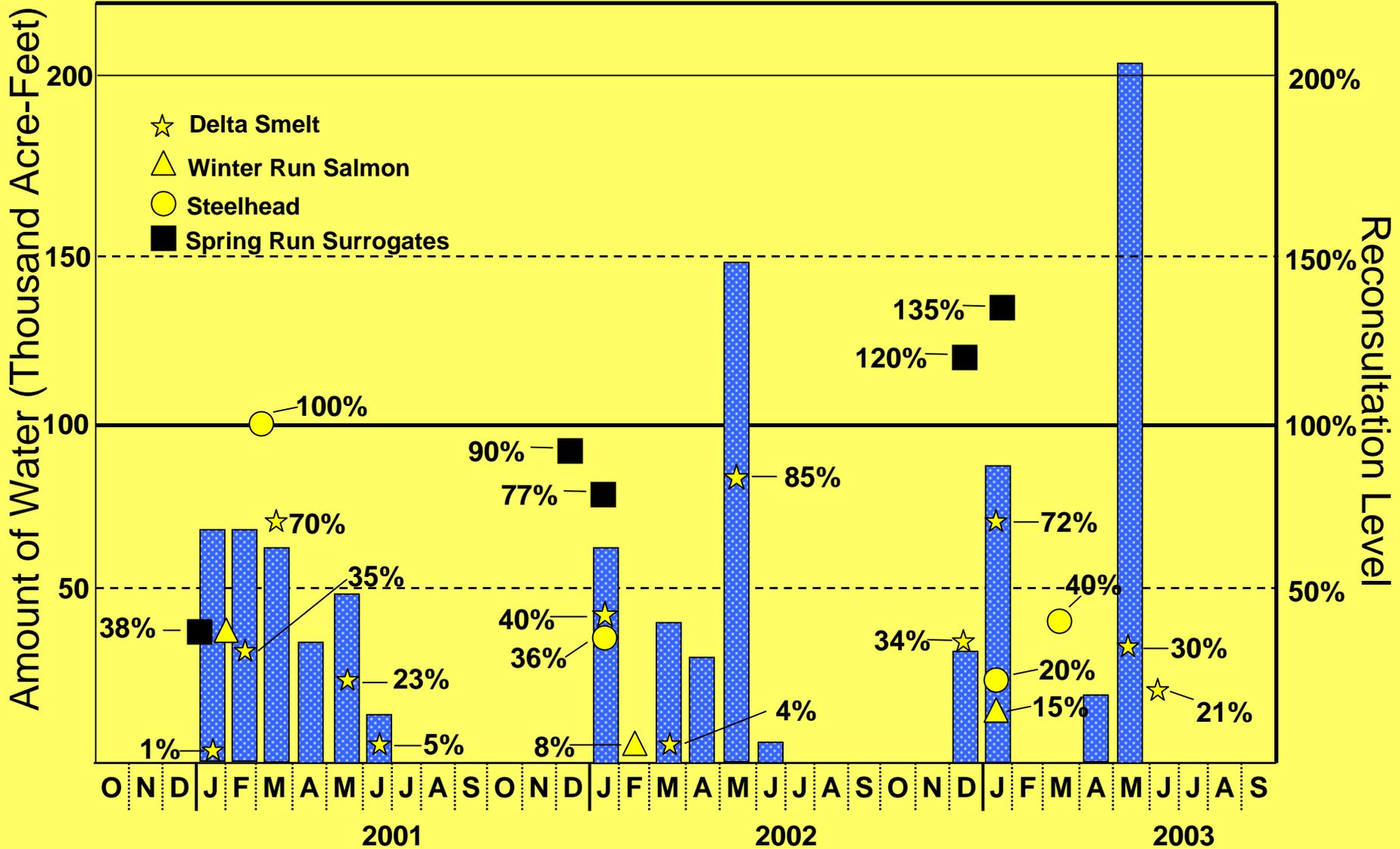
EWA Expenditures from October 2000 through September 2003

EWA EXPENDITURES OCTOBER 2000 - SEPTEMBER 2003

■ Salmon/Steelhead
 ■ Salmon/Steelhead/Delta Smelt
 ■ Delta (Conversion)
 ■ VAMP
 ■ Salmon/Delta Smelt
 ■ Salmon/Delta Smelt (CVP)



EWA Expenditures October 2000- September 2003



EWA in 2001, 2002, and 2003

Assets Acquired	2001 (Dry) (TAF)	2002 (Dry) (TAF)	2003*(AN) (TAF)
Purchase UOD	+105	+145	+70
Conveyance & Carriage Costs	-17	-31	-0
Purchased SOD			
State	+159	+37	+145
Federal (in kind in 2001)	+72	+60	0
SUBTOTAL	=319 (336 Purc.)	=211 (242 Purc)	=215 (215 Purc.)
Carryover from 2001, 2002		+84	+46 (Net Oro Spl)
Operational	+55	+20(Net SL spill)	+86
TOTAL	=374	=315	=347
Fish Actions	<u>-290</u> (290 State/0 Fed)	<u>-249</u> (177 State/72 Fed)	<u>-348</u> (322 State/26 Fed)
Carryover to 2002	=84		
Carryover to 2003		=66	
Carryover to 2004			= -1 (Debt)
Source Shift Activation	50 of 100	0 of 100	0 of 100

EWA Budget

Budgeted	2001	2002	2003
State	\$ 59 M	\$ 28.2 M	\$38.2M
• Federal (01 in kind)	<u>\$ 10 M</u>	<u>\$ 12.5 M</u>	<u>0</u>
• Total	\$ 69 M	\$ 40.7 M	\$38.2
Actual	(Dry)	(Dry)	(AN)
• Fixed and forward	\$ 6.6 M	\$ 1.0 M	\$0.6M
• Water Purchase	\$ 60.3M	\$ 28.9M	\$31M
• Acquisitions	336 TAF	242 TAF	215TAF
• Average Price	\$179/AF	\$120/AF	\$144/AF

Coordination of EWA with other Water Transfer Related Programs

- DWR Dry Year Program
- Colorado River Contingency Program
- CVP Dry Year Program
- Wildlife Refuge Supplies (Level IV)
- Environmental Water Program (EWP)
- Phase 8 Water Right Settlement Process

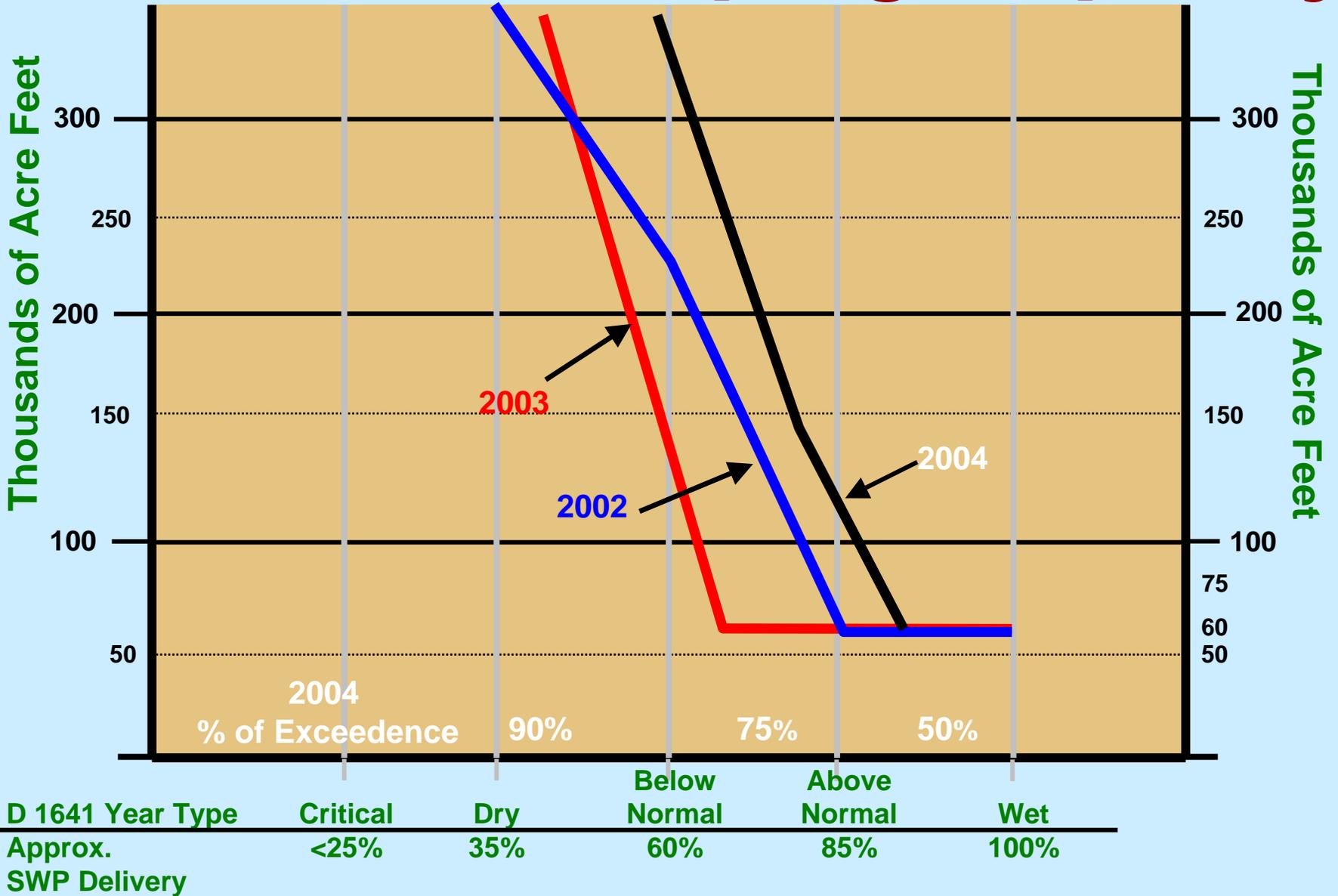
Development OF EWA OCAP Proposal

Does EWA Continue?

If so, In What Form?

- Who Benefits
 - Water supply Reliability – SWP/CVP
 - Trajectory Towards Recovery – F&W, Public
- Size of EWA
 - With 6680, with 8500 and Intertie
- Formulation and Funding
 - Participation by CVP and Federal funding
 - Water User and Public Funding
- Vehicle to Extend –
 - New EWA Operating Principles Agreement

EWA Delta Pumping Capacity



Environmental Water Account

- Development of Straw Proposal For EWA
 - Support of EWA Part of Project Integration Proposal (PIP) (aka - Napa Proposition)
 - Integral part of SDIP and OCAP
 - Developed straw proposal
 - Contractors offered tools

Environmental Water Account

- Development of Straw Proposal For EWA
 - DWR, USBR worked with USFWS, NOAA Fisheries, DFG
 - EWA Agencies worked to game and model
 - Currently testing refined proposal
 - Still refining tools, analyses

Environmental Water Account

- Proposed Annual Purchases
(in SOD equivalents)
 - Wet Year 250 TAF
 - Above Average Year 250 TAF
 - Below Average Year 250 TAF
 - Dry Year 230 TAF
 - Critical Year 210 TAF

Status of Proposed Long Term EWA

November 3, 2003

2000 CALFED ROD

10/7 - OCAP Proposal

**Fixed Assets
(SOD Equivalents)**

185 TAF

210/230/250 TAF

Critical/Dry/other

Variable Assets

- **50% State Gain**
- **E/I Relaxation**
- **Share Excess Capacity**
- **Source Shift (100 TAF)**
- **500 cfs @ Banks**
July - Sept

- **Same as ROD**
- **Same as ROD**
- **Same as ROD**
- **Same as ROD**
- **Same but last 30 TAF based on actual capacity**

Storage/ Exchange

- 200 TAF SOD Storage

- **100 SLR debt carryover**
- **200 Semitropic**
- **200 Wet/dry exchange**
(adds 24 TAF Average)

**Anticipated Fish
Actions**

380 TAF

250 - 490 TAF

374 TAF Average

Environmental Water Account

- Other Tools and Assets
 - Pumping cuts March 15-June 15 cost EWA 50% above 6,680 cfs
 - SVWMA (Phase 8) water available to EWA in above-normal years
 - Exchanges to contractors to prevent spill of EWA assets when San Luis Reservoir fills (if EWA has stored assets)

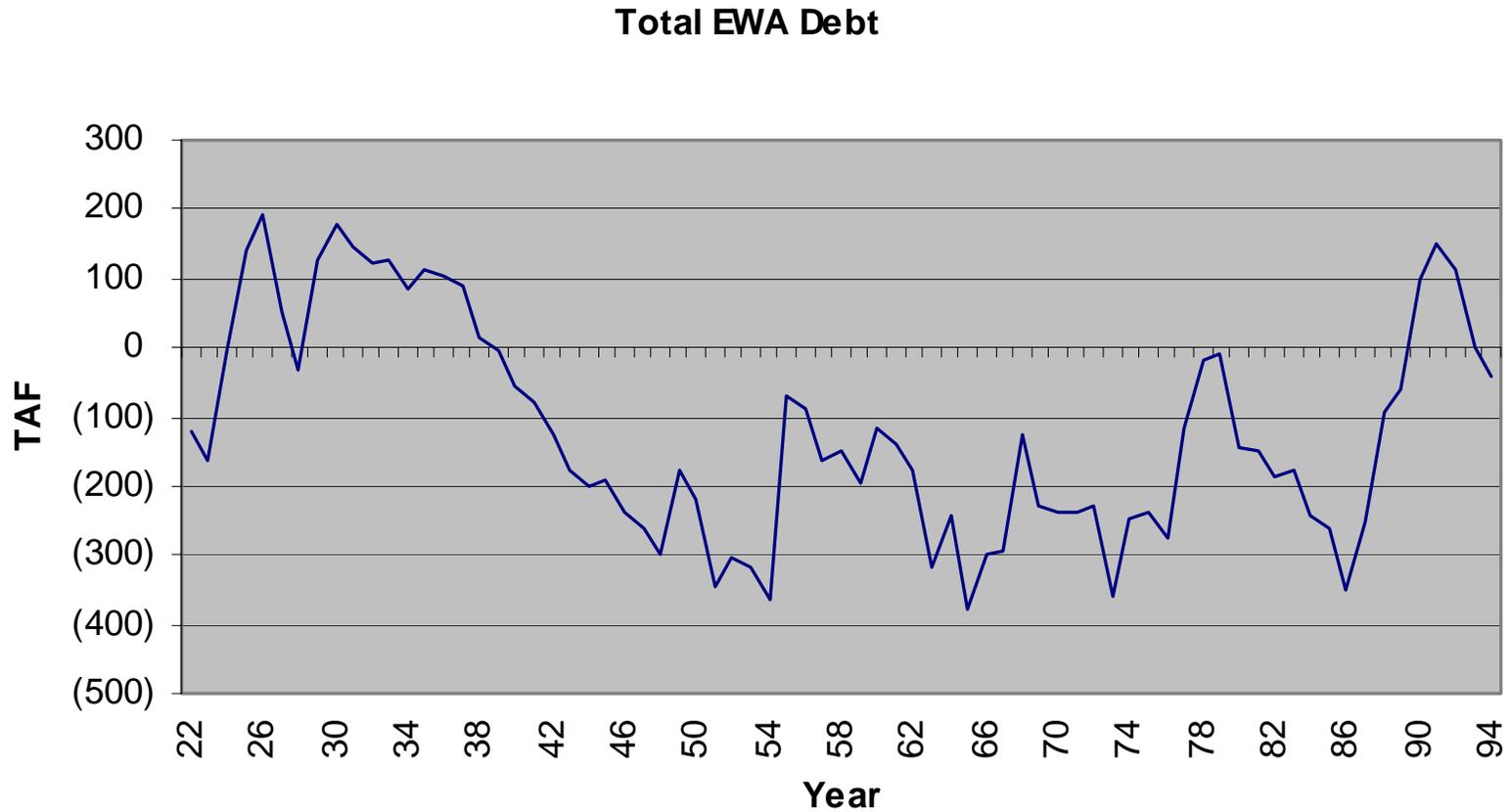
Environmental Water Account

- Anticipated Fish Actions
 - Wet Year 430 TAF
 - Above Average Year 490 TAF
 - Below Average Year 400 TAF
 - Dry Year 300 TAF
 - Critical Year 250 TAF

EWA Operations Model

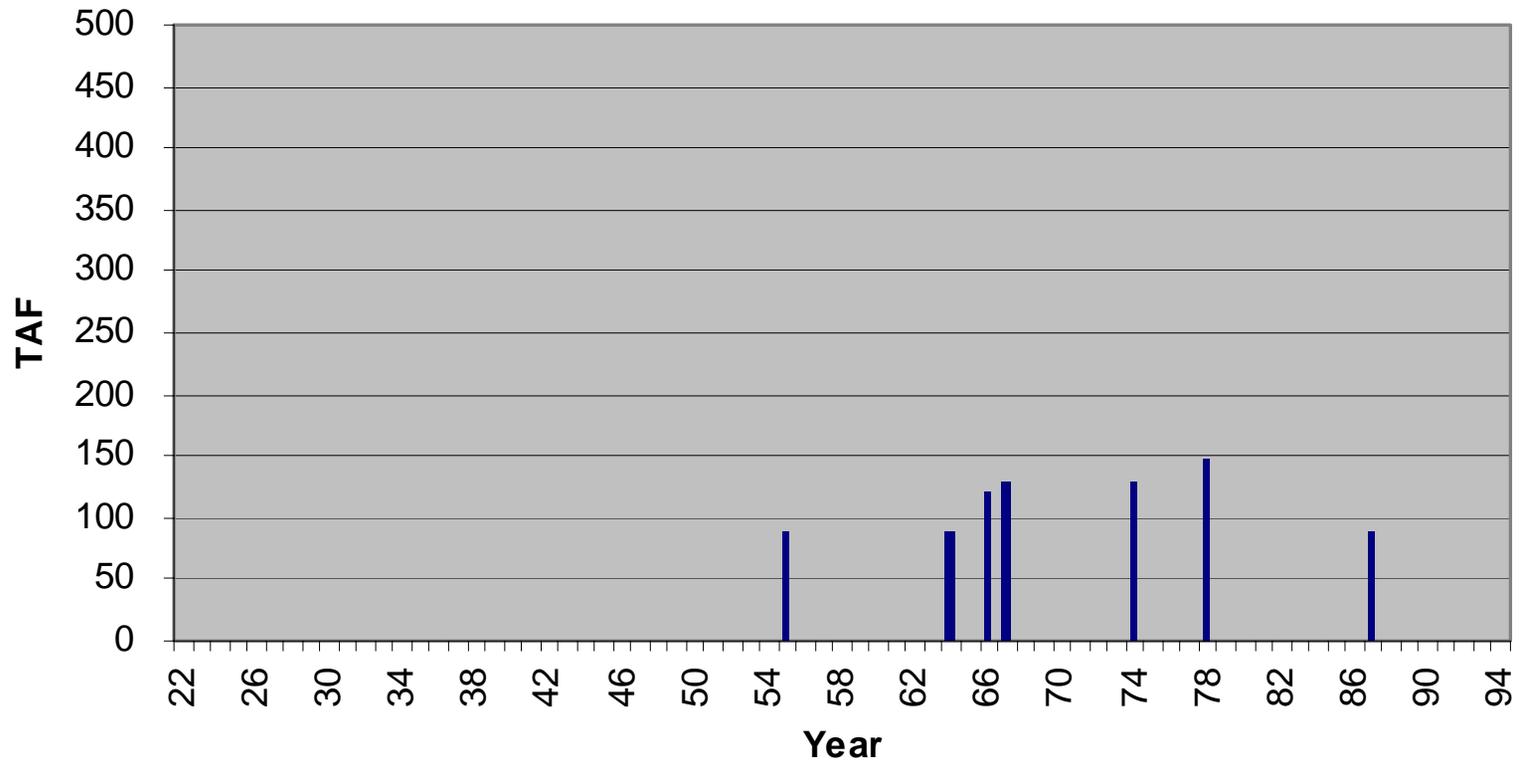
- Preliminary Findings
 - With the tools provided in the straw proposal, and variable assets performing as projected, EWA assets will support desired fish actions with small risk of reduction
 - Compromises could be required
 - Interactive application of the model can lead to an effective EWA

Sample of Results



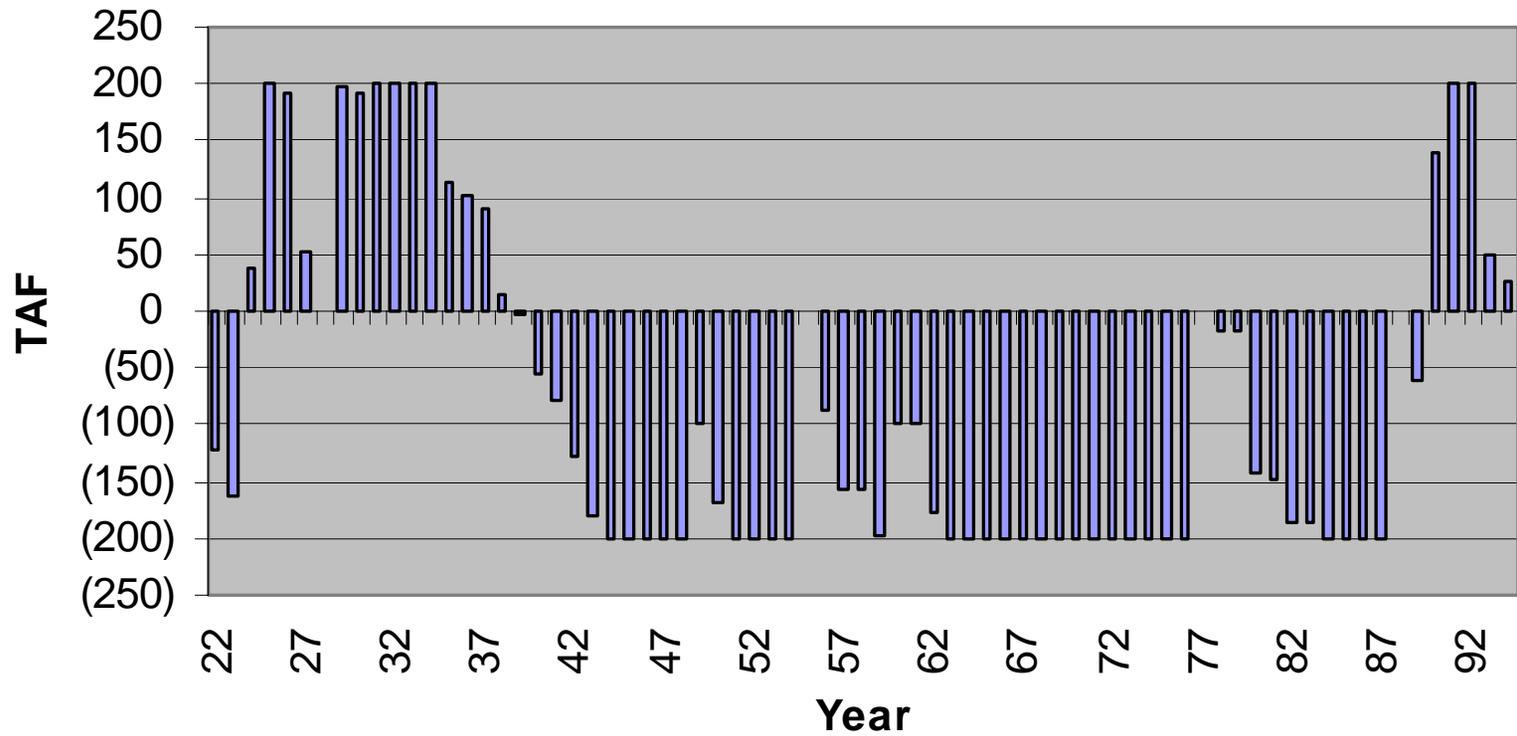
Sample of Results

Reductions in Fish Actions For Excess Debt



Sample of Results

EWA Exchange Balances



EWA Issues Ahead

- Clarify the **Purpose** of EWA and its beneficiaries
- Integration of **Science** in EWA and policy decisions
- EWA **Size and assets** (fixed and variable)
- Definition of **Tier 1** Baseline over time
- How EWA is characterized in **OCAP**
- **Long-term ESA Commitments** with a long term EWA
- **Operating rules** with 8,500 and Intertie (400 cfs)
- Vehicle to **Extend EWA** and Term of extension
- **Financing** of EWA long-term