

RECLAMATION

Managing Water in the West

CVP Operations Criteria and Plan and CVP/SWP OCAP Biological Assessment

November 16, 2004



U.S. Department of the Interior
Bureau of Reclamation

Purpose & Objectives

- Explain the relationship of the OCAP, BA, BOs
- Explain some overall comparisons in the OCAP
- Explain CVP/SWP current and future operations
- Explain contents of the BA

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 modeling changes (1991 to present)**
- **Explains forecasting process**

OCAP Outline

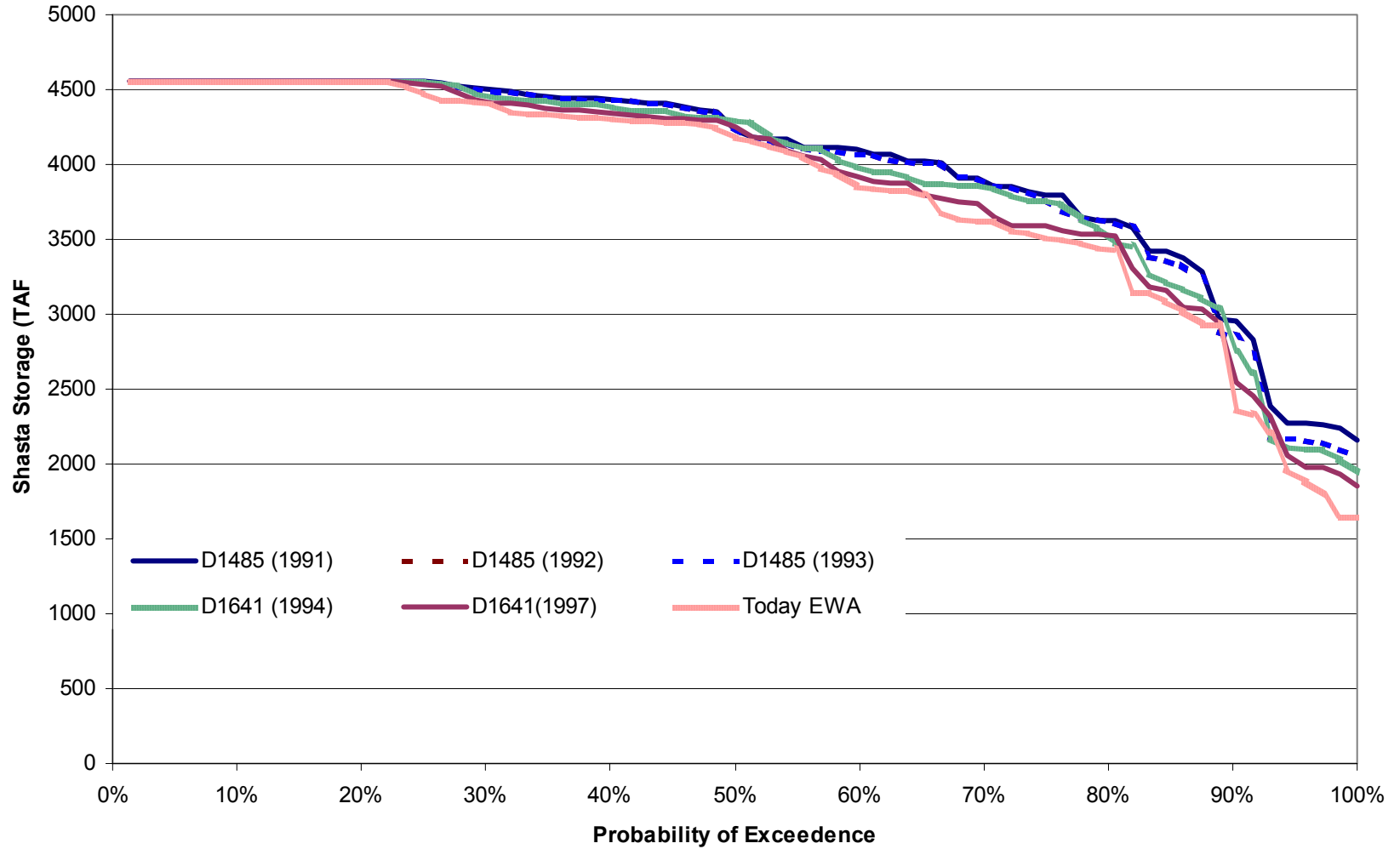
- **Introduction**
- **Project-Wide Operations Constraints and Objectives**
- **CVP Division Operations Constraints and Objectives**
- **State Water Projects**
- **Last few chapters on Modeling and Results**

Modeling for OCAP (2001 LOD)

	Article 21	Refuge Deliveries	Trinity Required Flows	D1485	Winter-Run B.O.	95 WQCP D1641	CVPIA 3406 (b)(2)	EWA
Study A D1485 (1991)		Historical Level 2	340,000 af/yr	X				
Study B D1485 (1992)		Firm Level 2	Same as above	X				
Study C D1485 (1993)		Same as above	Same as above	X	X			
Study D WQCP (1994)		Same as above	Same as above		X	X		
Study 1 WQCP (1997)	X	Same as above	Same as above		X	X	X	
Study 3 Today EWA	X	Same as above	369,000-453,000 af/yr		X	X	X	X

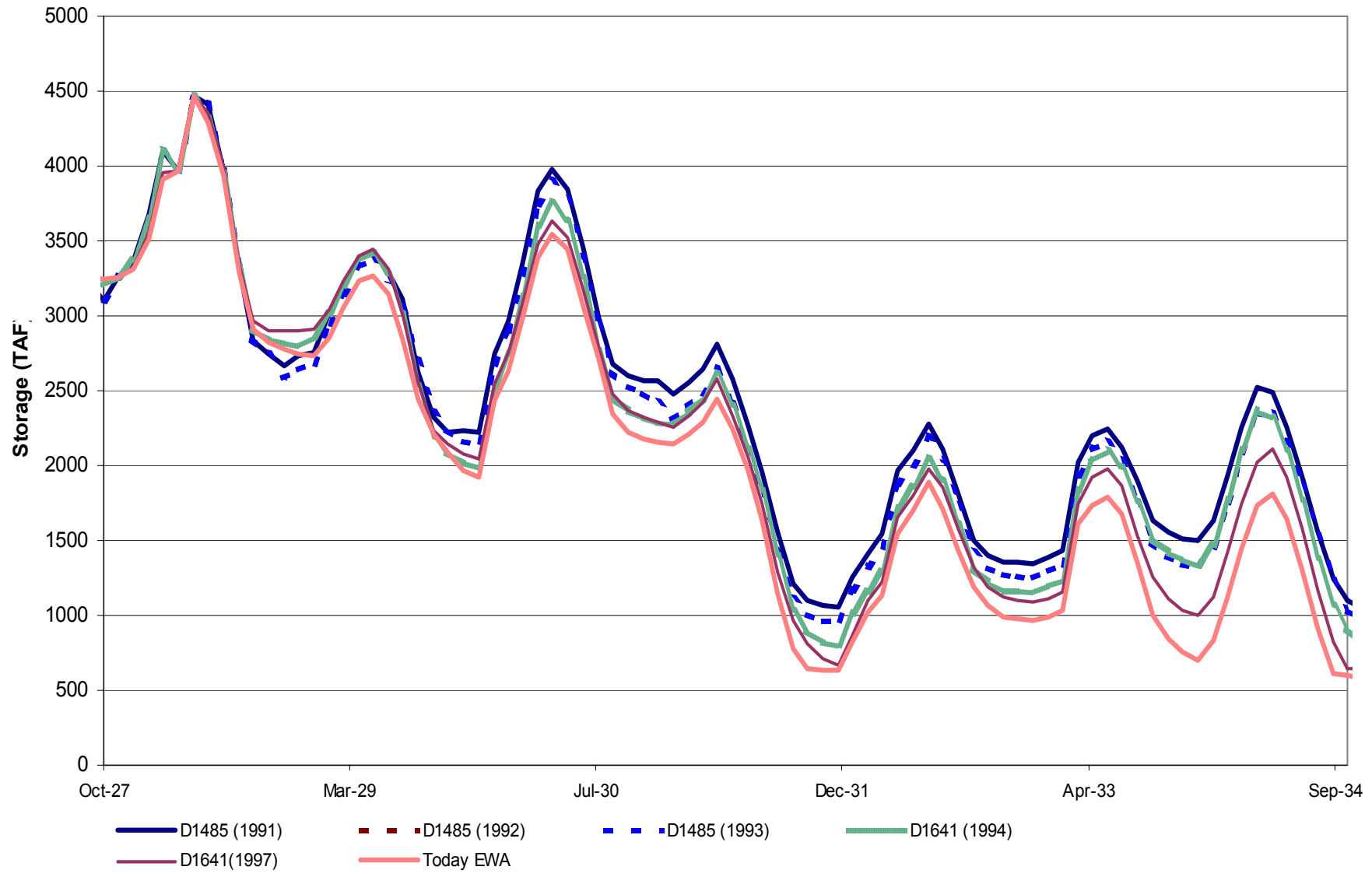
Shasta end of May Storage

May

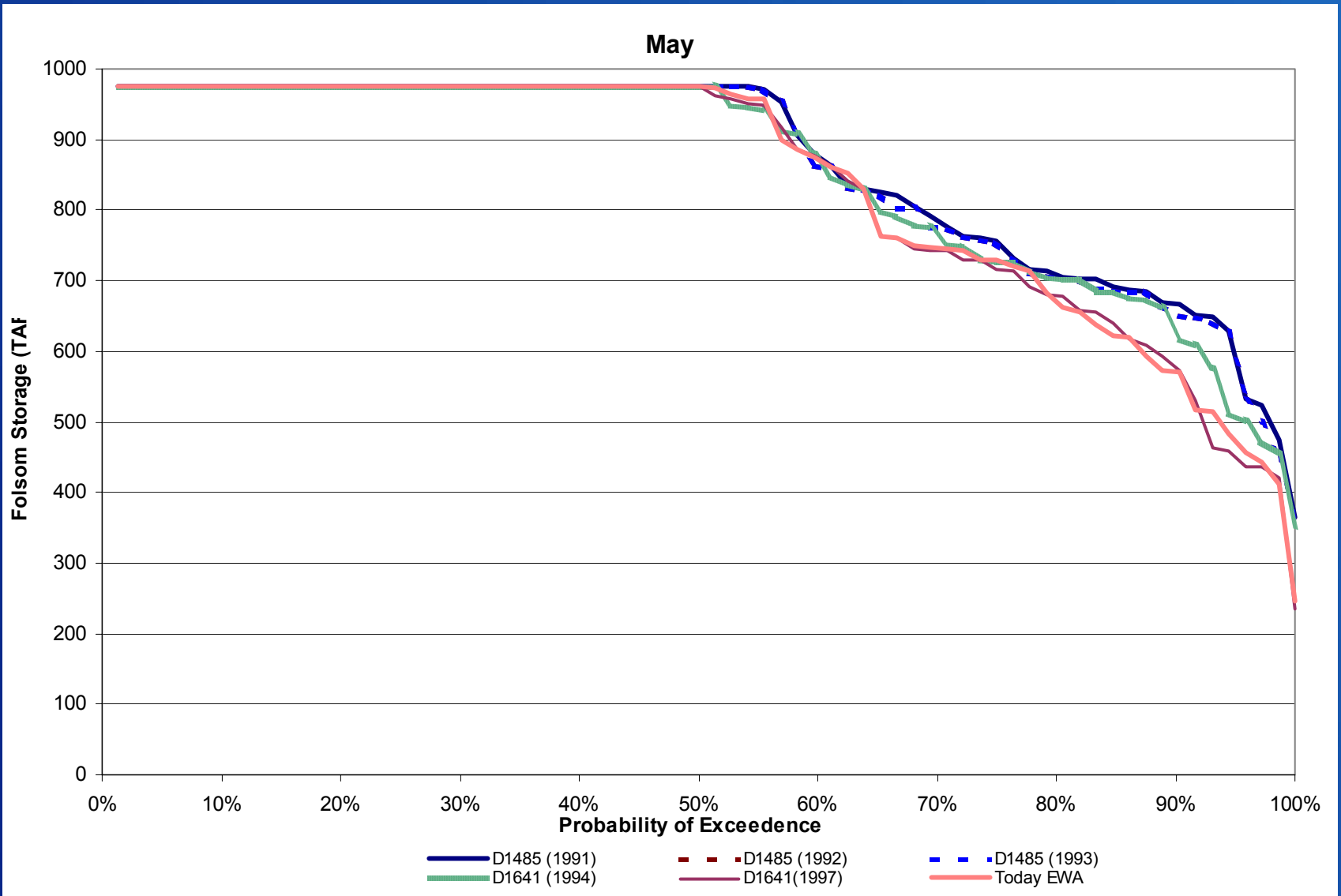


Shasta Storage Chronology 1928-1934

Shasta



Folsom end of May Storage

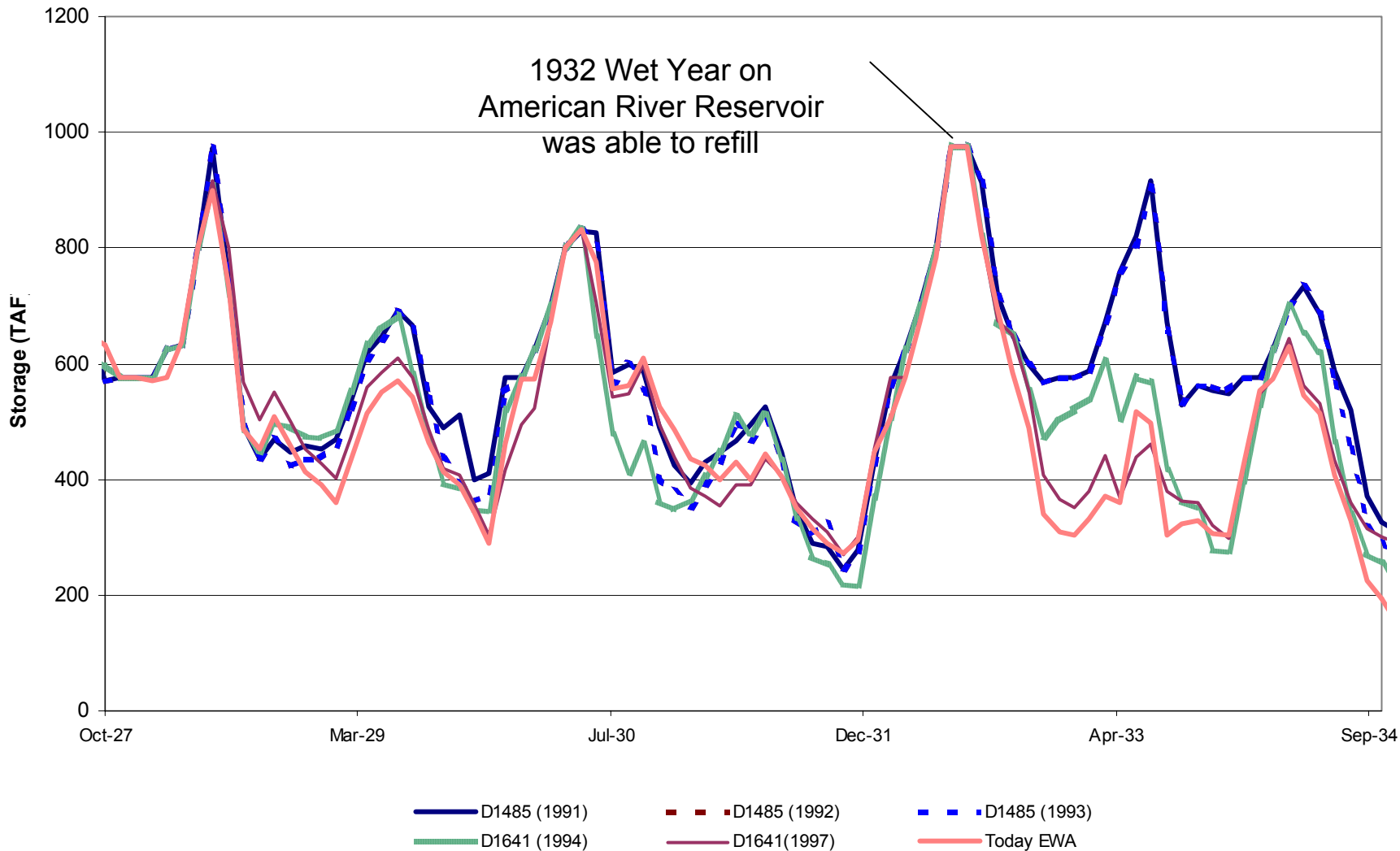


RECLAMATION

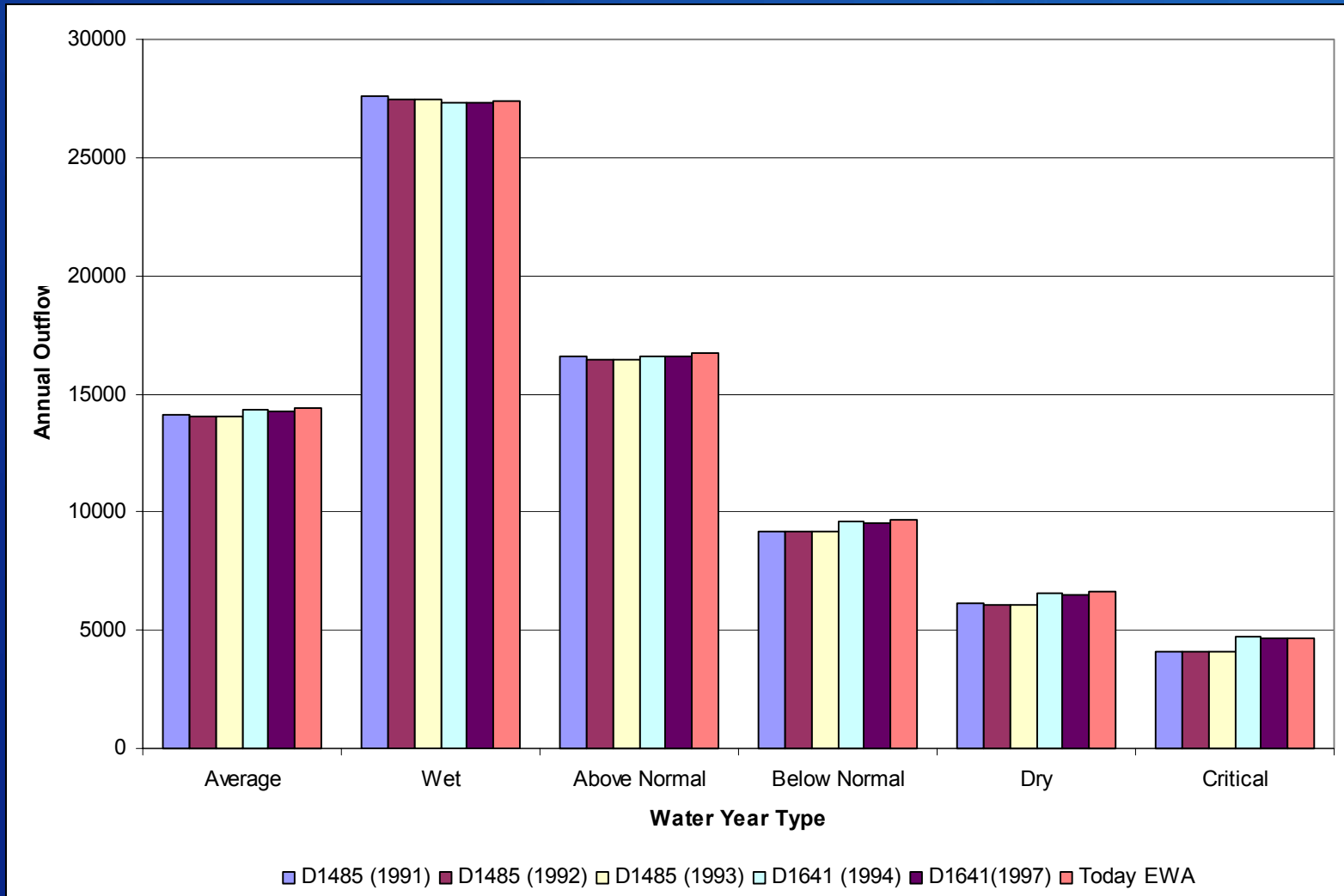
Folsom Storage Chronology 1928-1934

Folsom

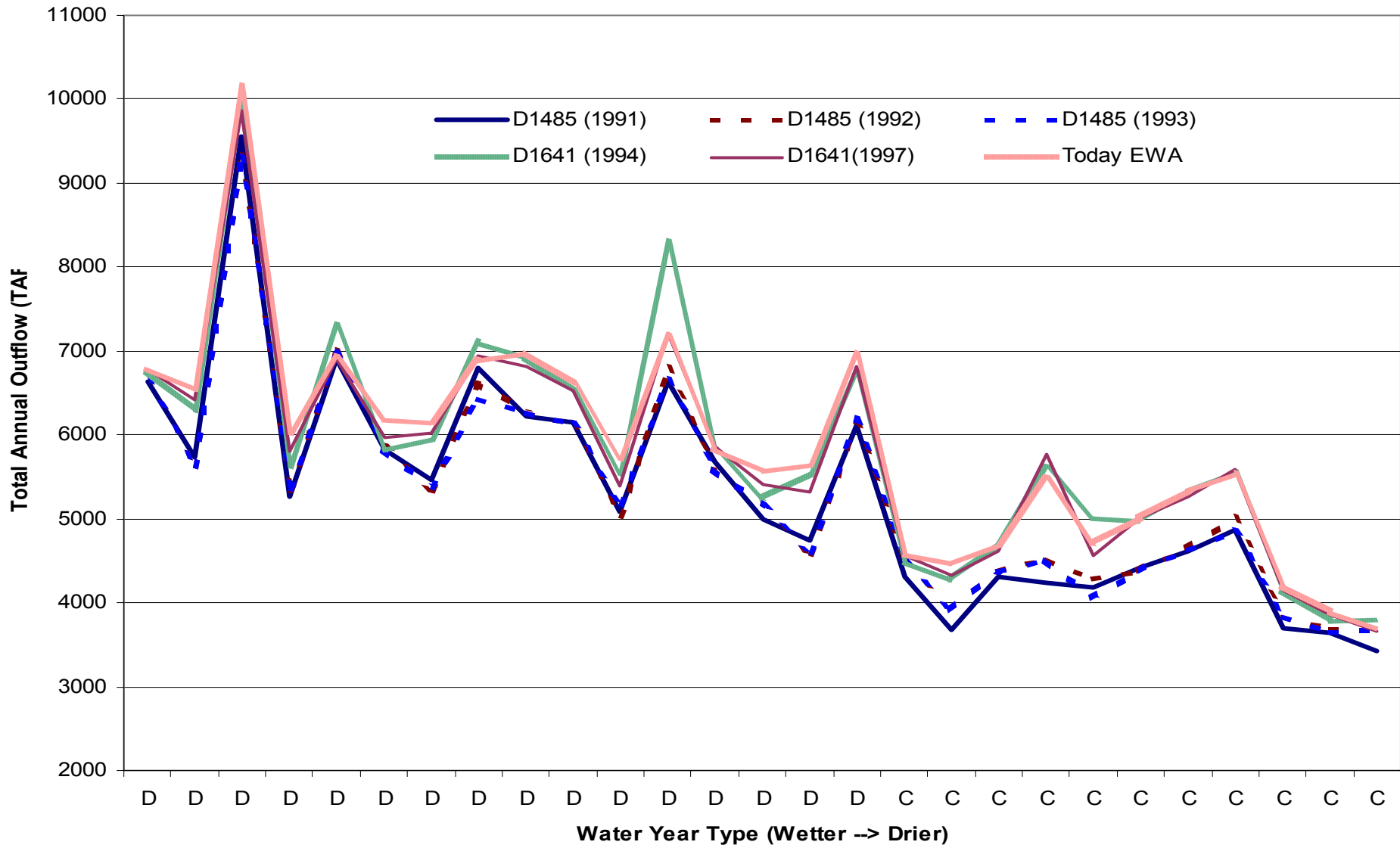
1932 Wet Year on American River Reservoir was able to refill



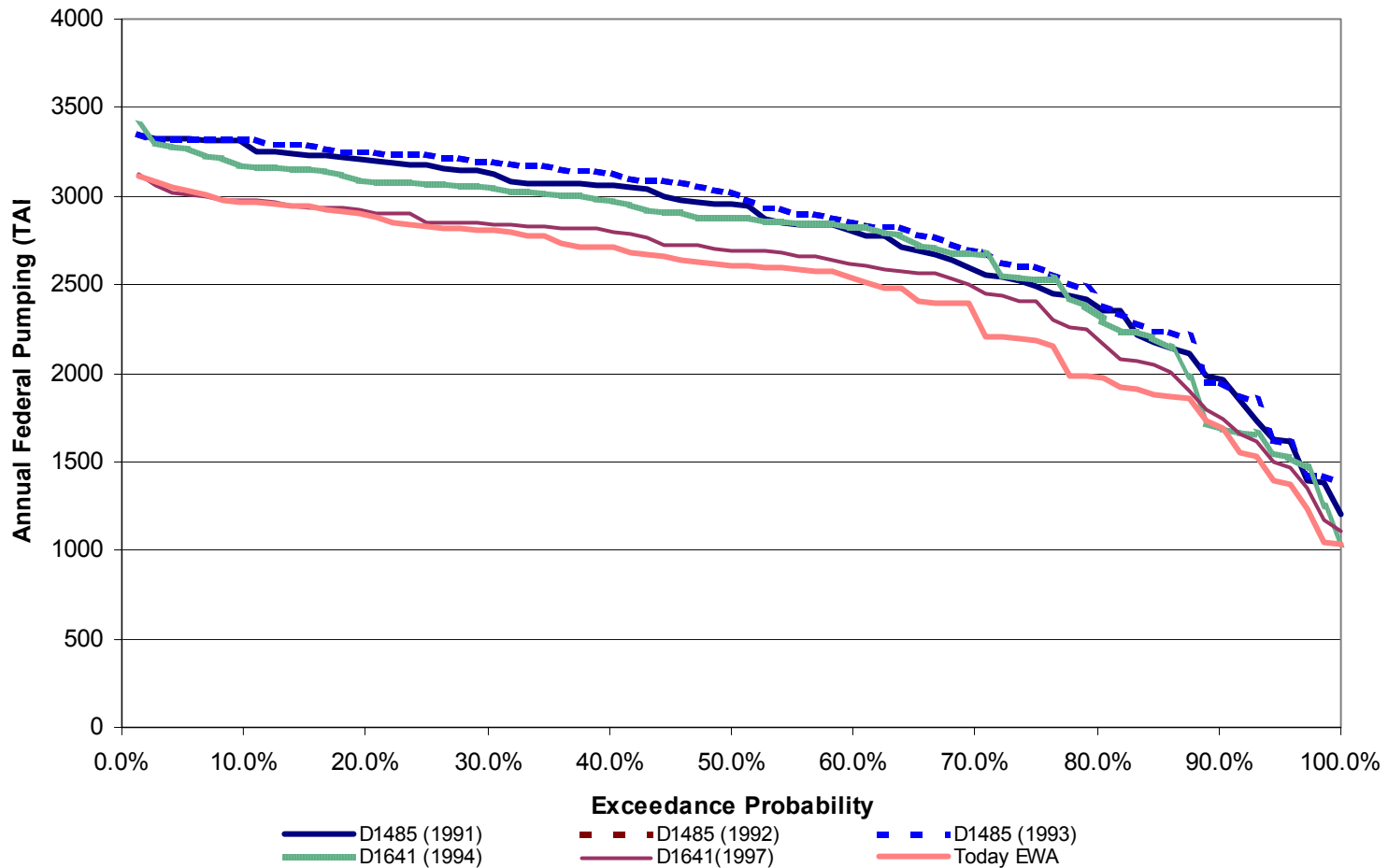
Total Annual Delta Outflow



Total Annual Outflow Dry and Critical Years

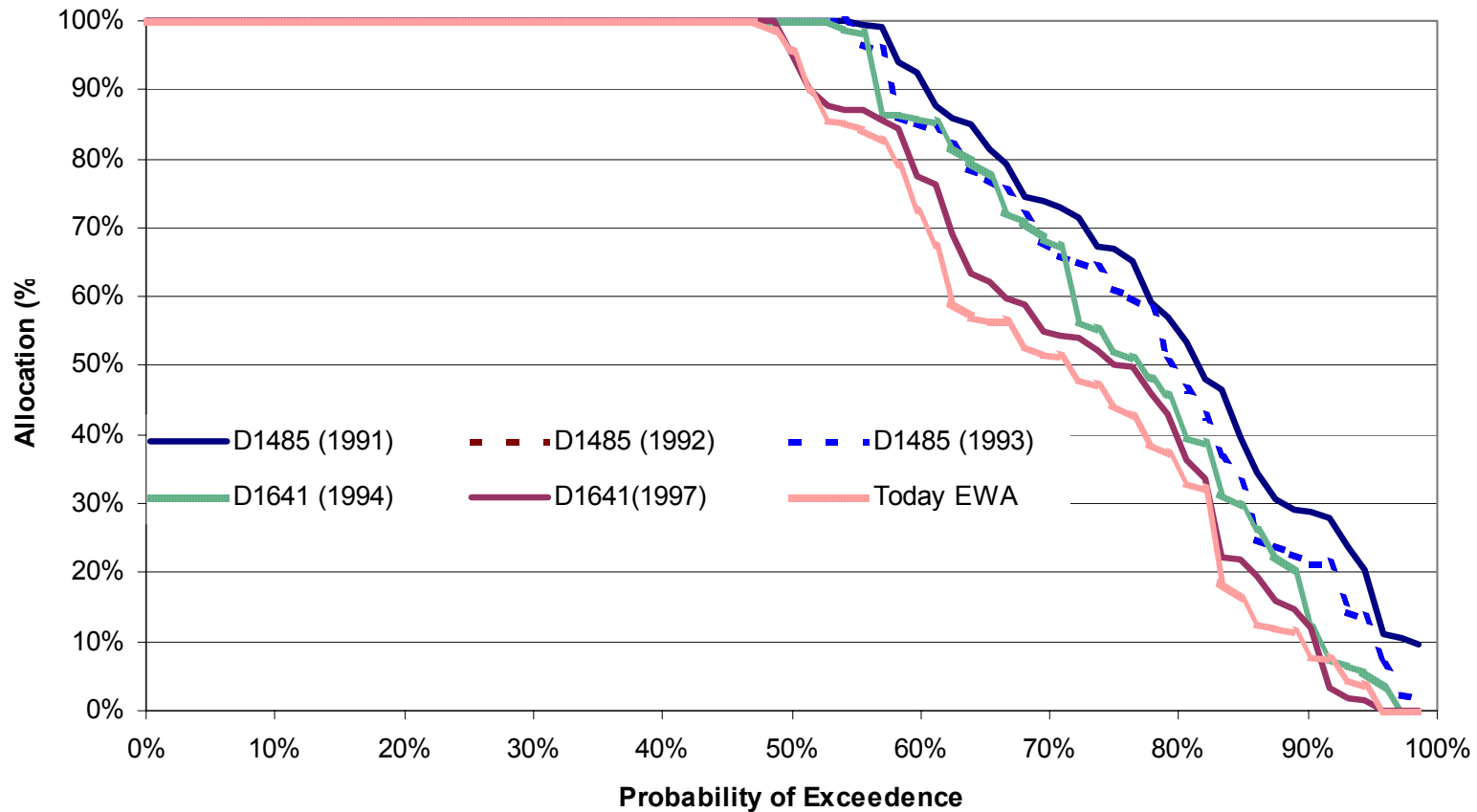


Total Annual Federal Pumping

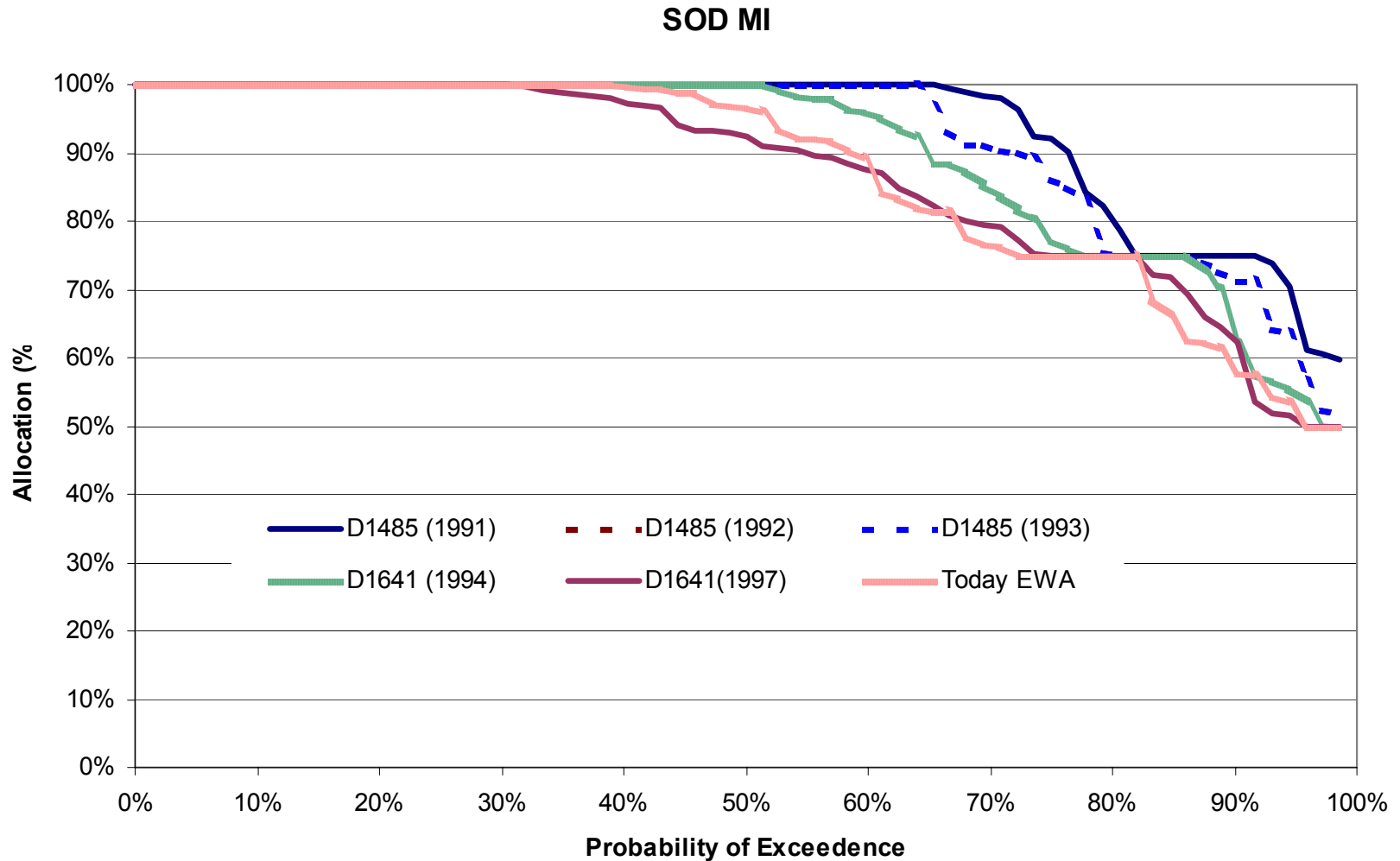


South of the Delta Agriculture Allocation

NOD AG



South of the Delta M&I Delivery



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**

ESA Consultation

- **Section 7(a)(2) consultation with FWS & NOAA Fisheries**
- **Addresses combined major hydrologic operations of the CVP/SWP**
- **Reclamation lead Federal agency**
- **DWR lead State agency**

History of Key Listings

- **Winter-run Chinook Salmon**
 - NOAA Fisheries listed as threatened in 1990, endangered in 1994
- **Delta Smelt**
 - FWS listed as threatened 1993
- **Coho Salmon (in the Trinity River)**
 - NOAA Fisheries listed as threatened in 1997
- **Steelhead**
 - NOAA Fisheries listed as threatened in 1998
- **Spring-run Chinook Salmon**
 - NOAA Fisheries listed as threatened in 1999

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**

Why Update Now?

- Long-term water supply contract renewals
- Long-term opinions on the listed species
- CVP/SWP operations with new projects
- Bring consultations on all the listed species to a common point

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 (cont'd)

- **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 B.O. Oct 22, 2004**

Biological Assessment

- **Description of action**
- **Biology of listed species**
- **Modeling present and future conditions**
- **Effects analyses**
- **Ongoing actions to reduce effects**

Adaptive Management

- **Within the Project Description**
- **CALFED Ops Groups**
- **Fisheries Technical Teams**
- **Water Operations Management Team**
- **Process to use Adaptive Management flexibility**

Description of Action

- **Formal consultation actions**
 - Results in Biological Opinions
- **Early consultation actions**
 - Results in Preliminary Biological Opinions
 - Requires consistency between BO and NEPA/CEQA documentation

Formal Consultation Actions

- **CVP/SWP operations**
- **Trinity River flows**
- **Freeport diversions**
- **DMC/CA Intertie**

CVP/SWP Operations

- **Water right permits and existing capabilities**
- **CVPIA Section 3406 (b)(2) and CALFED EWA**
- **CVP/SWP coordinated operations**
- **Water transfers**
- **Joint Point of Diversion**

Why do Early Consultation?

- **Makes efficient use of agency staff**
- **Provides a “heads up” of potential issues**
- **These actions will be revisited for consistency after draft NEPA/CEQA completed**

Early Consultation Actions

- **Operational components of South Delta Improvement Project (SDIP)**
- **CVP/SWP operational integration**
- **Long-Term EWA**

OCAP BA Studies

Study	Name	Level of Development	Trinity Flows	SDIP	CVP/SWP Integration	Freeport	Intertie
1	D1641 with b(2)	(2001 LOD)	340,000 AF/year				
2	Today b(2)	Same as Above	368,600-453,000 AF/year				
3	Today EWA	Same as Above	Same as Above				
4	Future SDIP	(2020 LOD)	368,600-815,000 AF/yr	X	X	X	X
4a	Future b(2)	Same as Above	Same as Above			X	X
5	Future EWA	Same as Above	Same as Above	X	X	X	X
5a	Future EWA 6680 cfs	Same as Above	Same as Above			X	X

OCAP BA Studies

Study	Name	Level of Development	Trinity Flows	SDIP	CVP/SWP Integration	Freeport	Intertie
1	D1641 with b(2)	(2001 LOD)	340,000 AF/year				
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4a	Future b(2)	Same as Above	Same as Above			X	X
5	Future EWA	Same as Above	Same as Above	X	X	X	X
5a	Future EWA 6680 cfs	Same as Above	Same as Above			X	X

Ongoing Actions

- **CVPIA**
- **CALFED**
- **Four Pumps Agreement**

Biological Assessment Outline

- 1. Authorities, Water Rights, & other obligations**
- 2. Project Description**
- 3. Steelhead Biology and Baseline**
- 4. Factors that Affect Steelhead**
- 5. Chinook Salmon Biology and Baseline**
- 6. Factors that Affect Chinook Salmon**
- 7. Delta Smelt Biology and Factors that affect Delta Smelt**

- 8. Hydrologic and Temperature Modeling Assumptions**
- 9. Upstream Effects on the species - Formal**
- 10. Delta Effects on the species – Formal**
- 11. Upstream Effects – Early Consultation**
- 12. Delta Effects – Early Consultation**
- 13. Effects Summary and Determination**
- 14. Essential Fish Habitat Assessment**
- 15. Ongoing Actions to Address Project Effects**
- 16. References**