

# 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

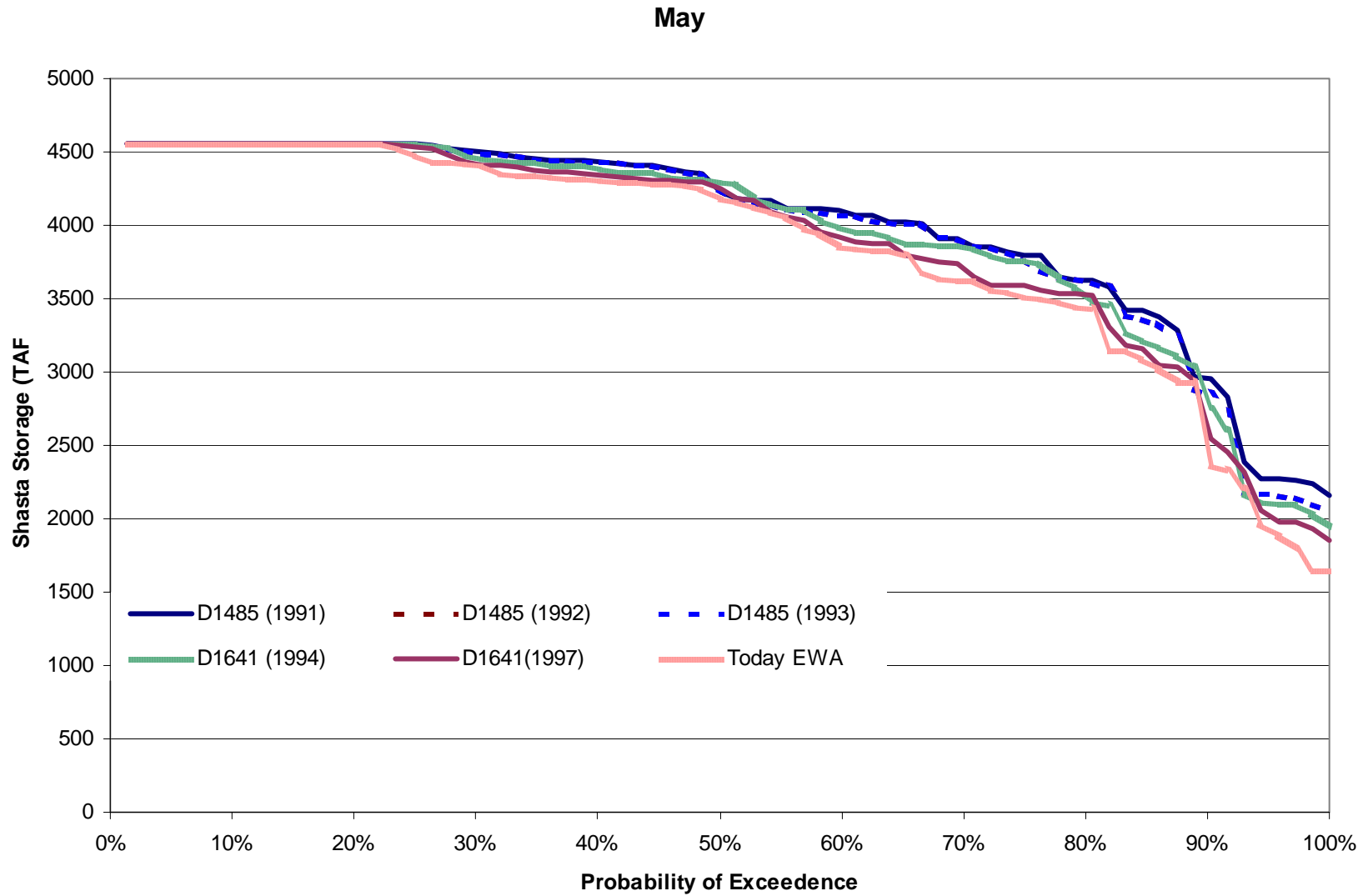
# OCAP Outline

- **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)

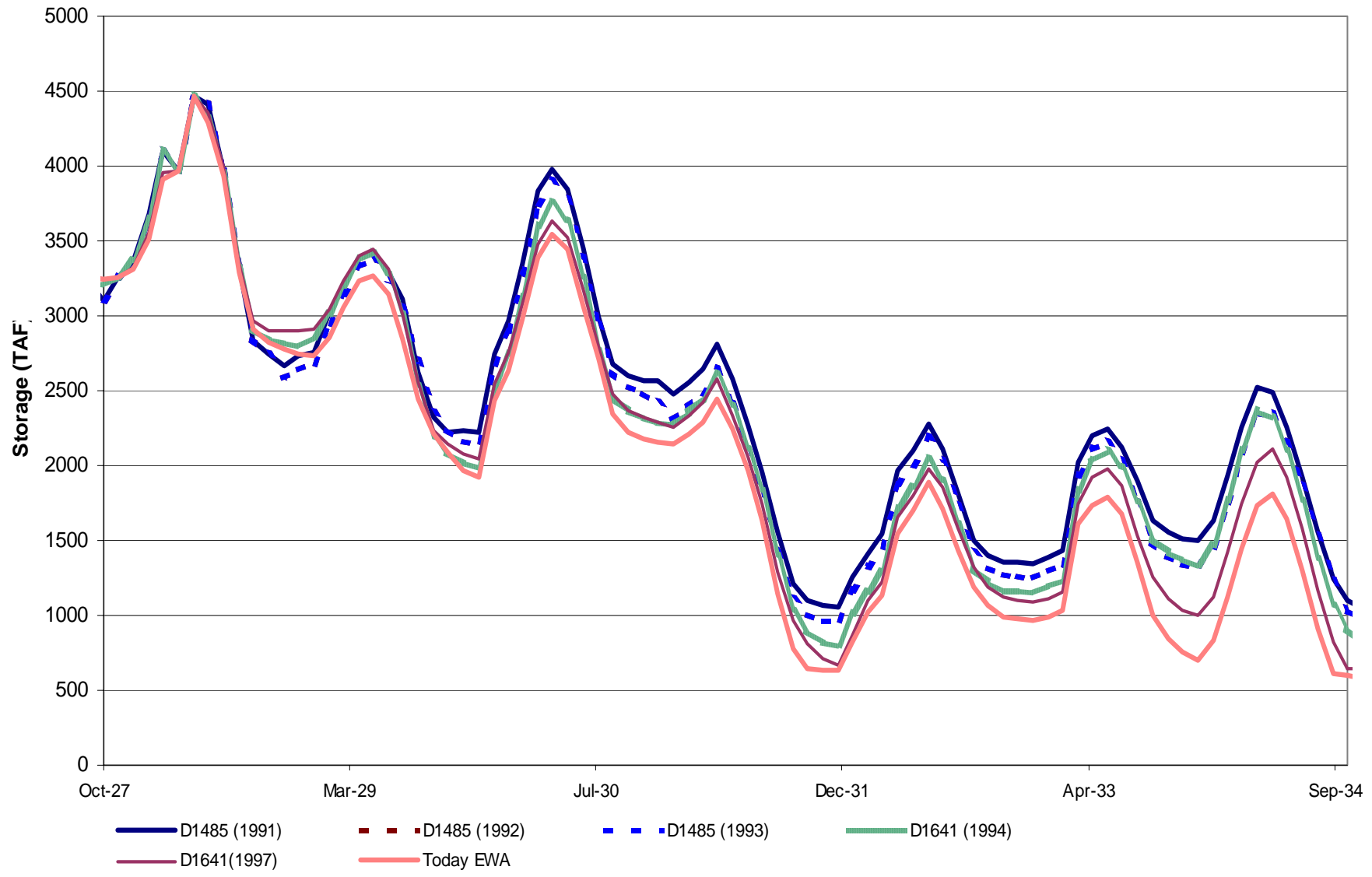
	Article 21	Refuge Deliveries	Trinity Required Flows	D1485	Winter-Run B.O.	95 WQCP D1641	CVPIA 3406 (b)(2)	EWA
Study A D1485 (1991)		Historical Level 2	340,000 af/yr	X				
Study B D1485 (1992)		Firm Level 2	Same as above	X				
Study C D1485 (1993)		Same as above	Same as above	X	X			
Study D WQCP (1994)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



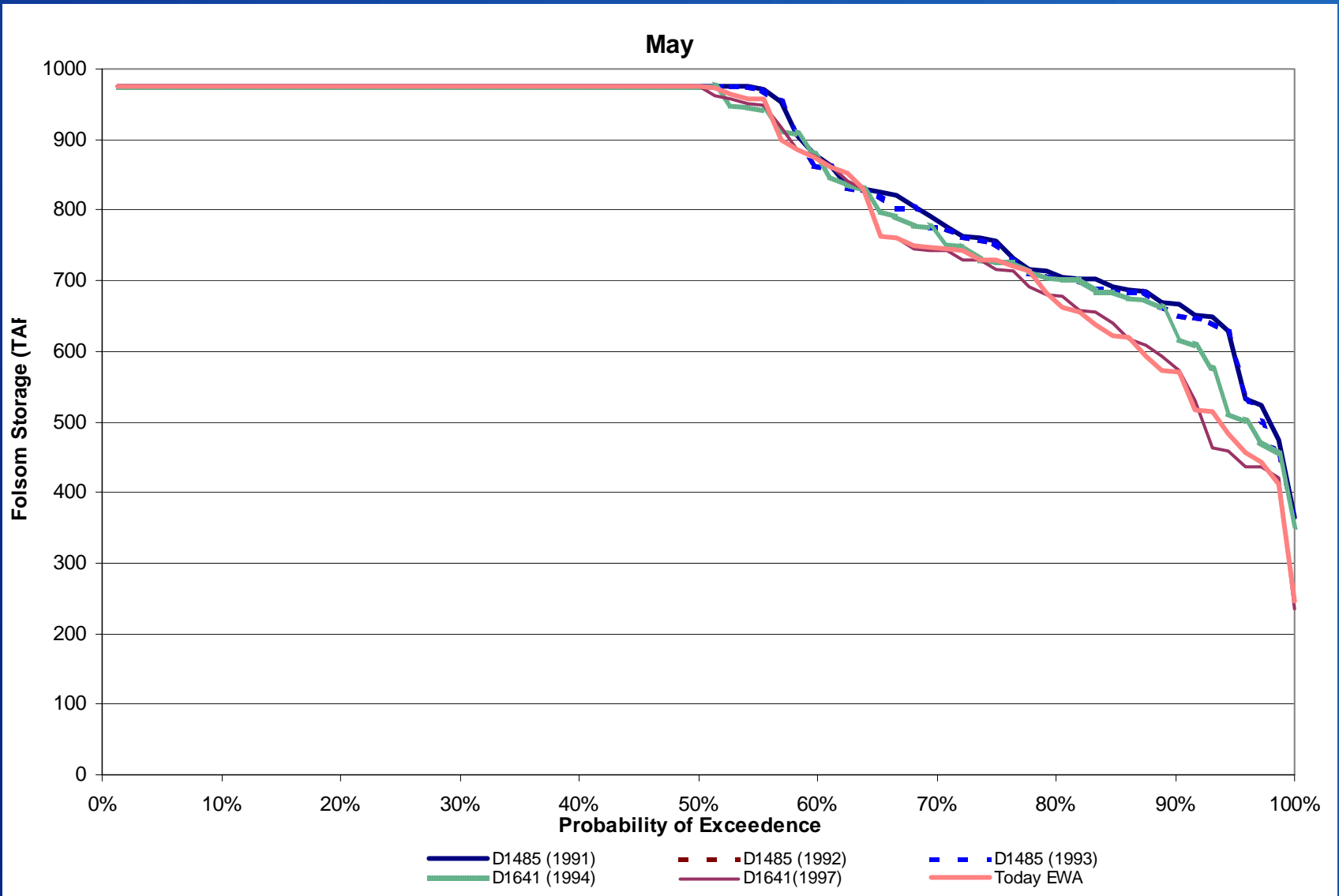
# Shasta Storage Chronology 1928-1934

Shasta





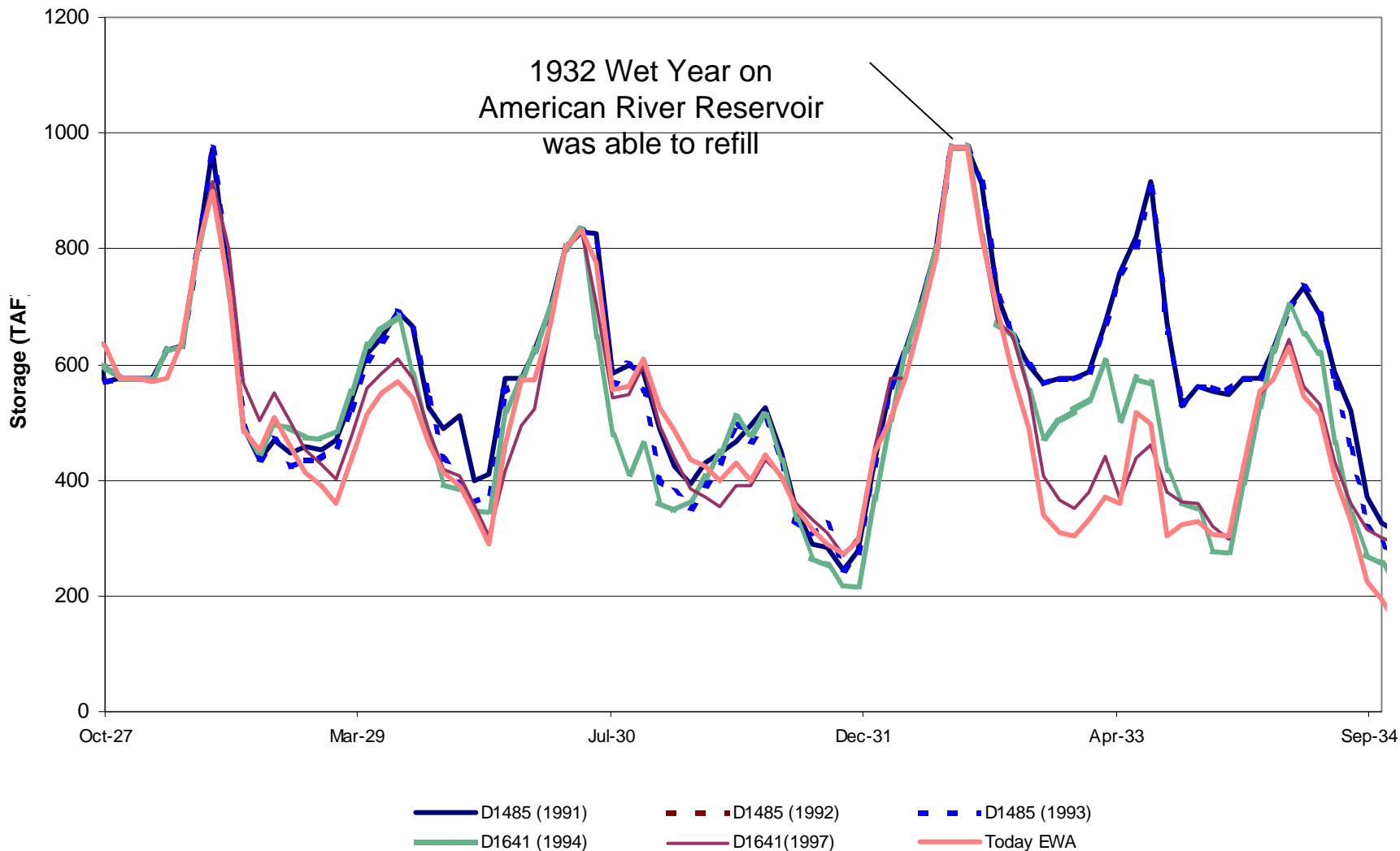
# Folsom end of May Storage



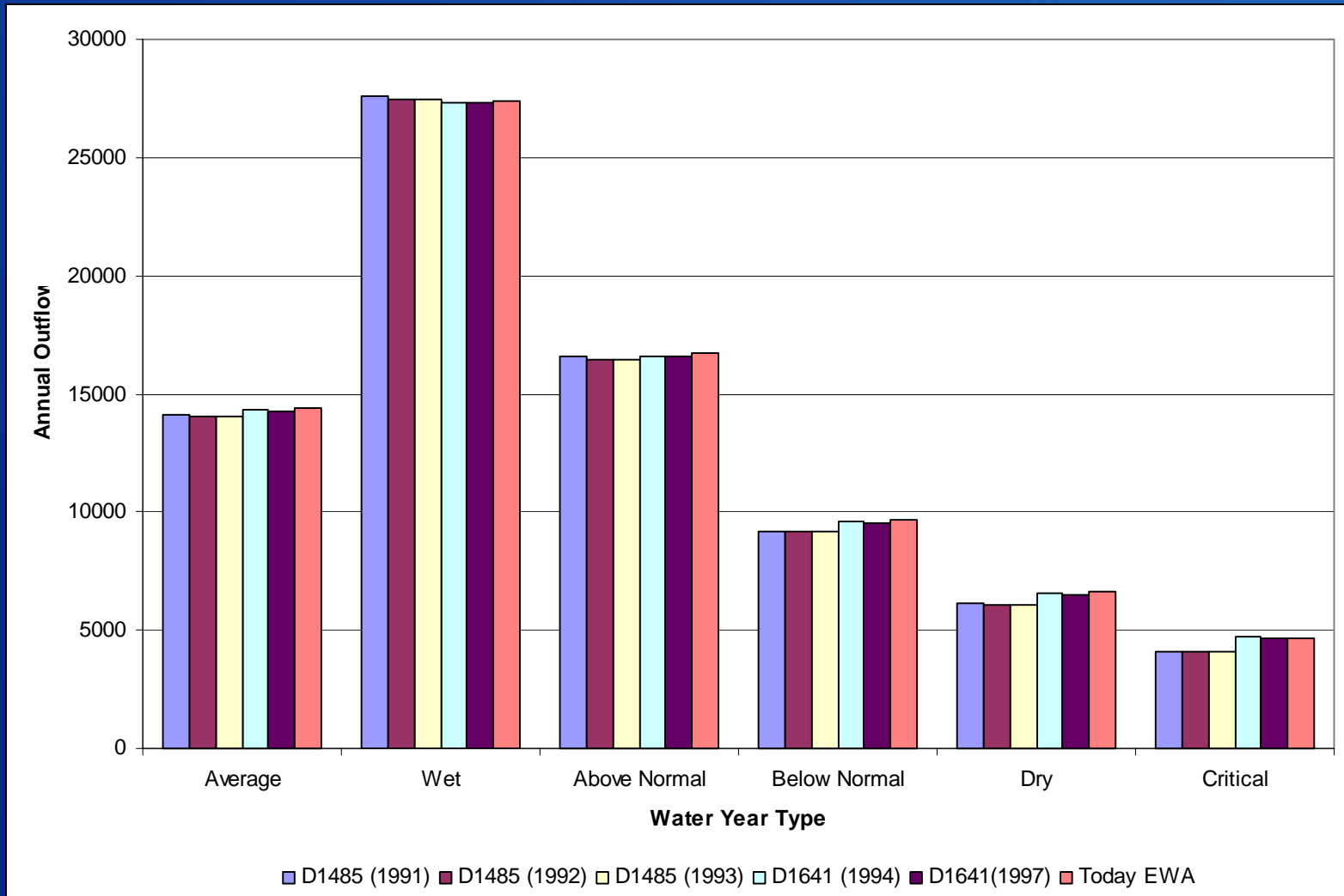
# Folsom Storage Chronology 1928-1934

## Folsom

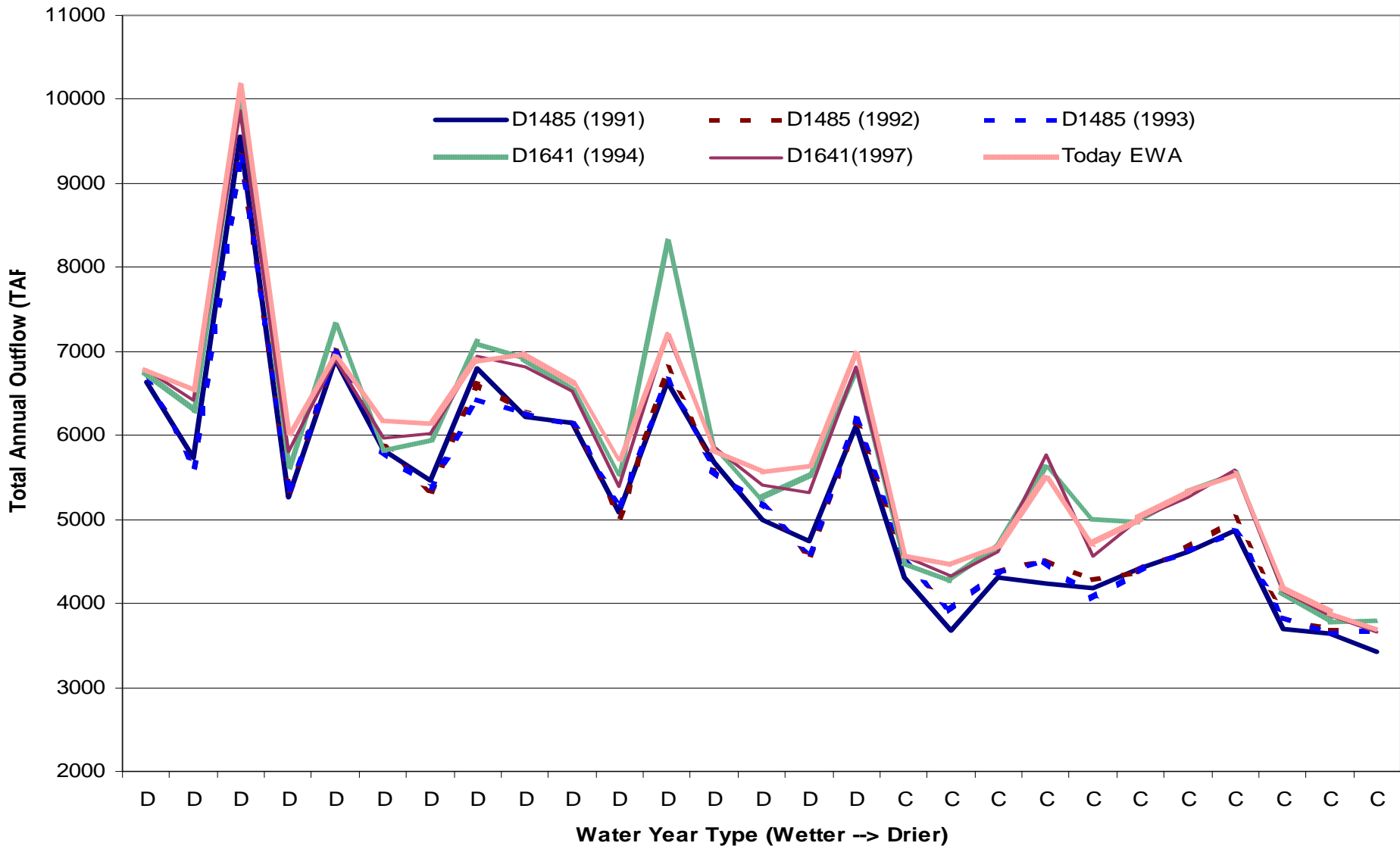
1932 Wet Year on  
American River Reservoir  
was able to refill



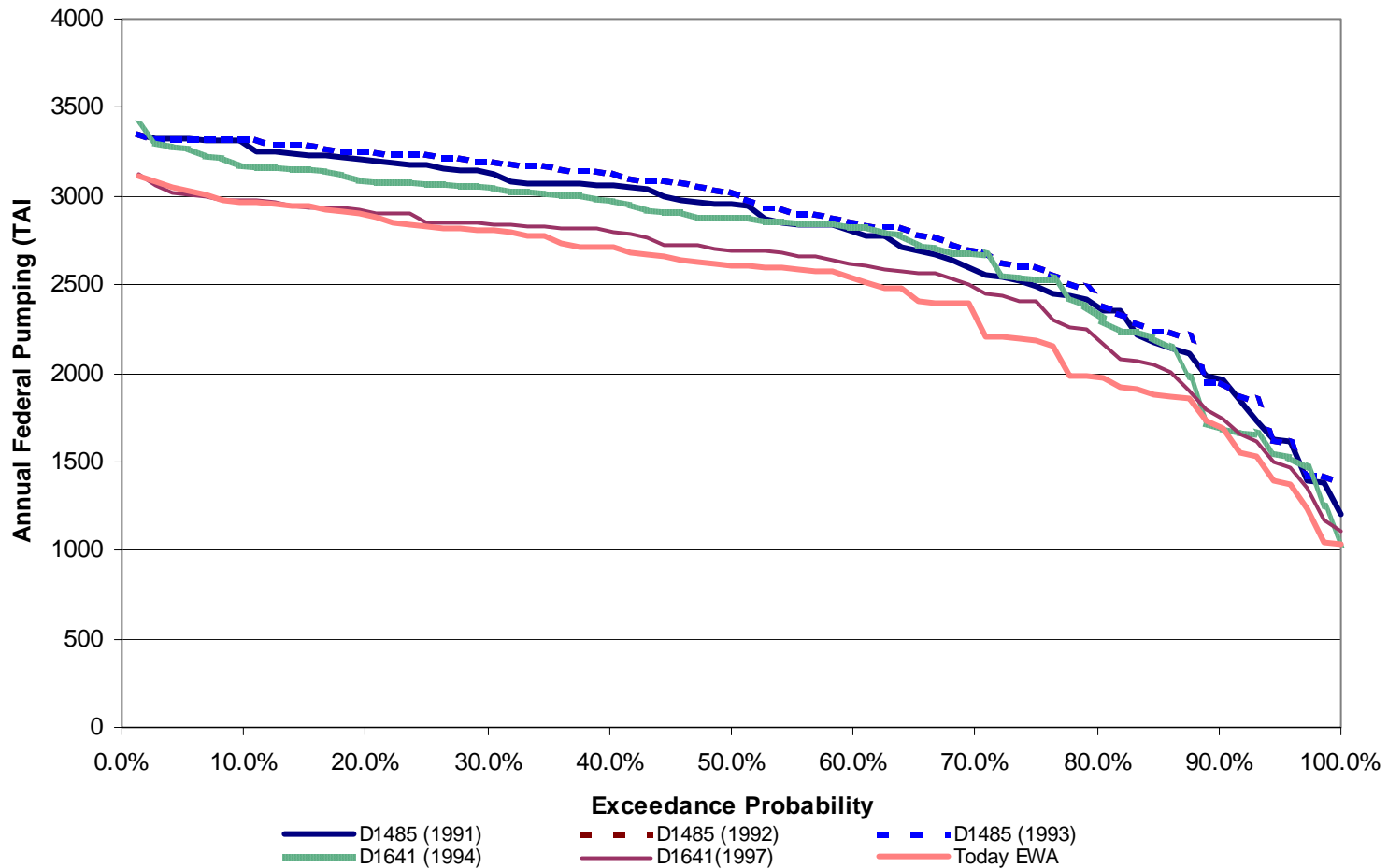
# Total Annual Delta Outflow



# Total Annual Outflow Dry and Critical Years

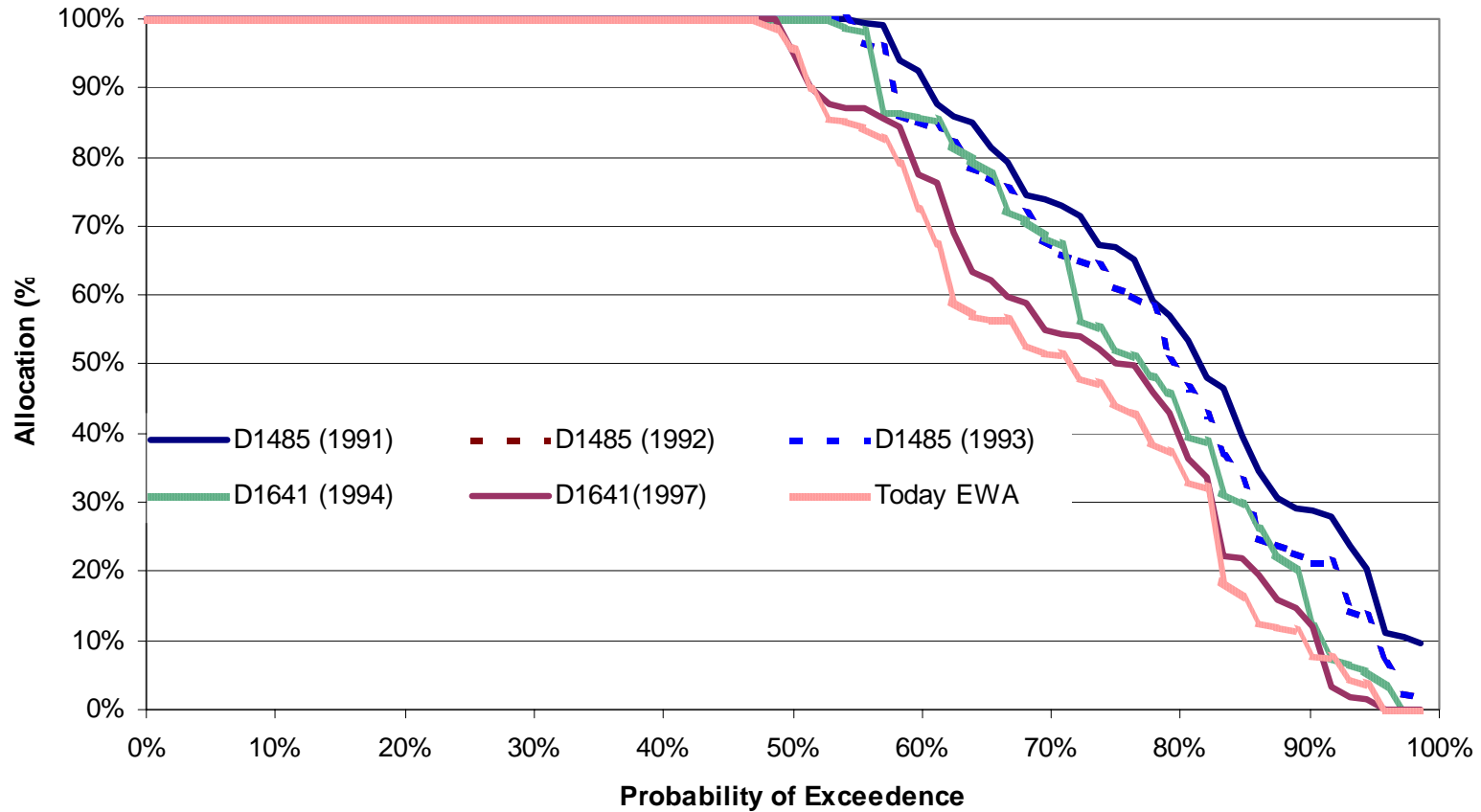


# Total Annual Federal Pumping



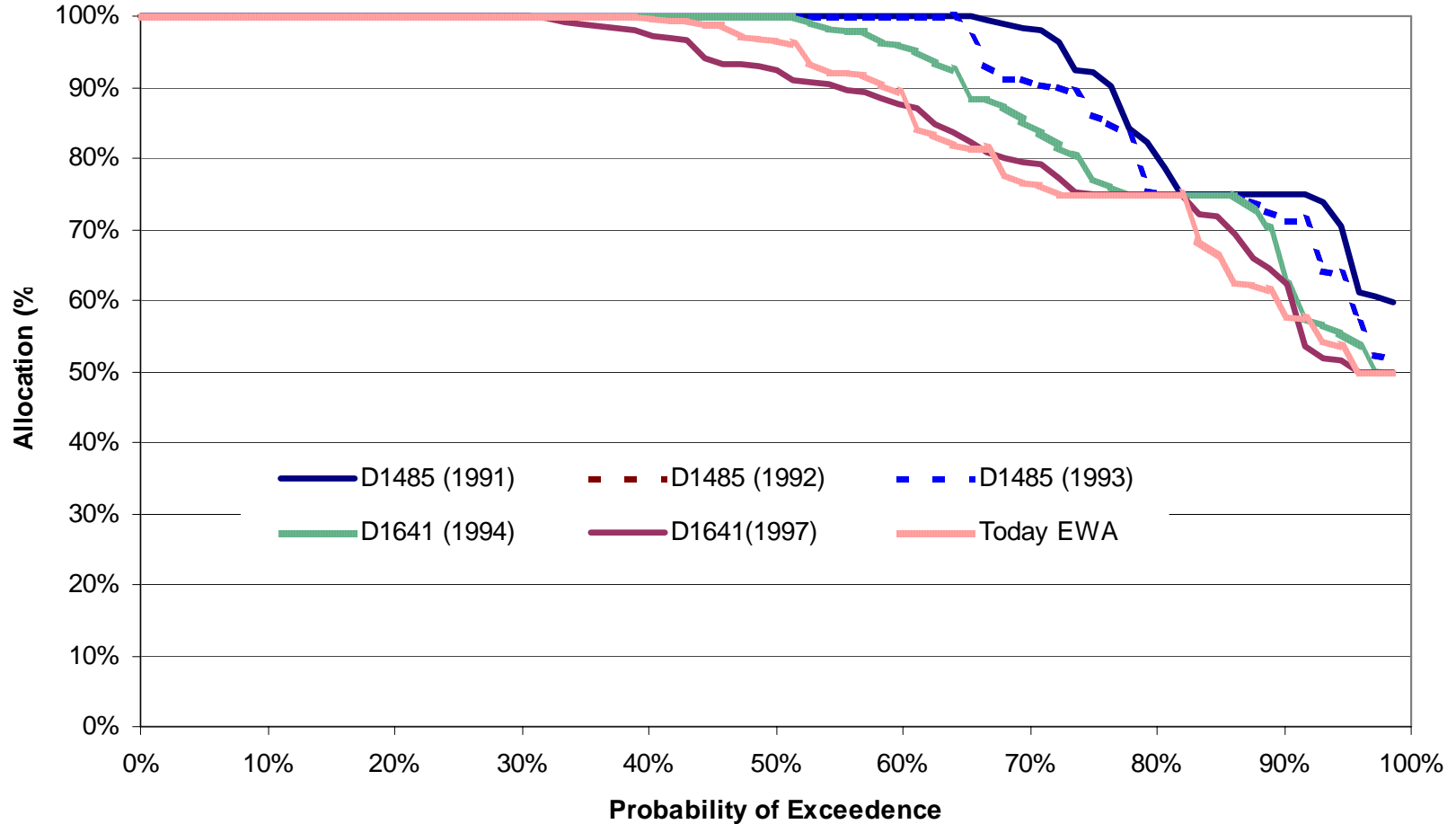
# South of the Delta Agriculture Allocation

NOD AG



# South of the Delta M&I Delivery

SOD MI



# 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

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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**