



Delta Conservancy Board Meeting
July 7, 2010
Bob Shaffer, CVJV Coordinator

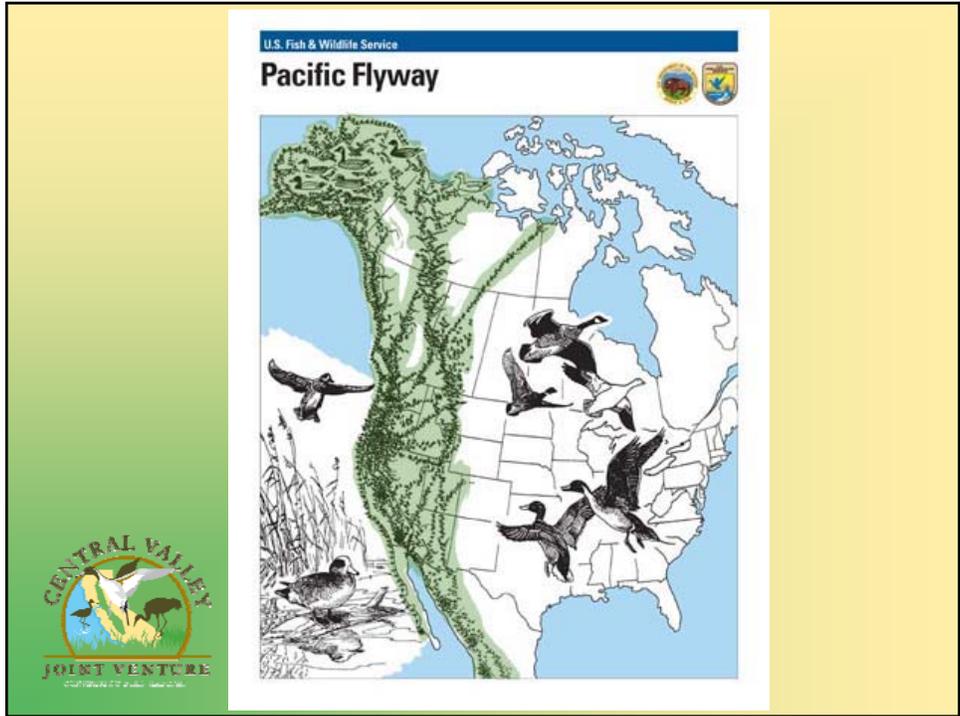
Waterfowl Migration Flyways



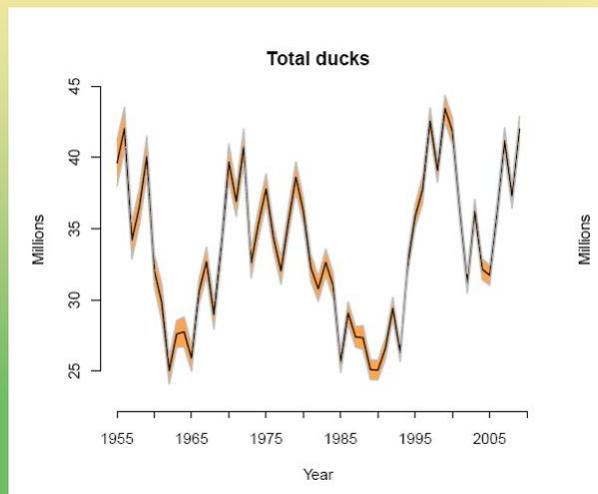
Waterfowl

- Central Flyway
- Mississippi Flyway
- Pacific Flyway
- Atlantic Flyway

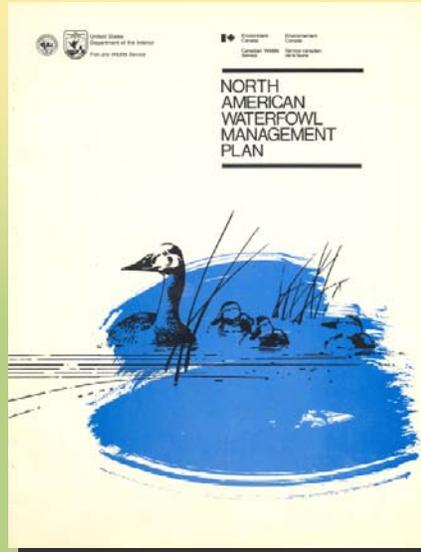




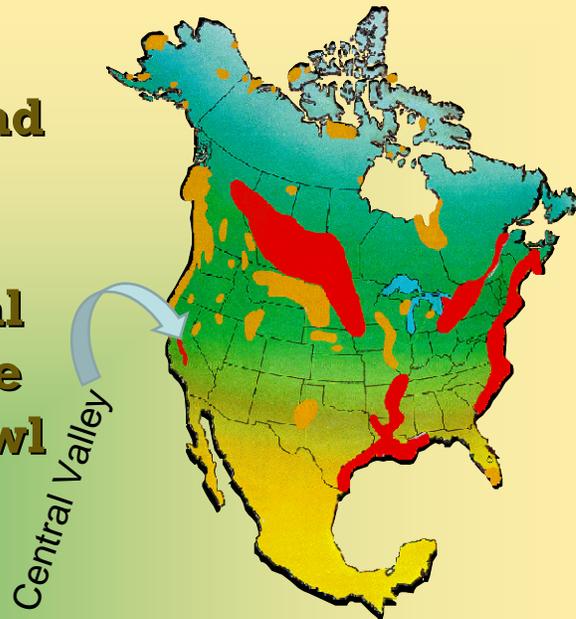
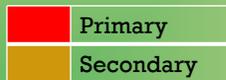
Continental Waterfowl Population Trends



Original NAWMP 1986



NAWMP Primary and Secondary Areas of Continental Importance to Waterfowl



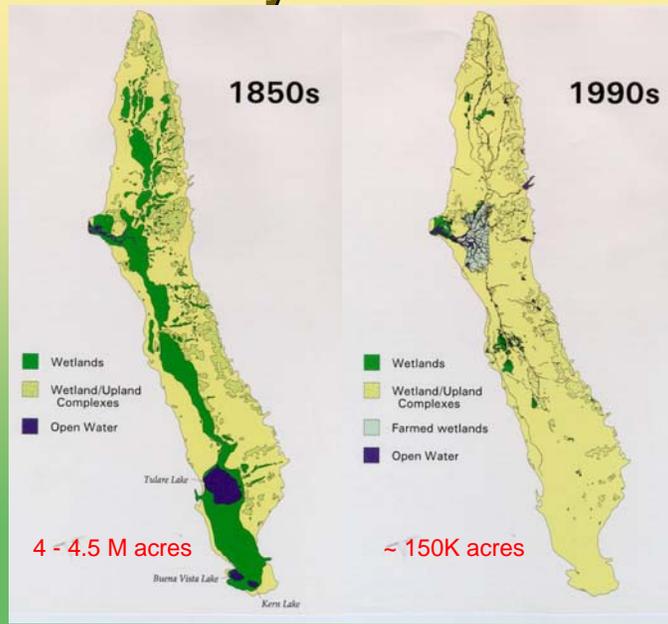
Joint Ventures were formed:

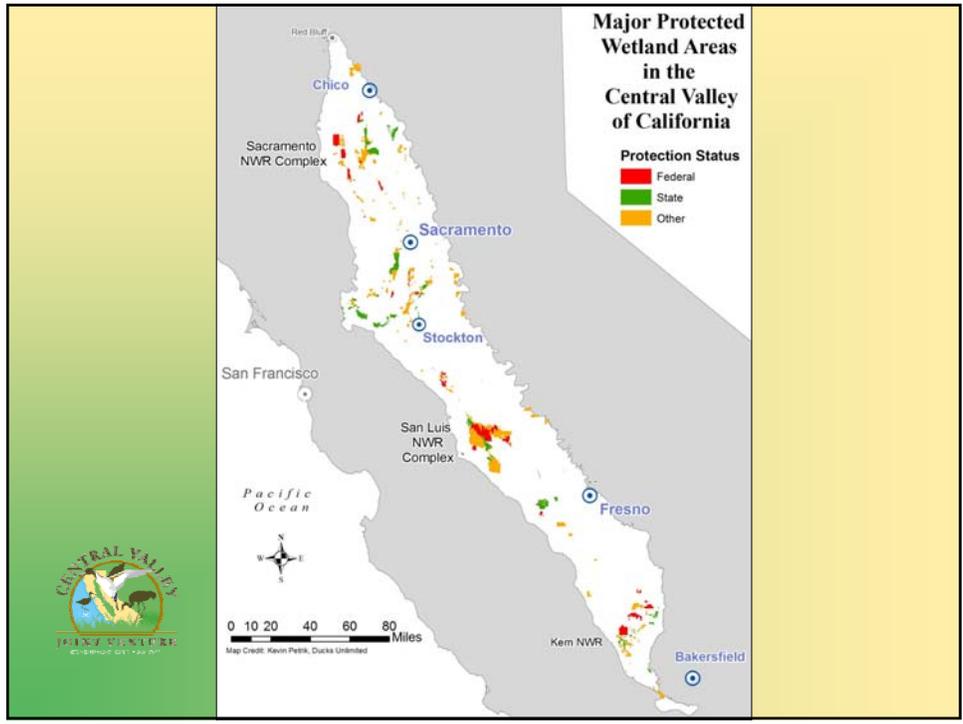
- Regionally-based non-regulatory partnerships
- Science-based implementation plans
- Collaborating to conserve habitat for priority birds

North American Waterfowl
Management Plan



Central Valley Wetlands Decline





Central Valley Wetlands Are Intensely Managed

The image contains three photographs illustrating wetland management activities:

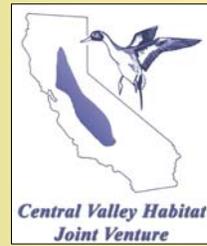
- A person in a white shirt and dark pants stands in a field, possibly monitoring or working on a structure.
- Two tractors are visible in a field, likely engaged in land management or construction work.
- An excavator is shown installing a large pipe into the ground, a common activity in wetland restoration or infrastructure projects.



Central Valley Habitat Joint Venture Hatched 1988

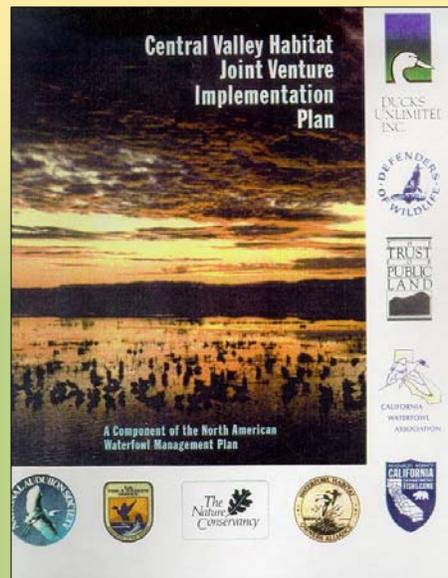
Management Board

- California Waterfowl Association
- Defenders of Wildlife
- Ducks Unlimited
- National Audubon Society
- The Nature Conservancy
- Trust for Public Land
- Waterfowl Habitat Owners Alliance
- California Department of Fish & Game
- U.S. Fish and Wildlife Service



Central Valley Habitat Joint Venture

1990 Implementation Plan



Nine Planning Basins



1990 Plan Objectives

Wetlands:

Focus: wintering waterfowl

- Protect 80,000 acres
- Restore 120,000 acres
- Enhance all existing

Agricultural land:

- Enhance 443,000 acres

Wetland Water Supplies:

- Secure 402,450 ac/ft (level 4) water for existing NWR's and WA's and Grasslands

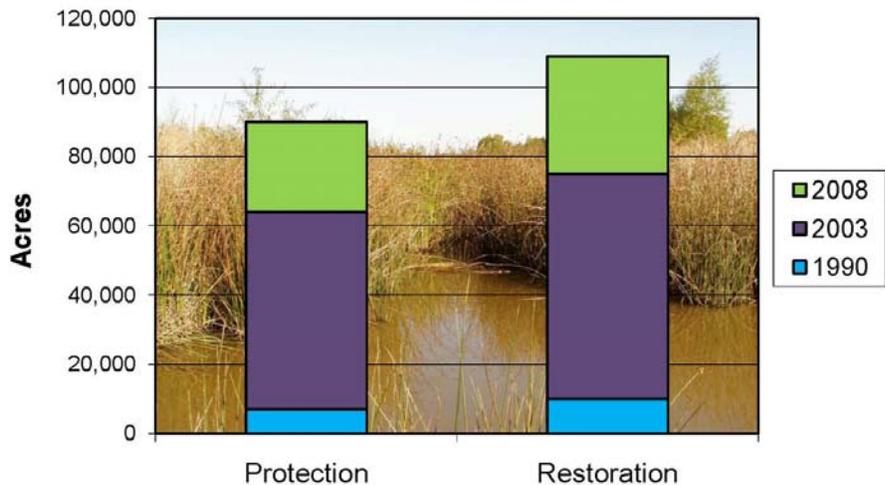


The CVJV Toolbox

- CA Inland Wetlands Program (WCB)
- Comprehensive Wetland Habitat Program (DFG)
- Presley Program aka CA Waterfowl Habitat Program (DFG)
- State and Federal Easement Programs (FWS, DFG)
- Farm Bill Programs – WRP, CREP, WHIP (NRCS/FSA)
- Partners for Fish and Wildlife Program (FWS)
- Law Resources Group
- NAWCA grants
- Pintail, Mallard and Wood Duck Programs (CWA)
- Central Valley Conservation Program (BOR)
- CVPIA Programs (BOR/FWS)
- Landowner Incentive Program (DFG, DU, FWS)
- Various Private Foundations



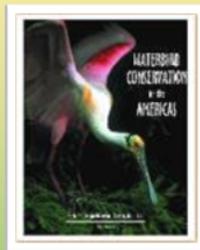
CVJV Accomplishments 1986-2008



NABCI 1999



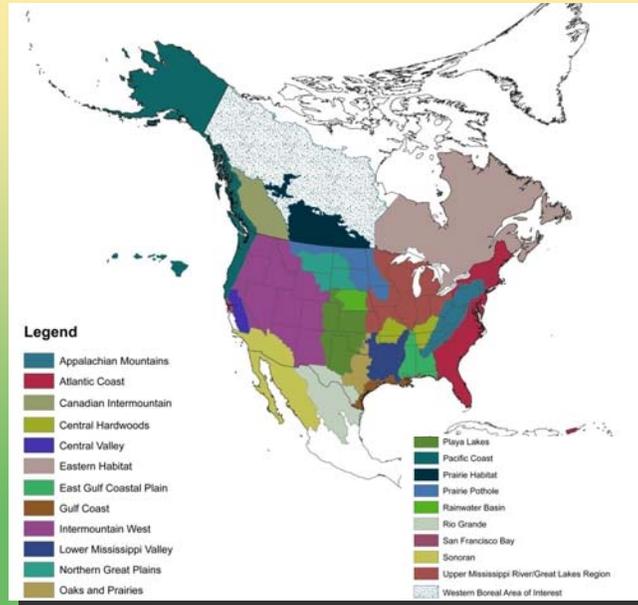
2000 North American Bird Conservation Initiative



www.nabci-us.org



22 North American Joint Ventures



Central Valley Joint Venture Management Board

2010

22 Management Board Members:

- 9 mgt board partners
- 11 ex-officio members
- 1 corporation





NGO Partners

- Audubon California
- **CA Association of Resource Conservation Districts**
- California Waterfowl Association
- Defenders of Wildlife
- Ducks Unlimited, Inc.
- **PRBO Conservation Science**
- **River Partners**
- The Nature Conservancy
- The Trust for Public Land



State/Federal/Corporate Ex-Officio Partners

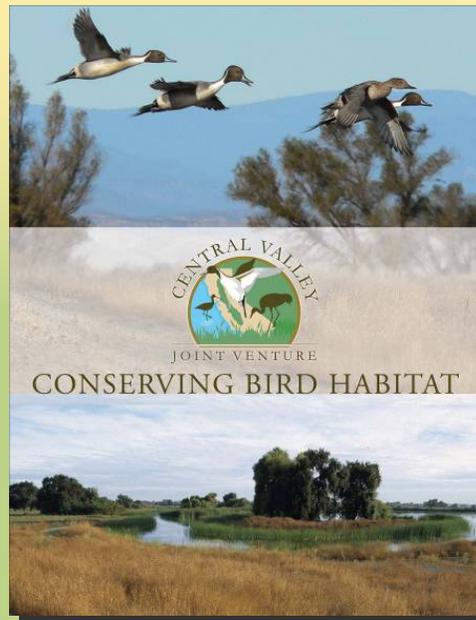
- **CA Dept. of Water Resources**
- CA Dept. of Fish and Game
- **CA Natural Resources Agency**
- **CA State Parks**
- **CA Wildlife Conservation Board**
- **PG&E Corporation**
- **US Natural Resources Conservation Service**
- **US Army Corps of Engineers**
- **US Bureau of Land Management**
- **US Bureau of Reclamation**
- **US Environmental Protection Agency**
- **US Fish and Wildlife Service**
- **US Geological Survey**



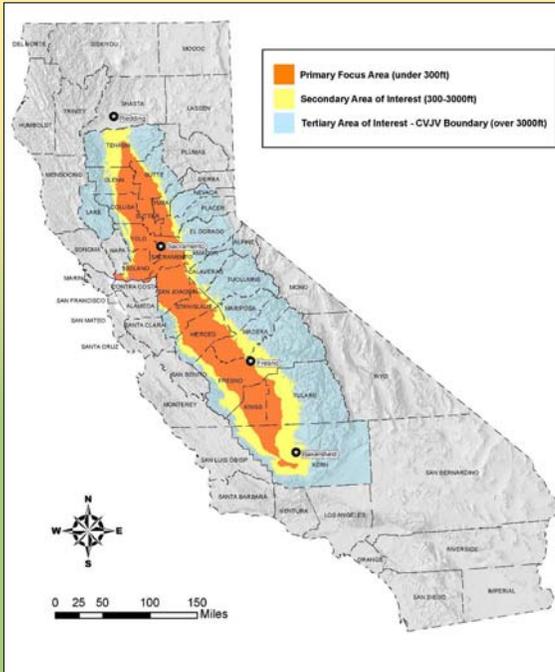
CVJV Mission

To work collaboratively through diverse partnerships to protect, restore, and enhance wetlands and associated habitats for waterfowl, shorebirds, waterbirds, and riparian songbirds, in accordance with conservation actions identified in the 2006 Implementation Plan.

2006 CVJV Implementation Plan



CVJV Area of Influence



Planning Basins



6 Major Bird Groups Addressed in the 2006 Plan

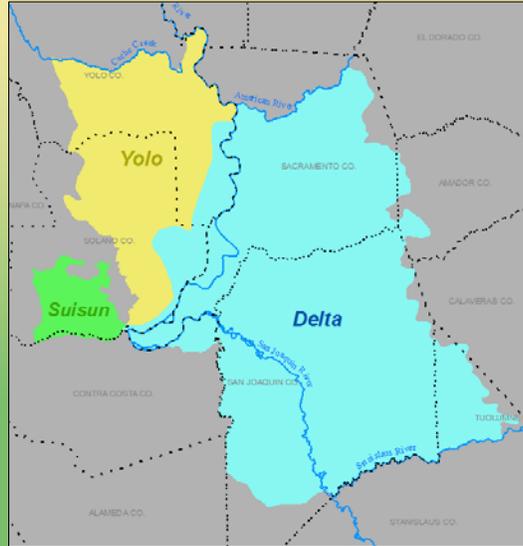
- Wintering and Breeding Waterfowl
- Wintering and Breeding Shorebirds
- Waterbirds
- Riparian Songbirds



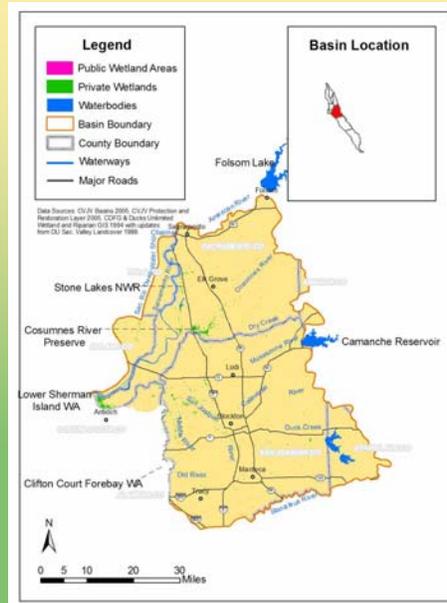
Planning Approach – Habitat Modeling for Bird Groups

- **Energetic Models**
Food based:
 - Wintering waterfowl and shorebirds
- **Conceptual Models**
Limiting factors:
 - Breeding waterfowl and shorebirds
 - Riparian songbirds
 - Waterbirds

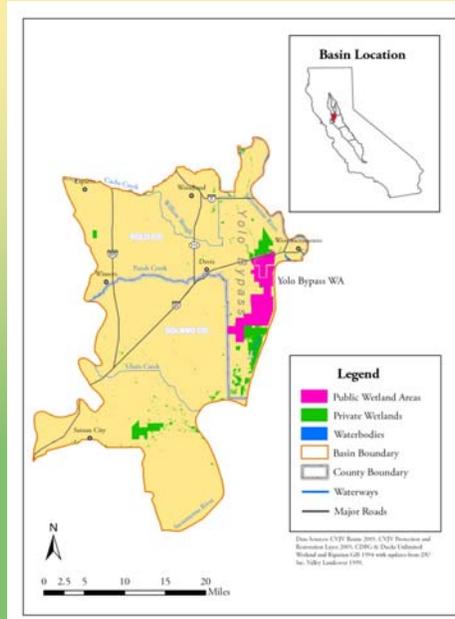
Yolo, Delta, and Suisun Planning Basins



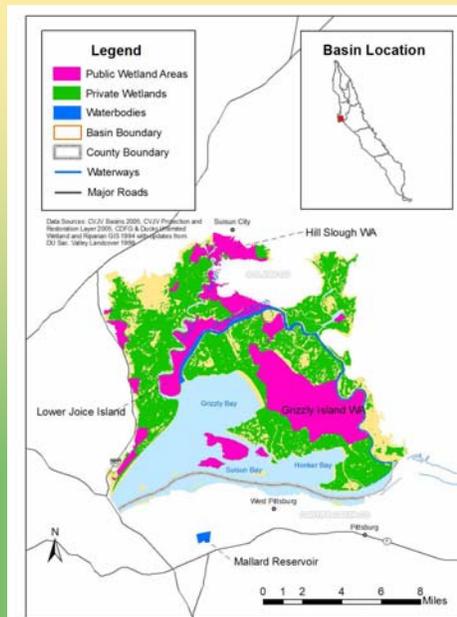
Delta Basin



Yolo Basin



Suisun Marsh





“Agricultural Constraint”

Basin Goal: At least
50% Wetlands

Ag Constraint Example: Delta Basin

(for Wintering Ducks at Population Goals)

- Amount of seasonal wetland habitat required to meet 50% of Duck energy needs:
25,350 acres
- Current seasonal wetlands:
6,350 acres
- Wetland restoration goal:
19,000 acres

Source: CVJV 2006 Plan

Delta Basin (Wintering Ducks at Population Goals)

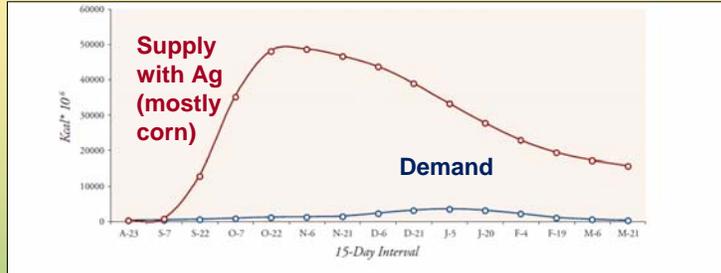


Figure 4-49. Population energy demand (blue) vs. food energy supply (red) for ducks in Delta Basin when duck populations are at NAWMP goals.

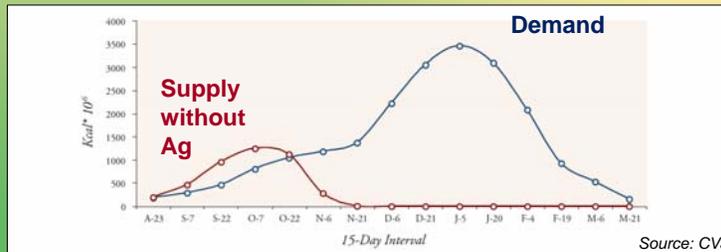


Figure 4-51. Population energy demand (blue) vs. food energy supplies (red) for ducks in Delta Basin when no agricultural food sources are available.

Source: CVJV 2006 Plan

Yolo Basin (Wintering Ducks at Population Goals)



Figure 4-83. Population energy demand (blue) vs. food energy supply (red) for ducks in Yolo Basin when duck populations are at NAWMP goals.

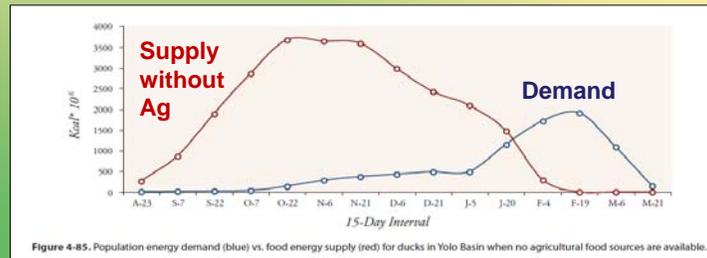
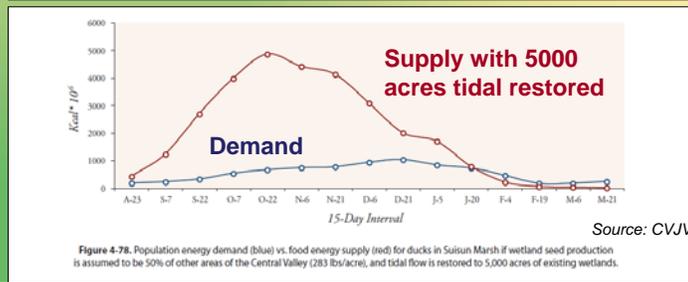
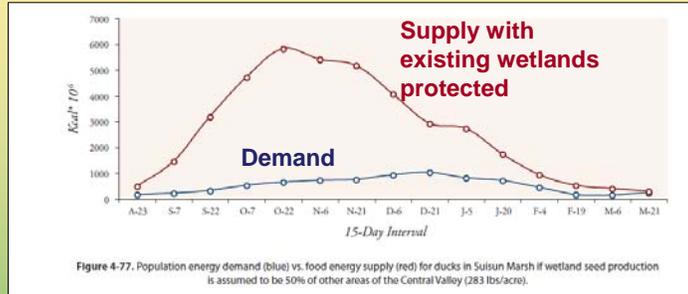


Figure 4-85. Population energy demand (blue) vs. food energy supply (red) for ducks in Yolo Basin when no agricultural food sources are available.

Source: CVJV 2006 Plan

Suisun Marsh Basin (Wintering Ducks at Population Goals)

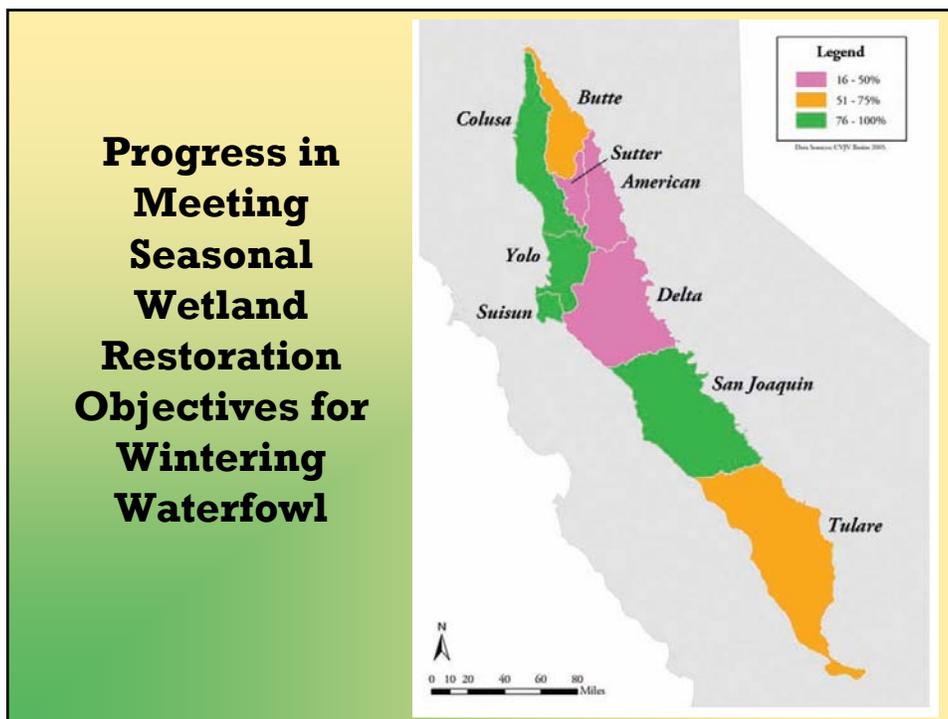


Wintering Waterfowl* Habitat Objectives – Delta Basin

Habitat type	Strategy	Objective
Seasonal Wetlands	Protection	For all unprotected wetlands
Seasonal Wetlands	Restoration	19,000 ac.
Seasonal Wetlands	Enhancement	2,112 ac. Annually**
Ag Cropland	Wildlife friendly	23,000 ac.
Ag Cropland	Easements	needed
Water Supplies		120,408 ac/ft***

Source: CVJV 2006 Plan

*Ducks and Geese objectives integrated.
 **Annual enhancement when restoration objective has been met.
 ***Annual water supply when restoration objective has been met.



Bird Response since CVJV

- 300% increase in waterfowl food within the Grassland Resource Conservation District;
- 89% reduction in avian disease on Sacramento National Wildlife Refuge Complex;
- 49% increase in fall shorebird use Central Valley-wide;
- 300% Increase in bird-use days on private lands in San Joaquin Valley;

Source: CVJV 2006 Plan

More Bird Response:

- 50% more heron and egret rookeries in SJV;
- 61% increase in visitor use on Sacramento National Wildlife Refuge Complex;
- Increases in T&E species; white-faced ibis and Sandhill cranes.



Source: CVJV 2006 Plan



