

RECLAMATION

Managing Water in the West

Refuge Water Supply Program

2012 Annual Work Plan

CVPIA 3406 (b)(3) & (d)(1)(2)(5)



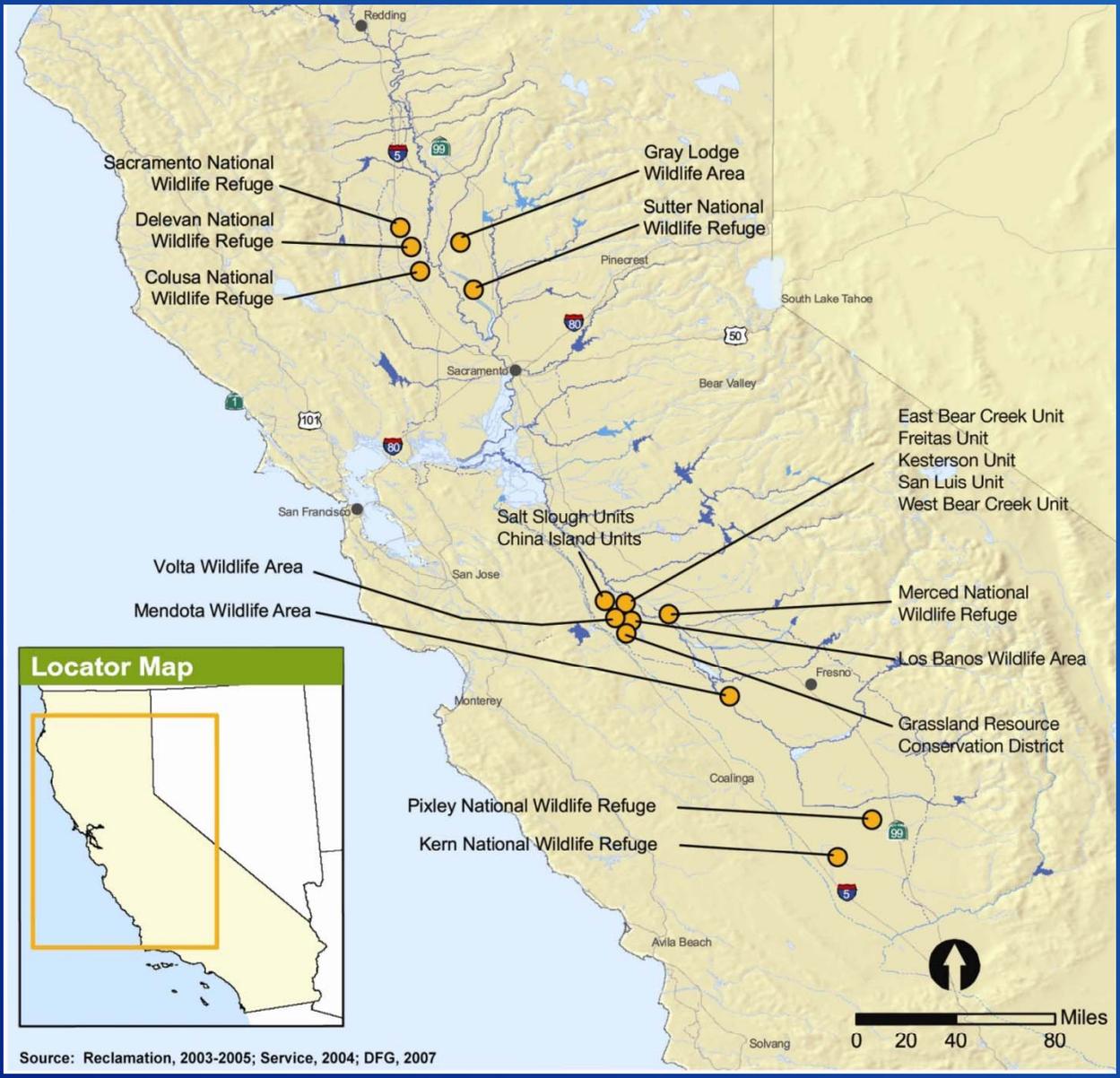
U.S. Department of the Interior
Bureau of Reclamation

Refuge Water Supply Program (RWSP)



GOAL:

Provide firm water supplies of suitable quality to maintain and improve wetland habitat areas on certain Central Valley wildlife refuges



RWSP Partners

Bureau of Reclamation

U.S. Fish & Wildlife Service

California Department of Fish & Game

Grassland Resource Conservation District

Central Valley Joint Venture



RWSP Interagency Management Team

Bureau of Reclamation

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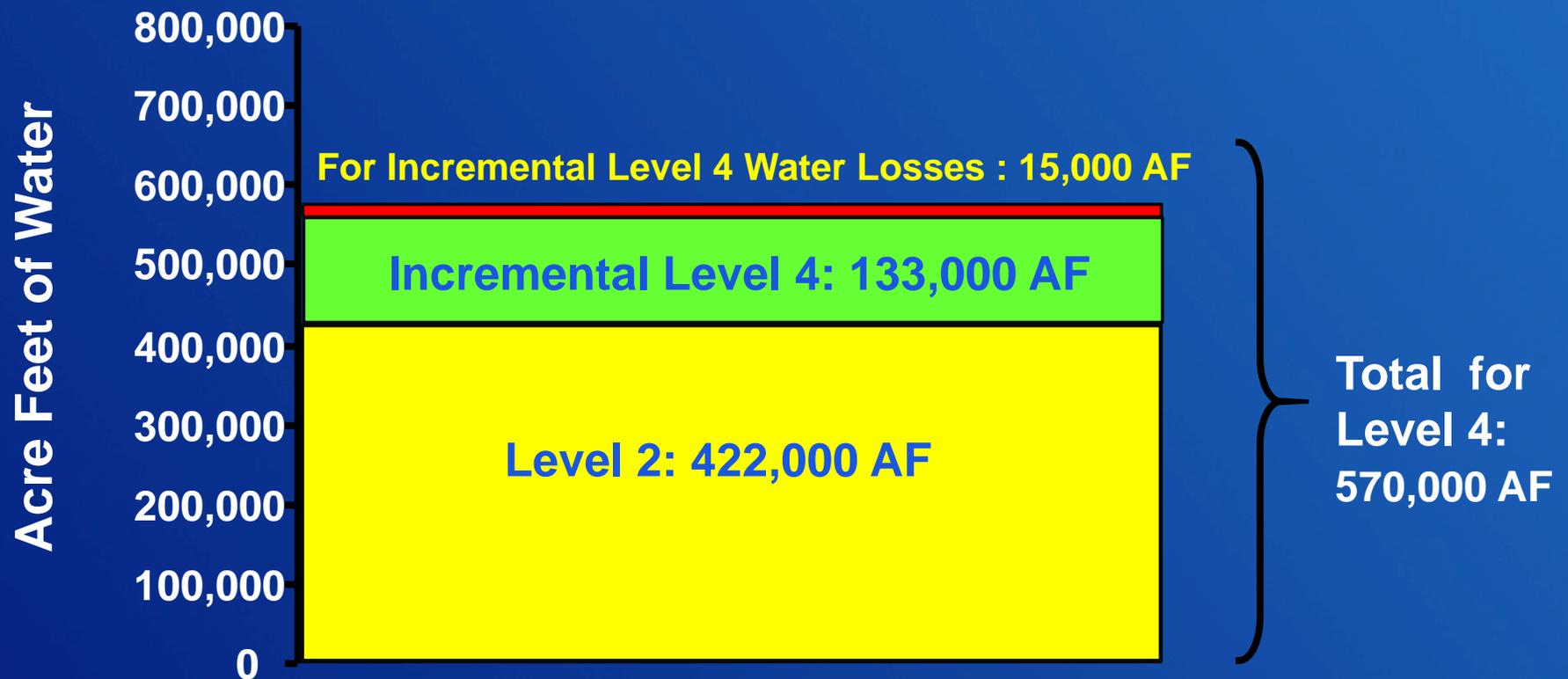
Grassland Water District

Ricardo Ortega
General Manager

Central Valley Joint Venture

Dan Taylor

Defining Level 2, Incremental Level 4, and Level 4 Refuge Water Supply



RWSP Status

- 15 of 19 refuges are able to receive full Level 4
- 32 of 46 construction projects completed
- Biggs-West Gridley Water District design & construction activities ongoing
- 9 long-term conveyance agreements
- Incremental Level 4 water purchased annually
- Gray Lodge Wildlife Area (WA) and Pixley National Wildlife Refuge (NWR) new groundwater wells under construction
- Volta Wasteway new groundwater wells in production

RWS Status

Refuges Not Able to Receive Full Level 4 Water:

- Gray Lodge WA
- Mendota WA
- Pixley NWR
- Sutter NWR



RWSP FY 2011 Accomplishments

Facilities Construction

- **East Bear Creek Pumping Plant/Pipeline**
 - Completed the pumping plant platform installation
 - On-going repairs to pumping plant due to mechanical and electrical control failures
- **Volta WA**
 - Completed construction of 2 wells
- **Gray Lodge WA and Pixley NWR**
 - On-going construction for 5 ground water wells (ARRA funding)



RWSP FY 2011 Accomplishments

Water Acquisitions – Incremental Level 4

Contractor	Source	Quantity (AF)	Unit Cost	Total Cost
San Joaquin River Exchange Contractors	Surface Water	50,333	39,833 AF @ \$101.83/AF 9,750 AF @ \$179.38/AF 750 AF @ \$65/AF	\$5,853,899
Grassland Water District	Groundwater	7,309	\$75/AF	\$548,175
East Side Canal & Irrigation Company	Surface Water	3,291	\$100/AF	\$329,100
Panoche Water District	Surface Water	4,250	\$75/AF	\$318,750
Merced Irrigation District	Surface Water	1,628	\$100/AF	\$162,800
San Luis Water District	Surface Water	5,000	\$69/AF	\$345,000
Santa Clara Valley Water District	Surface Water	10,000	\$75/AF	\$750,000
TOTALS		81,811		\$8,307,724

RWSP FY 2011 Accomplishments

Refuge Conveyance

- **Delivered 367,592 AF Level 2 Water, compared to 390,546 AF delivered in FY2010**
 - **312,249 AF -- Central Valley Project (CVP) Yield:**
 - **55,343 AF -- Diverse (Non-CVP) Sources**
- **Delivered 101,854 AF Incremental Level 4 Water, as compared to 58,021 AF delivered in FY2010**
- **Continued water quality monitoring at Gray Lodge WA and Grasslands Ecological Area**
- **Initiated design for the North Grasslands Water Conservation & Water Quality Control Project**
- **Initiated installation of flow meters in Bear Creek to determine conveyance losses**

RWSP FY 2012

Construction Activities

- Complete North Grasslands Water Conservation & Water Quality Control Project's Value Engineering Study (conducted in December 2011[FY 12])
- East Bear Creek on-going improvement activities
- Gray Lodge WA Wells (ARRA funded)
- Pixley NWR Wells (ARRA funded)
- Volta WA Wells discharge outlet and flowmeter improvement plans



RWSP FY 2012

Water Acquisition Activities – Potential Sources

- San Joaquin River Exchange Contractors
- Grassland Water District
- Panoche Water District
- Merced Irrigation District
- Madera Irrigation District
- New & Rehabilitated ARRA Wells
- Friant (SJRRP Recaptured water)
- Other Willing Sellers



RWSP FY 2012 Conveyance Activities



- Convey approximately 399,000 AF Level 2
- Convey between approximately 37,000 to 70,000 AF Incremental Level 4, depending on Reclamation's revised water supply allocations for WY2012
- Evaluate flow data at East Bear Creek NWR to determine losses in Bear Creek
- Complete Phase II (design) of North Grasslands Water Conservation & Water Quality Control Project

RWSP Monitoring Projects

- **Gray Lodge Wildlife Area**
 - Quality of delivered groundwater and surface water
- **Grassland Ecological Area (GEA)**
 - Real-time water quality
 - Measuring volume and salt load of sources entering and draining the GEA



RWSP FY 2012 Budget

- Reclamation and U.S. Fish & Wildlife Service Labor = \$2,205,218
- Refuge Construction (Facilities Construction & SJBAPL) = \$5,635,874
- Water Acquisition = \$7,956,675
- Water Conveyance = \$7,986,233
- Water Quality Monitoring = \$30,000

Total \$23,814,000



RWSP Three-Year Budget

(\$ amounts in thousands)

	<u>2013</u>	<u>2014</u>	<u>2015</u>
Labor	1,679	1,722	1,766
Water Acquisition	20,253	20,500	25,000
Planning	100	100	100
Construction	12,400	18,489	14,175
Monitoring	19	20	21
Conveyance	<u>10,080</u>	<u>10,484</u>	<u>10,903</u>
Total	\$44,531	\$51,315	\$51,965

QUESTIONS?



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