

**The West Side Irrigation District (IDCON-202120)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	6145	147	0	0	0	0	0	0	0	6292
AG-I	0	0	687	0	0	0	0	0	0	0	687
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	0	0	0	0	0
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	6145	834	0	0	0	0	0	0	0	6979

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

# **Coelho Family Trust IDCON202130**

---

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	167
Agriculture to Natural	49
Natural to Agriculture	2
Natural to Urban	0
Natural to Unknown	29
Urban to Natural	0
No Change	3253
<b>Total Acreage</b>	<b>3500</b>

**Coehlo Family Trust (IDCON-202130)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	2182	0	0	49	0	0	0	0	167	2398
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	388	0	11	0	0	23	422
WAT	0	0	0	0	0	87	0	0	0	6	93
GRS	0	2	0	0	0	0	585	0	0	0	587
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>2184</b>	<b>0</b>	<b>0</b>	<b>437</b>	<b>87</b>	<b>596</b>	<b>0</b>	<b>0</b>	<b>196</b>	<b>3500</b>

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

3/1/2004

Note 3: Italics indicate Habitat acres with no change.

*Habitat Totals in 1993 (acres)*

# **City of Tracy - IDCON202135**

---

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	1404
Agriculture to Unknown	0
Agriculture to Natural	12
Natural to Agriculture	0
Natural to Urban	107
Natural to Unknown	0
Urban to Natural	0
No Change	7570
<b>Total Acreage</b>	<b>9093</b>



Tracy, City of (IDCON-202135)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	2350	1404	0	0	12	0	0	0	0	3766
AG-I	0	0	5016	0	0	0	0	0	0	0	5016
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	28	0	0	0	0	28
GRS	0	0	107	0	0	0	176	0	0	0	283
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	2350	6527	0	0	40	176	0	0	0	9093

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren                        WAT - Water  
GRS - Grassland                  WDL - Woodland

3/1/2004

Note 3: Italics indicate Habitat acres with no change.

*Habitat Totals in 1993 (acres)*

# **Tranquillity I.D. - IDCON202140**

---

## **USBR/FWS Central Valley Habitat Monitoring Program**

### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	69
Agriculture to Unknown	842
Agriculture to Natural	0
Natural to Agriculture	1
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	9684
<b>Total Acreage</b>	<b>10596</b>

**Tranquillity Irrigation District (IDCON-202140)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	9520	69	0	0	0	0	0	0	842	10431
URB	0	0	148	0	0	0	0	0	0	0	148
BAR	0	0	0	0	0	0	3	0	0	0	3
WET	0	0	0	0	1	0	1	0	0	0	2
WAT	0	1	0	0	0	11	0	0	0	0	12
GRS	0	0	0	0	0	0	0	0	0	0	0
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	9521	217	0	1	11	4	0	0	842	10596

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland  
 SHB - Shrubland      WET - Wetland

3/1/2004

Note 3: Italics indicate Habitat acres with no change.

# Melvin Hughes - IDCON201940

---

## USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000

DESCRIPTION	TOTAL ACRES
Agriculture to Urban	1
Agriculture to Unknown	18
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	110
<b>Total Acreage</b>	<b>129</b>



**Tranquillity PUD (formerly Hughes, Melvin) (IDCON-201940)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	110	1	0	0	0	0	0	0	18	129
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	0	0	0	0	0
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	110	1	0	0	0	0	0	0	18	129

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland  
 SHB - Shrubland      WET - Wetland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

*Habitat Totals in 1993 (acres)*

# **West Stanislaus I.D. - IDCON202180**

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	49
Agriculture to Unknown	12
Agriculture to Natural	8
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	22433
<b>Total Acreage</b>	<b>22502</b>

**West Stanislaus Irrigation District (IDCON-202180)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	22337	49	0	0	0	8	0	0	12	22406
AG-I	0	0	73	0	0	0	0	0	0	0	73
URB	0	0	0	3	0	0	0	0	0	0	3
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	1	0	0	0	0	1
GRS	0	0	0	0	0	0	19	0	0	0	19
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	1	0	1
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	22337	122	3	0	1	27	0	1	12	22503

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland  
 SHB - Shrubland      WET - Wetland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

# **Widren W.D. - IDCON202192**

---

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	881
<b>Total Acreage</b>	<b>881</b>



**Widren Water District (IDCON-202192)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	782	0	0	0	0	0	0	0	0	782
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	84	0	0	0	0	0	84
WAT	0	0	0	0	0	15	0	0	0	0	15
GRS	0	0	0	0	0	0	0	0	0	0	0
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	782	0	0	84	15	0	0	0	0	881

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren                            WAT - Water  
GRS - Grassland                        WDL - Woodland  
SHB - Shrubland                        WET - Wetland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

## **Lewis Creek W. D. IDCON202420**

---

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	1297
<b>Total Acreage</b>	1297

Lewis Creek Water District (IDCON-202420)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	AG-D	0	0	0	0	0	0	0	0	0	0
	AG-I	0	1273	0	0	0	0	0	0	0	1273
	URB	0	0	24	0	0	0	0	0	0	24
	BAR	0	0	0	0	0	0	0	0	0	0
	WET	0	0	0	0	0	0	0	0	0	0
	WAT	0	0	0	0	0	0	0	0	0	0
	GRS	0	0	0	0	0	0	0	0	0	0
	SHB	0	0	0	0	0	0	0	0	0	0
	WDL	0	0	0	0	0	0	0	0	0	0
	UNK	0	0	0	0	0	0	0	0	0	0
Total	0	1273	24	0	0	0	0	0	0	0	1297

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)    UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren    WAT - Water  
GRS - Grassland    WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004



# SACRAMENTO RIVER DIVISION

## Summary of 1993 - 2000 Conversions of Natural Land by Water Service Area (Acres)

IDCON#	WSA NAME	WSA ACRES	Natural Landcover 1993	Natural Landcover 2000	Natural - Other (1993-2000)	Other - Natural (1993 - 2000)	Percent of Natural Loss or Gain	Natural Landcover Change per WSA	Natural - Ag.	Natural - Urban	Natural - Unknown
202690	Corning W.D.	12934	1686	1675	11	0	-0.65%	-0.09%	0	11	0
202720	Proberta W.D.	2935	390	428	0	38	9.74%	1.29%	0	0	0
202740	Thomes Creek W.D.	2371	508	495	13	0	-2.56%	-0.55%	0	13	0
202770	Colusa County W.D.	45842	2851	3646	162	957	27.88%	1.73%	0	0	162
202775	Cortina W.D.	613	232	232	0	0	0.00%	0.00%	0	0	0
202776	Davis W.D.(TC)	1016	0	0	0	0	0.00%	0.00%	0	0	0
202778	Dunnigan W.D.	10757	132	132	0	0	0.00%	0.00%	0	0	0
202779	Four-M W.D.	17581	13754	13754	0	0	0.00%	0.00%	0	0	0
202780	Glide W.D.	9421	199	242	0	43	21.61%	0.46%	0	0	0
202782	Glenn Valley W.D.	1975	20	20	0	0	0.00%	0.00%	0	0	0
202786	Holthouse W.D.	1992	662	661	1	0	-0.15%	-0.05%	1	0	0
202790	Kanawa W.D.	16519	385	385	0	0	0.00%	0.00%	0	0	0
202800	Kirkwood W.D.	1151	10	10	0	0	0.00%	0.00%	0	0	0
202810	La Grande W.D.	1471	0	0	0	0	0.00%	0.00%	0	0	0
202815	Myers Marsh	282	0	0	0	0	0.00%	0.00%	0	0	0
202820	Orland-Artois W.D.	31302	1213	1063	150	0	-12.37%	-0.48%	147	3	0
202834	Westside W.D.	17716	1279	1279	0	0	0.00%	0.00%	0	0	0
202890	Feather W.D.	8241	0	0	0	0	0.00%	0.00%	0	0	0
Total		184119	23321	24022	337	1038	3.01%	0.38%	148	27	162

11/5/03



# **Corning W.D. IDCON-202690**

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	66
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	11
Natural to Unknown	0
Urban to Natural	0
No Change	12857
<b>Total Acreage</b>	<b>12934</b>

**Corning Water District (IDCON-202690)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	136	0	0	0	0	0	0	0	0	0	136
AG-I	0	10921	66	0	0	0	0	0	0	0	10987
URB	0	0	125	0	0	0	0	0	0	0	125
BAR	0	0	0	76	0	0	0	0	0	0	76
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	14	0	0	0	0	14
GRS	0	0	11	0	0	0	1334	0	0	0	1345
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	251	0	251
UNK	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>136</b>	<b>10921</b>	<b>202</b>	<b>76</b>	<b>0</b>	<b>14</b>	<b>1334</b>	<b>0</b>	<b>251</b>	<b>0</b>	<b>12934</b>

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)    UNK - Unknown  
 AG-I - Agriculture (Irrigated)    URB - Urban areas  
 BAR - Barren    WAT - Water  
 GRS - Grassland    WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

# **Proberta W.D. IDCON-202720**

---

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	4
Agriculture to Unknown	0
Agriculture to Natural	38
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	2893
<b>Total Acreage</b>	<b>2935</b>

**Proberta Water District (IDCON-202720)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

Habitat Type in 1993											
	Habitat Type in 1993										
	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	2490	4	0	0	0	38	0	0	0	2532
URB	0	0	13	0	0	0	0	0	0	0	13
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	334	0	0	0	334
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	56	0	56
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	2490	17	0	0	0	372	0	56	0	2935

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

3/1/2004

*Habitat Totals in 1993 (acres)*

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

Note 3: Italics indicate Habitat acres with no change.



## Thomes Creek W.D. IDCON-202740

### USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000

DESCRIPTION	TOTAL ACRES
Agriculture to Urban	38
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	13
Natural to Unknown	0
Urban to Natural	0
No Change	2320
Total Acreage	2371

Thomes Creek Water District (IDCON-202740)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	AG-D	0	0	0	0	0	0	0	0	0	0
	AG-I	0	1810	38	0	0	0	0	0	0	1848
	URB	0	0	15	0	0	0	0	0	0	15
	BAR	0	0	0	22	0	0	0	0	0	22
	WET	0	0	0	0	0	0	0	0	0	0
	WAT	0	0	0	0	0	0	0	0	0	0
	GRS	0	0	13	0	0	453	0	0	0	466
	SHB	0	0	0	0	0	0	0	0	0	0
	WDL	0	0	0	0	0	0	0	20	0	20
	UNK	0	0	0	0	0	0	0	0	0	0
Total	0	1810	66	22	0	0	453	0	20	0	2371

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren                        WAT - Water  
GRS - Grassland                  WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

# **Colusa County W.D. IDCON-202770**

## **USBR/FWS Central Valley Habitat Monitoring Program**

### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	22
Agriculture to Unknown	0
Agriculture to Natural	957
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	162
Urban to Natural	0
No Change	44700
<b>Total Acreage</b>	<b>45841</b>

**Colusa County Water District (IDCON-202770)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	48012	22	0	1532	0	0	0	0	0	49566
URB	0	0	593	0	0	0	0	0	0	0	593
BAR	0	0	0	25	0	0	0	0	0	0	25
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	13	0	0	0	935	0	0	0	0	948
GRS	0	0	0	0	0	0	2711	0	0	365	3076
SHB	0	0	0	0	0	0	0	48	0	0	48
WDL	0	0	0	0	0	0	0	0	292	0	292
UNK	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>48025</b>	<b>615</b>	<b>25</b>	<b>1532</b>	<b>935</b>	<b>2711</b>	<b>48</b>	<b>292</b>	<b>365</b>	<b>54548</b>

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.



## CORTINA W.D. IDCON202772

### USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000

DESCRIPTION	TOTAL ACRES
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	613
<b>Total Acreage</b>	<b>613</b>

Wednesday, July 02, 2003

Page 1 of 1

Note This data is subject to change as refinements are made to processes

Cortina Water District (IDCON-202772)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	381	0	0	0	0	0	0	0	0	381
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	232	0	0	0	232
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	381	0	0	0	0	232	0	0	0	613

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

AG-D - Agriculture (Dryland)    UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren    WAT - Water  
GRS - Grassland    WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

*Habitat Totals in 1993 (acres)*

## **Davis W.D. (TC) IDCON-202776**

---

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	1016
<b>Total Acreage</b>	<b>1016</b>

Davis Water District (IDCON-202776)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	AG-D	0	0	0	0	0	0	0	0	0	0
	AG-I	0	1016	0	0	0	0	0	0	0	1016
	URB	0	0	0	0	0	0	0	0	0	0
	BAR	0	0	0	0	0	0	0	0	0	0
	WET	0	0	0	0	0	0	0	0	0	0
	WAT	0	0	0	0	0	0	0	0	0	0
	GRS	0	0	0	0	0	0	0	0	0	0
	SHB	0	0	0	0	0	0	0	0	0	0
	WDL	0	0	0	0	0	0	0	0	0	0
	UNK	0	0	0	0	0	0	0	0	0	0
Total	0	1016	0	0	0	0	0	0	0	0	1016

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren                        WAT - Water  
GRS - Grassland                  WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004



## Dunnigan W.D. IDCON - 202778

### USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000

DESCRIPTION	TOTAL ACRES
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	10757
Total Acreage	10757

# Landcover/Landuse Change (1993-2000, acres) Dunnigan W.D. IDCON-202778

## 2000 CVHM LANDCOVER/LANDUSE

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	6	0	0	0	0	0	0	0	0	0	6
AG-I	0	10484	0	0	0	0	0	0	0	0	10484
URB	0	0	135	0	0	0	0	0	0	0	135
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	11	0	0	0	0	11
GRS	0	0	0	0	0	0	87	0	0	0	87
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	34	0	34
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	6	10484	135	0	0	11	87	0	34	0	10757

1993 CVHM LANDCOVER/LANDUSE

1993

2000

AG-D - Agriculture (Dryland) UNK - Unknown  
AG-I - Agriculture (Irrigated) URB - Urban areas  
BAR - Barren WAT - Water  
GRS - Grassland WDL - Woodland  
SHB - Shrubland WET - Wetland

6/3/2003

Note: This data is subject to change as refinements are made to processes.

## **Four-M W.D. IDCON202779**

---

### **USBR/FWS Central Valley Habitat Monitoring Program**

#### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	17581
<b>Total Acreage</b>	17581

4-M Water District (IDCON-202779)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	1866	0	0	0	0	0	0	0	0	1866
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	16	0	0	0	0	16
GRS	0	0	0	0	0	0	4368	0	0	0	4368
SHB	0	0	0	0	0	0	0	277	0	0	277
WDL	0	0	0	0	0	0	0	0	9093	0	9093
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	1866	0	0	0	16	4368	277	9093	0	15620

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)    UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren    WAT - Water  
GRS - Grassland    WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004



## Glide W.D. IDCON - 202780

### USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000

DESCRIPTION	TOTAL ACRES
Agriculture to Urban	3
Agriculture to Unknown	43
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	9375
Total Acreage	9421

**Glide Water District (IDCON-202780)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	AG-D	0	0	0	0	0	0	0	0	0	0
	AG-I	0	9176	3	0	0	0	0	0	43	9222
	URB	0	0	0	0	0	0	0	0	0	0
	BAR	0	0	0	0	0	0	0	0	0	0
	WET	0	0	0	0	0	0	0	0	0	0
	WAT	0	0	0	0	0	0	0	0	0	0
	GRS	0	0	0	0	0	199	0	0	0	199
	SHB	0	0	0	0	0	0	0	0	0	0
	WDL	0	0	0	0	0	0	0	0	0	0
	UNK	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>9176</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>199</b>	<b>0</b>	<b>0</b>	<b>43</b>	<b>9421</b>

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)    UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren    WAT - Water  
GRS - Grassland    WDL - Woodland

3/1/2004

Note 3: Italics indicate Habitat acres with no change.

*Habitat Totals in 1993 (acres)*

# **Glenn Valley W.D. IDCON202782**

## **USBR/FWS Central Valley Habitat Monitoring Program**

### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	1975
<b>Total Acreage</b>	1975

Glenn Valley Water District (IDCON-202782)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	1955	0	0	0	0	0	0	0	0	1955
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	20	0	0	0	20
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	1955	0	0	0	0	20	0	0	0	1975

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)      URB - Urban areas  
BAR - Barren      WAT - Water  
GRS - Grassland      WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004



# **Holthouse W.D. IDCON202786**

---

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	1
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	1992
<b>Total Acreage</b>	1993

**Holthouse Water District (IDCON-202786)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	1331	0	0	0	0	0	0	0	0	1331
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	1	0	0	0	0	661	0	0	0	662
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	1332	0	0	0	0	661	0	0	0	1993

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)    URB - Urban areas  
 BAR - Barren                      WAT - Water  
 GRS - Grassland                WDL - Woodland

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

# **Kanawha W.D. IDCON-202790**

---

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	15
Agriculture to Unknown	375
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	16129
<b>Total Acreage</b>	<b>16519</b>

**Kanawha Water District (IDCON-202790)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	15632	15	0	0	0	0	0	0	375	16022
URB	0	0	112	0	0	0	0	0	0	0	112
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	1	0	0	0	0	1
GRS	0	0	0	0	0	0	384	0	0	0	384
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>15632</b>	<b>127</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>384</b>	<b>0</b>	<b>0</b>	<b>375</b>	<b>16519</b>

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

3/1/2004



## **Kirkwood W.D. IDCON - 202800**

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	1151
<b>Total Acreage</b>	<b>1151</b>

**Kirkwood Water District (IDCON-202800)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	1141	0	0	0	0	0	0	0	0	1141
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	10	0	0	0	10
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	1141	0	0	0	0	10	0	0	0	1151

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al.,1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

*Habitat Totals in 1993 (acres)*

# La Grande W.D. IDCON -202810

## USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000

DESCRIPTION	TOTAL ACRES
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	1471
<b>Total Acreage</b>	<b>1471</b>

La Grande Water District (IDCON-202810)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	<i>Habitat Type Existing in 2000</i>										
	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	1471	0	0	0	0	0	0	0	0	1471
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	0	0	0	0	0
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	1471	0	0	0	0	0	0	0	0	1471

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren                        WAT - Water  
GRS - Grassland                  WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

*Habitat Totals in 1993 (acres)*



# **Myers Marsh Mutual Water Company IDCON202815**

## **USBR/FWS Central Valley Habitat Monitoring Program**

### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	282
<b>Total Acreage</b>	<b>282</b>

Myers-Marsh MWC (IDCON-202815)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	<i>Habitat Type Existing in 2000</i>										
	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	221	0	0	0	0	0	0	0	0	221
AG-I	0	0	60	0	0	0	0	0	0	0	60
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	0	0	0	0	0
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	221	60	0	0	0	0	0	0	0	281

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)      URB - Urban areas  
BAR - Barren      WAT - Water  
GRS - Grassland      WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

# **Orland-Artois W.D. IDCON-202820**

---

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	32
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	146
Natural to Urban	3
Natural to Unknown	0
Urban to Natural	0
No Change	31118
<b>Total Acreage</b>	<b>31299</b>

Orland-Artois Water District (IDCON-202820)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	17	0	0	0	0	0	0	0	0	0	17
AG-I	0	29930	32	0	0	0	0	0	0	0	29962
URB	0	0	110	0	0	0	0	0	0	0	110
BAR	0	0	0	12	0	0	0	0	0	0	12
WET	0	0	0	0	1	0	0	0	0	0	1
WAT	0	27	0	0	0	38	0	0	0	0	65
GRS	1	119	3	0	0	0	930	0	0	0	1053
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	82	0	82
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	18	30076	145	12	1	38	930	0	82	0	31302

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)      URB - Urban areas  
BAR - Barren      WAT - Water  
GRS - Grassland      WDL - Woodland

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

Note 3: Italics indicate Habitat acres with no change.

3/1/2004



# Westside W.D. IDCON - 202834

## USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000

DESCRIPTION	TOTAL ACRES
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	17716

**Total Acreage**

17716

**Westside Water District (IDCON-202834)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	AG-D	0	0	0	0	0	0	0	0	0	0
	AG-I	0	16437	0	0	0	0	0	0	0	16437
	URB	0	0	0	0	0	0	0	0	0	0
	BAR	0	0	0	0	0	0	0	0	0	0
	WET	0	0	0	0	0	0	0	0	0	0
	WAT	0	0	0	0	8	0	0	0	0	8
	GRS	0	0	0	0	0	1187	0	0	0	1187
	SHB	0	0	0	0	0	0	0	0	0	0
	WDL	0	0	0	0	0	0	0	84	0	84
	UNK	0	0	0	0	0	0	0	0	0	0
Total	0	16437	0	0	0	8	1187	0	84	0	17716

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)    UNK - Unknown  
 AG-I - Agriculture (Irrigated)    URB - Urban areas  
 BAR - Barren    WAT - Water  
 GRS - Grassland    WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

## Feather River W.S.A.- IDCON202890

### USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000

DESCRIPTION	TOTAL ACRES
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	8241
<b>Total Acreage</b>	<b>8241</b>

**Feather Water District (IDCON-202890)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	8204	0	0	0	0	0	0	0	0	8204
AG-I	0	0	16	0	0	0	0	0	0	0	16
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	7	0	0	0	0	0	7
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	0	0	0	0	0
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	14	0	14
UNK	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>8204</b>	<b>16</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>0</b>	<b>8241</b>

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

3/1/2004

Note 3: Italics indicate Habitat acres with no change.

*Habitat Totals in 1993 (acres)*



# SHASTA DIVISION (Interim Contracts)

Summary of 1993 - 2000 Conversions of Natural Land by Water Service Area (Acres)

IDCON#	WSA NAME	WSA ACRES	Natural Landcover 1993	Natural Landcover 2000	Natural - Other (1993-2000)	Other - Natural (1993 - 2000)	Percent of Natural Loss or Gain	Natural Landcover Change per WSA	Natural - Ag.	Natural - Urban	Natural - Unknown
203129	Shasta Lake-City of	6984	5302	5291	11	0	-0.21%	-0.16%	0	11	0
203126	Mountain Gate C.S.D.	4012	3739	3739	0	0	0.00%	0.00%	0	0	0
203127	Shasta Co.W.A.	1558	1245	1245	0	0	0.00%	0.00%	0	0	0
Total		12554	10286	10275	11	0	-0.11%	-0.09%	0	11	0

10/31/03

## **City of Shasta Lake W.S.A. IDCON - 203129**

---

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	11
Natural to Unknown	0
Urban to Natural	0
No Change	6973
<b>Total Acreage</b>	6984

Shasta Lake, City of (IDCON-203129)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	1581	0	0	0	0	0	0	0	1581
BAR	0	0	0	74	0	0	0	0	0	0	74
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	10	0	0	0	0	10
GRS	0	0	0	0	0	0	180	0	0	0	180
SHB	0	0	0	0	0	0	0	369	0	0	369
WDL	0	0	11	0	0	0	8	0	1986	0	2005
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1592	74	0	10	188	369	1986	0	4219

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)      URB - Urban areas  
BAR - Barren      WAT - Water  
GRS - Grassland      WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

# **Mountain Gate C.S.D. IDCON-203126**

## **USBR/FWS Central Valley Habitat Monitoring Program**

### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	4012
<b>Total Acreage</b>	4012



**Mountain Gate CSD (IDCON-203126)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	272	0	0	0	0	0	0	0	272
BAR	0	0	0	101	0	0	0	0	0	0	101
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	522	0	0	0	522
SHB	0	0	0	0	0	0	0	323	0	0	323
WDL	0	0	0	0	0	0	0	0	2794	0	2794
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	272	101	0	0	522	323	2794	0	4012

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)      URB - Urban areas  
BAR - Barren      WAT - Water  
GRS - Grassland      WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

Note 3: Italics indicate Habitat acres with no change.

# **Shasta Co. Water Agency IDCON - 203127**

## **USBR/FWS Central Valley Habitat Monitoring Program**

### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	1558
<b>Total Acreage</b>	1558

Shasta County Water Agency (IDCON-203127)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	312	0	0	0	0	0	0	0	312
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	4	0	0	0	0	4
GRS	0	0	0	0	0	0	35	0	0	0	35
SHB	0	0	0	0	0	0	0	124	0	0	124
WDL	0	0	0	0	0	0	0	0	1083	0	1083
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	312	0	0	4	35	124	1083	0	1558

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)      URB - Urban areas  
BAR - Barren      WAT - Water  
GRS - Grassland      WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

# TRINITY RIVER DIVISION (Interim Contracts)

Summary of 1993 - 2000 Conversions of Natural Land by Water Service Area (Acres)

IDCON#	WSA NAME	WSA ACRES	Natural Landcover 1993	Natural Landcover 2000	Natural - Other (1993-2000)	Other - Natural (1993 - 2000)	Percent of Natural Loss or Gain	Natural Landcover Change per WSA	Natural - Ag.	Natural - Urban	Natural - Unknown
203078	Shasta C.S.D.	6708	6631	6631	0	0	0.00%	0.00%	0	0	0
203090	Clear Creek C.S.D.	29939	27862	27859	3	0	-0.01%	-0.01%	0	3	0
203110	Bella Vista	33932	29400	29337	63	0	-0.21%	-0.19%	27	36	0
Total		70579	63893	63827	66	0	-0.10%	-0.09%	27	39	0

10/31/03



# **Shasta C.S.D. IDCON - 203078**

---

## **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	6708
<b>Total Acreage</b>	6708

Shasta CSD (IDCON-203078)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	0	0	0	0	0	0	0	0	0	0
URB	0	0	77	0	0	0	0	0	0	0	77
BAR	0	0	0	61	0	0	0	0	0	0	61
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	58	0	0	0	58
SHB	0	0	0	0	0	0	0	2553	0	0	2553
WDL	0	0	0	0	0	0	0	0	3959	0	3959
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	77	61	0	0	58	2553	3959	0	6708

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren                        WAT - Water  
GRS - Grassland                  WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

## **Clear Creek C.S.D. - ICON203090**

---

### **USBR/FWS Central Valley Habitat Monitoring Program**

#### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	13073
<b>Total Acreage</b>	13073

Clear Creek CSD (IDCON-203090)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	<i>Habitat Type Existing in 2000</i>										
	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	1556	0	0	0	0	0	0	0	0	1556
AG-I	0	0	405	0	0	0	0	0	0	0	405
URB	0	0	0	121	0	0	0	0	0	0	121
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	3	0	0	0	0	3
GRS	0	0	0	0	0	0	1839	0	0	0	1839
SHB	0	0	0	0	0	0	0	841	0	0	841
WDL	0	0	0	0	0	0	0	0	9267	0	9267
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	1556	405	121	0	3	1839	841	9267	0	14032

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren                        WAT - Water  
GRS - Grassland                  WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

*Habitat Totals in 1993 (acres)*



## **Bella Vista W.D. IDCON-203110**

---

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	27
Natural to Urban	36
Natural to Unknown	0
Urban to Natural	0
No Change	33869
<b>Total Acreage</b>	33932

**Bella Vista Water District (IDCON-203110)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
<i>Habitat Type in 1993</i>	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	2277	0	0	0	0	0	0	0	0	2277
AG-I	0	0	2256	0	0	0	0	0	0	0	2256
URB	0	13	0	33	0	0	0	0	0	0	46
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	243	0	0	0	0	243
GRS	0	14	0	0	0	0	5951	0	0	0	5965
SHB	0	0	0	0	0	0	0	690	0	0	690
WDL	0	0	36	0	0	0	0	0	22420	0	22456
UNK	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>0</b>	<b>2304</b>	<b>2292</b>	<b>33</b>	<b>0</b>	<b>243</b>	<b>5951</b>	<b>690</b>	<b>22420</b>	<b>0</b>	<b>33933</b>

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

*Habitat Totals in 1993 (acres)*

**COLUSA BASIN DRAIN (Interim Contracts)**  
**Summary of 1993 - 2000 Conversions of Natural Land by Water Service Area (Acres)**

IDCON#	WSA NAME	WSA ACRES	Natural Landcover 1993	Natural Landcover 2000	Natural - Other (1993-2000)	Other - Natural (1993 - 2000)	Percent of Natural Loss or Gain	Natural Landcover Change per WSA	Natural - Ag.	Natural - Urban	Natural - Unknown
202875	Colusa Drain M.W.C.	37349	798	947	143	292	18.67%	0.40%	0	0	143
Total		37349	798	947	143	292	18.67%	0.40%	0	0	143

10/31/03

## **Colusa Drain MWC - 202875-IDCON**

---

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	83
Agriculture to Natural	298
Natural to Agriculture	6
Natural to Urban	0
Natural to Unknown	143
Urban to Natural	0
No Change	36820
<b>Total Acreage</b>	<b>37350</b>



Colusa Drain MWC (IDCON-202875)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	36134	0	0	298	0	0	0	0	83	36515
AG-I	0	0	36	0	0	0	0	0	0	0	36
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	366	0	0	0	0	143	509
WAT	0	0	0	0	0	230	0	0	0	0	230
GRS	0	6	0	0	0	0	50	0	0	0	56
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	3	0	3
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	36140	36	0	664	230	50	0	3	226	37349

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)      URB - Urban areas  
BAR - Barren      WAT - Water  
GRS - Grassland      WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004

# **CROSS VALLEY CANAL (Interim Contracts)** **Summary of 1993 - 2000 Conversions of Natural Land by Water Service Area (Acres)**

IDCON#	WSA NAME	WSA ACRES	Natural Landcover 1993	Natural Landcover 2000	Natural - Other (1993-2000)	Other - Natural (1993 - 2000)	Percent of Natural Loss or Gain	Natural Landcover Change per WSA	Natural - Ag.	Natural - Urban	Natural - Unknown
202325	Fresno-County of	3924	3817	3817	0	0	0.00%	0.00%	0	0	0
202350	Hills Valley I.D. Amen	4557	976	976	0	0	0.00%	0.00%	0	0	0
202385	Kern-Tulare WD	21854	1027	1027	0	0	0.00%	0.00%	0	0	0
202460	Lower Tule River I.D.	103743	5032	4987	45	0	-0.89%	-0.04%	0	0	45
202500	Pixley I.D.	69974	6404	6401	13	10	-0.05%	0.00%	13	0	0
202520	Rag Gulch W.D.	5998	16	16	0	0	0.00%	0.00%	0	0	0
202600	Tri-Valley W.D.	2901	829	829	0	0	0.00%	0.00%	0	0	0
204600	Tulare-County of	71686	3537	5331	20	1814	50.72%	2.50%	20	0	0
Total		284637	21638	23384	78	1824	8.07%	0.61%	33	0	45

10/31/03

## **Fresno, County of IDCON 202325**

---

### **USBR/FWS Central Valley Habitat Monitoring Program**

#### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	3924
<b>Total Acreage</b>	3924



Fresno, County of (IDCON-202325)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	AG-D	0	0	0	0	0	0	0	0	0	0
	AG-I	0	0	0	0	0	0	0	0	0	0
	URB	0	0	107	0	0	0	0	0	0	107
	BAR	0	0	0	0	0	0	0	0	0	0
	WET	0	0	0	0	0	0	0	0	0	0
	WAT	0	0	0	0	0	3	0	0	0	3
	GRS	0	0	0	0	0	1575	0	0	0	1575
	SHB	0	0	0	0	0	0	36	0	0	36
	WDL	0	0	0	0	0	0	0	2203	0	2203
	UNK	0	0	0	0	0	0	0	0	0	0
Total		0	0	107	0	0	3	1575	36	2203	3924

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al.,1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren                        WAT - Water  
GRS - Grassland                  WDL - Woodland

3/1/2004

Note 3: Italics indicate Habitat acres with no change.

*Habitat Totals in 1993 (acres)*



## **Hills Valley I.D.-Amendatory - IDCON-202350**

### **USBR/FWS Central Valley Habitat Monitoring Program**

#### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	4558
<b>Total Acreage</b>	<b>4558</b>

**Hills Valley Irrigation District-Amendatory (IDCON-202350)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	0	3581	0	0	0	0	0	0	0	0	3581
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	961	0	0	0	961
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	15	0	15
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	3581	0	0	0	0	961	0	15	0	4557

*Habitat Type in 1993*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

Note 3: Italics indicate Habitat acres with no change.

## **Kern-Tulare W.D. - 202385 IDCON**

---

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	21853
<b>Total Acreage</b>	<b>21853</b>

**Kern-Tulare Water District (IDCON-202385)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	20827	0	0	0	0	0	0	0	0	20827
AG-I	0	0	21	0	0	0	0	0	0	0	21
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	46	0	0	0	0	46
GRS	0	0	0	0	0	0	960	0	0	0	960
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	20827	21	0	0	46	960	0	0	0	21854

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)      URB - Urban areas  
BAR - Barren      WAT - Water  
GRS - Grassland      WDL - Woodland

Note 3: Italics indicate Habitat acres with no change.

3/1/2004



## **Lower Tule River ID - 202460 IDCON**

---

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	15
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	45
Urban to Natural	0
No Change	103683
<b>Total Acreage</b>	103743

Lower Tule River Irrigation District (IDCON-202460)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	164	0	0	0	0	0	0	0	0	0	164
AG-I	707	96287	15	0	0	0	0	0	0	0	97009
URB	0	0	1538	0	0	0	0	0	0	0	1538
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	432	0	0	0	0	0	432
WAT	0	0	0	0	0	726	0	0	0	45	771
GRS	0	0	0	0	0	0	3793	0	0	0	3793
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	36	0	36
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	871	96287	1553	0	432	726	3793	0	36	45	103743

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)    UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren    WAT - Water  
GRS - Grassland    WDL - Woodland

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

3/2/2004

## **Pixley ID - 202500 IDCON**

---

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	88
Agriculture to Unknown	0
Agriculture to Natural	10
Natural to Agriculture	13
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	69863
<b>Total Acreage</b>	<b>69974</b>

**Pixley Irrigation District (IDCON-202500)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	97	0	0	0	0	0	0	0	0	0	97
AG-I	240	62253	88	0	0	0	10	0	0	0	62591
URB	0	0	882	0	0	0	0	0	0	0	882
BAR	0	0	0	56	0	0	0	0	0	0	56
WET	0	0	0	0	776	0	0	0	0	0	776
WAT	0	0	0	0	0	128	0	0	0	0	128
GRS	0	13	0	0	0	0	5427	0	0	0	5440
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	4	0	4
UNK	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>337</b>	<b>62266</b>	<b>970</b>	<b>56</b>	<b>776</b>	<b>128</b>	<b>5437</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>69974</b>

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)    UNK - Unknown  
AG-I - Agriculture (Irrigated)    URB - Urban areas  
BAR - Barren    WAT - Water  
GRS - Grassland    WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

Note 3: Italics indicate Habitat acres with no change.



## **Rag Gulch W.D. - 202520 IDCON**

---

### **USBR/FWS Central Valley Habitat Monitoring Program Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	5998
<b>Total Acreage</b>	5998

**Rag Gulch Water District (IDCON-202520)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	5968	0	0	0	0	0	0	0	0	5968
AG-I	0	0	14	0	0	0	0	0	0	0	14
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	16	0	0	0	0	16
GRS	0	0	0	0	0	0	0	0	0	0	0
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	0	0	0
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	5968	14	0	0	16	0	0	0	0	5998

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

3/1/2004

Note 3: Italics indicate Habitat acres with no change.

## **Tri-Valley W.D. - IDCON-202600**

---

### **USBR/FWS Central Valley Habitat Monitoring Program**

#### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	0
Agriculture to Unknown	0
Agriculture to Natural	0
Natural to Agriculture	0
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	2901
<b>Total Acreage</b>	2901

**Tri-Valley Water District (IDCON-202600)**  
**Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)**

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
Habitat Type in 1993	0	0	0	0	0	0	0	0	0	0	0
AG-D	0	2070	0	0	0	0	0	0	0	0	2070
AG-I	0	0	2	0	0	0	0	0	0	0	2
URB	0	0	0	0	0	0	0	0	0	0	0
BAR	0	0	0	0	0	0	0	0	0	0	0
WET	0	0	0	0	0	0	0	0	0	0	0
WAT	0	0	0	0	0	0	0	0	0	0	0
GRS	0	0	0	0	0	0	707	0	0	0	707
SHB	0	0	0	0	0	0	0	0	0	0	0
WDL	0	0	0	0	0	0	0	0	122	0	122
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	0	2070	2	0	0	0	707	0	122	0	2901

*Habitat Totals in 1993 (acres)*

*Habitat Totals Existing in 2000 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

AG-D - Agriculture (Dryland)      UNK - Unknown  
 AG-I - Agriculture (Irrigated)      URB - Urban areas  
 BAR - Barren      WAT - Water  
 GRS - Grassland      WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et.al., 1988).

Note 3: Italics indicate Habitat acres with no change.



## **County of Tulare IDCON - 204600**

---

### **USBR/FWS Central Valley Habitat Monitoring Program**

#### **Land Cover Change Report 1993 - 2000**

<b>DESCRIPTION</b>	<b>TOTAL ACRES</b>
Agriculture to Urban	267
Agriculture to Unknown	0
Agriculture to Natural	1814
Natural to Agriculture	20
Natural to Urban	0
Natural to Unknown	0
Urban to Natural	0
No Change	69585
<b>Total Acreage</b>	<b>71686</b>

Tulare, County of (IDCON-204600)  
Central Valley Habitat Monitoring (CVHM), Habitat Change From 1993 To 2000 (acres)

*Habitat Type Existing in 2000*

	AG-D	AG-I	URB	BAR	WET	WAT	GRS	SHB	WDL	UNK	Total
AG-D	0	0	0	0	0	0	0	0	0	0	0
AG-I	23	51404	267	0	12	6	1796	0	0	0	53508
URB	0	0	14641	0	0	0	0	0	0	0	14641
BAR	0	0	0	110	0	0	0	0	0	0	110
WET	0	0	0	0	196	0	0	0	0	0	196
WAT	0	0	0	0	0	308	0	0	0	0	308
GRS	0	20	0	0	6	0	2634	0	0	0	2660
SHB	0	0	0	0	0	0	0	142	0	0	142
WDL	0	0	0	0	0	0	0	0	121	0	121
UNK	0	0	0	0	0	0	0	0	0	0	0
Total	23	51424	14908	110	214	314	4430	142	121	0	71686

*Habitat Type in 1993*

*Habitat Totals in 1993 (acres)*

Note 1: This data is subject to change as refinements are made to processes.

*Habitat Totals Existing in 2000 (acres)*

AG-D - Agriculture (Dryland)      UNK - Unknown  
AG-I - Agriculture (Irrigated)      URB - Urban areas  
BAR - Barren      WAT - Water  
GRS - Grassland      WDL - Woodland

3/1/2004

Note 2: The habitat types in this matrix are based on groupings of the WHR classification (Meyer et al., 1988).

Note 3: Italics indicate Habitat acres with no change.

## **APPENDIX F**

### **SUMMARY STATUS REPORT ON THE CONSERVATION ACTIONS INCLUDED IN THE 2000 INTERIM RENEWAL BIOLOGICAL OPINION**



## Appendix F. Updated Status Report on the Conservation Actions and the RPMs included in the February 29, 2000 Biological Opinion on CVP Interim Renewal Contracts.

Proposed Action/Conservation Measures	Responsibility	Due Date/ Time Period	Status/Remarks
<b>1.</b> Reclamation will develop and implement programs with the water districts (Districts) to ensure that land use changes associated with project water will be addressed pursuant to ESA.	FWS/USBR		
<b>a.</b> Notify Districts regarding ESA requirements of the Interim Opinion	FWS/USBR	Done	1a. <b>Completed.</b> Notice sent week of July 3, 2000
<b>b.</b> Synthesize existing and new information on distribution and potential habitat of federally listed, proposed, and candidate species within the Districts.	FWS/USBR	Ongoing	1b, c, d: <b>Ongoing.</b> Cooperative GIS teams from both agencies working on Central Valley Habitat Monitoring Program mapping efforts. Data for all CVP service areas is being made available to the Service. Data for the 2004 IRC service areas is presented in Attachment 6 of this memo.
<b>c.</b> Map (hard copy and digitized) habitat and potential distribution of listed, proposed, and candidate species, and provide information to the Districts, the Service and the California Department of Fish and Game.	FWS/USBR	Ongoing	<b>c. Ongoing.</b> Cooperative GIS teams from both agencies working on Central Valley Habitat Monitoring Program mapping efforts. Data for the 2004 IRC service areas is presented in Attachment 6 of this memo. Data for all CVP service areas will be made available to the CVP contractors and the California Department of Fish and Game.
<b>d.</b> Monitor land use changes and ongoing activities in the Districts to ensure that project water is not used in a manner that adversely affects listed, proposed, and candidate species.	FWS/USBR	Ongoing	<b>d. Ongoing.</b> Cooperative GIS teams from both agencies working on Central Valley Habitat Monitoring Program mapping efforts. Landuse/landcover Trend Analysis is available. Data for the 2004 IRC service areas is presented in Attachment 6 of this memo.
<b>2.</b> Reclamation will ensure that its operation and maintenance activities as well as activities of other associated with the use of CVP water within the Districts will not adversely affect listed, proposed and candidate species.	FWS/USBR		
<b>a. Work</b> with the California Department of Pesticide Regulation to develop guidelines and information addressing the effects of the application of pesticides to listed, proposed, and candidate species.	FWS/USBR	Done	2a. <b>Completed.</b> Memo to Service documenting the pesticide information related to candidate species that Reclamation contributed to CDPR.
<b>b.</b> Develop and distribute to the Districts and landowners guidance on construction and maintenance activities that are most beneficial to listed, proposed, and candidate species.	FWS/USBR	Done	2b. <b>Completed.</b> Draft Field Operations Manuals, O&M Manuals, and IPMs were completed for each Reclamation Area Office and reviewed by FWS. Final Field Operations Manuals, O&M Manuals, and IPMs were sent to the Service in 2003.
<b>c.</b> Review water conservation plans for the Districts prior to implementation to ensure they do not adversely affect listed, proposed or candidate species.	USBR	Completed	2c. <b>Completed.</b> Completed for Reclamation Area Offices.
<b>d.</b> Amend the criteria for water conservation plans to ensure consistency with the ESA. 1) Status Report Update 2) Revise Criteria	USBR	Ongoing	2d. <b>Ongoing.</b> The criteria for water conservation plans are amended every 3 years, consistent with the CVPIA. The criteria were amended in 2002, so will not be amended again until 2005. Reclamation informally consults with the Service by forming an interagency team that to ensure that the criteria is in compliance with the ESA. Reclamation will send memos to the Service and NMFS requesting their review of criteria and participation on interagency teams.



Proposed Action/Conservation Measures	Responsibility	Due Date/ Time Period	Status/Remarks
3. Reclamation, working with the Service, will implement critically needed action to assure the continued existence of listed and proposed species and their habitats that have been affected by the CVP.	FWS/USBR	Ongoing	3. Ongoing. CVP conservation program (CP) and b(1) other projects.
a. Identify lands that are critical to the continued survival of listed species and proposed species.	USBR	Ongoing. Continue updating	3a. Ongoing. Last update of high priority species provided to CP from FWS on 1/27/00. Historic trend analysis completed and mapping program discussed in 1bcd above to help identify and prioritize land for conservation easements or acquisition.
b. Implement critical needs plan.	FWS/USBR	Implementing ongoing	3b. Ongoing
4. Develop a long-term program to address overall effect of the CVP and implementation of the CVP/A.	FWS/USBR	Pursue adequate funding and partners	4. Ongoing. CVP consultations, CVP conservation program and b(1) "other" projects/programs.
Reasonable and Prudent Measures	Responsibility	Due Date/ Time Period	Status/Remarks
I. Develop and implement programs with the Districts in Attachment 1 of this opinion to ensure that land use activities associated with project water will be addressed pursuant to the ESA.			
A. Work with CDPR to develop guidelines that provide an update on work that has been completed on this measure. In addition, provide information to CDPR generated from mapping efforts described in Conservation Measure I(c).	FWS/USBR	Done	A. Completed. Memo to Service describing Reclamation's contribution of ESA information to the CDPR.
II. Identify land and water use techniques or measures within CVP service areas which are critically impacting listed and proposed species or their habitats.			
A. Prepare a study plan to identify the sources of selenium contamination in the Grasslands, San Joaquin River, and south Delta estuary.	USBR	Ongoing	A. Ongoing. This requirement is already handled through the existing Grassland Bypass Project (GBP) monitoring program. USGS conducted a sources of selenium study for the GBP was completed in 2003. The BA for the Delta Mendota Canal Long Term Contract Renewal, and the BA for the South Central California Area Office O&M Manual used the sources of selenium study.
B. Develop and implement an approved monitoring program to assess the effects of selenium loading within the San Joaquin River on aquatic listed species or their surrogates using the lower San Joaquin River and southern Sacramento-San Joaquin Delta.	USBR	Ongoing	B. Initiated and ongoing. The BA/BO Proposed Action for the Grassland Bypass Project has commitments for supporting Se studies and monitoring to assess the effects of selenium loading within the San Joaquin River on aquatic listed species or their surrogates.
C. Provide quarterly reports on locations of monitoring and monitoring results. If concentration exceeds 2 ug/l monthly mean standard for wetland water supplies in the Grasslands, and is a result either directly or indirectly from Reclamation actions, will identify and implement corrective actions and initiate separate formal consultation.	USBR	Ongoing	C. See IIA - the reporting measure is handled with the existing GBP monitoring program and existing quarterly reports. Corrective actions were made in previous years and continue to be monitored through the GBP monitoring program, which includes Service biologists, who receive the monthly averages at the same time as Reclamation. All inlets from the Grasslands Project Area to the wetland channels have been plugged since April 21, 1998 and monthly selenium averages have only exceeded 2 ppb occasionally since then and the exceedences have been less than 1 ppb.



Reasonable and Prudent Measures	Responsibility	Due Date/ Time Period	Status/Remarks
<p><b>III.</b> Identify, analyze and compensate for past effects since 1991 for Friant and 1995 for Interim contractors. (Note: Friant is not a 2004 interim contractor)</p> <p><b>A.</b> Identify and analyze the impacts of changes to contract service area boundaries since 1991 for any Friant contracts that have not undergone section 7 consultation. Fully compensate for any impacts associated with past water assignments of Interim or Friant Div. water allocations.</p> <p><b>B.</b> Identify and analyze the impacts of changes to contract service area boundaries since 1995 for interim contractors and provide this information and associated GIS data layers. Fully compensate for any impacts associated with past changes to contract service area boundaries for interim contracts.</p> <p><b>C.</b> Identify and analyze the impacts of changes in purpose of use since 1991 for Friant contractors and 1995 for Interim contractors and provide this information and analysis. Provide an analysis on how changes in purpose of use will affect shortages to districts, and how these changes in allocations will affect CVP-wide water supplies under drought conditions</p> <p><b>D.</b> Identify and analyze the impacts of all water assignments executed since 1991 for Friant contractors and 1995 for interim contractors and provide this information. Fully compensate for any impacts associated with past water assignments of Interim or Friant Division water allocations.</p>	USBR	Prior to L/TCR consultations.	<p>A. Information and analysis ongoing, and will be presented in the BA's for Long-Term contract renewals (L/TCRs).</p> <p>Note: Friant is not a 2004 interim contractor. All Friant contract service area boundary changes have been consulted on separately.</p> <p>B. Information and analysis ongoing. Maps for interim contract service areas are provided in Attachment 6 of this memo. Summary of changes to IRC contract service area boundaries since the 2002 consultation are presented in Attachment 2 of this memo. Additional boundary change information will be provided in BA's for Long-Term contract renewal. Analysis of impacts associated with past changes to boundaries since 1995 will be discussed in the BAs for the L/TCRs.</p> <p>Note: Friant is not a 2004 interim contractor</p> <p>C. No Change. The 1995 Interim contract renewal consultation included change of purpose of use from Agriculture to M&amp;I. In general the Ag. shortage provisions remain even if purpose of use converted to M&amp;I so these changes in allocations will not affect CVP-wide supplies under drought conditions. The CVP M&amp;I water shortage policy is currently under going NEPA and ESA review.</p> <p>Note: Friant is not a 2004 interim contractor</p> <p>D. Interim renewal contractors with an Assignment action are indicted in Attachment 2. There have been four assignments since the 2002 IRC consultation. Some assignments are simple name change actions, usually as a result of deaths in a family.</p> <p>- Assignment actions are separate discretionary actions, and not part of the proposed IRC actions included in this memo. Assignment actions are analyzed in separate NEPA and ESA documents for that action.</p> <p>- Note: Friant is not a 2004 interim contractor</p> <p>IV. Will occur when applicable</p> <p>Note: Friant is not a 2004 interim contractor</p> <p>A. Will occur when applicable</p> <p>B. No Change. June 9, 1997 joint letter on CVP/IA administrative proposal on urban water supply reliability stated that Ag. shortage provisions remain even if converted to M&amp;I. M&amp;I water in the districts up for renewal that are granted M&amp;I priority has not changed since the OCAP consultation (1992). See remarks under III.C above</p> <p>C. See B above.</p> <p>D. Will occur when applicable. Please see remarks to III D. above.</p> <p>Note: Friant is not a 2004 interim contractor</p>
<p><b>IV.</b> Consult on future actions including changes in purpose of use of contracts, transfers involving interim for Friant Div. contractors, assignments, and inclusions, annexations and exclusions to contract service area boundaries.</p> <p><b>A.</b> Consult on future changes in water contracts from agriculture only to agriculture/M&amp;I purposes.</p> <p><b>B.</b> Provide an analysis of how future changes in purpose of use will affect shortages to districts and how this change in allocations will affect CVP-wide water supplies under drought conditions.</p> <p><b>C.</b> No execution of future changes in purpose of use unless it can be shown that such changes will not reduce under drought condition water supplies for proposed or listed species.</p> <p><b>D.</b> Informal consultation for assignments of interim and Friant Divisions that may affect listed species. Consult formally for those contracts or actions with direct or indirect effects that are likely to adversely affect listed species, or result in take. Consult informally if an action will not affect listed species prior to signing of the FONSI or ROD</p>	USBR	Due Date Not Applicable	<p>A. Will occur when applicable</p> <p>B. No Change. June 9, 1997 joint letter on CVP/IA administrative proposal on urban water supply reliability stated that Ag. shortage provisions remain even if converted to M&amp;I. M&amp;I water in the districts up for renewal that are granted M&amp;I priority has not changed since the OCAP consultation (1992). See remarks under III.C above</p> <p>C. See B above.</p> <p>D. Will occur when applicable. Please see remarks to III D. above.</p> <p>Note: Friant is not a 2004 interim contractor</p>



Reasonable and Prudent Measures	Responsibility	Due Date/ Time Period	Status/Remarks
<p><b>E.</b> Informal consultation for inclusions or annexations involving the interim and Friant contractors in this opinion that may affect listed species. Formally consult for those inclusions with direct or indirect effects that are likely to adversely affect listed species, or result in take. Informal consultation will determine if the inclusions or annexations will not affect listed species prior to signing of the FONSI or ROD.</p>	USBR		<p>E. Will occur when applicable. Please see Attachment 2 for inclusion and exclusion information for these interim renewal contractors.</p> <p>Inclusion and Exclusion actions are separate actions, and not part of the proposed IRC actions included in this memo. Inclusion and Exclusion action are analyzed in NEPA and ESA documents on that action.</p> <p>Note: Friant is not a 2004 interim contractor</p>
<p><b>F.</b> Apply specific criteria to all transfers involving interim or Friant Divisions contracts that have not already under gone section 7 consultation.</p>	USBR		<p>F. Will occur when applicable. Transfer approvals are separate actions, and not part of the proposed IRC actions included in this memo. Transfer actions are analyzed in NEPA and ESA documents for that action.</p> <p>Note: Friant is not a 2004 interim contractor</p>
<p><b>V.</b> Develop and implement a program to compensate for losses of listed species habitat that occur as a result of delivery of CVP water to the Interim &amp; Friant Div. Contract service area.</p>	USBR	Pending	<p>V. Pending. Reclamation agrees to work with the Service to develop such a contingency guideline program. This program would incorporate the following criteria:</p> <ol style="list-style-type: none"> <li>1. Use of monitoring and mapping actions to identify land-use changes that result in losses of listed species habitat.</li> <li>2. Notification to, and the education of districts about their need to comply with requirements of the Endangered Species Act.</li> <li>3. Reporting to the Service of any activities that may have resulted in unauthorized losses of listed species habitat.</li> <li>4. Development of habitat compensation plans for any land-use changes that result in loss of listed species resulting from Reclamation's discretionary actions.</li> <li>5. Continued coordination between the Service and Reclamation to ensure existing conservation programs continue to address listed species that have been affected by use of CVP water.</li> <li>6. We commit to work with the Service to develop such a program that recognizes Reclamation's authorities. Reclamation would provide a draft of such a contingency guideline program within 90 days of receipt of the biological opinion on these proposed interim contracts.</li> </ol> <p>Note: Friant is not a 2004 interim contractor</p>
<p><b>A.</b> Establish a contingency plan that would develop and implement a process to identify impacts and then address those impacts to listed species or their habitats within the interim and Friant Division's contract service area that occur as a result of delivering CVP water to contractors.</p>	USBR/CONTR	Pending	<p>A. Pending. See response to V.</p> <p>Note: Friant is not a 2004 interim contractor</p>
<p><b>B.</b> Ensure implementation of the contingency plan to address impacts to species or their habitats within the interim and Friant Division's contract service area that occur without a FWS incidental take authorization.</p>	USBR/CONTR	Pending	<p>B. Pending. Once the contingency criteria are finalized, steps will be made to ensure that contingency plans are developed, and that all contractors are made aware of the plans.</p> <p>Note: Friant is not a 2004 interim contractor</p>
<p><b>C.</b> The contingency plan for impacts to listed species or their habitat will be reviewed in a section 7 consultation with the FWS and will incorporate compensation for temporal and other habitat losses. Losses of listed species habitat within the interim and Friant contract service areas will be compensated at ratios consistent with the recovery needs for those listed species.</p>	USBR/FWS	Pending	<p>C. The contingency plans will be coordinated with the FWS and the appropriate Section 7 consultation will occur after finalization.</p> <p>Note: Friant is not a 2004 interim contractor</p>





**APPENDIX G**

**COMMENT LETTERS RECEIVED  
AND  
RECLAMATION RESPONSES TO PUBLIC COMMENTS**

## APPENDIX G - CONTINUED

### **Introduction to Appendix G**

The *Draft Supplemental EA for the 2004 Renewal of Interim Water Service Contracts* was circulated for public and agency review in a 30-day review period that began on December 23, 2003 and ended January 23, 2004. Three written comments were received during the public review period. This final *Supplemental EA for the 2004 Renewal of Interim Water Service Contracts* provides responses to the comments received on the draft.

This appendix includes a list of the comment letters (Table 1), the comment letters, and the responses to the substantive environmental issues raised in the comment letters.

No new impacts were identified in the public comments, nor was there an increase in the severity of previously identified impacts.

**Table 1. List of Comment Letters Received.**

<b>Letter Reference</b>	<b>Commenter</b>
USEPA	Lisa B. Hanf, Manager, Federal Activities Office U.S. Environmental Protection Agency Region IX
SCVWD	Kellye Kennedy, Senior Project Manager, Santa Clara Valley Water District
CH	Terry Roberts, Director, State of California, Governor's Office of Planning and Research, State Clearinghouse and Planning Unit



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

EA  
2/3

BUREAU OF RECLAMATION OFFICIAL FILE COPY RECEIVED		
FEB 02 2004		
CODE	ACTION	SURNAME & DATE
150	✓	lu

6

January 27, 2004

Frank Michny  
Regional Environmental Officer  
Bureau of Reclamation  
Mid-Pacific Regional Office  
2800 Cottage Way  
Sacramento, California 95825

**Subject:** 2004 Renewal of Interim Water Service Contracts Supplemental Draft  
Environmental Assessment (SEA)

Dear Mr. Michny:

The Environmental Protection Agency (EPA) has reviewed the Draft Supplemental Environmental Assessment for the 2004 Renewal of Interim Water Service Contracts through February 29, 2006 - Central Valley Project, California. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

USEPA  
1

EPA provided comments on the 1994 draft guidelines for interim renewal of long-term CVP contracts, the 1994 EA for interim renewal of 67 CVP water service contracts, and the 2002 EA for interim renewal of 42 CVP water service contracts. Since our earlier comments are still relevant to the proposed contracts and current SEA, these letters are hereby incorporated by reference. A copy of our 2002 letter is attached.

The current management of the contract water supplies constitutes an irretrievable commitment of resources which should be fully evaluated pursuant to NEPA. The present SEA is the fifth "roll-over" since 1994. Section 3404(c) of Central Valley Project Improvement Act (CVPIA) states that the interim period may not exceed three years and that successive interim periods may not exceed two years prior to execution of new long-term contracts. Therefore, EPA urges Reclamation to pursue execution of long-term contracts based on a sound NEPA process, supporting an environmentally-responsive contract design.

USEPA  
2

EPA acknowledges the significant efforts made by Reclamation staff over the past several years in developing an approach to CVP contracts that is fair to the districts involved and implements the reforms envisioned by the CVPIA. We continue to offer our support on working

USEPA  
3

Classification	ENV 600
Project	CVP
Control No.	4001638
Folder I.D.	57194

Printed on Recycled Paper

through the issues raised in our comments or on other issues raised during the comment period. If you have questions, please contact Summer Allen, the lead reviewer for this project, at 415-972-3847.

Sincerely,

A handwritten signature in black ink, reading "Lisa B. Hanf". The signature is fluid and cursive, with the first name "Lisa" being the most prominent.

Lisa B. Hanf, Manager  
Federal Activities Office

Main ID# 002218

Enclosures:

EPA Comments on 2002 Interim Renewal EA





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

January 4, 2002

Frank Michny  
Regional Environmental Officer  
Bureau of Reclamation  
Mid-Pacific Regional Office  
2800 Cottage Way  
Sacramento, California 95825

Dear Mr. Michny:

The Environmental Protection Agency (EPA) has reviewed the **Draft Supplemental Environmental Assessment for the 2002 Renewal of Interim Water Service Contracts through February 29, 2004 - Central Valley Project, California**. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The Bureau of Reclamation (Bureau) proposes to execute 42 interim renewal water service contracts for up to two years between March 1, 2002 and February 29, 2004. Execution of interim contracts is needed to continue delivery of Central Valley Project (CVP) water until long-term contracts can be executed.

The renewal of interim water service contracts was first evaluated in a 1994 environmental assessment (EA) with supplemental EAs (SEAs) issued in 1998, 2000, and 2001 for subsequent interim renewals (i.e., "roll-overs"). The current SEA is tiered to these previous EAs and relies on the evaluation of environmental consequences provided in the 2000 and 2001 SEAs. The proposed interim contracts include the same terms as those executed in 1994, and renewed in 1998, 2000, and 2001. If long-term contracts are not executed by March 1, 2003, a one-year extension of these interim contracts (March 1, 2003 through February 29, 2004) may be executed. Prior to a second year extension, the Bureau will determine if additional NEPA analysis is necessary.

As you know, EPA has had a long institutional interest in the Bureau's renewal of interim and long-term contracts. We provided comments on the 1994 draft guidelines for interim renewal of long-term CVP contracts and on the 1994 EA for interim renewal of 67 CVP water service contracts. In that many of our earlier comments are still relevant to the proposed contracts and current SEA, these letters are hereby incorporated by reference. Copies are attached.

EPA continues to be concerned that the "roll-overs" of the interim contracts have compromised the Bureau's NEPA process for the following reasons:

USEPA  
4



- The present SEA is the fourth "roll-over" since 1994. In effect, many of these interim renewal contracts have been continued for 7 years. The current renewal would extend these interim renewal contracts to a period of 10 years. Therefore, the premise that the contracts are of a limited duration with minor environmental impacts, is no longer valid.
- The status quo perpetuates and aggravates environmental degradation and constitutes an irretrievable commitment of resources which should be fully evaluated pursuant to NEPA. We note that the Central Valley Project Improvement Act Programmatic Environmental Impact Statement did not evaluate water quality impacts at any level, nor did it evaluate other environmental impacts at the district level. We continue to believe there is a compelling need for detailed evaluation of long-term and cumulative impacts of district-level water quality, groundwater, and water supply reliability effects of the continuing action.

USEPA  
5

USEPA  
6

USEPA  
7


We urge the Bureau to stop continual "roll-overs" of the interim contracts and to pursue execution of long-term contracts based on a sound NEPA process which informs environmentally responsive contract design. To do so would be in the best interests of California, the public, and sound water supply management. We believe an adequate NEPA process for district-level contracts should include evaluation of the long-term and cumulative impacts of the status quo and continual roll-over of interim renewal contracts. We also urge the Bureau to create strong incentives to move contractors from interim renewal contracts to long-term contracts. We consider these NEPA compliance issues to be significant and we will work with you to resolve our concerns to avoid elevation of these issues.

USEPA  
8

USEPA  
9

EPA wishes to acknowledge the significant efforts made by Bureau staff over the past several years in developing an approach to CVP contracts that is fair to the districts involved and implements the reforms envisioned by the CVPIA. Our detailed comments (attached) discuss a number of issues which we believe should be considered in the environmental documentation for interim renewal of water service contracts. We stand ready to offer our support on working through the issues raised in our comments or on other issues raised during the comment period. If you have any questions about these comments, please call Lisa Hanf at (415) 972-3854 or Laura Fujii at (415) 972-3852.

Yours truly,



Joshua Baylson,  
Acting Deputy Director  
Cross Media Division

Attachments: Detailed comments (3 pages)

EPA Comments on 1994 Draft Guidelines for Interim Renewal of CVP  
Contracts

EPA Comments on 1994 Interim Renewal EA

MI002218

Filename: interimcvpcontracts.wpd

cc: Donna Tegelman, BOR, MP-400

Gary Stern, National Marine Fisheries Service, Santa Rosa

Michael Aceituno, National Marine Fisheries Service, Sacramento

US Army Corps of Engineers, San Francisco & Sacramento

Pat Port, Department of the Interior

Wayne White and David Wright, US Fish and Wildlife Service

Jim White, Department of Fish and Game

Victoria Whitney, State Water Resources Control Board

Mary Nichols, California Resources Agency

Patrick Wright, CALFED



## DETAILED COMMENTS

### **Impact of No Action (Status Quo)**

The 1994 Environmental Assessment (EA) and subsequent Supplemental Environmental Assessments (SEAs) measure impacts of the proposed action relative to the status quo scenario, or "no action." However, the Bureau has failed to place the status quo in the context of historical biological resource losses or actual on-the-ground environmental conditions associated with CVP water delivery (e.g., reduced flows in the San Joaquin River). Thus, the conclusion that there are no significant impacts since the proposed action represents a continuation of the existing action is flawed.

USEPA  
10

#### *Recommendation:*

We urge the Bureau to evaluate potential impacts of the continuing action in comparison to existing environmental conditions and trends. As we have stated before, "no action" does not equate with "no impact." Therefore, the Bureau should determine whether the continuation of the action will contribute to a declining, stable, or improving environmental condition.

### **Environmental Consequences**

An underlying assumption of the SEA appears to be that there are no changes in land use, canal maintenance procedures, cropping patterns, or other agricultural and irrigation practices because the contracts are of a limited duration, represent a continuation of existing conditions, and will not provide for additional water supplies that could lead to shifts in agricultural practices or land use (draft Finding Of No Significant Impacts (FONSI), pg. 3). However, changes in existing conditions have occurred which could affect agricultural practices. These changes should be taken into account.

USEPA  
11

#### *Recommendations:*

We recommend the Bureau reevaluate the assumption of no change in agricultural or irrigation practices that occur with market and other economic shifts, regulatory reform, and environmental dynamics. In examining the incremental impacts of roll-overs, the Bureau should consider the cumulative impacts from changed agricultural conditions. Conditions to consider include changes in herbicide use for aquatic plant control in irrigation canals, the increased focus on invasive species control, new air quality standards (e.g., PM2.5), new water quality actions (e.g., California Regional Water Quality Control Board waste discharge requirements), and projected growth and development within the Central Valley.



The 2000 SEA (pg. 3-4) states that the Bureau has undertaken a number of commitments to monitor and address any impacts from the previous interim contracts. We urge the Bureau to include the most recent monitoring results in the final environmental documentation.

USEPA  
12

## **Alternatives**

1. It appears that Alternative 2, as presented in the 2000 SEA, is no longer being evaluated as an alternative. Therefore, only Alternative 1, the No Action alternative, is considered in the 2001 and 2002 SEAs (2002 SEA, pg. 2-2).

USEPA  
13

### ***Recommendation:***

Given the fact that many of the interim contracts have been in place for 7 years and may be continued into the indefinite future, we strongly believe the Bureau should consider evaluation of other reasonable alternatives as required by NEPA [40 CFR Section 1502.14(a) and (c)].

2. As presented in the 2000 SEA, Alternative 2 would specify water quantities using two water supply categories. The first, more reliable water category, would be the quantity of water that would be reasonably likely to be available during a year for delivery and would be the "contract total." The second category of water would be any additional water that may be delivered to contractors in excess of the first category of water.

EPA has frequently expressed our concern that the contract quantities included in the current contracts do not accurately reflect the delivery capability of the CVP, especially after regulatory actions under the Clean Water Act, the CVPIA and the Endangered Species Act are considered. In many years – and for some districts, in most years – the CVP is unable to deliver the entire amount of water called for in the current contracts. EPA is concerned that this "over commitment" of CVP supplies has the potential to adversely affect the Bureau's ability to effectively assist in addressing California water and environmental needs.

USEPA  
14

### ***Recommendation:***

We urge the Bureau to consider including the dual water category approach in their interim contract renewals, especially since these contracts may continue into the indefinite future. We suggest that the Bureau develop a consistent process for determining, on a contract by contract basis, the proper allocations of "base" and "supplemental" quantities. We believe the "base" amount should reflect recent historical realities but also factor in the anticipated future limitations on CVP supplies noted and evaluated in the CVPIA Programmatic EIS.



3. Alternative 2 also included the concept of tiered water pricing for the first category of water (contract total) where the first 80 percent of the contract total would be priced at the contract rate. Subsequent 10 percent increments would be priced at higher rates. The second category of water would be priced at the full cost rate.

USEPA  
15

*Recommendation:*

EPA has often expressed our support for the concept of tiered pricing as a mechanism for encouraging economically efficient water uses in both the agricultural and urban sectors. EPA appreciates that implementing tiered pricing in the real world is difficult, given the vastly different circumstances of irrigation districts and the various approaches to managing water supplies in diverse hydrologies. Nevertheless, we urge the Bureau to reconsider including tiered water pricing in interim renewal contracts and to develop carefully tailored, district or unit level approaches to tiered pricing.

**General Comments**

1. We recommend the Bureau clearly state in the environmental documentation the most realistic schedule for execution of long-term contract renewals. We ask that the Bureau confirm that interim contract renewals will not be continued into the indefinite future. We also strongly urge the Bureau to include language in each interim contract stating a specific schedule and date for finalizing and executing the long-term contract.
2. We are concerned that NEPA review of the major environmental issues involved in water delivery under these contracts is being carried out in an increasingly fragmented way through different NEPA processes. We urge the Bureau to more explicitly articulate (a) how the various long-term contract EISs (e.g., American River Unit) will tier from the CVPIA PEIS, (b) how these interim contract SEAs will tier from the CVPIA PEIS (now that there is a final Record Of Decision on the PEIS), and (c) how the many local efforts, such as the San Luis Drain EIS and the Westside Integrated Resource Plan (WIRP), will tier from the CVPIA PEIS and relate to the various contract renewal evaluations.
3. The final environmental documentation should include updated information on the status of current water transfers and assignments; implementation of CVPIA requirements of Section 3405, as already incorporated into the interim contract provisions (e.g., installation of water measurement devices, conservation plans, meeting water quality standards, payment provisions); US Fish and Wildlife and National Marine Fisheries Service concurrence letters on meeting Endangered Species Act requirements; and status of Interim Contracts Renewal Biological Opinion commitments.

USEPA  
16

USEPA  
17

USEPA  
18

## APPENDIX G - CONTINUED

### Response to Comments by US Environmental Protection Agency (USEPA)

- USEPA-1      Comment Noted.
- USEPA-2      Comment Noted. See section 1.1, fourth paragraph, of this environmental assessment which explains our environmental analysis approach. Reclamation believes the NEPA analysis is appropriate for the action at hand.
- USEPA-3      Comment Noted.
- USEPA-4      Comment Noted
- USEPA-5      Reclamation anticipates completing the environmental compliance and the execution of long-term water service contract within this interim period. The complexity of the analysis associated with the Programmatic Environmental Impact Statement (PEIS) extended its completion until October 1999 with the Record of Decision approved on January 9, 2001. The CVPIA PEIS evaluated CVP-wide impacts of long-term contract renewal. Long-term contract environmental compliance documents tiered from the CVPIS PEIS are at various stages of completion. Friant Division, Hidden Unit, and Buchanan Unit long-term contract have been executed. Interim contracts are necessary until completion of the contract negotiation and environmental compliance processes. The interim renewal of these contracts essentially maintains the status quo.
- USEPA-6      See Response to USEPA-2
- USEPA-7      The final CVPIA PEIS, partly based on comments on the draft CVPIA PEIS, did evaluate impacts to Delta water quality in Technical Appendix Volume Ten, October 1999, and habitat and water quality conditions that affect fish in the Central Valley streams in Attachment B of the Fish Habitat Water Quality Technical Information, September 1997. Regional and district level water quality impacts as they may relate to the approval of long-term water service contracts have or will be evaluated in the long-term contract renewal NEPA documents tiered from the PEIS.
- USEPA-8      See USEPA-5 and 2. Reclamation and the contractors have made and will continue efforts to complete the appropriate environmental compliance process for long-term contracts.



## Response to Comments by US Environmental Protection Agency (USEPA)

- USEPA-9      Section 3404 (c)(3) of the CVPIA provides the incentives to renew interim and “encourage early renewal” of all CVP water service contracts. Reclamation intent is to aggressively pursue completion of long-term contract renewals.
- USEPA-10     See section 1.1, fourth paragraph, of this final EA. The EA and the scope of analysis were developed consistent with NEPA regulations and guidance for the Council on Environmental Quality. The proposed action is the continuation of the existing interim contracts with only minor, administrative changes to the contract provisions. Only minor change in actions, circumstances, or information has occurred. See response to comment USEPA-2.
- USEPA-11     With interim contract renewal, the continuation of providing the same amount of water to the same lands for the existing/ongoing purpose does not result in a significant new impact. Other activities may be affecting agricultural practices, but the renewal of existing interim water service contracts for up to 2 years will not shift agricultural practices or land use. For the renewal of interim contracts, we believe it would be a unproductive exercise to analyze impacts on natural resources from activities such as changes in herbicide use for aquatic plant control or increased focus on invasive species control which interim water service contracts have little if any relationship to the action at hand.
- USEPA-12     Monitoring results of previous interim contracts have shown no significant affects from Reclamation’s discretionary actions related to interim contract renewals. Appendix H of this Supplemental EA provide the latest report on the interim contract renewal US Fish and Wildlife Service’s biological opinion.
- USEPA-13     Other alternatives are being evaluated as part of the long-term contract renewal process. So far, twenty-seven long-term contracts have been renewed. Unless unforeseen complications arise, Reclamation and the interim contractors will execute long-term contracts, which will include completing all environmental compliance, within the next two years.
- USEPA-14     The Reclamation Project Act of 1956 and Reclamation Project Act of 1963 mandate renewal of existing contract amounts when beneficially used. Needs analysis have been completed to identify the amount of water that could be beneficially used by each water service contractor. The contract amounts were constrained to not exceed the beneficial use or the existing contract amount, whichever is less.

CVPIA required CVP to institute environmental management as part of the CVP operations, such as allocation of 800,000 acre-feet for fish and wildlife



## Response to Comments by US Environmental Protection Agency (USEPA)

purposes, refuge water supply, and acquisition of water from willing sellers. These requirements in addition to existing Federal and State requirements of CVP operations constrain the actual delivery amounts. These existing legal constraints provide regulatory/environmental use of CVP water.

- USEPA-15      Alternatives, including tiered pricing, are being addressed through the negotiations process for long-term contracts. Appropriate alternatives will be evaluated as part of the environmental compliance process for long-term water-service contract renewals.
- USEPA-16      See response USEPA-5 and 9. Various unforeseen circumstances have delayed the execution of long-term contracts for the interim contractors.
- USEPA-17      With the completion the CVPIA PEIS and the ROD (1/9/01), Reclamation has continued with the process to complete the contract negotiations and tiered regional environmental documents necessary to executed long-term water service contracts, many of which are also interim contracts. The environmental process is complete for the 25 of the 28 Friant Division contracts, the Hidden Unit contract, and the Buchanan Unit contract and also near completion for the Cross Valley Canal Unit contracts.
- USEPA-18      No water transfers or assignments of water are part of the proposed action. They are separate independent actions. Appropriate environmental compliance and documentation will be completed for any request from interim contractors for Reclamation approval of water transfers or water assignments.

This Supplemental EA provides the US Fish and Wildlife Service biological opinion (Appendix H), the National Marine Fisheries Service concurrence letter (Appendix I), and the summary status report on the conservation actions included in the US Fish and Wildlife Service's 2000 biological opinion on interim renewals (Appendix F).

5750 ALMADEN EXPWY  
SAN JOSE, CA 95118-3686  
TELEPHONE (408) 265-2600  
FACSIMILE (408) 266-0271  
[www.scvwd.dst.ca.us](http://www.scvwd.dst.ca.us)  
AN EQUAL OPPORTUNITY EMPLOYER

[illegible]

January 23, 2004

Frank Michny, Environmental Officer  
Bureau of Reclamation (MP-150)  
2800 Cottage Way  
Sacramento, CA 95825-1898

Subject: Draft Supplemental Environmental Assessment and Finding of No Significant Impact for the 2004 Interim Water Service Contracts through February 28, 2006.

Dear Mr. Michny:

The Santa Clara Valley Water District (District) is pleased to provide comments on the subject Draft Supplemental Environmental Assessment (DSEA) and Finding of No Significant Impact (FONSI). We agree with the conclusion reached in the Draft FONSI that interim renewal of the proposed water service contracts for an additional term of two years will not have a significant impact on the human environment. Therefore we support that a FONSI for the proposed action is appropriate.

With respect to Threatened and endangered species as discussed in Chapter 3 of the Draft SEA, we support Reclamation's commitment to undertake activities described in the referenced 2002 Biological Opinion. However, we believe clarification is necessary in Reclamation's addition to Chapter 3 Biological Resources. In section 3.3.1, the Bureau has included a paragraph that states the following:

"The FWS Biological Opinion for 2002 interim contracts is incorporated by reference in the 2004 Supplemental EA and presents the commitments that Reclamation will undertake during the proposed 2004 interim renewal period."

The 2002 Biological Opinion included statements with respect to the District's activities and the impacts of the interim contract renewal that the District has disputed. We understand that these portions of the 2002 Biological Opinion will be revised when the new Biological Opinion for 2004 Interim Renewal Contracts is issued. In order to clarify this point, we request that Reclamation add a sentence explaining that a new biological opinion will be issued for the proposed action. It is our understanding the new biological opinion will supercede the 2002 biological opinion.

Classification	ENV 6-00
Project	OW
Control No.	4001996
Folder I.D.	57194



Mr. Frank Michny  
Page 2  
January 23, 2004

Thank you for considering these comments. If you have any questions, you may contact me at (916) 447-1534.

Sincerely,

A handwritten signature in black ink, appearing to read "Kellye J. Kennedy", with a stylized flourish at the end.

Kellye Kennedy  
Senior Project Manager  
Imported Water Unit

---

cc: Karen Donovan, Duane Morris  
kk:kk

## **APPENDIX G - CONTINUED**

### **Response to Comments by Santa Clara Valley Water District (SCVWD)**

- SCVWD-1      Comment noted.
- SCVWD-2      Text revised as suggested.





Arnold  
Schwarzenegger  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



February 19, 2004

Bob Eckart  
U.S. Bureau of Reclamation  
2800 Cottage Way  
Sacramento, CA 95825

Subject: 2004 Renewal of Interim Water Service Contracts Through February 28, 2006, CVP, CA  
SCH#: 2004014004

Dear Bob Eckart:

The State Clearinghouse submitted the above named Joint Document to selected state agencies for review. The review period closed on February 18, 2004, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

*Terry Roberts*

Terry Roberts  
Director, State Clearinghouse

EA  
2/23

BUREAU OF RECLAMATION OFFICIAL FILE COPY RECEIVED		
FEB 20 2004		
CODE	ACTION	SURNAME & DATE
150		RE 2/23/04

Jan Boel  
Acting Deputy  
Director

CH  
1

NOTICE: IF YOU DETACH  
ENCLOSURE PLEASE INSERT  
CODE NO. \_\_\_\_\_  
INITIAL \_\_\_\_\_  
DATE \_\_\_\_\_

Project	
Control No.	4002393
Folder No.	5180

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2004014004  
**Project Title** 2004 Renewal of Interim Water Service Contracts Through February 28, 2006, CVP, CA  
**Lead Agency** U.S. Bureau of Reclamation

---

**Type** JD Joint Document  
**Description** Execute up to 59 interim Water Service Contracts with Central Valley Project water contractors for a period of up to two years, from March 1, 2004 through February 28, 2006. Interim Contract Renewals are executed under the authority of the CVPIA to provide a bridge between the expiration of existing long-term water service contracts and the execution of new long-term water contracts.

---

**Lead Agency Contact**

**Name** Bob Eckart  
**Agency** U.S. Bureau of Reclamation  
**Phone** 916.978-5051 **Fax**  
**email**  
**Address** 2800 Cottage Way  
**City** Sacramento **State** CA **Zip** 95825

---

**Project Location**

**County**  
**City**  
**Region**  
**Cross Streets**  
**Parcel No.**  

<b>Township</b>	<b>Range</b>	<b>Section</b>	<b>Base</b>
-----------------	--------------	----------------	-------------

---

**Proximity to:**

**Highways**  
**Airports**  
**Railways**  
**Waterways** Sacramento River, San Joaquin River, American River, Feather River  
**Schools**  
**Land Use** Agricultural and Municipal / Industrial

---

**Project Issues** Agricultural Land; Vegetation; Wildlife; Growth Inducing; Cumulative Effects

---

**Reviewing Agencies** Resources Agency; Department of Fish and Game, Region 2; Department of Fish and Game, Headquarters; Delta Protection Commission; Department of Parks and Recreation; Reclamation Board; Department of Water Resources; Native American Heritage Commission; State Lands Commission; Regional Water Quality Control Bd., Region 5 (Sacramento); State Water Resources Control Board, Clean Water Program; State Water Resources Control Board, Division of Water Quality; State Water Resources Control Board, Division of Water Rights

---

**Date Received** 01/20/2004 **Start of Review** 01/20/2004 **End of Review** 02/18/2004

## **APPENDIX G - CONTINUED**

### Response to Comments by State of California State Clearinghouse and Planning Unit

CH-1      Comment noted.  
CH-2      Comment noted.

