DELTA-MENDOTA CANAL UNIT

ENVIRONMENTAL ASSESSMENT LONG-TERM CONTRACT RENEWAL

Attachment C Water Needs Assessments

February 2005

BANTA-CARBONA ID Contractor ID: 201840

Colin accol 10. 201040	22124											
Delta		ŏ	Contractor	's Water	Supply	s Water Supply Sources and Quantities (acre-feet)	and Qua	ntities	(acre-fee	it)	Date: 2/22/2	Date: 2/22/2005 2:04:44 P
				Surface	Surface Water Supply					Groundwater Supply	Supply	
Timeframe	Reference Delivery 2	eny	USBR Total Deliv/Max 3	SWP 4	tocal 5	Local Source 6	Trsfr / Rtm / Recycle In 7	Trsfr / Out 8	District 9	S Private Y 10	Safe Recharge Yield Recharge 11 12	Fotal Supply 13
1989	22,355	55 :	21,023	0 (29,248	S. Joaquin	0 0	7,150	0 0	0 %	0 8	43,121
2025 Future	000°e7	: B	000,000	Contrac	عدرمده tor's Aar	Contractor's Agricultural Water Demands	ຶ Water D€	emands	⇒	230 <u>Maximum </u>]	30 Maximum ProductiveAcres: <u>14,893</u>	45,750 14,893
Timeframe	Crop Water Requirement (acre-feet)	District Irrig. Efficiency (%) (%)	Effective Effective (acre-feet) (acre-feet)	Reference C Effective Precip ((acre-ft) (Calculated Net Crop Water Req (acre-feet)	USBR Net Crop Water Req (acre-feet) 20	Average Firigated Acres (acres) 21	Reference Irrigated Acres (acres)	Catculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feel) 25	Total Ag Demand (acre-feet) 26
1989	46,032 44,408	75 85	9,143	6,200	49,185	49,603 44,950	15,130	15,501	3.25	3.20	1,200	50,385 45,920
		A CALL CALL CALL CALL CALL CALL CALL CA		Con	tractor's	Contractor's M&I Water Demands	er Dema	spu				
Timeframe	Population 28	Residential water Demand Per Capita T Demand De ion (gpcd) (acr	Demand Demand (acre-feet)	nonse Industrial (acre-feet)	Nonestoental water Dentand Comm / Tot strial Instit. Demx -feet) (acre-feet) (acre-	Total Total Demand (acre-feet)	Unacc. / Distr. (acre-feet) 34	Ref Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Omd (gpcd) 36	Total M&I Demand (acre-feet)	Total Ag + M&I Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
1989 2025						0 0	00			00	50,385 45,920	7,264

* Represents Maximum Contract Amount

** Represents Maximum Contract Amount

** Represents Maximum Contract Amount

BROADVIEW WD Contractor ID: 201850

	200												
Delta		ŏ	ontractor	"s Wate	r Supply	Contractor's Water Supply Sources and Quantities (acre-feet)	and Qua	antities	(acre-fee	£	Date: 2/.	Date; 2/22/2005 2:04:44 P	:04:44 P
				Surface	Surface Water Supply					Groundwater Supply	Supply		
Timeframe 1	Reference Delivery 2	ence	USBR Total Deliv/Max 3	SWP 4	. Local 5	Local Source 6	Trsfr / Rtm / Recycle In	/ Trsfr / Out 8	District 0	S Private Y 10	Safe Yield Rect	Recharge 12	Total Supply 13
1989 2025	19,394	000	32,975 27,000	0 0	0 0		0 0	8,104	0 0	0 0		0 0	24,871
			1	Confrac	tor's Ag	Confractor's Agricultural Water Demands	Water De	emands		Maximum	Maximum Productive Acres: 8,725	res: 8,725	
Timeframe 1	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%) 16	Effective Precip (acre-feet)	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet)	USBR Net Crop Water Red (acre-feel) 20	Average Inigated Acres (acres) 21	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25		Total Ag Demand (acre-feet) 26
1989 2025	20,596	75 85	810	2,606	26,381	23,452	969'8	8,686	3.03	2.70	360	& 8	26,741 25,100
				Cor	itractor's	Contractor's M&I Water Demands	er Dema	spu					
	Res	Residential Water Demand	Demand	Non	Nonresidential Water Demand	er Demand	Loss						
Timeframe 1	Population 28	Per Capita Demand (gpcd) 29	a Total Demand (acre-feet)	Industrial (acre-feet) 31	Comm / Instit.) (acre-feet) 32	Total Demand (acre-feet)	Unacc. / Distr. (acre-feet) 34	Ref Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total M&I Demand (acre-feet)	Total Ag + M&I Dmd (acre-feet) 38		Unmet Demand (acre-feet) 39
1989				-		0	0	1		0	26,741	_	1,870
2025						0	0			0	25,100	0	0

* Represents Maximum Contract Amount

Must. In order to limit this to an assessment of ag water needs, M&I water in the amount of 20 AF is shown as transfer out in year 2025. Transfers in year 2025 limited by amount of water available.

COELHO FAMILY TRUST Contractor ID: 202130

4)-0		•		;		,		;		:			
Delta		•	Contract	or's Wate	r Suppl	Contractor's Water Supply Sources and Quantities (acre-feet)	and Qu	antities	(acre-fee	t)	Date: 2	Date: 2/22/2005 2:04:44 P	2:04:44 P
				Surfa	Surface Water Supply	, A				Groundwater Supply	Supply		
Timeframe 1	Refe Deli	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	P Local 5	Local Source 6	Trsfr / Rtm / Recycle In 7	n Out	District 9	Private 10	Safe Yield Rev 11	Recharge 12	Total Supply 13
1999 2025	2,0	2,080 7	2,080	1,336	00		00	00	0 0	1,336		00	4,752 6,670
				Contra	ctor's Ag	Contractor's Agricultural Water Demands	Water D	emands		Maximun	Maximum Productive Acres: 1.823	Tes: 1.823	
Timeframe	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%)	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet) 19	USBR Net Crop Water Req (acre-feet) 20	Average Imigated Acres (acres) 21	Reference Irrigated Acres (acres)	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feel) 25		Total Ag Demand (acre-feet) 26
1999	7,331	88 85	593	302	8,423	2,923	2,250	1,008	3.74	2.90	337	37	8,760
				Co	ntractor	Contractor's M&I Water Demands	er Dem	sput					

* Represents Maximum Contract Amount

Metas:

4,008

8,760 6,637

0 0

00

0 0

Unmet Demand (acre-feet) 39

Total Ag + M&I Dmd (acre-feet) 38

Total M&i
Demand
(acre-feet)
37

Calc Urban Per Capita Omd (gpcd) 36

Ref Urban Per Capita Dmd (gpcd) 35

Unacc. / Distr. (acre-feet) 34

Yotal Demand

(acre-feet) 33

Comm / Instit. (acre-feet) 32

> Industrial (acre-feet) 31

Total Demand (acre-feet) 30

> Population 28

> > Timeframe

1999 2025

Loss

Nonresidential Water Demand

Residential Water Demand

Per Capita Demand (gpcd) 29

CONTRA COSTA WD Contractor ID: 201820

Delta 		S	ontracto	or's Wat	er Supp	Contractor's Water Supply Sources and Quantities (acre-feet)	and Qu	antities	(acre-fee	it)	Date: 2/2	Date: 2/22/2005 2:04:44 P	4 0
				Surfa	Surface Water Supply	yldo				Groundwater Supply	Supply		
	Reference	ance :	USBR Total				Trsfr / Rtm /	/ Trsfr /			Safe	Total	aj
Timeframe	Delivery	ery	Deliv/Max	SWP	/P Local	Local Source	Recycle In	out Out	District	Private	Yield Recharge		yla
-	2		က	4	c)	G	١.	80	ථා	10	11 12		
1989	123,657	357	133,224	0	8,000		٥	0	096	2,040		0 144,224	224
2025	195,0	* 000	195,000	0	8,200	-	0	0	096	2,040		0 206,200	200
						COSIGID							
				Contra	ctor's #	Contractor's Agricultural Water Demands	Water D	emands		Maximum	Maximum Productive Acres: 15,751	<u>x 15,751</u>	
		District	••••	Reference	Calculated	USBR Net	Average	Reference		. ,			
	Crop Water	lmig.	Effective	Effective	Net Crop	Crop	Irrigated	Irrigated	Calculated	USBR	Conveyance	Total Ag	o,
	Requirement	Efficiency	Precip	Precip	Water Red	Water Red	Acres	Acres	FDR	FOR	Loss	Demand	ď
Timeframe	(acre-feet)	(%)	(acre-feet)	(acre-ft)	(acre-feet)	(acre-feet)	(acres)	(acres)	(AF/acre)	(AF/acre)	(acre-feet)	(acre-feet)	el)
	15	16	11	8	19	20	77	82	23			56	
1989	2,889	75	0	969	3,852	2,384	1,100	1,192	3.50	2.00	0	3,852	52
2025						: : : : :	<i>,</i>						

Contractor's M&I Water Demands

		Unmet Demand	(acre-feet) 39	0	1,000
		Total Ag + M&I Omd	(acre-feet) 38	144,224	207,200
		Total M&I Demand	(acre-feet) 37	140,372	207,200
		Calc Urban Per Capita	Dmd (gpcd) 36	338.7	325.7
en en		Ref Urban Per Capita	0md (gpcd) 35	301.0	269.0
COMPACION SIMILANDE MARCHIDANIAS	ross	Unacc. / Distr.	(acre-feet) 34	13,666	10,000
אומו זייםני	Demand	Total Demand	(acre-feet) 33	50,000	57,000
Jacon 3	Nonresidential Water Demand	Comm / Instit.	(acre-feet) 32		
5	Nonres	fndustrial	(acre-feet) 31	20,000	57,000
	mand	Total Demand	(acre-feet) 30	76,706	140,200
	Residential Water Demand	Per Capita Demand	(9pcd) 29	185.1	220.4
	Resid	:	Population 28	370,000	268,000
			Timeframe 1	1989	2025

* Represents Maximum Contract Amount

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**Men quality and hydrologic conditions are suitable. In 2025 100 acre-feet was incorporated into the Commerical and Institutional Demand section to account for agricultural delvieries at the FY 2003 level of usage.

DEL PUERTO WD Contractor ID: 201890

Delta		S	Contractor!	r's Wate	er Supply	s Water Supply Sources and Quantities (acre-feet)	and Que	antities	(acre-fee	Đ	Date: 2/22/2	Date: 2/22/2005 2:04:44 P
				Surfa	Surface Water Supply					Groundwater Supply	Kjddn;	
Timeframe	Reference Delivery 2	ery	USBR Total Deliv/Max 3	SWP 4	P Local 5	Local Source 6	Trsfr / Rtm / Recycle In 7	/ Trsfr / 0 Out 8	District B	Srivate Yi	Safe Yield Recharge 11 12	Total e Supply 13
1989 2025	11,866	66	128,395 140,210 *	0 0	0 0		0 0	0	00	0 3,000	3,000	128,395
				Contra	ctor's Ag	Contractor's Agricultural Water Demands	Nater Do	emands		Maximum P	Maximum Productive Acres: 43,525	43,525
Тineframe 1	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%)	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft)	Calculated Net Crop Water Red (acre-feet)	USBR Net Crop Water Red (acre-feet) 20	Average in Irrigated Acres (acres) 21	Reference Imgated Acres (acres)	Calculated FDR (AFfacre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26
1989 2025	111,545	7.5 8.5	8,164	12,107 13,425 CO	137,841 138,725 ntractor's	07 137,841 141,250 40,819 40, 25 138,725 138,725 44,750 44, Contractor's M&I Water Demands	40,819 44,750 er Dema	40,357 44,750	3.38	3.50	6,420	144,261 142,735
	Res	Residential Water Demand	r Demand	Non	Nonresidential Water Demand	er Demand	Loss					
Timeframe	Population 28	Per Capita Demand (gpcd) 29	a Total i Demand (acre-feet) 30	I Industrial (acre-feet)	Comm / Instit.	Total Demand) (acre-feet)	Unacc. / Distr. (acre-feet) 34	Ref Urban Per Capita Omd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total M&I Demand (acre-feet)	Total Ag + M&I Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
1989 2025						0 0	00	,		00	144,261	15,866 2,525

* Represents Maximum Contract Amount

** Represents Maximum Contract

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Contractor ID: 201950

JAMES ID

Delta		O	Contract	or's Wate	r Suppl	Contractor's Water Supply Sources and Quantities (acre-feet)	and Qua	antities	(acre-fee	ŧ	Date: 2	Date: 2/22/2005 2:04:44 P	2:04:44 P
				Surfac	Surface Water Supply	ly l				Groundwater Supply	Supply		
Timeframe 1	Reference Delivery 2	ance ery	USBR Total Deliv/Max 3	SWP 4	local 5	Local Source 6	Trsfr / Rtm / Recycle In 7	/ Trsfr / Out	District 9	Private 10	Safe Yield Re 11	Recharge 12	Totat Supply 13
1996C Plan/revised 2025	35,300	* 00	35,300	0 0	35,116 9,700	Kings R/ripm Kings R/ripm	2,054	00	7,235 7	7,517	H	12,534	74,688
			•	Contra	ctor's Ac	Contractor's Agricultural Water Demands	Nater D	emands		Maximum	Maximum Productive Acres: 22,443	cres: 22.4	임
C R Timeframe (Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%)	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ff) 18	Calculated Net Crop Water Reg (acre-feet) 19	USBR Net Crop Water Red (acre-feet) 20	Average Irrigated Acres (acres) 21	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feel) 25		Total Ag Demand (acre-feel) 26
1996 2025	61,726	75	411	6,943	81,753	69,429	23,350	23,143	3.50	3.00	2, 2,	2,432	84,185 59,932
				CO	ntractor	Contractor's M&I Water Demands	er Dema	spu					
	Res	Residential Water Demand	⊭ Demand	Noni	Nonresidential Water Demand	ter Demand	Loss						

(acre-feel) 39 Total Ag + M&I Dmd (acre-feel) 38 84,185 59,932 (acre-feet) 37 Total M&I Demand 00 Ref Urban Calc Urban Per Capita Per Capita Dmd (gpcd) Dmd (gpcd) 35 36 Unacc. / Distr. (acre-feet) 34 00 (acre-feet) 33 00 Demand Total instit. (acre-feet) 32 Сошт / (acre-feet) Industrial 33 Demand (acre-feet) 30 Total * Represents Maximum Contract Amount Per Capita Demand (gpcd) 29 Population 8 Timeframe 2025 1996

15,166 9,497

Unmet Demand

In WC Plan, convey, includes 100 AF envim use; recharge includes 9,534 convey loss component. In 2025, local supply = 10 year avg Kings R + riparian water; same conveyance loss/recharge split assumed as in 1996.

MERCY SPRINGS WD Contractor ID: 201980

Delta		ŭ	ontractor	's Wateı	r Supply	Contractor's Water Supply Sources and Quantities (acre-feet)	and Qu	antities	(acre-fee	Ę.	Date: 2/22/	Date: 2/22/2005 2:04:44 P
				Surface	Surface Water Supply					Groundwater Supply	Supply	
	Reference	nce .	USBR Total				Trsfr / Rtm /	/ Trsfr /		ς, 	Safe	Total
Fimeframe 1	Delivery 2	Lie	Deliv/Max 3	SWP 4	Local 5	Local Source 6	Recycle In 7	n 8 9	District 9	Private Y 10	Yield Recharge 11 12	ge Supply 13
1989 WC Plan	9,766		13,850	0	0		550	4,084	0	0		0 10,316
2025	7,040	*	7,040	0	0			0	0	0	J	7,040
			-	Contrac	tor's Ag	Contractor's Agricultural Water Demands	Water D	emands		Maximum I	Maximum Productive Acres: 3,042	3,042
		District		Reference (Calculated	USBR Net	Average	Reference				
	Crop Water	Irrig.		Effective	Net Crop	Crop	Irrigated	Irrigated	Calculated	USBR	Conveyance	Total Ag
	Requirement	Efficiency	Precip	Precip	Water Req	Water Reg	Acres	Acres	FDR	FDR	Loss	Demand
Timeframe	(acre-feet)	8)	(acre-feet)	€	(acre-feet)	(acre-feet)	(acres)	(acres)	(AF/acre)	(AF/acre)	(acre-feet)	(acre-feet)
-	15	9	1,	∞	6	20	72	23	33	24	22	56
1989	7,69,7	75	515	155	9,576	10,571	2,345	2,517	4.08	4.20	488	10,064
2025	14,853	85	1,017	1,017	16,277	16,277	3,391	3,391	4.80	4.80	488	16,765
				Con	tractor's	Contractor's M&I Water Demands	er Deme	spus				
	Res	Residential Water Demand	Demand	Nonre	Nonresidential Water Demand	er Demand	5807					
		Per Capita		1	Comm /	Total	Unacc. /	Ref Urban	Calc Urban	Total M&I	Total Ag +	Unmet
ì	Population	(apcd)	(acre-feet)	(acre-feet)	instit. (acre-feet)	Demand (acre-feet)	UISTr. (acre-feet)	Dmd (gpcd)	Per Capita Dmd (apcd)	(acre-feet)	M&I Umd (acre-feet)	Demand (acre-feet)
і шетапе 1	78	53	30	بج		33	34	æ		37	38	39
1989				1		0	0			٥	10,064	-252
2025						0	0			0	16,765	9,725

Represents Maximum Contract Amount
 Institute that no convey as reduced in 2025 due to contract reassignment. Transfers out reduced to 0 in 2025. District has no conveyance system. Convey losses estimated at 5% from farm convey, systems.

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Water Needs Assessment

PACHECO WD-DMC Contractor ID: 202020

Delta		ٽ	Contractor	's Water	Supply	r's Water Supply Sources and Quantities (acre-feet)	and Qua	intities	(acre-fee	ŧ	Date: 2/22/2	Date: 2/22/2005 2:04:44 P
				Surface	Surface Water Supply					Groundwater Supply	Álddr	
	Reference	auce ::	USBR Total				Trsfr / Rtm /	/ Trsfr /		 	Safe	Total
Timeframe 1	Delivery 2	eгу	Deliv/Max 3	SWP 4	Local 5	Local Source 6	Recycle In 7	od ⊗	District 9	Private Yis 10 1	Yield Recharge 11 12	
1989 WC Plan	9,384	*	9,362	0	4,400	CCID			0	0	0	13,762
1993 WC Plan	10,080	* 08	2,644	0	3,181	CCID	0	0	95	1,075	0	6,995
2025	10,080	. 08	10,080	0	4,399	CCID	0	2,849	0	0	0	11,630
				Contrac	tor's Ag	Contractor's Agricultural Water Demands	Nater De	emands		Maximum P	Maximum Productive Acres: 3,964	3,964
		District		Reference (Calculated	USBR Net	Average : F	Reference		,		
	Crop Water	frrig.			Net Crop	Crop	Irrigated	Irrigated	Calculated	USBR	Conveyance	Total Ag
	Requirement	Efficiency	Precip	Precip	Water Req	Water Reg	Acres	Acres	FOR S	 5	Loss	Demand
Timeframe	(acre-feet)	(%)		(acre-ff)	(acre-feet)	(acre-feet)	(acres)	(acres)	(AF/acre)	(AF/acre)	(acre-feet)	(acre-feet)
-	<u>0</u>		 <u>-</u>	<u>.</u>	2	77	17	77	3	67	C7	97
1989	8,564	75	830	1,022	10,312	8,853	4,024	3,405	2.56	2.60	1,534	11,846
1993	8,339	75	2,032	1,043	8,409	8,340	3,972	3,475	2.12	2.40	1,235	9,644
2025	10,166	82	1,215	1,215	10,530	10,530	4,050	4,050	2.60	2.60	1,100	11,630
				Con	tractor's	Contractor's M&I Water Demands	er Dema	nds				
	Re	Residential Water Demand	Demand	Nonre	Nonresidential Water Demand	sr Demand	ross	,				
		Per Capita			Comm /	Total	Unacc. /	Ref Urban	Calc Urban	Total M&i	Total Ag +	Unmet
		Demand	Demand	Industriat	Instit.	Demand	Distr.	rei Capita	Per Capita	Demand	M&I Dmd	Demand
Timeframe	Population 28	(gpcd) 29	(acre-feet) 30	(acre-feet) 31	(acre-feet) 32	(acre-feet) 33	(acre-feet) 34	Umd (gpcd) 35	Omd (gpcd) 36	(acre-feet) 37	(acre-feet) 38	(acre-feet) 39
1989						0	0			0	11,846	-1,916
1993						0	0			0	9,644	2,649
2025						0	0			0	11,630	0

* Represents Maximum Contract Amount

* Represents Maximum Contract Amount

** Represents Maximum Contract Amount

** Represents Maximum Contract Amount

PATTERSON WD Contractor ID: 202040

1) 	((•	;		
9 J		ق	Contractor	rs wate	r Supply	's Water Supply Sources and Quantities (acre-feet)	and Qua	intities	(acre-tee	jt)	Date: 2/22	Date: 2/22/2005 2:04:44 P
				Surfac	Surface Water Supply					Groundwater Supply	Supply	
Timoformo	Reference	ence :	USBR Total	QMO		James James	Trsfr / Rtm /	_	District		Safe Vield Doebo	Г
	2 2	di di	Delivinda 3	4	5	Eural Source 5	necycle III	ē ∞	9	711vale 10	Treiu Recitalge 11 12	age 13
1989 IWC Plan	13,055	155	20,428	0	25,483	S. Joaquin	0	2,400	535	4,000	5,000	0 43,046
2025	16,500	. 00	16,500 *	0	23,000	S, Joaquin	0	1,000	535	2,000	5,000	0 36,035
				Contra	ctor's Agi	Contractor's Agricultural Water Demands	Water De	emands		Maximum	Maximum Productive Acres: 12,056	12,056
		District		Seference	Calculated	USBR Net	Average	Reference		 		
	Crop Water	lmg.		Effective	Net Crop	Crop	Irrigated	Imigated	Calculated	USBR	Conveyance	Total Ag
	Requirement	Efficiency	Precip	Precip	Water Req	Water Req	Acres	Acres	FOR	FDR	Loss	Demand
Timeframe	(acre-feet)	(%)	(acre-feet)	(acre-fl)	(acre-feet)	(acre-feet)	(acres)	(acres)	(AF/acre)	(AF/acre)	(acre-feet)	(acre-feet)
-	15	9	4	\$	6	8	77	8	ಣ	24	25	79
1989	37,557	75	2,804	1,768	46,337	22,393	13,469	5,893	3.44	3.80	725	47,062
2025	48,680	88	4,040	4,040	52,517	52,517	13,466	13,466	3.90	3.90	725	53,242
				Co	tractor's	Contractor's M&I Water Demands	er Dema	spu				
	Re	Residential Water Demand	Demand	Non	Nonresidential Water Demand	r Demand	5507					
		Per Capita			Сошт/	Total	Unacc. /	Ref Urban	Calc Urban	Total M&	Total Ag +	Unmet
	c c	_	Demand			Demand	Oistr.	Per Capita	Per Capita		M&I Dmd	Demand
Timeframe	28	(gpcd) 29	(acre-leet) 30	(acre-reet) 31) (acre-teet) 32	(acre-teet) 33	(acre-teet) 34	35	სოძ (gpcd) 36	(acre-feet) 37	(acre-reet) 38	(acre-leet) 39
1989						0	0	_		0	47,062	4,016
2025						0	0			0	53,242	17,207

* Represents Maximum Contract Amount

** Represents Maxim

PLAINVIEW WATER DISTRICT Contractor ID: 202050

Delta		Ō	ontractor	's Wate	r Supply	Contractor's Water Supply Sources and Quantities (acre-feet)	and Qua	Intities	(acre-fee	t)	Date: 2/2	Date: 2/22/2005 2:04:44 P	a.
				Surface	Surface Water Supply					Groundwater Supply	Supply	_	l
Timeframe	Reference Delivery	ery	USBR Total Deliv/Max	SWP	Local	Local Source	Trsfr / Rtm / Recycle In	, Trsfr / Out	į;	ক	L We	⊬ জ ⊺	>
-	7		3	,	,	o	•	0	מ	2	71 11	<u>.</u>	
1989 WC Plan	18,964	64	18,351	0	٥		٥	1,636	٥	0		0 16,715	12
2025	20,600	• 00	20,600	0	0		0	12,100	0	0		0 8,500	8
			-	Contrac	tor's Agi	Contractor's Agricultural Water Demands	Nater De	smands		Maximum	Maximum Productive Acres: 5,647	5,647	
		District		Reference :	Calculated	USBR Net	Average F	Reference					ı
	Crop Water	lrrig.	Effective F	Effective	Net Crop	Crop		Irrigated	Calculated	USBR	Conveyance	Total Ag	
	Requirement	Efficiency	Precip		Water Req	Water Req	Acres	Acres	FOR	FDR	Loss		
Timeframe	(acre-feet)	(%)	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		(acre-feet)	(acre-feel)	(acres)	(acres)	(AF/acre)	(AF/acre)	(acre-feet)	_	_
-	15	16			19	%	21	ដ	83	24	25		
1989	16,449	75	2,114	5,209	19,113	18,223	5,594	5,522	3.42	3.30	0	19,113	lص
2025	7,980	85	1,184	- 20,	7,995	7,995	2,961	2,961	2.70	2.70		7,995	5
				Con	tractor's	Contractor's M&I Water Demands	er Dema	nds					
	Res	Residential Water Demand	Demand .	Nonre	Nonresidential Water Demand	r Demand	Loss						ı
		Per Capita		1	Comm /	Fotal	Unacc. /	Ref Urban	Calc Urban	Total M&I	Total Ag +	Unmet	
i	Population	_	Demand (acre-feet)	(acre-feet)	losm. (acre-feet)	(acre-feet)	Distr. (acre-feet)	Dind (sped)	Per Capita	(acre-feet)	M&I Dmd	Demand	
Timeframe 1	. 28	29	30			33	34	35	36	37	38 38	39	
1989						0	0			0	19,113	2,398	l
2025	•	0.0		0 800		0 800	0	0.0	0.0	800	8,795	295	

* Represents Maximum Contract Amount

Note: Ten-year historic average Transfer out is 3,400 acre feet. In 2025, 800 acre feet of this amount is included under industrial demand. The remaining 3,100 acre feet is included in the 2025 transfers out amount. Also include in the 2025 transfers out amount. Also include in the 2025 transfers out amount is 9,500 of M&I water based on estimate that 3,800 acres will be incorporated into the city of Tracy with an average use of 2.5 AF/AC.

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Water Needs Assessment

SAN LUIS WD-DMC Confractor ID: 202100

127,266 81,973 125,186 Date: 2/22/2005 2:04:44 P Total Supply 13 Maximum Productive Acres: 50,523 Recharge 0 0 7 Groundwater Supply Yield Safe 7 Private 10,000 5,000 10,000 ç Contractor's Water Supply Sources and Quantities (acre-feet) District 0 0 0 6 Contractor's Agricultural Water Demands Trsfr / ρŌ 4,894 2,894 1,864 œ Trsfr / Rtm / Recycle In 13,038 4,458 Local Source Surface Water Supply 0 : Reference : Calculated S S SWP 0 0 USBR Tota! Deliv/Max 70,409 125,080 106,092 Dietrics Reference Delivery 125,080 120,261 125,080 1989 WC Plan 1998 WC Plan Timeframe Delta 2025

		DISILIC		Kelerence	Calculated	USBK Net	Average	Kelerence :				
	Crop Water	Irríg.	Effective	Effective	Net Crop	Crop	Irrigated	Irrigated	Calculated	USBR	Conveyance	Total Ag
	Requirement	Efficiency	Precip	Precip	Water Reg	Water Req	Acres	Acres	FOR	- FOR	Coss	Demand
Timeframe	(acre-feet)	· %	(acre-feet)	(acre-ft)	(acre-feet)	(acre-feet)	(acres)	(acres)	(AF/acre)		(acre-feet)	(acre-feet)
-	15	16	17	\$2	19	50	77	2	23		. 52	32
1989	128,994	75	9,289	13,385	159,607	129,389	44,764	44,617	3.57	2.90	442	160,049
1998	104,656	75	33,107		95,399		47,924	: : :	1.99		1,906	97,305
2025	112,883	82	13,050	13,050	117,450	117,450	43,500	43,500	2.70	2.70	1,906	119,356
				ပိ	ntractor's	Contractor's M&I Water Demands	er Dem	ands				
	Re	Residential Water Demand	г Оетлапо	Nor	Nonresidential Water Demand	я Demand	Loss					
		Per Capita	ta Total		Сотт /	Total	Unacc. /	Ref Urban	Calc Urban	Total M&I	Total Ag +	Unmet
		Demand	J Demand	d Industrial	al Instit,	Demand	Distr.	Per Capita	Per Capita	Demand	M&I Dmd	Demand
Timeframe	Population 28	(gpcd) 29	(acre-feet) 30	et) (acre-feet) 31	et) (acre-feet) 32		(acre-feet) 34	Omd (gpcd)	Dmd (gpcd) 36	(acre-feel) 37	(acre-feet) 38	(acre-feet) 39
-						:						
1989	-	0.0	0	0	0	0	0	0.0	0.0	0	160,049	32,783
1998						0	0			0	97,305	15,332
2025	-	0.0	0	0	0	0 0	0	0.0	0.0	0	119,356	-5,830

Represents Maximum Contract Amount

Historic transfers out include M&I deliveries. Drainage water of 3,785 for 1989 and 2,621 for 1998 not included. In 2025, 2000 AF M&I water use included in transfers out due to increase in development of I-5 businesses. Mates:

THE WEST SIDE ID Contractor ID: 202120

Delta		ن	Contractor	's Water	· Supply	's Water Supply Sources and Quantities (acre-feet)	and Qua	antities	(acre-fee	Đ	Date: 2/2	Date: 2/22/2005 2:04:44 P	4 □
				Surface	Surface Water Supply					Groundwater Supply	Supply		
	Reference	ince	USBR Total				Trsfr / Rtm /	/ Trsfr/			Safe	Total	fal
Timeframe 1	Delivery 2	ery	Deliv/Max 3	SWP 4	Local 5	Local Source 6	Recycle In 7	out 8	District 9	Private Y 10	Yield Recharge 11 12	rrge Supply	3 pply
1989 WC Plan	7,927		7,500	0	19,823	S. Joaquin	000	0	0	0		0 27,	27,923
2025	7,500	. 00	1,500	0	22,046	S. Joaquin	9009	6,300	0	0		0 23,	23,846
			-	Contrac	tor's Agi	Contractor's Agricultural Water Demands	Water Do	emands		Maximum	Maximum Productive Acres: 6,080	080'9	
		District			Calculated :	USBR Net	Average	Reference					
	Crop Water	lmig.		Effective	Net Crop	Crop		Imgated	Caiculated	USBR	Conveyance	. Total Ag	P
	Requirement	Efficiency		Precip 1	Water Req	Water Req	Acres	Acres	FDR	70R	Lass		Þ
Timeframe	(acre-feet)	(%)		(acre-fl) 🐪 ((acre-feet)	(acre-feel)	(acres)	(acres)	(AF/acre)	(AF/acre)	(acre-feet)	(acre-feet)	et)
-	15	16		æ 	6	8	73	22	23	24	\$2	79	
1989	25,240	75	3,056	3,133	29,579	28,199	7,871	7,833	3.76	3.60	1,026	30,605	905
2025	19,965	82	2,560	2,560	20,477	20,477	6666,8	6,399	3.20	3.20	1,575	22,052	052
				Con	tractor's	Contractor's M&I Water Demands	er Dema	spu					
	Res	Residential Water Demand	Demand	Nonre	Nonresidential Water Demand	r Demand	Loss						
		Per Capita		lochochás	Comm /	Total	Unacc, /	Ref Urban Per Canita	Calc Urban	Total M&!	Total Ag +	Unmet	_ 3
j	Population	(gpcd)	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)	(acre-feet)	Dmd (gpcd)	Dmd (apcd)	(acre-feet)	ing Ding (acre-feet)	Demand (acre-feet)	e G
IImelrame 1	88	53		સ			%	ж Ж	38	37	` 38 `	33	
1989				1		0	0			0	30,605	2,682	82
2025						0	0			0	22,052	-1,794	94

* Represents Maximum Contract Amount

* Represents Maximum Contract Am

TRACY, CITY OF Contractor ID: 202135

CONTRACTOR IC. AUXIO	202133												
Delta		J	Sontract	or's Wat	er Sup	Contractor's Water Supply Sources and Quantities (acre-feet)	and Qua	antities	(acre-fee	t)	Date: 2/2	Date: 2/22/2005 2:04:44 P	44 P
				Surfa	Surface Water Supply	Álddr				Groundwater Supply	ynddns		
Timeframe 1	Refe Del	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	IP Local	Local Source 6	Trsfr / Rtm / Recycle In	/ Trsfr / Out 8	District §	Private Y 10	Safe Yield Recharge 11 12		Total Supply 13
1995 2025	5 5	10,000 *	10,000	0 0		0 0	32,500	00	5,000	0 0		0 0	5,000
			-	Contra	ctor's	Contractor's Agricultural Water Demands	Water D	emands		Maximum]	Maximum Productive Acres: 3,962	3,962	
Timeframe 1	Crop Water Requirement (acre-feet)	District Irrig. Efficiency (%)	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ff)	Calculated Net Crop Water Req (acre-feet)	d USBR Net Crop Water Req (acre-feet) 20	Average Inigated Acres (acres)	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26	Ag and feet)
1995 2025								,					
					intracto	Contractor's M&I Water Demands	ter Dema	spu					
	<u>«</u>	Residential Water Demand	r Demand	No:	nresidential	Nonresidential Water Demand	Loss						

* Represents Maximum Coutract Amount

** Represents Maximum Coutract Amount these transfers are uncertain.

(acre-feet) 39

(acre-feet) 37 Total M&I Demand

Calc Urban Per Capita Dmd (gpcd) 36

Ref Urban Per Capita Omd (gpcd) 35

Unacc. / Distr. (acre-feet) 34

Demand Total

Comm / Instit,

(acre-feet) 33

(acre-feet) 32

(acre-feet) 31 Industrial

(acre-feet) 30

Population

Timeframe

Demand Total

Per Capita Demand (gpcd) 29

Unmet Demand

Total Ag + M&I Dmd (acre-feet) 38 7,487

12,487 46,000

46,000 12,487

242.3 256.7

301.0 269.0

00

0 0

0 0

0 0

46,000

256.7 242.3

160,000 46,000

2025 1995

12,487

TRANQUILLITY ID

202140	
Contractor ID: 2	

Delta		O	ontractor	's Wate	r Supply	Contractor's Water Supply Sources and Quantities (acre-feet)	and Qua	antities	(acre-fee	et)	Date:	Date: 2/22/2005 2:04:45 P	2:04:45 P
				Surface	Surface Water Supply					Groundwater Supply	Supply		
	Reference	aou	USBR Total				Trsfr / Rtm /	/ Trsfr /			Safe		Total
Timeframe	Delivery	λ	Deliv/Max	SWP	۲	Local Source	Recycle In		District	e.		Recharge	Supply
-	2		e;	4	5	9	7	œ	თ	9	=	12	13
1989	7,825	<u>بري</u>	7,825	0	20,200		0	5,975	547	0		0	22,597
1995	. 13,800		3,694	0	37,973		0	5,100	853	0		4,116	33,304
2025	13,800		13,800	0	20,200	SJR	0	1,000	0	2,600		2,600	33,000
			-			Exchange Water							
				Contrac	tor's Ag	Contractor's Agricultural Water Demands	Nater D	emands		Maximum	Maximum Productive Acres:	Acres: 8,960	C
		District			Calculated	USBR Net	Average	Reference					
	Crop Water	Irrig. Efficiency	Effective	Effective	Net Crop	Water Bee	Imgated	Irrigated	Calculated	- K88	Conveyance		Total Ag Demand
Timeframe	(acre-feet)	(%)		,	facre-feet)	(acre-feet)	(acres)	(acres)	(AF/acre)	(AF/acre)	<u>.</u>		acre-feet)
-	15	16			19	. 20	. 72	ä	. 23	. 24			, 92
1989	25,015	75	2,432	2,590	30,111	25,033	8,631	8,632	3.49	2.90	2,6	2,654	32,765
1995	25,687	75	4,514	2,466	28,231	42,739	9,243	8,219	3.05	5.20	'n	3,300	31,531
2025	24,056	85	2,781	2,781	25,029	25,029	9,270	9,270	2.70	2.70	4	4,200	29,229
				Con	itractor's	Contractor's M&I Water Demands	er Dema	spu					
	Res	Residential Water Demand	r Demand	None	Nonresidential Water Demand	er Demand	Loss						
		Per Capita	ta Total		Comm /	Total	Unacc. /	Ref Urban	Calc Urban	Total M&!	Total Ag +		Unmet
		Demand	d Demand	Industrial	Instit.	Demand	Distr.	Per Capita	Per Capita	Demand	M&I Drnd		Demand
Timeframe 1	Population 28	(gpcd) 29	(acre-feet) 30) (acre-feet) 31	(acre-feet) 32) (acre-fest) 33	(acre-feet) 34	Dmd (gpcd) 35	Omd (gpcd) 36	(acre-feet) 37	(acre-feet) 38		(acre-feet) 39
1989	0		0.0 300	0		0	0	0.0	0.0	300	33,065	965	10,468
1995	0	0.0	.0 324	4		0	0	0.0	0.0	324	31,855	355	-1,449
2025	0		0.0 324	0		0 0	0	0.0	0.0	324	29,553	553	3,447

* Represents Maximum Contract Amount Notes:

WEST STANISLAUS ID Contractor ID: 202180

Delta		Ç	Contractor's Water Supply Sources and Quantities (acre-feet)	's Water	Supply	Sources	and Qua	intities	(acre-fee	it)	Date: 2	Date: 2/22/2005 2:04:45 P	2:04:45 P
				Surface	Surface Water Supply					Groundwater Supply	Supply		
	Reference	suce .	USBR Total				Trsfr / Rtm /	l Trsfr /			Safe		Total
Timeframe	Delivery	ery	Deliv/Max	SWP	ŭ	Local Source	Recycle In		ict	le	Yield Rec	Recharge	Supply
-	7		5	4	c	٥	,	xo	'n	10	=	7.5	2
1989 WC Plan	51,454	54	900'09	0	51,610	S.J. River	1,454	15,490	3,692	4,000	15	15,000	80,266
2025	50,000	. 00	20,000	0	45,000	S.J. River	0	3,993	3,692	5,000	15	15,000	84,699
				Contrac	tor's Agr	Contractor's Agricultural Water Demands	Water De	emands		Maximum	Maximum Productive Acres: 19.768	37.61 33.76	<u>%</u>
		District		Reference (Calculated	USBR Net	Average R	Reference					
	Crop Water	lrtig	Effective		Net Crop	Crop		Irrigated	Calculated	USBR	Conveyance		Total Ag
	Requirement	Efficiency	Precip		Water Req	Waler Req		Acres	FDR	FDR	Loss		Demand
Timeframe	(acre-feel)	(%)		(acre-ft) ((acre-feet)	(acre-feet)	(acres)	(acres)	(AF/acre)	(AF/acre)	(acre-feet)		(acre-feet)
-	15	16	17	\$	19	70	7	8	R	24	52		56
1989	66,450	75	768	7,033	87,404	60,952	23,727	23,443	3.68	2.80	2,799	66	90,203
2025	77,312	82	7,680	7,680	81,920	81,920	25,600	25,600	3.20	3.23	2,779	6/	84,699
				Con	tractor's	Contractor's M&I Water Demands	er Demai	spu					
	Res	Residential Water Demand	Demand	Nonre	Nonresidential Water Demand	r Demand	Loss						
		Per Capita	a Total		Comm /	Total	Unacc. /	Ref Urban	Calc Urban	Total M&I	Total Ag +		Unmet
	•	_			Instit.	Demand	Distr.	Per Capita	Per Capila	Demand	M&I Dmd		Demand
Timeframe	Population 28	(gpcd) 29	(acre-feet) 30	(acre-feet) 31	(acre-feet) 32	(acre-feel)	(acre-feet) 34	55 35	Dmd (gpcd) 36	(acre-feet) 37	(acre-feet) 38		(acre-feet) 39
1989						0	0			٥	90,203	0	9,937
2025						0	0			0	84,699	ගු	0

* Represents Maximum Contract Amount

* Represents Maximum Contract Amount

* Represents Maximum Contract Amount

* Represent Page and 2025, majority of conveyance losses were from local supplies and used for ground-water recharge. In 2025, transfers out limited to supply available.