Appendix A

Colorado River Basin Regional Groundwater Basin Evaluation Summary Table

DWR Basin	Salt and Nutrient Concentration Trends	Contribution of Imported / Recycled Water	Reliance on Groundwater	Population 2010	Area mi ²	Persons per mi ²	Persons per acre	Number / Density OWTS	Other Salt and Nutrient Sources	Hydrologic Factors	Factor Total	GAMA Ranking	CASGEM Ranking	Total Negative Factors	Identified Risks to Water Quality
7-01 Lanfair Valley	Slight Increase	0%	100%	19	245	0.08	0.0001	Based on Population	None Noted	DTW = 300 - 500		low	very low		Low to None
	negative factor	-1 positive factor 1	negative factor -1	positive factor	•		1 positive fa	ctor	1 positive factor	1 positive factor	1 3	0	0		
7-02 Fenner Valley	Slight Increase	0%	100%	31	709	0.04	0.0001	Based on Population	None Noted	Unknown DTW		low	very low		Low to None
	negative factor	-1 positive factor 1	negative factor -1	positive factor	•		1 positive fa	ctor	1 positive factor	1 neutral factor (2	0	0		
7-03 Ward Valley	Stable	0%	100%	22	1,500	0.01	0.0000	Based on Population	None Noted	DTW = 0 - 700		low	very low		Low to None
	neutral factor	0 positive factor 1	negative factor -1	positive factor	•		1 positive fa	ctor	1 positive factor	1 neutral factor (3	0	0		
7-04 Rice Valley	Unknown	0%	100%	23	295	0.08	0.0001	Based on Population	None Noted	DTW = 150 - 285		low	very low		Low to None
	neutral factor	0 positive factor 1	negative factor -1	positive factor			1 positive fa	ctor	1 positive factor	1 negative factor -	1 2	0	0		
7-05 Chuckwalla Valley	TDS: Primarily >SMCL. Max 4,000 mg/L. Decreasing and Stable N: Primarily <1/2 MCL, Stable	20% Import Colorado River at Eagle Mtn. Ripley & Lake Tamarisk WTPs	80%	7,853	940	8.35	0.0131	Desert Center Pop. 6.7/acre Lake Tamarisk WTP [Golf]	Race Track. Hydro-Electric. Solar. Mining. Landfill. Correctional Facilities. Minor Ag.	Natural Springs. Dry Lakes		low	very low		Moderate
	positive factor	1 negative factor -	negative factor -1	positive factor	•		1 neutral fac	tor	0 neutral factor	0 negative factor -		0	0	-1	
7-06 Pinto Valley	Good Quality Unknown	0%	0%	7	286	0.02	0.0000	Based on Population	Cottonwood Campground	Unknown DTW		low	very low		Low to None
	neutral factor	0 positive factor 1	positive factor 1	positive factor			1 positive fa	ctor	1 positive factor	1 neutral factor	5	0	0		None
7-07 Cadiz Valley	Unknown	0%	100%	10	423	0.02	0.0000	Based on Population	Limited Ag. Recreation	Dry Lake [shallow]		low	very low		Low to None
	neutral factor	0 positive factor 1	negative factor -1	positive factor	•		1 positive fa	ctor	1 positive factor	1 negative factor -	1 2	0	0		140110
7-08 Bristol Valley	TDS: Good-Fair Quality. Poor Quality at Dry Lakes.	0%	100%	27	778	0.03	0.0001	Based on Population	Evaporate Mining	Dry Lake [shallow] DTW = 0 to 200'					Low to
							4		4	4		low	very low		None
7.40.04 Decidence Valley	neutral factor	0 positive factor 1	negative factor -1	positive factor		0.40	1 positive fa		1 positive factor	1 negative factor -	1 2	0	0		
7-13.01 Deadman Valley Deadman Lake	TDS:Fair Quality Stable	Recycled Water	100%	22	139	0.16	0.0002	Based on Population	Small Airport	DTW >200'		low	very low		Low to None
	neutral factor	0 negative factor -	1 negative factor -1	positive factor			1 positive fa	ctor	1 positive factor	1 positive factor	1 2	0	0		
7-13.02 Deadman Valley Surprise Spring	Good Quality Stable	0%	100%	179	46	3.89	0.0061	Based on Population	None Noted	DTW ~160. spring		la			Low to
	neutral factor	0 positive factor 1	negative factor -1	positive factor			1 positive fa	ctor	1 positive factor	negative factor -	1 2	low 0	very low 0		None
7-14 Lavic Valley	1917 Data Point Unknown	0%	0%	0	159	0.00	0.0000	0	None Noted	DTW ~400'		low	very low		Low to None
	neutral factor	0 positive factor 1	positive factor 1	positive factor	•		1 positive fa	ctor	1 positive factor	1 positive factor	1 6	0	0		140110
7-20 Morongo Valley	Good Quality Stable	0%	100%	2,983	11	263.98	0.4125	Based on Population	Septic use WDRs and Landfill	DTW 200-300'		mo diu m	vom dove		Madarata
	neutral factor	0 positive factor 1	negative factor -1	negative facto	or		-1 negative fa	actor	-1 neutral factor	0 neutral factor (- 2	medium -1	very low 0	-3	Moderate
7-21.04 Coachella Valley San Gorgonio Pass		700 afy [10%] Import SWP for Recharge. Recycled Water	~ 90% GW	29,540	60	492.33	0.7693	Cities Sewered, but not all areas connected	Airport Septic Morongo Reservation Correctional Facility	Hydrologic Vulnerable Area	_		medium		High
	neutral factor	0 neutral factor (negative factor -1	negative facto	or		-1 neutral fac	etor	0 neutral factor	0 negative factor -	1 -3	high -2	medium -1	-6	nign
	ווטעוומו ומטוטו		/ Hogalive lactor -1	Thogaine racit	71		i jiiculiai ial		TICULIAI IACIUI	- Hogalive lactor -	<u>' </u>		- I	-0	

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DWR B	asin	Salt and Nutrient Concentration Trends	Contribution of Imported / Recycled Water	Reliance on Groundwater	Population 2010	Area	Persons per mi ²	Persons per acre	Number / Density OWTS		Other Salt and Nutrient Sources	Hydrologic Factors	Factor Total	GAMA Ranking	CASGEM Ranking	_	Identified Risks to Water Quality
7-22	West Salton Sea	Poor Quality TDS Good Quality Nitrate Stable	Recycled Water WWTP	100%	5,352	166	32.24	0.0504	Sewer System		WDRs Landfill Geothermal	DTW = 10 - 50 Adjacent to Salton Sea. Hydrologic Vulnerable Area		low	very low		Moderate
		neutral factor (negative factor -1	negative factor	-1 neutral factor			0 positive fac	ctor	1	positive factor 1	negative factor -1	<u> </u>	0	very low	-1	ivioderate
7-24.01	1 Borrego Valley Borrego Springs	TDS: Good to Poor Quality Primarily Stable Slight Increases N: Good Quality Stable	0%	100%	3,853	120	32.11	0.0502	Urban Centers No Sewer Systems		~20% Land Use: Ag. Golf. Recreation. Trailer Parks WDRs Landfill	DTW = 18 - 305 Multiple Aquifers. Hydrologic Vulnerable Area				•	
														medium	high		High
7-24.02	2 Borrego Valley Ocotillo Wells	neutral factor Good Quality. TDS: Increasing N: Stable	positive factor 1 0%	negative factor	-1 neutral factor 500	120	4.17	0 negative fa 0.0065	Based on Population	-1	negative factor -1 Recreation. Trailer Parks	negative factor -1 DTW = 100 130 Hydrologic Vulnerable Area	-3	-1	-2	-6	Low to
		negative factor -	1 positive factor 1	negative factor	-1 positive facto	r		1 positive fac	ctor	1	positive factor 1	negative factor -1	1	medium -1	very low 0	0	None
7-25	Ocotillo-Clark Valley	TDS: Poor Quality. (Stable	Unknown 0	20%	1 27	348	0.08	1 0.0001	Based on Population	1	Border Patrol. 0 Vehicle Recreation Solar Farm. Ag	DTW <200'1 Hydrologic Vulnerable Area	2	low	vondo		Low to
		neutral factor (neutral factor 0	positive factor	1 positive facto			1 positive fac	ctor	1	neutral factor 0	negative factor -1	2	low 0	very low 0		None
7-26	Terwilliger Valley	TDS: Good Quality. Slight Increase.	Unknown	20%	1,085	13	83.46	0.1304	Based on Population		Septic	DTW = 300		very low	very low		Low to None
		negative factor -	1 neutral factor 0	positive factor	1 neutral factor			0 negative fa	actor	-1	positive factor 1	positive factor 1	1	0	0		
7-27	San Felipe Valley	Increasing Concentrations	0%	20%	188	4	47.00	0.0734	Based on Population		Campground. Wilderness Area	DTW = 22 - 88		very low	very low		Low to None
		negative factor -	1 positive factor 1	positive factor	1 neutral factor			0 neutral fac		0	positive factor 1	negative factor -1	1	0	0		
7-28	Vallecito-Carrizo Valley	Increasing Concentrations	0%	100%	77	191	0.40	0.0006	Based on Population		None Noted	DTW = 40 - 78 Springs		low	very low		Low to None
7 20	Cayata Walla	negative factor -	1 positive factor 1		-1 positive facto		2.74	1 positive fac		1	positive factor 1	negative factor -1	-1 1	0	0		
7-29	Coyote Wells Valley	Good Quality Stable	0%	100%	374	100	3.74	0.0058	Based on Population		Recreation Vehicle Park. Mining.	DTW: 100-300'. Hydrologic Vulnerable 1/4 Area		low	very low		Low to None
		neutral factor (positive factor 1	negative factor	-1 positive facto	r		1 positive fa	ctor	1	positive factor 1	negative factor -1	2	0	0		
7-30	Imperial Valley	Variable Localized Concentrations [increasing, decreasing and stable]	Use 100% Imported Colorado River. Recycled Water	0%	164,037	1,870	87.72	0.1371	Cities Sewered.		~40% Ag. Naval Air Facility El Centro.	Adjacent to SaltonSea. Colorado/ New/Alamo Rivers, Canals. Aquitard. Hydrologic Vulnerable E/W Sides		low	voncloss		Low to
		neutral factor (negative factor -1	positive factor	1 neutral factor			0 positive fac	ctor	1	negative factor -1	neutral factor 0	0	low 0	very low 0		None
7-31	Orocopia Valley	TDS: Good to Fair Quality Unknown Trend	0%	100%	2,243	150	14.95	0.0234	0		None Noted	DTW = 480 - 800		very low	very low		Low to None
		neutral factor (positive factor 1	negative factor	-1 positive facto			1 positive fa	ctor	1	positive factor 1	positive factor 1	4	0	0		
7-32	Chocolate Valley	TDS: Poor Quality Increasing	0%	0%	658	203	3.24	0.0051	0		Nature Preserve Recreation. Hiking	DTW = 10 - 99					Low to
		negative factor -	1 positive factor 1	positive factor	1 positive facto			1 positive fac	ctor	1	positive factor 1	negative factor -1	3	very low	very low		None

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DWR B	asin	Salt and Nutrient Concentration Trends	Contribution of Imported / Recycled Water	Reliance on Groundwater	Population 2010	Area mi ²	Persons per mi ²	Persons per acre	Number / Density OWTS		Other Salt and Nutrient Sources	Hydrologic Factors	Factor Total	GAMA Ranking	CASGEM Ranking	Total Negative Factors	Identified Risks to Water Quality
7-33		TDS: Good to Poor Quality Unknown Trend	0%	0%	1,083	306	3.54	0.0055	Based on Population		~15% Ag.	DTW = 20-48. Adjacent to Salton Sea. Hydrologic Vulnerable Area		low	very low		Low to None
		neutral factor 0	positive factor 1	positive factor 1	1 positive factor			1 positive fac	ctor	1	neutral factor 0	negative factor -1	3	0	0		
7-34	Amos Valley	Stable	0%	0%	9	203	0.04	0.0001	Based on Population		Mine. Landfill	DTW = NW 126-228 SE 465-480. Hydrologic Vulnerable Area		la			Low to
		neutral factor 0	positive factor 1	positive factor 1	1 positive factor			1 positive fac	etor	1	positive factor 1	negative factor -1	4	l low 0	very low 0		None
7-35	Ogilby Valley	Slight Increases	0%	20%	36	209	0.17	0.0003	Based on Population	•	Ag. Recreational Vehicle Park. Mining.	DTW = 150'. Hydrologic Vulnerable Area		low	very low		Low to None
		negative factor -1	positive factor 1	positive factor 1	1 positive factor			1 positive fac	ctor	1	positive factor 1	negative factor -1	3	0	0		None
7-36	Yuma Valley	TDS: Fair to Poor Quality Increasing to Stable N: Good Quality Stable	Use 100% Imported Colorado River	0%	3,146	6	524.33	0.8193	Sparse spaced Population		Ag ~30%. Tribal Land. Military. Camping. Trailer Parks. 2-Landfills	DTW = 5-240 Adjacent to Colorado River. Hydrologic Vulnerable 1/3 Area		medium	very low		Moderate
		positive factor 1	negative factor -1	positive factor 1	1 negative facto	or	-	1 neutral fact	tor	0	negative factor -1	negative factor -1	-2	-1	0	-3	Moderate
7-37	Arroyo Seco Valley	Good Quality Stable to Decreasing	0%	100%	6	403	0.01	0.0000	Based on Population		None Noted	DTW = 30-98		low	very low		Low to None
		positive factor 1	positive factor 1	negative factor -	1 positive factor			1 positive fac	etor	1	positive factor 1	negative factor -1	3	0	0		
7-38	Palo Verde Valley	TDS: Poor Quality N: Good Quality Stable	Recycled Water Blythe WWTP	20%	7,459	200	37.30	0.0583	Blythe, Palo Verde have Sewer Systems		Ag ~100% Solar Plants Landfills Recreation Septic	DTW = 100 and 200- 400. adjacent to Colorado River. Hydrologic Vulnerable Area					
		neutral factor 0	negative factor -1	positive factor 1	1 neutral factor			D positive fac	etor	1	negative factor -1	negative factor -1	-1	medium -1	very low	2	Moderate
7-39	Palo Verde Mesa	TDS: Fair Quality Fluctuating N: Good Quality Stable	Imported Colorado River. Recycled Water Blythe WWTP	20%	9,231	353	26.15	0.0409	Blythe, Palo Verde have sewer	'	Ag ~30%. Golf. Solar	DTW = 135 -230 Adjacent to River. 1/3 Hydrologic Vulnerable Area	-1	medium	very low	-2	Moderate
		neutral factor 0	negative factor -1	positive factor 1	1 neutral factor) positive fac	ctor	1	negative factor -1	negative factor -1	-1	-1	0	-2	Moderate
7-40	Quien Sabe Point Valley	TDS: Poor Quality N: Good Quality 1970 Data Point	Unknown Source	20%	112	40	2.80	0.0044	Based on Population		Ag small %. Resorts.	Adjacent to Colorado River		very low	very low		Low to None
		neutral factor 0	neutral factor 0	positive factor 1	1 positive factor			1 positive fac	ctor	1	positive factor 1	neutral factor 0	4	0	0		
7-41	Calzona Valley	TDS: Fair Quality Unknown	0%	100%	1,608	127	12.66	0.0198	Big River Not Sewered		Ag small %	DTW = ~200' Adjacent to Colorado River		very low	very low		Low to None
		neutral factor 0	positive factor 1	negative factor -	· pooliivo idoloi			1 neutral fact		0	positive factor 1	positive factor 1	3	0	0		
7-42	Vidal Valley	Unknown neutral factor 0	0% positive factor 1	100% negative factor -	10 1 positive factor	216	0.05	0.0001 1 positive fac	Based on Population ctor	1	None Noted positive factor 1	Unknown DTW neutral factor 0	3	very low 0	very low 0		Low to None
7-43	Chemehuevi Valley	Good Quality Stable neutral factor 0	0% positive factor 1	100% negative factor -	395 1 positive factor	427	0.93	0.0014 1 positive fac	Based on Population	1	None Noted positive factor 1	DTW = Shallow negative factor -1	2	very low	very low 0		Low to None

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DWR E	Basin	Salt and Nutrient Concentration Trends	Contribution of Imported / Recycled Water	Reliance on Groundwater	Population 2010	Area mi ²	Persons per mi ²	Persons per acre	Number / Density OWTS		Other Salt and Nutrient Sources	Hydrologic Factors	Factor Total	GAMA Ranking	CASGEM Ranking	Total Negative Factors	Identified Risks to Water Quality
7-44	Needles Valley	TDS: Good Quality N: Good Quality Stable	Recycled Water	20%	4,902	138	35.52		City of Needles has Sewer and LAMP		River Recreation Recreational Vehicle Parks. Wildlife Refuge. Tribal Land. Airport. Ag.	DTW: 9 - 12 Adjacent to Colorado River. Hydrologic Vulnerable Area Along River		medium	very low		Moderate
7 45	Divita Vallavi	neutral factor 0	negative factor -1	positive factor 1	neutral factor	075		positive facto		1	neutral factor 0	negative factor -1	0	-1	0	-1	
7-45	Piute Valley	Good Quality Stable	0%	100%	2	275	0.01	0.0000	Based on Population		None Noted	Spring		very low	very low		Low to None
		neutral factor 0	positive factor 1	negative factor -1	positive factor	•		1 positive fact	or	1	positive factor 1	negative factor -1	2	0	0		140110
7-46	Canebrake Valley	Unknown	0%	100%	2	9	0.22	0.0003	Based on Population		None Noted	Unknown DTW		very low	very low		Low to None
		neutral factor 0	positive factor 1	negative factor -1	positive factor		,	1 positive fact	or	1	positive factor 1	neutral factor 0	3	0	0		
7-47	Jacumba Valley	N: Poor Quality Increasing	0%	100%	517	10	51.70	0.0808	Based on Population		None Noted	Unknown DTW		very low	very low		Low to None
7.40	Halamdala Favik	negative factor -1	positive factor 1	negative factor -1				neutral facto		0	positive factor 1	neutral factor 0	0	0	0		
7-48	Helendale Fault Valley	Good Quality Slight Increase	0%	100%	9	4	2.25	0.0035	Based on Population		Vehicle Recreation	Streams		very low	very low		Low to None
7-49	Pipes Canyon	negative factor -1 Unknown	positive factor 1 0%	negative factor -1	positive factor	<u>.</u> 5	1.00	1 positive factor 0.0016	or Based on	1	positive factor 1 Wilderness	neutral factor 0 Unknown DTW	2	0	0		
7-43	Fault Valley						1.00		Population	······································	Area			very low	very low		Low to None
7-50	Iron Ridge Area	neutral factor 0 Unknown	positive factor 1	negative factor -1	positive factor	8	0.00	1 positive factor 0.0000	or Based on	1	positive factor 1 Wilderness	neutral factor 0 Unknown DTW	3	U	0		
7-30	Hoff Ridge Area	neutral factor 0	positive factor 1	positive factor 1	positive factor		0.00	1 positive factor	Population	1	Area positive factor 1	neutral factor 0	5	very low	very low		Low to None
7-51	Lost Horse	Good Quality	0%	0%	0	27	0.00	0.0000	Based on		Wilderness	Unknown DTW					
	Valley	Unknown							Population		Area Trails. Camping			very low	very low		Low to None
	51 (1)(1)	neutral factor 0	positive factor 1	positive factor 1	positive factor			1 positive fact		1	positive factor 1	neutral factor 0	5	0	0		
7-52	Pleasant Valley	N: Poor Quality Stable	0%	0%	0	15	0.00	0.0000	Based on Population		None Noted	Unknown DTW		very low	very low		Low to None
7-53	Hexie Mountain	neutral factor 0 Unknown	positive factor 1 0%	positive factor 1	positive factor	18	0.00	1 positive factor 0.0000	or Based on	1	positive factor 1 None Noted	neutral factor 0 Unknown DTW	5	0	0		
7-00	rickie iviouritairi	neutral factor 0	positive factor 1	positive factor 1	positive factor		0.00	1 positive factor	Population	1	positive factor 1	neutral factor 0		very low	very low		Low to None
7-54	Buck Ridge	Unknown	0%	0%	0	11	0.00	0.0000	Based on		Campground.	Springs	5	0			
	Fault Valley								Population		Wilderness Area	ı		very low	very low		Low to None
7	Oallin A.V. P	neutral factor 0	positive factor 1	positive factor 1	positive factor		4.00	positive facto		1	positive factor 1	negative factor -1	4	0	0		
7-55	Collins Valley	Unknown	0%	100%	11	11	1.00	0.0016	Based on Population		Campground. Hiking	Unknown DTW		very low	very low		Low to None
7 50	Voqui Mall Are e	neutral factor 0	positive factor 1	negative factor -1	positive factor		0.47	1 positive factor		1	positive factor 1	neutral factor 0	3	0	0		
7-56	Yaqui Well Area	Slight Increases	0%	100%	4	23	0.17	0.0003	Based on Population	1	Campground	DTW = 50'		very low	very low		Low to None
7-59	Mason Valley	negative factor -1 Stable	positive factor 1 0%	negative factor -1	positive factor	9	2.56	1 positive factor 0.0040	Based on	1	positive factor 1 Trailer Park	negative factor -1 DTW = 40 - 75	'	U	U		
- -		neutral factor 0	positive factor 1	negative factor -1	positive factor			1 positive factor	Population	1	small % positive factor 1	negative factor -1	. 2	very low 0	very low 0		Low to None
7-61	Davies Valley	Unknown	0%	0%	0	6	0.00	0.0000	Based on Population	•	None Noted	Unknown DTW		Vom dan.	Vom Lave		Low to
		neutral factor 0	positive factor 1	positive factor 1	positive factor	•		1 positive fact	or	1	positive factor 1	neutral factor 0	5	very low 0	very low 0		None
7-63	Vandeventer Flat	Good Quality Stable	0%	100%	50	11	4.55	0.0071	Based on Population		None Noted	DTW = 75-125		very low	very low		Low to None
		neutral factor 0	positive factor 1	negative factor -1	positive factor	*		1 positive factor	or	1	positive factor 1	negative factor -1	2	Ó	0		

	Salt and Nutrient Concentration	Contribution of Imported /	Reliance on	Population	Area	Persons	Persons	Number /	Other Salt and Nutrient		Factor	GAMA	CASGEM	Total Negative	Identified Risks to Water
DWR Basin	Trends	Recycled Water	Groundwater	2010	mi ²	per mi ²	per acre	Density OWTS	Sources	Hydrologic Factors	Total	Ranking	Ranking	Factors	Quality

DWR = Department of Water Resources

S = Salt measured as Total Dissolved Solids (TDS)

N = Nutrients measured as Nitrates

mi² = square miles

OWTS = Onsite Wastewater Treatment Systems (Septic Systems)

GAMA = Groundwater Ambient Monitoring Assessment

CASGEM = California State Groundwater Elevation Monitoring

DTW = Depth to Water Measured in Feet Below Ground

WTP / WWTP = Water Treatment Plant / Waste Water Treatment Plant

Ag = Agriculture

WDR = Waste Discharge Requirement [Permit]

afy = acre feet per year

SWP = State Water Project

LAMP = Local Area Management Plan

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