Appendix K – Sediment Quality Summary Tables

Sediment Quality from 2001 to 2014

Table 1: EC Measurements for Sample Years between 2001 and 2014

	Sampling Station	Salinity(EC) in µmhos/cm						
		2001 / 2002 (Base)	2007	2009	2010	2012	2013	2014
SJR	Columbia Canal	79	264	179	88	73	95	721
North & Central Fresno Slough	Mendota Dam	156	433	180	273	78	165	458
	DMC	223	371	450	423	148	209	537
	Firebaugh Intake Canal	89	362	174	245	135	221	848
	Etchegoinberry	133	242	371	404	264	347	1790
Southern Fresno Slough	MWA	202	363	336	420	163	305	1550
	James ID Booster Plant	170	170	--	284	138	3210	1190
	Lateral 6	271	451	479	448	234	373	589

Notes: Three samples were tested at each location; results show maximum recorded value for each constituent. Data are based on a saturation extract. Samples were only taken in years the MPG exchanged water with Reclamation (2001, 2002, 2007, 2009, 2010, 2012, 2013, and 2014). There was no sample data available for James ID Booster Plant in 2009.
Source: LSCE & KDSA 2015. MPG Pumping and Monitoring Program: 2014 Annual Report.

Table 2: Arsenic Concentrations for Sample Years between 2001 and 2014

	Sampling Station	Arsenic in mg/kg (Target value is 14 mg/kg)						
		2001 / 2002 (Base)	2007	2009	2010	2012	2013	2014
SJR	Columbia Canal	3.3	1.6	4.6	5.8	6.5	4.9	6.1
North & Central Fresno Slough	Mendota Dam	4.6	9.1	5.2	5.4	3.7	4.7	9.2
	DMC	7.1	5.7	9.2	7.8	8.9	6.7	5.7
	Firebaugh Intake Canal	4.7	0.5 (B)	5.7	4.7	5.9	4.1	5.6
	Etchegoinberry	5.0	4.6	6.7	6.5	7.6	6.1	7.9
Southern Fresno Slough	MWA	8.6	2.2	5.4	7.3	5.5	3.6	5.8
	James ID Booster Plant	2.6	0.9 (B)	--	2.1	1.4	**16.0**	2.8
	Lateral 6	3.2	4.4	5.0	3.7	8.7	6.6	10.5

Notes: Three samples were tested at each location; results show maximum recorded value for each constituent. Data are expressed in a dry weigh basis. Samples were only taken in years the MPG exchanged water with Reclamation (2001, 2002, 2007, 2009, 2010, 2012, 2013, and 2014). There was no sample data available for James ID Booster Plant in 2009.
B = Analyte found in method blank at significant level relative to sample results.
Source: LSCE & KDSA 2015. MPG Pumping and Monitoring Program: 2014 Annual Report.

Table 3: Boron Concentrations for Sample Years between 2001 and 2014

	Sampling Station	Boron in mg/kg						
		2001 / 2002 (Base)	2007	2009	2010	2012	2013	2014
SJR	Columbia Canal	6.4	5.1 (B)	5.4	8.9	3.0	8.2	6.2
North & Central Fresno Slough	Mendota Dam	11.8	60.4	8.6	13.8	5.6	11.9	9.6
	DMC	35.5	26.3	26.0	32.5	10.3	38.0	12.5
	Firebaugh Intake Canal	12.3	8.6	8.6	13.7	11.0	12.2	11.6
	Etchegoinberry	20.6	43.8	18.3	20.9	13.5	25.5	21.6
Southern Fresno Slough	MWA	25.1	12.8	18.0	18.4	12.7	24.4	19.1
	James ID Booster Plant	10.8	6.4 (B)	--	8.6	3.1	16.7	10.6
	Lateral 6	28.1	27.7	18.2	36.3	28.7	40.5	22.4

Notes: Three samples were tested at each location; results show maximum recorded value for each constituent. Data are expressed in a dry weigh basis. Samples were only taken in years the MPG exchanged water with Reclamation (2001, 2002, 2007, 2009, 2010, 2012, 2013, and 2014). There was no sample data available for James ID Booster Plant in 2009.
B = Analyte found in method blank at significant level relative to sample results.
Source: LSCE & KDSA 2015. MPG Pumping and Monitoring Program: 2014 Annual Report.

Table 4: Molybdenum Concentrations for Sample Years between 2001 and 2014

	Sampling Station	Molybdenum in mg/kg						
		2001 / 2002 (Base)	2007	2009	2010	2012	2013	2014
SJR	Columbia Canal	0.7 (B)	<0.6	0.7 (J)	0.4	0.78	0.53	0.66
North & Central Fresno Slough	Mendota Dam	0.8 (B)	<0.6	0.2 (J)	0.4	0.38	0.25	0.41
	DMC	2.4	<0.5	0.7	1.4	0.43	0.9	0.90
	Firebaugh Intake Canal	1.2 (B)	<0.5	0.2 (J)	0.4	0.78	0.39	0.45
	Etchegoinberry	1.0 (B)	<0.6	<0.1	0.5 (J)	0.61	0.4	0.57
Southern Fresno Slough	MWA	1.7 (B)	<0.6	0.3 (J)	0.7	0.75	0.41	0.56
	James ID Booster Plant	1.5 (B)	<0.6	--	0.3 (J)	0.24 (J)	0.43	0.22
	Lateral 6	1.0 (B)	<0.5	0.7	1.2	0.35 (J)	0.6	1.55

Notes: Three samples were tested at each location; results show maximum recorded value for each constituent. Data are expressed in a dry weigh basis. Samples were only taken in years the MPG exchanged water with Reclamation (2001, 2002, 2007, 2009, 2010, 2012, 2013, and 2014). There was no sample data available for James ID Booster Plant in 2009.
B = Analyte found in method blank at significant level relative to sample results; J = Result is an estimated concentration greater than the Method Detection Limit but less than the Method Reporting Limit.
Source: LSCE & KDSA 2015. MPG Pumping and Monitoring Program: 2015 Annual Report.

Table 5: Selenium Concentrations for Sample Years between 2001 and 2014

	Sampling Station	Selenium in mg/kg (Target value is 2 mg/kg; Toxicity threshold is 4 mg/kg)						
		2001 / 2002 (Base)	2007	2009	2010	2012	2013	2014
SJR	Columbia Canal	<1.1	<0.6	2.0	1.4	0.8 (J)	0.5 (J)	0.6 (J)
North & Central Fresno Slough	Mendota Dam	<1.1	<0.6	1.3 (J)	1.5	0.9 (J)	0.3 (J)	0.5 (J)
	DMC	1.1 (B)	0.5 (B)	1.8 (J)	2.4	0.64 (J)	0.2 (J)	0.5 (J)
	Firebaugh Intake Canal	<1	<0.5	0.8 (J)	1.2	1.0 (J)	0.4 (J)	0.7 (J)
	Etchegoinberry	<1.1	<0.6	2.7	1.1 (J)	1.2	0.6 (J)	0.9 (J)
Southern Fresno Slough	MWA	<1.1	<0.6	2.8	1.2	1.6	0.6 (J)	0.7 (J)
	James ID Booster Plant	<1	<0.6	--	0.5 (J)	0.2 (J)	0.2 (J)	<0.07
	Lateral 6	<1.1	<0.5	1.2 (J)	0.7 (J)	1.2 (J)	0.3 (J)	0.1 (J)

Notes: Three samples were tested at each location; results show maximum recorded value for each constituent. Data are expressed in a dry weigh basis. Samples were only taken in years the MPG exchanged water with Reclamation (2001, 2002, 2007, 2009, 2010, 2012, 2013, and 2014). There was no sample data available for James ID Booster Plant in 2009.
B = Analyte found in method blank at significant level relative to sample results; J = Result is an estimated concentration greater than the Method Detection Limit but less than the Method Reporting Limit.
Source: LSCE & KDSA 2015. MPG Pumping and Monitoring Program: 2014 Annual Report.