Figure U-15
Western Meadowlark (Herbivore) Risk Summary
Based on Maximum Detected Concentrations

	Western Meadowlark																																			
Study Area	**SW**	**SW**	**SWP**	**SWP**	**ADB**	**ADB**	**BTA**	**BTA**	**CDA**	**CDA**	**FPP**	**FPP**	**LQT**	**LQT**	**MSA**	**MSA**	**ROS**	**ROS**	**RCRA**	**RCRA**	**RWA**	**RWA**	**WCS**	**WCS**	**ASP**	**ASP**	**P13**	**P13**	**P18**	**P18**	**PA5**	**PA5**	**RCF**	**RCF**	**BKG**	**BKG**
CPEC	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**	**Low HQ**	**High HQ**
Inorganics																																				
Barium	24	49	24	49	<1	<1	<1	1	2	4	8	15	<1	1	3	5	1	2	24	49	1	2	<1	1	<1	<1	<1	<1	<1	<1	9	18	2	4	<1	<1
Beryllium																																				
Cadmium	<1	2	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	1	<1	<1	<1	1	<1	1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1
Chromium	11	12	11	12	<1	<1	2	2	1	1	3	3	1	1	5	5	1	1	8	8	8	8	11	12	<1	<1	<1	<1	<1	<1	1	1	<1	<1	<1	<1
Cobalt	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper	2	6	2	6	<1	<1	<1	1	<1	1	<1	1	<1	2	<1	3	<1	1	1	4	1	4	2	6	<1	1	<1	<1	<1	1	<1	1	<1	<1	<1	<1
Total Cyanide	<1	8	<1	8	<1	<1	<1	<1	<1	<1	<1	<1	<1	8	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Lead	14	29	11	22	<1	<1	<1	<1	<1	<1	2	3	<1	1	11	22	<1	1	2	4	<1	2	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Manganese	<1	1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Mercury	<1	2	<1	2	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	2	<1	<1	<1	2	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Molybdenum	<1	6	<1	6	<1	2	<1	3	<1	3	<1	5	<1	4	<1	2	<1	5	<1	6	<1	3	<1	3	<1	9	<1	<1	<1	5	<1	6	<1	3	<1	4
Nickel	<1	1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	1	<1	1	<1	1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1
Selenium	3	12	4	17	<1	1	3	12	<1	2	<1	4	<1	2	<1	<1	<1	3	1	6	<1	2	<1	2	2	10	4	16	4	17	2	7	<1	3	<1	3
Thallium	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tin	<1	1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	1	<1	1	<1	1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	3	6	3	6	1	3	2	5	3	5	2	4	2	5	2	4	2	5	2	5	2	4	2	4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	4	8
Zinc	<1	5	<1	5	<1	<1	<1	1	<1	2	<1	2	<1	3	<1	3	<1	1	<1	5	<1	3	<1	4	<1	1	<1	1	<1	1	<1	1	<1	1	<1	1
PCDD/PCDFs (Dioxins)																																				
Total Avian Dioxin TEQ	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Avian TEQ	<1	9	<1	9	<1	<1	<1	<1	<1	<1	<1	9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Herbicides																																				
2,4-Dichlorophenoxybutyric acid (2,4-DB)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Dalapon	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
MCPA	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
MCPP	4	40	4	40	<1	<1	<1	<1	<1	3	<1	<1	4	40	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Polycyclic Aromatic Hydrocarbons (PAHs)																																				
Total LMW PAH	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Total HMW PAH	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
PCBs																																				
Aroclor 1260	<1	1	<1	1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Sum of PCB Congeners	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Total Avian PCB TEQ	<1	9	<1	9	<1	<1	<1	<1	<1	<1	<1	9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Pesticides																																				
4,4'-DDE	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
4,4'-DDT	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Total DDT	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Hexachlorobenzene	<1	2	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Methoxychlor	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Semi-Volatile Organic Compounds (SVOCs)																																				
Bis(2-ethylhexyl)phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Diethylphthalate	<1	6	<1	6	<1	<1	<1	<1	<1	<1	<1	6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Volatile Organic Compounds (VOCs)																																				
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
1,1-Dichloroethylene																																				
1,2-Dichloroethene																																				
Acetone	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
Acetonitrile																																				
Acrolein																																				
Benzene																																				
Carbon disulfide																																				
Freon 113 (1,1,2-trichloro-1,2,2-trifluoroethane)																																				
Isopropanol																																				
Methyl ethyl ketone																																				
Methylene chloride																																				
Propanal																																				
Tert-Butyl alcohol (TBA)																																				
Tetrachloroethylene																																				
Tetrahydrofuran																																				
Toluene																																				
Trichloroethylene																																				

Notes:

Not evaluated
Low or High HQ < 1
High HQ ≥ 1
Low HQ ≥ 1
Low HQ > 10

CPEC = Constituent of Potential Ecological Concern
HQ = Hazard Quotient
LMW PAH = Low Molecular Weight Polycyclic Aromatic Hydrocarbons
HMW PAH = High Molecular Weight Polycyclic Aromatic Hydrocarbons
NOAEL = No Observed Adverse Effect Level
LOAEL = Lowest Observed Effect Level
TRV = Toxicity Reference Value
Low HQ is based on LOAEL TRV; High HQ is based on NOAEL TRV.

Study Areas:
SW = Sitewide
SWP = Sitewide Including Ponds (Ponds 18 and A-5)
ADB = Administration Building Area
BTA = Burial Trench Area
CDA = Central Drainage Area
FPP = Former Ponds and Pads
LQT = Liquid Treatment Area
MSA = Maintenance Shed Area
ROS = Remaining On-site Areas
RCRA = RCRA Canyon
RWA = Roadway Areas
WCS = West Canyon Spray Area
ASP = A-Series Pond
P13 = Pond 13
P18 = Pond 18
PA5 = Pond A-5
RCF = RCF Pond
STW = Stormwater Ponds (Pond 13, A-Series Pond, and RCF Pond)
NDR = North Drainage
ADR = A Drainage
BDR = B Drainage
UCD = Upper C Drainage
LCD = Lower C Drainage
BKG = Background