

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Ingestion of Berries

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Equipment	Public Receptor	Fraction a.i. Retained on Berry	Deposition Rate (mg/cm2)	Exposure Factor (cm2/kg-day)	Absorbed Dose (mg/kg-day)	PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Ground	Low Boom	Berry - child	2.00E-01	1.06E-05	4.60E+00	9.75E-06	2.60E-01	0.003751%
Typical	Ground	High Boom	Berry - child	2.00E-01	1.75E-05	4.60E+00	1.61E-05	2.60E-01	0.006192%
Max	Ground	Low Boom	Berry - child	2.00E-01	1.41E-05	4.60E+00	1.30E-05	2.60E-01	0.004989%
Max	Ground	High Boom	Berry - child	2.00E-01	2.33E-05	4.60E+00	2.14E-05	2.60E-01	0.008245%
Typical	Ground	Low Boom	Berry - adult	2.00E-01	1.06E-05	4.57E+00	9.69E-06	2.60E-01	0.003727%
Typical	Ground	High Boom	Berry - adult	2.00E-01	1.75E-05	4.57E+00	1.60E-05	2.60E-01	0.006154%
Max	Ground	Low Boom	Berry - adult	2.00E-01	1.41E-05	4.57E+00	1.29E-05	2.60E-01	0.004958%
Max	Ground	High Boom	Berry - adult	2.00E-01	2.33E-05	4.57E+00	2.13E-05	2.60E-01	0.008193%
Typical	Ground	Low Boom	Res-child	2.00E-01	1.06E-05	4.60E+00	9.75E-06	2.60E-01	0.003751%
Typical	Ground	High Boom	Res-child	2.00E-01	1.75E-05	4.60E+00	1.61E-05	2.60E-01	0.006192%
Max	Ground	Low Boom	Res-child	2.00E-01	1.41E-05	4.60E+00	1.30E-05	2.60E-01	0.004989%
Max	Ground	High Boom	Res-child	2.00E-01	2.33E-05	4.60E+00	2.14E-05	2.60E-01	0.008245%
Typical	Ground	Low Boom	Res-adult	2.00E-01	1.06E-05	4.57E+00	9.69E-06	2.60E-01	0.003727%
Typical	Ground	High Boom	Res-adult	2.00E-01	1.75E-05	4.57E+00	1.60E-05	2.60E-01	0.006154%
Max	Ground	Low Boom	Res-adult	2.00E-01	1.41E-05	4.57E+00	1.29E-05	2.60E-01	0.004958%
Max	Ground	High Boom	Res-adult	2.00E-01	2.33E-05	4.57E+00	2.13E-05	2.60E-01	0.008193%
Typical	Ground	Low Boom	N.American - child	2.00E-01	1.06E-05	4.60E+00	9.75E-06	2.60E-01	0.003751%
Typical	Ground	High Boom	N.American - child	2.00E-01	1.75E-05	4.60E+00	1.61E-05	2.60E-01	0.006192%
Max	Ground	Low Boom	N.American - child	2.00E-01	1.41E-05	4.60E+00	1.30E-05	2.60E-01	0.004989%
Max	Ground	High Boom	N.American - child	2.00E-01	2.33E-05	4.60E+00	2.14E-05	2.60E-01	0.008245%
Typical	Ground	Low Boom	N.American - adult	2.00E-01	1.06E-05	4.57E+00	9.69E-06	2.60E-01	0.003727%
Typical	Ground	High Boom	N.American - adult	2.00E-01	1.75E-05	4.57E+00	1.60E-05	2.60E-01	0.006154%
Max	Ground	Low Boom	N.American - adult	2.00E-01	1.41E-05	4.57E+00	1.29E-05	2.60E-01	0.004958%
Max	Ground	High Boom	N.American - adult	2.00E-01	2.33E-05	4.57E+00	2.13E-05	2.60E-01	0.008193%

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Margins of Exposure

Scenario: Public Receptors - Routine Exposure

Pathway: Dermal Contact with Water While Swimming - Intermediate-Term Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Equipment	Public Receptor	Skin Permeability Constant (cm/hr)	Intermediate-Term Water Concentration (mg/L)	Unit Correction Factor (L/cm ³)	Exposure Factor (cm ² -hr/kg-day)	Absorbed Dose (mg/kg-day)	Oral NOAEL (mg/kg-day) Short/Int	Intermediate-Term MOE (unitless) Short/Int
Typical	Ground	Low Boom	Swimmer-child	1.03E-04	5.87E-03	1.00E-03	4.40E+02	2.67E-07	5.80E+01	2.17E+08
Typical	Ground	High Boom	Swimmer-child	1.03E-04	5.90E-03	1.00E-03	4.40E+02	2.68E-07	5.80E+01	2.16E+08
Max	Ground	Low Boom	Swimmer-child	1.03E-04	7.82E-03	1.00E-03	4.40E+02	3.56E-07	5.80E+01	1.63E+08
Max	Ground	High Boom	Swimmer-child	1.03E-04	7.86E-03	1.00E-03	4.40E+02	3.58E-07	5.80E+01	1.62E+08
Typical	Ground	Low Boom	Swimmer-adult	1.03E-04	5.87E-03	1.00E-03	2.57E+02	1.56E-07	5.80E+01	3.72E+08
Typical	Ground	High Boom	Swimmer-adult	1.03E-04	5.90E-03	1.00E-03	2.57E+02	1.57E-07	5.80E+01	3.70E+08
Max	Ground	Low Boom	Swimmer-adult	1.03E-04	7.82E-03	1.00E-03	2.57E+02	2.08E-07	5.80E+01	2.79E+08
Max	Ground	High Boom	Swimmer-adult	1.03E-04	7.86E-03	1.00E-03	2.57E+02	2.09E-07	5.80E+01	2.77E+08
Typical	Ground	Low Boom	N.American-child	1.03E-04	5.87E-03	1.00E-03	1.14E+03	6.94E-07	5.80E+01	8.35E+07
Typical	Ground	High Boom	N.American-child	1.03E-04	5.90E-03	1.00E-03	1.14E+03	6.98E-07	5.80E+01	8.31E+07
Max	Ground	Low Boom	N.American-child	1.03E-04	7.82E-03	1.00E-03	1.14E+03	9.26E-07	5.80E+01	6.27E+07
Max	Ground	High Boom	N.American-child	1.03E-04	7.86E-03	1.00E-03	1.14E+03	9.31E-07	5.80E+01	6.23E+07
Typical	Ground	Low Boom	N.American-adult	1.03E-04	5.87E-03	1.00E-03	6.69E+02	4.06E-07	5.80E+01	1.43E+08
Typical	Ground	High Boom	N.American-adult	1.03E-04	5.90E-03	1.00E-03	6.69E+02	4.08E-07	5.80E+01	1.42E+08
Max	Ground	Low Boom	N.American-adult	1.03E-04	7.82E-03	1.00E-03	6.69E+02	5.41E-07	5.80E+01	1.07E+08
Max	Ground	High Boom	N.American-adult	1.03E-04	7.86E-03	1.00E-03	6.69E+02	5.44E-07	5.80E+01	1.07E+08

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Margins of Exposure

Scenario: Public Receptors - Routine Exposure

Pathway: Dermal Contact with Water While Swimming - Long-Term Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Equipment	Public Receptor	Skin Permeability Constant (cm/hr)	Long-Term Water Concentration (mg/L)	Unit Correction Factor (L/cm ³)	Exposure Factor (cm ² -hr/kg-day)	Absorbed Dose (mg/kg-day)	Oral NOAEL (mg/kg-day) Short/Int	Long--Term MOE (unitless) Short/Int
Typical	Ground	Low Boom	Swimmer-child	1.03E-04	8.93E-04	1.00E-03	4.40E+02	4.07E-08	5.80E+01	1.43E+09
Typical	Ground	High Boom	Swimmer-child	1.03E-04	9.24E-04	1.00E-03	4.40E+02	4.21E-08	5.80E+01	1.38E+09
Max	Ground	Low Boom	Swimmer-child	1.03E-04	1.19E-03	1.00E-03	4.40E+02	5.42E-08	5.80E+01	1.07E+09
Max	Ground	High Boom	Swimmer-child	1.03E-04	1.23E-03	1.00E-03	4.40E+02	5.61E-08	5.80E+01	1.03E+09
Typical	Ground	Low Boom	Swimmer-adult	1.03E-04	8.93E-04	1.00E-03	2.57E+02	2.38E-08	5.80E+01	2.44E+09
Typical	Ground	High Boom	Swimmer-adult	1.03E-04	9.24E-04	1.00E-03	2.57E+02	2.46E-08	5.80E+01	2.36E+09
Max	Ground	Low Boom	Swimmer-adult	1.03E-04	1.19E-03	1.00E-03	2.57E+02	3.17E-08	5.80E+01	1.83E+09
Max	Ground	High Boom	Swimmer-adult	1.03E-04	1.23E-03	1.00E-03	2.57E+02	3.28E-08	5.80E+01	1.77E+09
Typical	Ground	Low Boom	N.American-child	1.03E-04	8.93E-04	1.00E-03	1.14E+03	1.06E-07	5.80E+01	5.49E+08
Typical	Ground	High Boom	N.American-child	1.03E-04	9.24E-04	1.00E-03	1.14E+03	1.09E-07	5.80E+01	5.30E+08
Max	Ground	Low Boom	N.American-child	1.03E-04	1.19E-03	1.00E-03	1.14E+03	1.41E-07	5.80E+01	4.11E+08
Max	Ground	High Boom	N.American-child	1.03E-04	1.23E-03	1.00E-03	1.14E+03	1.46E-07	5.80E+01	3.98E+08
Typical	Ground	Low Boom	N.American-adult	1.03E-04	8.93E-04	1.00E-03	6.69E+02	6.18E-08	5.80E+01	9.39E+08
Typical	Ground	High Boom	N.American-adult	1.03E-04	9.24E-04	1.00E-03	6.69E+02	6.39E-08	5.80E+01	9.07E+08
Max	Ground	Low Boom	N.American-adult	1.03E-04	1.19E-03	1.00E-03	6.69E+02	8.24E-08	5.80E+01	7.04E+08
Max	Ground	High Boom	N.American-adult	1.03E-04	1.23E-03	1.00E-03	6.69E+02	8.52E-08	5.80E+01	6.81E+08

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses, Margins of Exposure, and Population Adjusted Doses
 Scenario: Public Receptors - Routine Exposure
 Pathway: Incidental Ingestion of Water while Swimming - Intermediate-Term Exposure
 Pesticide: Diflufenzopyr
 Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Equipment	Public Receptor	Intermediate-Term Water Concentration (mg/L)	Exposure Factor (L/kg-day)	Absorbed Dose (mg/kg-day)	Incidental Ingestion	
							Oral NOAEL (mg/kg-day) Short/Int	Intermediate-Term MOE (unitless) Short/Int
Typical	Ground	Low Boom	Swimmer-child	5.87E-03	3.33E-03	1.96E-05	5.80E+01	2.97E+06
Typical	Ground	High Boom	Swimmer-child	5.90E-03	3.33E-03	1.97E-05	5.80E+01	2.95E+06
Max	Ground	Low Boom	Swimmer-child	7.82E-03	3.33E-03	2.61E-05	5.80E+01	2.22E+06
Max	Ground	High Boom	Swimmer-child	7.86E-03	3.33E-03	2.62E-05	5.80E+01	2.21E+06
Typical	Ground	Low Boom	Swimmer-adult	5.87E-03	7.14E-04	4.19E-06	5.80E+01	1.38E+07
Typical	Ground	High Boom	Swimmer-adult	5.90E-03	7.14E-04	4.21E-06	5.80E+01	1.38E+07
Max	Ground	Low Boom	Swimmer-adult	7.82E-03	7.14E-04	5.59E-06	5.80E+01	1.04E+07
Max	Ground	High Boom	Swimmer-adult	7.86E-03	7.14E-04	5.62E-06	5.80E+01	1.03E+07

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses, Margins of Exposure, and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Incidental Ingestion of Water while Swimming - Long-Term Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Equipment	Public Receptor	Long-Term Water Concentration (mg/L)	Exposure Factor (L/kg-day)	Absorbed Dose (mg/kg-day)	Incidental Ingestion	
							Oral NOAEL (mg/kg-day) Short/Int	Long-Term MOE (unitless) Short/Int
Typical	Ground	Low Boom	Swimmer-child	8.93E-04	3.33E-03	2.98E-06	5.80E+01	1.95E+07
Typical	Ground	High Boom	Swimmer-child	9.24E-04	3.33E-03	3.08E-06	5.80E+01	1.88E+07
Max	Ground	Low Boom	Swimmer-child	1.19E-03	3.33E-03	3.97E-06	5.80E+01	1.46E+07
Max	Ground	High Boom	Swimmer-child	1.23E-03	3.33E-03	4.11E-06	5.80E+01	1.41E+07
Typical	Ground	Low Boom	Swimmer-adult	8.93E-04	7.14E-04	6.38E-07	5.80E+01	9.09E+07
Typical	Ground	High Boom	Swimmer-adult	9.24E-04	7.14E-04	6.60E-07	5.80E+01	8.78E+07
Max	Ground	Low Boom	Swimmer-adult	1.19E-03	7.14E-04	8.51E-07	5.80E+01	6.82E+07
Max	Ground	High Boom	Swimmer-adult	1.23E-03	7.14E-04	8.80E-07	5.80E+01	6.59E+07

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses, Margins of Exposure, and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Drinking Water Ingestion - Intermediate-Term Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Equipment	Public Receptor	Intermediate-Term Water Concentration (mg/L)	Exposure Factor (L/kg-day)	Absorbed Dose (mg/kg-day)	Drinking Water	
							PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Ground	Low Boom	Hiker/Hunter	5.87E-03	2.86E-02	1.68E-04	2.60E-01	0.064476%
Typical	Ground	High Boom	Hiker/Hunter	5.90E-03	2.86E-02	1.69E-04	2.60E-01	0.064817%
Max	Ground	Low Boom	Hiker/Hunter	7.82E-03	2.86E-02	2.24E-04	2.60E-01	0.085969%
Max	Ground	High Boom	Hiker/Hunter	7.86E-03	2.86E-02	2.25E-04	2.60E-01	0.086418%
Typical	Ground	Low Boom	Berry - child	5.87E-03	6.67E-02	3.91E-04	2.60E-01	0.150445%
Typical	Ground	High Boom	Berry - child	5.90E-03	6.67E-02	3.93E-04	2.60E-01	0.151240%
Max	Ground	Low Boom	Berry - child	7.82E-03	6.67E-02	5.22E-04	2.60E-01	0.200595%
Max	Ground	High Boom	Berry - child	7.86E-03	6.67E-02	5.24E-04	2.60E-01	0.201641%
Typical	Ground	Low Boom	Berry - adult	5.87E-03	2.86E-02	1.68E-04	2.60E-01	0.064476%
Typical	Ground	High Boom	Berry - adult	5.90E-03	2.86E-02	1.69E-04	2.60E-01	0.064817%
Max	Ground	Low Boom	Berry - adult	7.82E-03	2.86E-02	2.24E-04	2.60E-01	0.085969%
Max	Ground	High Boom	Berry - adult	7.86E-03	2.86E-02	2.25E-04	2.60E-01	0.086418%
Typical	Ground	Low Boom	Angler	5.87E-03	2.86E-02	1.68E-04	2.60E-01	0.064476%
Typical	Ground	High Boom	Angler	5.90E-03	2.86E-02	1.69E-04	2.60E-01	0.064817%
Max	Ground	Low Boom	Angler	7.82E-03	2.86E-02	2.24E-04	2.60E-01	0.085969%
Max	Ground	High Boom	Angler	7.86E-03	2.86E-02	2.25E-04	2.60E-01	0.086418%
Typical	Ground	Low Boom	N.American - child	5.87E-03	3.33E-02	1.96E-04	2.60E-01	0.075222%
Typical	Ground	High Boom	N.American - child	5.90E-03	3.33E-02	1.97E-04	2.60E-01	0.075620%
Max	Ground	Low Boom	N.American - child	7.82E-03	3.33E-02	2.61E-04	2.60E-01	0.100297%
Max	Ground	High Boom	N.American - child	7.86E-03	3.33E-02	2.62E-04	2.60E-01	0.100821%
Typical	Ground	Low Boom	N.American - adult	5.87E-03	1.43E-02	8.38E-05	2.60E-01	0.032238%
Typical	Ground	High Boom	N.American - adult	5.90E-03	1.43E-02	8.43E-05	2.60E-01	0.032409%
Max	Ground	Low Boom	N.American - adult	7.82E-03	1.43E-02	1.12E-04	2.60E-01	0.042985%
Max	Ground	High Boom	N.American - adult	7.86E-03	1.43E-02	1.12E-04	2.60E-01	0.043209%

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses, Margins of Exposure, and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Drinking Water Ingestion - Long-Term Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Equipment	Public Receptor	Long-Term Water Concentration (mg/L)	Exposure Factor (L/kg-day)	Absorbed Dose (mg/kg-day)	Drinking Water	
							PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Ground	Low Boom	Hiker/Hunter	8.93E-04	2.86E-02	2.55E-05	2.60E-01	0.009817%
Typical	Ground	High Boom	Hiker/Hunter	9.24E-04	2.86E-02	2.64E-05	2.60E-01	0.010158%
Max	Ground	Low Boom	Hiker/Hunter	1.19E-03	2.86E-02	3.40E-05	2.60E-01	0.013090%
Max	Ground	High Boom	Hiker/Hunter	1.23E-03	2.86E-02	3.52E-05	2.60E-01	0.013538%
Typical	Ground	Low Boom	Berry - child	8.93E-04	6.67E-02	5.96E-05	2.60E-01	0.022906%
Typical	Ground	High Boom	Berry - child	9.24E-04	6.67E-02	6.16E-05	2.60E-01	0.023701%
Max	Ground	Low Boom	Berry - child	1.19E-03	6.67E-02	7.94E-05	2.60E-01	0.030544%
Max	Ground	High Boom	Berry - child	1.23E-03	6.67E-02	8.21E-05	2.60E-01	0.031590%
Typical	Ground	Low Boom	Berry - adult	8.93E-04	2.86E-02	2.55E-05	2.60E-01	0.009817%
Typical	Ground	High Boom	Berry - adult	9.24E-04	2.86E-02	2.64E-05	2.60E-01	0.010158%
Max	Ground	Low Boom	Berry - adult	1.19E-03	2.86E-02	3.40E-05	2.60E-01	0.013090%
Max	Ground	High Boom	Berry - adult	1.23E-03	2.86E-02	3.52E-05	2.60E-01	0.013538%
Typical	Ground	Low Boom	Angler	8.93E-04	2.86E-02	2.55E-05	2.60E-01	0.009817%
Typical	Ground	High Boom	Angler	9.24E-04	2.86E-02	2.64E-05	2.60E-01	0.010158%
Max	Ground	Low Boom	Angler	1.19E-03	2.86E-02	3.40E-05	2.60E-01	0.013090%
Max	Ground	High Boom	Angler	1.23E-03	2.86E-02	3.52E-05	2.60E-01	0.013538%
Typical	Ground	Low Boom	N.American - child	8.93E-04	3.33E-02	2.98E-05	2.60E-01	0.011453%
Typical	Ground	High Boom	N.American - child	9.24E-04	3.33E-02	3.08E-05	2.60E-01	0.011851%
Max	Ground	Low Boom	N.American - child	1.19E-03	3.33E-02	3.97E-05	2.60E-01	0.015272%
Max	Ground	High Boom	N.American - child	1.23E-03	3.33E-02	4.11E-05	2.60E-01	0.015795%
Typical	Ground	Low Boom	N.American - adult	8.93E-04	1.43E-02	1.28E-05	2.60E-01	0.004909%
Typical	Ground	High Boom	N.American - adult	9.24E-04	1.43E-02	1.32E-05	2.60E-01	0.005079%
Max	Ground	Low Boom	N.American - adult	1.19E-03	1.43E-02	1.70E-05	2.60E-01	0.006545%
Max	Ground	High Boom	N.American - adult	1.23E-03	1.43E-02	1.76E-05	2.60E-01	0.006769%

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Ingestion of Fish - Intermediate-Term Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Equipment	Public Receptor	Intermediate-Term Water Concentration (mg/L)	Bioconcentration Factor (L/kg)	Unit Correction Factor (kg/mg)	Exposure Factor (mg/kg-day)	Absorbed Dose (mg/kg-day)	PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Ground	Low Boom	Angler	5.87E-03	3.16E+00	1.00E-06	9.00E+02	1.67E-05	2.60E-01	0.006418%
Typical	Ground	High Boom	Angler	5.90E-03	3.16E+00	1.00E-06	9.00E+02	1.68E-05	2.60E-01	0.006452%
Max	Ground	Low Boom	Angler	7.82E-03	3.16E+00	1.00E-06	9.00E+02	2.22E-05	2.60E-01	0.008557%
Max	Ground	High Boom	Angler	7.86E-03	3.16E+00	1.00E-06	9.00E+02	2.24E-05	2.60E-01	0.008602%
Typical	Ground	Low Boom	N.American - child	5.87E-03	3.16E+00	1.00E-06	1.27E+04	2.35E-04	2.60E-01	0.090327%
Typical	Ground	High Boom	N.American - child	5.90E-03	3.16E+00	1.00E-06	1.27E+04	2.36E-04	2.60E-01	0.090804%
Max	Ground	Low Boom	N.American - child	7.82E-03	3.16E+00	1.00E-06	1.27E+04	3.13E-04	2.60E-01	0.120437%
Max	Ground	High Boom	N.American - child	7.86E-03	3.16E+00	1.00E-06	1.27E+04	3.15E-04	2.60E-01	0.121065%
Typical	Ground	Low Boom	N.American - adult	5.87E-03	3.16E+00	1.00E-06	1.26E+04	2.34E-04	2.60E-01	0.090157%
Typical	Ground	High Boom	N.American - adult	5.90E-03	3.16E+00	1.00E-06	1.26E+04	2.36E-04	2.60E-01	0.090634%
Max	Ground	Low Boom	N.American - adult	7.82E-03	3.16E+00	1.00E-06	1.26E+04	3.13E-04	2.60E-01	0.120211%
Max	Ground	High Boom	N.American - adult	7.86E-03	3.16E+00	1.00E-06	1.26E+04	3.14E-04	2.60E-01	0.120838%

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation: Potential Doses and Population Adjusted Doses

Scenario: Public Receptors - Routine Exposure

Pathway: Ingestion of Fish - Long-Term Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Equipment	Public Receptor	Long-Term Water Concentration (mg/L)	Bioconcentration Factor (L/kg)	Unit Correction Factor (kg/mg)	Exposure Factor (mg/kg-day)	Absorbed Dose (mg/kg-day)	PAD (mg/kg-day) Chronic	%PAD (unitless) Chronic
Typical	Ground	Low Boom	Angler	8.93E-04	3.16E+00	1.00E-06	9.00E+02	2.54E-06	2.60E-01	0.000977%
Typical	Ground	High Boom	Angler	9.24E-04	3.16E+00	1.00E-06	9.00E+02	2.63E-06	2.60E-01	0.001011%
Max	Ground	Low Boom	Angler	1.19E-03	3.16E+00	1.00E-06	9.00E+02	3.39E-06	2.60E-01	0.001303%
Max	Ground	High Boom	Angler	1.23E-03	3.16E+00	1.00E-06	9.00E+02	3.50E-06	2.60E-01	0.001348%
Typical	Ground	Low Boom	N.American - child	8.93E-04	3.16E+00	1.00E-06	1.27E+04	3.58E-05	2.60E-01	0.013753%
Typical	Ground	High Boom	N.American - child	9.24E-04	3.16E+00	1.00E-06	1.27E+04	3.70E-05	2.60E-01	0.014230%
Max	Ground	Low Boom	N.American - child	1.19E-03	3.16E+00	1.00E-06	1.27E+04	4.77E-05	2.60E-01	0.018338%
Max	Ground	High Boom	N.American - child	1.23E-03	3.16E+00	1.00E-06	1.27E+04	4.93E-05	2.60E-01	0.018966%
Typical	Ground	Low Boom	N.American - adult	8.93E-04	3.16E+00	1.00E-06	1.26E+04	3.57E-05	2.60E-01	0.013727%
Typical	Ground	High Boom	N.American - adult	9.24E-04	3.16E+00	1.00E-06	1.26E+04	3.69E-05	2.60E-01	0.014204%
Max	Ground	Low Boom	N.American - adult	1.19E-03	3.16E+00	1.00E-06	1.26E+04	4.76E-05	2.60E-01	0.018304%
Max	Ground	High Boom	N.American - adult	1.23E-03	3.16E+00	1.00E-06	1.26E+04	4.92E-05	2.60E-01	0.018931%

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation Aggregate Risk Index - Intermediate Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Dermal Exposure Pathways			Incidental Ingestion Short/Int Term Oral Water MOE	Dietary Exposure Pathways			Intermediate-Term Aggregate Risk Index
						Intermediate-Term Dermal Drift MOE	Foliage MOE	Short/Int Term Oral Water MOE		Chronic Water %PAD	Chronic Berries %PAD	Chronic Fish %PAD	
Typical	Ground	Both	Low Boom	Hiker/Hunter	1.00E+02	NC	NC	--	--	0.064476%	--	--	1.55E+03
Typical	Ground	Both	High Boom	Hiker/Hunter	1.00E+02	NC	NC	--	--	0.064817%	--	--	1.54E+03
Max	Ground	Both	Low Boom	Hiker/Hunter	1.00E+02	NC	NC	--	--	0.085969%	--	--	1.16E+03
Max	Ground	Both	High Boom	Hiker/Hunter	1.00E+02	NC	NC	--	--	0.086418%	--	--	1.16E+03
Typical	Ground	Both	Low Boom	Berry - child	1.00E+02	NC	NC	--	--	0.150445%	0.003751%	--	6.49E+02
Typical	Ground	Both	High Boom	Berry - child	1.00E+02	NC	NC	--	--	0.151240%	0.006192%	--	6.35E+02
Max	Ground	Both	Low Boom	Berry - child	1.00E+02	NC	NC	--	--	0.200595%	0.004989%	--	4.86E+02
Max	Ground	Both	High Boom	Berry - child	1.00E+02	NC	NC	--	--	0.201641%	0.008245%	--	4.76E+02
Typical	Ground	Both	Low Boom	Berry - adult	1.00E+02	NC	NC	--	--	0.064476%	0.003727%	--	1.47E+03
Typical	Ground	Both	High Boom	Berry - adult	1.00E+02	NC	NC	--	--	0.064817%	0.006154%	--	1.41E+03
Max	Ground	Both	Low Boom	Berry - adult	1.00E+02	NC	NC	--	--	0.085969%	0.004958%	--	1.10E+03
Max	Ground	Both	High Boom	Berry - adult	1.00E+02	NC	NC	--	--	0.086418%	0.008193%	--	1.06E+03
Typical	Ground	Both	Low Boom	Angler	1.00E+02	NC	NC	--	--	0.064476%	--	0.006418%	1.41E+03
Typical	Ground	Both	High Boom	Angler	1.00E+02	NC	NC	--	--	0.064817%	--	0.006452%	1.40E+03
Max	Ground	Both	Low Boom	Angler	1.00E+02	NC	NC	--	--	0.085969%	--	0.008557%	1.06E+03
Max	Ground	Both	High Boom	Angler	1.00E+02	NC	NC	--	--	0.086418%	--	0.008602%	1.05E+03
Typical	Ground	Both	Low Boom	Res-child	1.00E+02	NC	NC	--	--	--	0.003751%	--	2.67E+04
Typical	Ground	Both	High Boom	Res-child	1.00E+02	NC	NC	--	--	--	0.006192%	--	1.61E+04
Max	Ground	Both	Low Boom	Res-child	1.00E+02	NC	NC	--	--	--	0.004989%	--	2.00E+04
Max	Ground	Both	High Boom	Res-child	1.00E+02	NC	NC	--	--	--	0.008245%	--	1.21E+04
Typical	Ground	Both	Low Boom	Res-adult	1.00E+02	NC	NC	--	--	--	0.003727%	--	2.68E+04
Typical	Ground	Both	High Boom	Res-adult	1.00E+02	NC	NC	--	--	--	0.006154%	--	1.63E+04
Max	Ground	Both	Low Boom	Res-adult	1.00E+02	NC	NC	--	--	--	0.004958%	--	2.02E+04
Max	Ground	Both	High Boom	Res-adult	1.00E+02	NC	NC	--	--	--	0.008193%	--	1.22E+04
Typical	Ground	Both	Low Boom	N.A.-child	1.00E+02	NC	NC	8.35E+07	--	0.075222%	0.003751%	0.090327%	5.90E+02
Typical	Ground	Both	High Boom	N.A.-child	1.00E+02	NC	NC	8.31E+07	--	0.075620%	0.006192%	0.090804%	5.79E+02
Max	Ground	Both	Low Boom	N.A.-child	1.00E+02	NC	NC	6.27E+07	--	0.100297%	0.004989%	0.120437%	4.43E+02
Max	Ground	Both	High Boom	N.A.-child	1.00E+02	NC	NC	6.23E+07	--	0.100821%	0.008245%	0.121065%	4.34E+02
Typical	Ground	Both	Low Boom	N.A.-adult	1.00E+02	NC	NC	1.43E+08	--	0.032238%	0.003727%	0.090157%	7.92E+02
Typical	Ground	Both	High Boom	N.A.-adult	1.00E+02	NC	NC	1.42E+08	--	0.032409%	0.006154%	0.090634%	7.74E+02
Max	Ground	Both	Low Boom	N.A.-adult	1.00E+02	NC	NC	1.07E+08	--	0.042985%	0.004958%	0.120211%	5.94E+02
Max	Ground	Both	High Boom	N.A.-adult	1.00E+02	NC	NC	1.07E+08	--	0.043209%	0.008193%	0.120838%	5.80E+02
Typical	Ground	Both	Low Boom	Swimmer-child	1.00E+02	--	--	2.17E+08	2.97E+06	--	--	--	2.93E+04
Typical	Ground	Both	High Boom	Swimmer-child	1.00E+02	--	--	2.16E+08	2.95E+06	--	--	--	2.91E+04
Max	Ground	Both	Low Boom	Swimmer-child	1.00E+02	--	--	1.63E+08	2.22E+06	--	--	--	2.19E+04
Max	Ground	Both	High Boom	Swimmer-child	1.00E+02	--	--	1.62E+08	2.21E+06	--	--	--	2.18E+04
Typical	Ground	Both	Low Boom	Swimmer-adult	1.00E+02	--	--	3.72E+08	1.38E+07	--	--	--	1.33E+05
Typical	Ground	Both	High Boom	Swimmer-adult	1.00E+02	--	--	3.70E+08	1.38E+07	--	--	--	1.33E+05

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation Aggregate Risk Index - Intermediate Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Dermal Exposure Pathways			Incidental Ingestion	Dietary Exposure Pathways			Intermediate-Term Aggregate Risk Index
						Intermediate-Term Dermal Drift MOE	Foliage MOE	Short/Int Term Oral Water MOE	Short/Int Term Oral Water MOE	Chronic Water %PAD	Chronic Berries %PAD	Chronic Fish %PAD	
Max	Ground	Both	Low Boom	Swimmer-adult	1.00E+02	--	--	2.79E+08	1.04E+07	--	--	--	1.00E+05
Max	Ground	Both	High Boom	Swimmer-adult	1.00E+02	--	--	2.77E+08	1.03E+07	--	--	--	9.95E+04

--Receptor not exposed via this pathway.

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation Aggregate Risk Index - Long Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Dermal Exposure Pathways			Incidental Ingestion Short/Int Term Oral Water MOE	Dietary Exposure Pathways			Long-Term Aggregate Risk Index
						Long-Term Dermal Drift MOE	Foliage MOE	Short/Int Term Oral Water MOE		Chronic Water %PAD	Chronic Berries %PAD	Chronic Fish %PAD	
Typical	Ground	Both	Low Boom	Hiker/Hunter	1.00E+02	NC	NC	--	--	0.009817%	--	--	1.02E+04
Typical	Ground	Both	High Boom	Hiker/Hunter	1.00E+02	NC	NC	--	--	0.010158%	--	--	9.84E+03
Max	Ground	Both	Low Boom	Hiker/Hunter	1.00E+02	NC	NC	--	--	0.013090%	--	--	7.64E+03
Max	Ground	Both	High Boom	Hiker/Hunter	1.00E+02	NC	NC	--	--	0.013538%	--	--	7.39E+03
Typical	Ground	Both	Low Boom	Berry - child	1.00E+02	NC	NC	--	--	0.022906%	0.003751%	--	3.75E+03
Typical	Ground	Both	High Boom	Berry - child	1.00E+02	NC	NC	--	--	0.023701%	0.006192%	--	3.35E+03
Max	Ground	Both	Low Boom	Berry - child	1.00E+02	NC	NC	--	--	0.030544%	0.004989%	--	2.81E+03
Max	Ground	Both	High Boom	Berry - child	1.00E+02	NC	NC	--	--	0.031590%	0.008245%	--	2.51E+03
Typical	Ground	Both	Low Boom	Berry - adult	1.00E+02	NC	NC	--	--	0.009817%	0.003727%	--	7.38E+03
Typical	Ground	Both	High Boom	Berry - adult	1.00E+02	NC	NC	--	--	0.010158%	0.006154%	--	6.13E+03
Max	Ground	Both	Low Boom	Berry - adult	1.00E+02	NC	NC	--	--	0.013090%	0.004958%	--	5.54E+03
Max	Ground	Both	High Boom	Berry - adult	1.00E+02	NC	NC	--	--	0.013538%	0.008193%	--	4.60E+03
Typical	Ground	Both	Low Boom	Angler	1.00E+02	NC	NC	--	--	0.009817%	--	0.000977%	9.26E+03
Typical	Ground	Both	High Boom	Angler	1.00E+02	NC	NC	--	--	0.010158%	--	0.001011%	8.95E+03
Max	Ground	Both	Low Boom	Angler	1.00E+02	NC	NC	--	--	0.013090%	--	0.001303%	6.95E+03
Max	Ground	Both	High Boom	Angler	1.00E+02	NC	NC	--	--	0.013538%	--	0.001348%	6.72E+03
Typical	Ground	Both	Low Boom	Res-child	1.00E+02	NC	NC	--	--	--	0.003751%	--	2.67E+04
Typical	Ground	Both	High Boom	Res-child	1.00E+02	NC	NC	--	--	--	0.006192%	--	1.61E+04
Max	Ground	Both	Low Boom	Res-child	1.00E+02	NC	NC	--	--	--	0.004989%	--	2.00E+04
Max	Ground	Both	High Boom	Res-child	1.00E+02	NC	NC	--	--	--	0.008245%	--	1.21E+04
Typical	Ground	Both	Low Boom	Res-adult	1.00E+02	NC	NC	--	--	--	0.003727%	--	2.68E+04
Typical	Ground	Both	High Boom	Res-adult	1.00E+02	NC	NC	--	--	--	0.006154%	--	1.63E+04
Max	Ground	Both	Low Boom	Res-adult	1.00E+02	NC	NC	--	--	--	0.004958%	--	2.02E+04
Max	Ground	Both	High Boom	Res-adult	1.00E+02	NC	NC	--	--	--	0.008193%	--	1.22E+04
Typical	Ground	Both	Low Boom	N.A.-child	1.00E+02	NC	NC	5.49E+08	--	0.011453%	0.003751%	0.013753%	3.45E+03
Typical	Ground	Both	High Boom	N.A.-child	1.00E+02	NC	NC	5.30E+08	--	0.011851%	0.006192%	0.014230%	3.10E+03
Max	Ground	Both	Low Boom	N.A.-child	1.00E+02	NC	NC	4.11E+08	--	0.015272%	0.004989%	0.018338%	2.59E+03
Max	Ground	Both	High Boom	N.A.-child	1.00E+02	NC	NC	3.98E+08	--	0.015795%	0.008245%	0.018966%	2.32E+03
Typical	Ground	Both	Low Boom	N.A.-adult	1.00E+02	NC	NC	9.39E+08	--	0.004909%	0.003727%	0.013727%	4.47E+03
Typical	Ground	Both	High Boom	N.A.-adult	1.00E+02	NC	NC	9.07E+08	--	0.005079%	0.006154%	0.014204%	3.93E+03
Max	Ground	Both	Low Boom	N.A.-adult	1.00E+02	NC	NC	7.04E+08	--	0.006545%	0.004958%	0.018304%	3.35E+03
Max	Ground	Both	High Boom	N.A.-adult	1.00E+02	NC	NC	6.81E+08	--	0.006769%	0.008193%	0.018931%	2.95E+03
Typical	Ground	Both	Low Boom	Swimmer-child	1.00E+02	--	--	1.43E+09	1.95E+07	--	--	--	1.92E+05
Typical	Ground	Both	High Boom	Swimmer-child	1.00E+02	--	--	1.38E+09	1.88E+07	--	--	--	1.86E+05
Max	Ground	Both	Low Boom	Swimmer-child	1.00E+02	--	--	1.07E+09	1.46E+07	--	--	--	1.44E+05
Max	Ground	Both	High Boom	Swimmer-child	1.00E+02	--	--	1.03E+09	1.41E+07	--	--	--	1.39E+05
Typical	Ground	Both	Low Boom	Swimmer-adult	1.00E+02	--	--	2.44E+09	9.09E+07	--	--	--	8.76E+05
Typical	Ground	Both	High Boom	Swimmer-adult	1.00E+02	--	--	2.36E+09	8.78E+07	--	--	--	8.47E+05

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Calculation Aggregate Risk Index - Long Term Exposure Scenario

Scenario: Public Receptors - Routine Exposure

Pesticide: Diflufenzopyr

Program: Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural

Scenario:	AgDrift Scenario	Land Type	Equipment	Public Receptor	Target MOE	Dermal Exposure Pathways			Incidental Ingestion	Dietary Exposure Pathways			Long-Term
						Long-Term Dermal		Short/Int Term Oral	Short/Int Term Oral	Chronic Water %PAD	Chronic Berries %PAD	Chronic Fish %PAD	Aggregate Risk Index
						Drift MOE	Foliage MOE	Water MOE	Water MOE				
Max	Ground	Both	Low Boom	Swimmer-adult	1.00E+02	--	--	1.83E+09	6.82E+07	--	--	--	6.57E+05
Max	Ground	Both	High Boom	Swimmer-adult	1.00E+02	--	--	1.77E+09	6.59E+07	--	--	--	6.35E+05

--Receptor not exposed via this pathway.

NA - Not Available.

NC - Not Calculated (No dose-response value).

APPENDIX E - PUBLIC RECEPTOR UNCERTAINTY ANALYSIS (INTERMEDIATE AND LONG-TERM EXPOSURE)

Aggregate Risk Indices - Routine Exposure Scenarios for Public Receptors

Herbicide: *Diffuzenzopyr*

Programs: *Rangeland, Energy/Mineral, Rights-of-Way, Recreation/Cultural*

EIS HHRA

BLM

AgDrift Scenario:	Typical Application Rate Scenario ARIs (a) (b)		Maximum Application Rate Scenario ARIs (a) (b)	
	Ground	Ground	Ground	Ground (Truck or ATV)
Land Type:	NA	NA	NA	NA
Equipment (c):	Low Boom	High Boom	Low Boom	High Boom
Intermediate-Term Exposure				
Hiker/Hunter (Adult)	1,551	1,543	1,163	1,157
Berry Picker (Child)	649	635	486	476
Berry Picker (Adult)	1,466	1,409	1,100	1,057
Angler (Adult)	1,411	1,403	1,058	1,052
Residential (Child)	26,661	16,149	20,043	12,129
Residential (Adult)	26,828	16,250	20,168	12,205
Native American (Child)	590	579	443	434
Native American (Adult)	792	774	594	580
Swimmer (Child)	29,256	29,102	21,942	21,828
Swimmer (Adult)	133,425	132,723	100,068	99,548
Long-Term Exposure				
Hiker/Hunter (Adult)	10,186	9,845	7,639	7,386
Berry Picker (Child)	3,751	3,345	2,814	2,510
Berry Picker (Adult)	7,383	6,131	5,541	4,602
Angler (Adult)	9,264	8,954	6,948	6,718
Residential (Child)	26,661	16,149	20,043	12,129
Residential (Adult)	26,828	16,250	20,168	12,205
Native American (Child)	3,451	3,097	2,589	2,324
Native American (Adult)	4,470	3,930	3,353	2,949
Swimmer (Child)	192,149	185,705	144,104	139,331
Swimmer (Adult)	876,307	846,919	657,194	635,430
Notes: ARI - Aggregate Risk Index. Values less than one represent a level of concern. ARIs less than one are highlighted. NA - Not Applicable. (a) - ARIs are based on oral and dietary exposure. Based on laboratory studies, diflufenzopyr does not have toxic effects via the dermal route of exposure. (b) - Application rates are shown on Table 4-1 and are the same for each program. (c) - Low and High Boom applies to a truck-mount or an All-Terrain Vehicle (ATV)-mount boom.				