

4.0 MEC Risk Assessment Results

Two scenarios were analyzed to determine the Overall MEC Risk at the Parker Flats MRA – baseline and after-action. The following sections describe the assumptions and results of each analysis and for each of the areas. Figures 3 and 4 show the reuse areas in Parker Flats MRA.

4.1. Presentation of Input Scores

4.1.1. Baseline Scenario Analysis

The baseline analysis considers the potential MEC risk at the site following the closure of Fort Ord in 1994. The baseline analysis does not represent the current state of Parker Flats MRA; however, it provides a background representation of the potential MEC risk prior to any removal actions, allowing for an analysis of the removal actions.

The Level of Intrusion, Frequency of Entry, and Intensity of Contact with Soil input factors are provided for each receptor in Table 3-1. The Migration/Erosion Potential score is expected to be low for all of the reuse areas. The Army Maintenance Center was not part of the geophysical survey and removal activities at MRS-13B. The CSUMB Expansion Area, the Monterey County Public Facilities, and the MRS-13B Habitat Reserve did not contain MEC. All of the remaining reuse areas contain MEC Hazard Types 1, 2, and 3 except for the MRS-13B Development Reserve and MST Maintenance Center, where no MEC Hazard Types 2 or 3 were found.

Table 4-1 provides the baseline analysis results of the density calculations, as discussed in Section 2.3.1, and the corresponding MEC Density input factor score for each of the reuse areas by MEC Hazard Type and by depth below ground surface.

Table 4-1. Baseline MEC Density

Depth (feet)	Land Reuse	BASELINE MEC DENSITY (number per acre calculated)			BASELINE MEC DENSITY INPUT FACTOR SCORE		
		MEC Hazard Type			MEC Hazard Type		
		1	2	3	1	2	3
0	MPC EVOC	0.170	0.043	0	3	2	NA ^a
0-1	MPC EVOC	2.656	0.238	0.234	4	3	3
0-2	MPC EVOC	4.314	0.261	NC ^b	4	3	4
0-3	MPC EVOC	4.633	0.265	NC ^b	4	3	4
0-4	MPC EVOC	4.847	0.265	NC ^b	4	3	4
0-5	MPC EVOC	9.695	0.530	NC ^b	4	3	4

Depth (feet)	Land Reuse	BASELINE MEC DENSITY (number per acre calculated)			BASELINE MEC DENSITY INPUT FACTOR SCORE		
		MEC Hazard Type			MEC Hazard Type		
		1	2	3	1	2	3
0	Parker Flats MRA Horse Park	0.107	0.040	0	3	2	NA ^a
0-1	Parker Flats MRA Horse Park	1.437	0.146	0.047	4	3	2
0-2	Parker Flats MRA Horse Park	1.570	0.146	0.047	4	3	2
0-3	Parker Flats MRA Horse Park	1.593	0.146	0.047	4	3	2
0-4	Parker Flats MRA Horse Park	1.630	0.146	0.047	4	3	2
0-5	Parker Flats MRA Horse Park	3.259	0.292	0.093	4	3	2
0	MRS-13B Horse Park	0.076	0.011	0	2	2	NA ^a
0-1	MRS-13B Horse Park	1.305	0.033	0.010	4	2	2
0-2	MRS-13B Horse Park	1.647	0.033	0.021	4	2	2
0-3	MRS-13B Horse Park	1.730	0.044	0.021	4	2	2
0-4	MRS-13B Horse Park	1.854	0.074	0.021	4	2	2
0-5	MRS-13B Horse Park	1.854	0.074	0.021	4	2	2
0	Parker Flats MRA Habitat Reserve	0.071	0	0	2	NA ^a	NA ^a
0-1	Parker Flats MRA Habitat Reserve	1.606	0.144	0.054	4	3	2
0-2	Parker Flats MRA Habitat Reserve	2.084	0.144	0.054	4	3	2
0-3	Parker Flats MRA Habitat Reserve	3.400	0.165	0.054	4	3	2
0-4	Parker Flats MRA Habitat Reserve	3.518	0.186	0.054	4	3	2
0-5	Parker Flats MRA Habitat Reserve	7.037	0.372	0.108	4	3	3
0	Veterans Cemetery	0.041	0	0	2	NA ^a	NA ^a
0-1	Veterans Cemetery	1.850	0.140	0.105	4	3	3
0-2	Veterans Cemetery	2.185	0.170	0.105	4	3	3
0-3	Veterans Cemetery	2.205	0.170	0.154	4	3	3
0-4	Veterans Cemetery	2.205	0.170	0.154	4	3	3
0-5	Veterans Cemetery	4.410	0.340	0.308	4	3	3
0	Parker Flats MRA Development Reserve	0	0	0	NA ^a	NA ^a	NA ^a
0-1	Parker Flats MRA Development Reserve	1.636	0.093	0.195	4	2	3
0-2	Parker Flats MRA Development Reserve	1.636	0.093	0.195	4	2	3
0-3	Parker Flats MRA Development Reserve	2.682	0.093	0.195	4	2	3
0-4	Parker Flats MRA Development Reserve	2.682	0.093	0.195	4	2	3
0-5	Parker Flats MRA Development Reserve	5.364	0.186	0.390	4	3	3

Depth (feet)	Land Reuse	BASELINE MEC DENSITY (number per acre calculated)			BASELINE MEC DENSITY INPUT FACTOR SCORE		
		MEC Hazard Type			MEC Hazard Type		
		1	2	3	1	2	3
0	MRS-13B Development Reserve	0	0	0	NA ^a	NA ^a	NA ^a
0-1	MRS-13B Development Reserve	4.241	0	0	4	NA ^c	NA ^c
0-2	MRS-13B Development Reserve	4.241	0	0	4	NA ^c	NA ^c
0-3	MRS-13B Development Reserve	4.241	0	0	4	NA ^c	NA ^c
0-4	MRS-13B Development Reserve	4.241	0	0	4	NA ^c	NA ^c
0-5	MRS-13B Development Reserve	4.241	0	0	4	NA ^c	NA ^c
0	MST Park and Ride	0.130	0	0	3	NA ^a	NA ^a
0-1	MST Park and Ride	2.585	0.047	0.041	4	2	2
0-2	MST Park and Ride	3.266	0.129	0.041	4	3	2
0-3	MST Park and Ride	3.266	0.129	0.083	4	3	2
0-4	MST Park and Ride	3.266	0.129	0.083	4	3	2
0-5	MST Park and Ride	3.266	0.129	0.083	4	3	2
0	MST Maintenance Center	0	0	0	NA ^a	NA ^a	NA ^a
0-1	MST Maintenance Center	0	0	0	NA ^a	NA ^a	NA ^a
0-2	MST Maintenance Center	0	0	0	NA ^a	NA ^a	NA ^a
0-3	MST Maintenance Center	0.712	0	0	3	NA ^c	NA ^c
0-4	MST Maintenance Center	0.712	0	0	3	NA ^c	NA ^c
0-5	MST Maintenance Center	0.712	0	0	3	NA ^c	NA ^c

^a NA – No MEC items were found in this depth interval

^b NC – These numbers are not calculated because the Pd value from Table 2-3 was 0% and the calculation would result in an infinite number of items.

^c NA – No MEC Hazard Type 2 and 3 items were found in either the MRS-13B Development Reserve or the MST Maintenance Center, therefore, the MEC Density Input Factor score is not applicable.

4.1.2. After-action Scenario Analysis

The after-action scenario analysis considers the MEC risk at the site following the removal actions performed on Parker Flats MRA. The after-action scenario represents the current state of Parker Flats MRA. The removal work performed in the Parker Flats MRA included MEC investigation and removal, as discussed in Section 3.0 of the RI.

The Level of Intrusion, Frequency of Entry, and Intensity of Contact with Soil input factors are provided for each receptor in Table 3-2. The Migration/Erosion Potential Score is expected to remain low for all of the reuse areas. All of the reuse areas contained MEC Hazard Types 1, 2, and 3.

Table 4-2 provides the after-action analysis results of the density calculations, as discussed in Section 2.3.1, and the MEC Density input factor score for each of the reuse areas by MEC Hazard Type and by depth below ground surface.

Table 4-2. After-action MEC Density

Depth (feet)	Land Reuse	AFTER-ACTION MEC DENSITY (number per acre calculated)			AFTER-ACTION MEC DENSITY INPUT FACTOR SCORE		
		MEC Hazard Type			MEC Hazard Type		
		1	2	3	1	2	3
0	MPC EVOC	NC ^a	NC ^a	NA ^b	1	1	1
0-1	MPC EVOC	NC ^a	NC ^a	NC ^a	1	1	1
0-2	MPC EVOC	1.840	0.080	NC ^c	4	2	4
0-3	MPC EVOC	2.041	0.080	NC ^c	4	2	4
0-4	MPC EVOC	2.156	0.080	NC ^c	4	2	4
0-5	MPC EVOC	4.312	0.160	NC ^c	4	3	4
0	Parker Flats MRA Horse Park	NC ^a	NC ^a	NA ^b	1	1	1
0-1	Parker Flats MRA Horse Park	NC ^a	NC ^a	NC ^a	1	1	1
0-2	Parker Flats MRA Horse Park	0.532	0.041	0.023	3	2	2
0-3	Parker Flats MRA Horse Park	0.532	0.041	0.023	3	2	2
0-4	Parker Flats MRA Horse Park	0.556	0.041	0.023	3	2	2
0-5	Parker Flats MRA Horse Park	1.113	0.082	0.047	4	2	2
0	MRS-13B Horse Park	NC ^a	NC ^a	NA ^b	1	1	1
0-1	MRS-13B Horse Park	NC ^a	NC ^a	NC ^a	1	1	1
0-2	MRS-13B Horse Park	0.453	0.002	0 ^d	3	2	1
0-3	MRS-13B Horse Park	0.475	0.002	0 ^d	3	2	1
0-4	MRS-13B Horse Park	0.475	0.002	0 ^d	3	2	1

Depth (feet)	Land Reuse	AFTER-ACTION MEC DENSITY (number per acre calculated)			AFTER-ACTION MEC DENSITY INPUT FACTOR SCORE		
		MEC Hazard Type			MEC Hazard Type		
		1	2	3	1	2	3
0-5	MRS-13B Horse Park	0.475	0.002	0 ^d	3	2	1
0	Parker Flats MRA Habitat Reserve	NC ^a	NC ^a	NA ^b	1	1	1
0-1	Parker Flats MRA Habitat Reserve	NC ^a	NC ^a	NC ^a	1	1	1
0-2	Parker Flats MRA Habitat Reserve	0.792	0.049	0.027	3	2	2
0-3	Parker Flats MRA Habitat Reserve	1.669	0.063	0.027	4	2	2
0-4	Parker Flats MRA Habitat Reserve	1.747	0.078	0.027	4	2	2
0-5	Parker Flats MRA Habitat Reserve	3.493	0.156	0.054	4	3	2
0	Veterans Cemetery	NC ^a	NA ^b	NA ^b	1	1	1
0-1	Veterans Cemetery	NC ^a	NC ^a	NC ^a	1	1	1
0-2	Veterans Cemetery	0.726	0.053	0.017	3	2	2
0-3	Veterans Cemetery	0.726	0.053	0.056	3	2	2
0-4	Veterans Cemetery	0.726	0.053	0.056	3	2	2
0-5	Veterans Cemetery	1.452	0.105	0.112	4	3	3
0	Parker Flats MRA Development Reserve	NA ^b	NA ^b	NA ^b	1	1	1
0-1	Parker Flats MRA Development Reserve	NC ^a	NC ^a	NC ^a	1	1	1
0-2	Parker Flats MRA Development Reserve	0.465	0.037	0.056	3	2	2
0-3	Parker Flats MRA Development Reserve	1.176	0.037	0.056	4	2	2
0-4	Parker Flats MRA Development Reserve	1.176	0.037	0.056	4	2	2
0-5	Parker Flats MRA Development Reserve	2.352	0.074	0.112	4	2	3
0	MRS-13B Development Reserve	NA ^b	NA ^b	NA ^b	1	NA ^d	NA ^d
0-1	MRS-13B Development Reserve	NC ^a	NA ^b	NA ^b	1	NA ^d	NA ^d
0-2	MRS-13B Development Reserve	1.145	NA ^b	NA ^b	4	NA ^d	NA ^d
0-3	MRS-13B Development Reserve	1.145	NA ^b	NA ^b	4	NA ^d	NA ^d
0-4	MRS-13B Development Reserve	1.145	NA ^b	NA ^b	4	NA ^d	NA ^d
0-5	MRS-13B Development Reserve	1.145	NA ^b	NA ^b	4	NA ^d	NA ^d
0	MST Park and Ride	NC ^a	NA ^b	NA ^b	1	1	1
0-1	MST Park and Ride	NC ^a	NC ^a	NC ^a	1	1	1
0-2	MST Park and Ride	0.623	0.006	0 ^f	3	2	1
0-3	MST Park and Ride	0.623	0.006	0 ^f	3	2	1
0-4	MST Park and Ride	0.623	0.006	0 ^f	3	2	1

Depth (feet)	Land Reuse	AFTER-ACTION MEC DENSITY (number per acre calculated)			AFTER-ACTION MEC DENSITY INPUT FACTOR SCORE		
		MEC Hazard Type			MEC Hazard Type		
		1	2	3	1	2	3
0-5	MST Park and Ride	0.623	0.006	0 ^f	3	2	1
0	MST Maintenance Center	NA ^b	NA ^b	NA ^b	1	NA ^h	NA ^h
0-1	MST Maintenance Center	NA ^b	NA ^b	NA ^b	1	NA ^h	NA ^h
0-2	MST Maintenance Center	NA ^b	NA ^b	NA ^b	1	NA ^h	NA ^h
0-3	MST Maintenance Center	0 ^g	NA ^b	NA ^b	1	NA ^h	NA ^h
0-4	MST Maintenance Center	0 ^g	NA ^b	NA ^b	1	NA ^h	NA ^h
0-5	MST Maintenance Center	0 ^g	NA ^b	NA ^b	1	NA ^h	NA ^h

^a NC – The potential number per acre were not calculated for the surface to one-foot below ground surface because all of the items found in this interval have been removed (corresponding to a score of 1).

^b NA – No MEC items were found in this depth interval

^c These number per item is not calculated because the Pd value from Table 2-3 was 0% and the calculation would result in an infinite number of items.

^d NA – No MEC Hazard Type 2 or 3 items were found in the MRS-13B Development Reserve, therefore, the MEC Density Input Factor score is not applicable.

^f One MEC Hazard Type 3 pit was found in the MST Park and Ride area below one foot and one MEC Hazard Type 3 item was found within the top one foot. Burial pits are not included in the calculation of potential residual density as discussed in Section 2.4.1.

^g Two MEC Hazard Type 1 pits were found in the MST Maintenance Center below two feet. Burial pits are not included in the calculation of potential residual density as discussed in Section 2.4.1.

^h No MEC Hazard Type 2 or 3 items were found in the MST Maintenance Center, therefore, the MEC Density Input Factor score is not applicable.

4.2. Description of Overall MEC Risk

The input factors were applied to the Protocol to determine the Overall MEC Risk. Attachment A provides the matrices from the Protocol.

4.2.1. Baseline Analysis

Tables 4-3 through 4-11 provide a summary of the input factors and the MEC risk assessment results for each of the reuse areas, except the Army Maintenance Center, the Monterey County Public Facilities, the MRS-13B Habitat Reserve, and the CSUMB Expansion Area. For each receptor, the risk posed by each MEC Hazard Type is scored separately. The MEC Hazard Type giving the highest Overall MEC Risk score is highlighted in each table. In general, the highest MEC Hazard Type (MEC Hazard Type 3) produces the highest Overall MEC Risk. However, in some instances, the MEC Density associated with MEC Hazard Type 3 is lower than the MEC Density of another MEC Hazard Type and the Overall MEC Risk score is determined using another MEC Hazard Type. Theoretically, if there is one MEC Hazard Type 3 item in an area and ten MEC Hazard Type 2 items in the same area, the risk is more likely to be from the MEC Hazard Type 2 items. The risk scores are based on the MEC Hazard Type found in each area and the related estimation of the residual MEC density. MEC Hazard Types that were not found in an area were not considered in the risk evaluation. While the probability of their presence is very likely low, the potential exists for items of these types to be found at the site. Attachment C provides the narrative discussion of each of the results.

The Army Maintenance Center was developed starting in the 1970s. Because the area is paved, no MEC surveys or removals have been performed to date. The baseline analysis of the Army Maintenance Center cannot be directly applied using the Protocol without supporting data on the MEC potentially found in this area. The Army Maintenance Center was previously identified in the 1950s and 1960s as the Guard Duty Area, Mortar Square #2 and the physical training area (PCPTA-2). Given this usage, the expected MEC at the Army Maintenance Center would be similar to the MEC found throughout MRS-13B, specifically, hand grenades (practice, smoke, and illumination), practice mortars, signals, and flares. Because the area is developed, the assumed receptors for the baseline analysis would be indoor workers and trespassers. An indoor worker would have a low risk in the paved area because s/he would not be expected to intrude below ground surface and would not spend time in contact with soil at the Center. A trespasser in the baseline analysis is assumed to intrude up to two feet below ground surface and to spend up to six hours per day in contact with the soil. It is unlikely that a trespasser at the Army Maintenance Center would meet these criteria because digging below the pavement would require mechanical equipment. Therefore, the risk to the trespasser in the baseline analysis would also be low. Should a receptor gain access to the soil below the pavement, the risk would increase depending on the items discovered.

The Monterey County Public Facilities, the MRS-13B Habitat Reserve, and the CSUMB Expansion Area had no MEC items found during MEC survey and removal activities. These areas would be considered low risk using the Protocol because the density and depth input factors would be negligible. Overall risk scores were not applied to these areas because no data was available to support the presence of MEC in the areas.

4.2.2. After-action Analysis

Tables 4-12 through 4-20 provide a summary of the input factors and the MEC risk assessment results for each of the reuse areas, except the Army Maintenance Center, the Monterey County Public Facilities, the MRS-13B Habitat Reserve, and the CSUMB Expansion Area. For each receptor, the risk posed by each MEC Hazard Type is scored separately. The MEC Hazard Type giving the highest Overall MEC Risk score is highlighted in each table. In general, the highest MEC Hazard Type (MEC Hazard Type 3) produces the highest Overall MEC Risk. However, in some instances, the MEC Density associated with MEC Hazard Type 3 is lower than the MEC Density of another MEC Hazard Type and the Overall MEC Risk score is determined using another MEC Hazard Type. Theoretically, if there is one MEC Hazard Type 3 item in an area and ten MEC Hazard Type 2 items in the same area, the risk is more likely to be from the MEC Hazard Type 2 items. The risk scores are based on the MEC Hazard Type found in each area and the related estimation of the residual MEC density. MEC Hazard Types that were not found in an area were not considered in the risk evaluation. While the probability of their presence is very likely low, the potential exists for items of these types to be found at the site. Attachment C provides the narrative discussion of each of the highlighted results.

The after action analysis is not directly applicable to the Army Maintenance Center reuse area because no survey and removal actions were performed in the area and there is no data available to support a risk assessment. The expected receptors in the Army Maintenance Center, for the after action analysis, would be indoor workers, construction workers, public facility visitors, and trespassers. As with the baseline analysis, the indoor worker would have a low risk in the paved area. A public facility visitor would be expected to have similar interaction with the site as an indoor worker. The public facility visitor would not be expected to intrude below the ground surface and would not spend time in contact with the soil. A trespasser in the after action analysis is not assumed to intrude below ground surface and would spend less than one hour per day in contact with the soil. Therefore, the risk to the trespasser in the after action analysis would also be low. Construction workers at the Army Maintenance Center would present the highest risk due to the potential for a higher level of intrusion and more than six hours spent in contact with the soil. Should any receptor gain access to the soil below the pavement, the risk would increase depending on the items discovered.

The Monterey County Public Facilities, the MRS-13B Habitat Reserve, and the CSUMB Expansion Area had no MEC items found during MEC survey and removal activities. These areas would be considered low risk using the Protocol because the density and depth input factors would be negligible. Overall risk scores were not applied to these areas because no data was available to support the presence of MEC in the areas.

Table 4-3. MPC EVOC Baseline Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
MPC Trespasser	1	8	1	3	5	4	4	3	5	D
	2	8	1	3	5	3	4	3	5	E
	3	7	1	3	5	4	4	3	5	E
Construction Worker	1	8	1	5	5	4	4	4	5	D
	2	8	1	5	5	3	4	4	5	E
	3	7	1	5	5	4	4	4	5	E
Outdoor Maintenance Worker	1	8	1	4	5	4	4	4	5	D
	2	8	1	4	5	3	4	4	5	E
	3	7	1	4	5	4	4	4	5	E
MPC Recreational User	1	8	1	2	5	4	4	2	5	D
	2	8	1	2	5	3	4	2	4	E
	3	7	1	2	5	3	4	2	4	E
Indoor Worker	1	8	1	1	5	3	4	1	3	D
	2	8	1	1	5	2	3	1	2	C
	3	7	1	1	4	2	3	1	2	C
Student/Faculty	1	8	1	1	5	3	4	2	4	D
	2	8	1	1	5	2	4	2	3	C
	3	7	1	1	4	2	4	2	2	C

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-4. Parker Flats MRA Horse Park Baseline Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
Horse Park Trespasser	1	8	1	3	5	4	4	3	5	D
	2	8	1	3	5	3	4	3	5	E
	3	7	1	3	5	2	4	3	3	E
Construction Worker	1	8	1	5	5	4	4	4	5	D
	2	8	1	5	5	3	4	4	5	E
	3	7	1	5	5	2	4	4	4	E
Outdoor Maintenance Worker	1	8	1	4	5	4	4	4	5	D
	2	8	1	4	5	3	4	4	5	E
	3	7	1	4	5	2	4	4	4	E
RV Camper	1	8	1	1	5	3	4	3	5	D
	2	8	1	1	5	2	4	3	3	D
	3	7	1	1	4	2	4	3	3	D
Recreational Horseback Rider	1	8	1	2	5	4	4	4	5	D
	2	8	1	2	5	3	4	4	5	E
	3	7	1	2	5	2	4	4	4	E

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-5. MRS-13B Horse Park Baseline Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
Horse Park Trespasser	1	8	1	3	5	4	4	3	5	D
	2	8	1	3	5	2	4	3	3	D
	3	7	1	3	5	2	4	3	3	E
Construction Worker	1	8	1	5	5	4	4	4	5	D
	2	8	1	5	5	2	4	4	4	E
	3	7	1	5	5	2	4	4	4	E
Outdoor Maintenance Worker	1	8	1	4	5	4	4	4	5	D
	2	8	1	4	5	2	4	4	4	E
	3	7	1	4	5	2	4	4	4	E
RV Camper	1	8	1	1	5	2	4	3	3	D
	2	8	1	1	5	2	4	3	3	D
	3	7	1	1	4	2	4	3	3	D
Recreational Horseback Rider	1	8	1	2	5	4	4	4	5	D
	2	8	1	2	5	2	4	4	4	E
	3	7	1	2	5	2	4	4	4	E

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-6. Parker Flats MRA Habitat Reserve Baseline Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
Habitat Reserve Trespasser	1	8	1	3	5	4	4	3	5	D
	2	7	1	3	5	3	4	3	5	E
	3	7	1	3	5	2	4	3	4	E
Construction Worker	1	8	1	5	5	4	4	4	5	D
	2	7	1	5	5	3	4	4	5	E
	3	7	1	5	5	3	4	4	5	E
Habitat Reserve Recreational User	1	8	1	2	5	4	4	2	5	D
	2	7	1	2	5	3	4	2	4	E
	3	7	1	2	5	2	4	2	3	D
Habitat Monitor	1	8	1	1	5	2	4	4	4	D
	2	7	1	1	4	2	4	4	4	E
	3	7	1	1	4	2	4	4	4	E
Habitat Worker	1	8	1	3	5	4	4	4	5	D
	2	7	1	3	5	3	4	4	5	E
	3	7	1	3	5	2	4	4	4	E

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-7. Veterans Cemetery Baseline Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/ Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
Veterans Cemetery Trespasser	1	8	1	3	5	4	4	3	5	D
	2	7	1	3	5	3	4	3	4	E
	3	7	1	3	5	3	4	3	4	E
Construction Worker	1	8	1	5	5	4	4	4	5	D
	2	7	1	5	5	3	4	4	5	E
	3	7	1	5	5	3	4	4	5	E
Outdoor Maintenance Worker	1	8	1	4	5	4	4	4	5	D
	2	7	1	4	5	3	4	4	5	E
	3	7	1	4	5	3	4	4	5	E
Cemetery Recreational User	1	8	1	2	5	4	4	2	5	D
	2	7	1	2	5	3	4	2	4	E
	3	7	1	2	5	3	4	2	4	E
Cemetery Worker	1	8	1	5	5	4	4	4	5	D
	2	7	1	5	5	3	4	4	5	E
	3	7	1	5	5	3	4	4	5	E
Cemetery Visitor	1	8	1	1	5	2	4	1	2	C
	2	7	1	1	4	2	4	1	2	C
	3	7	1	1	4	2	4	1	2	C

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-8. Parker Flats MRA Development Reserve Baseline Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface*	Migration / Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk**
Development Reserve Trespasser	1	7	1	3	5	4	4	3	5	D
	2	7	1	3	5	2	4	3	4	D
	3	7	1	3	5	3	4	3	5	E
Construction Worker	1	7	1	5	5	4	4	4	5	D
	2	7	1	5	5	3	4	4	5	E
	3	7	1	5	5	3	4	4	5	E
Outdoor Maintenance Worker	1	7	1	4	5	4	4	4	5	D
	2	7	1	4	5	2	4	4	4	E
	3	7	1	4	5	3	4	4	5	E
Development Reserve Recreational User	1	7	1	2	5	4	4	2	5	D
	2	7	1	2	5	2	4	2	3	C
	3	7	1	2	5	3	4	2	4	E
Indoor Worker	1	7	1	1	4	2	4	1	3	B
	2	7	1	1	4	2	4	1	3	C
	3	7	1	1	4	2	4	1	3	C
Adult/ Child Resident	1	7	1	4	5	4	4	2	5	D
	2	7	1	4	5	2	4	2	3	C
	3	7	1	4	5	3	4	2	4	E

* No MEC items were found on the surface in the Parker Flats MRA Development Reserve

****Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

***NA – Not Applicable because no MEC Hazard Type 3 items were found in the Parker Flats MRA Development Reserve.

Table 4-9. MRS-13B Development Reserve Baseline Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface*	Migration / Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk**
Development Reserve Trespasser	1	7	1	3	5	4	4	3	5	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Construction Worker	1	7	1	5	5	4	4	4	5	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Outdoor Maintenance Worker	1	7	1	4	5	4	4	4	5	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Development Reserve Recreational User	1	7	1	2	5	4	4	2	5	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Indoor Worker	1	7	1	1	4	2	4	1	2	B
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Adult/ Child Resident	1	7	1	4	5	4	4	2	5	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***

* No MEC items were found on the surface in the MRS-13B Development Reserve

** **Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

***NA – Not Applicable because no MEC Hazard Type 2 or 3 items were found in the MRS 13 B Development Reserve.

Table 4-10. MST Park and Ride Baseline Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration / Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
MST Park and Ride Trespasser	1	8	1	3	5	4	4	3	5	D
	2	7	1	3	5	3	4	3	4	E
	3	7	1	3	5	2	4	3	3	E
Construction Worker	1	8	1	5	5	4	4	4	5	D
	2	7	1	5	5	3	4	4	5	E
	3	7	1	5	5	2	4	4	4	E
MST Park and Ride Recreational User	1	8	1	2	5	4	4	2	5	D
	2	7	1	2	5	2	4	2	2	C
	3	7	1	2	5	2	4	2	2	D
Indoor Worker	1	8	1	1	5	3	4	1	3	D
	2	7	1	1	4	2	4	1	2	C
	3	7	1	1	4	2	4	1	2	C
Public Facility Visitor	1	8	1	1	5	3	4	1	3	D
	2	7	1	1	4	2	4	1	2	C
	3	7	1	1	4	2	4	1	2	C

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-11. MST Maintenance Center Baseline Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface*	Migration / Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk**
MST Maintenance Center Trespasser	1	7	1	3	5	2	4	3	3	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Construction Worker	1	7	1	5	5	3	4	4	5	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
MST Maintenance Center Recreational User	1	7	1	2	5	2	4	2	2	C
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Indoor Worker	1	7	1	1	4	2	4	1	2	B
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***

* No MEC items were found on the surface in the MST Maintenance Center

****Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

***NA – Not Applicable because no MEC Hazard Type 2 or 3 items were found in the MST Maintenance Center.

Table 4-12. MPC EVOC After-action Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
MPC Trespasser	1	1	1	1	1	1	2	2	1	A
	2	1	1	1	1	1	2	2	1	A
	3	1	1	1	1	1	2	2	1	A
Construction Worker	1	6	1	5	5	4	4	4	5	D
	2	6	1	5	5	3	4	4	5	E
	3	6	1	5	5	4	4	4	5	E
Outdoor Maintenance Worker	1	6	1	4	5	4	4	4	5	D
	2	6	1	4	5	2	4	4	4	E
	3	6	1	4	5	4	4	4	5	E
MPC Recreational User	1	1	1	1	1	1	3	1	1	A
	2	1	1	1	1	1	3	1	1	A
	3	1	1	1	1	1	3	1	1	A
Indoor Worker	1	1	1	1	1	1	4	1	1	A
	2	1	1	1	1	1	4	1	1	A
	3	1	1	1	1	1	4	1	1	A
Student/Faculty	1	1	1	1	1	1	4	2	1	A
	2	1	1	1	1	1	4	2	1	A
	3	1	1	1	1	1	4	2	1	A

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-13. Parker Flats MRA Horse Park After-action Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
Horse Park Trespasser	1	6	1	2	3	1	2	3	1	A
	2	6	1	2	3	1	2	3	1	A
	3	6	1	2	3	1	2	3	1	B
Construction Worker	1	6	1	5	5	4	4	4	5	D
	2	6	1	5	5	2	4	4	4	E
	3	6	1	5	5	2	4	4	4	E
Outdoor Maintenance Worker	1	6	1	4	5	3	4	4	5	D
	2	6	1	4	5	2	4	4	4	E
	3	6	1	4	5	2	4	4	4	E
RV Camper	1	1	1	1	1	1	4	3	1	A
	2	1	1	1	1	1	4	3	1	A
	3	1	1	1	1	1	4	3	1	A
Recreational Horseback Rider	1	6	1	2	3	1	4	4	1	A
	2	6	1	2	3	1	4	4	1	A
	3	6	1	2	3	1	4	4	1	B

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-14. MRS-13B Horse Park After-action Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
Horse Park Trespasser	1	6	1	2	3	1	2	3	1	A
	2	6	1	2	3	1	2	3	1	A
	3	1	1	2	1	1	2	3	1	A
Construction Worker	1	6	1	5	5	3	4	4	5	D
	2	6	1	5	5	2	4	4	4	E
	3	1	1	5	1	1	4	4	1	A
Outdoor Maintenance Worker	1	6	1	4	5	3	4	4	5	D
	2	6	1	4	5	2	4	4	4	E
	3	1	1	4	1	1	4	4	1	A
RV Camper	1	1	1	1	1	1	4	3	1	A
	2	1	1	1	1	1	4	3	1	A
	3	1	1	1	1	1	4	3	1	A
Recreational Horseback Rider	1	6	1	2	3	1	4	4	1	A
	2	6	1	2	3	1	4	4	1	A
	3	1	1	2	1	1	4	4	1	A

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-15. Parker Flats MRA Habitat Reserve After-action Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
Habitat Reserve Trespasser	1	1	1	2	1	1	3	3	1	A
	2	1	1	2	1	1	3	3	1	A
	3	1	1	2	1	1	3	3	1	A
Construction Worker	1	6	1	5	5	4	4	4	5	D
	2	6	1	5	5	3	4	4	5	E
	3	6	1	5	5	2	4	4	4	E
Habitat Reserve Recreational User	1	1	1	2	1	1	4	2	1	A
	2	1	1	2	1	1	4	2	1	A
	3	1	1	2	1	1	4	2	1	A
Habitat Monitor	1	1	1	1	1	1	4	4	1	A
	2	1	1	1	1	1	4	4	1	A
	3	1	1	1	1	1	4	4	1	A
Habitat Worker	1	6	1	3	5	4	4	4	5	D
	2	6	1	3	5	2	4	4	4	E
	3	6	1	3	5	2	4	4	4	E

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-16. Veterans Cemetery After-action Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration/Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
Veterans Cemetery Trespasser	1	1	1	1	1	1	2	3	1	A
	2	1	1	1	1	1	2	3	1	A
	3	1	1	1	1	1	2	3	1	A
Construction Worker	1	6	1	5	5	4	4	4	5	D
	2	6	1	5	5	3	4	4	5	E
	3	6	1	5	5	3	4	4	5	E
Outdoor Maintenance Worker	1	6	1	4	5	3	4	4	5	D
	2	6	1	4	5	2	4	4	4	E
	3	6	1	4	5	2	4	4	4	E
Cemetery Recreational User	1	1	1	1	1	1	1	1	1	A
	2	1	1	1	1	1	1	1	1	A
	3	1	1	1	1	1	1	1	1	A
Cemetery Worker	1	6	1	5	5	4	4	4	5	D
	2	6	1	5	5	3	4	4	5	E
	3	6	1	5	5	3	4	4	5	E
Cemetery Visitor	1	1	1	1	1	1	4	1	1	A
	2	1	1	1	1	1	4	1	1	A
	3	1	1	1	1	1	4	1	1	A

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-17. Parker Flats MRA Development Reserve After-action Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface*	Migration / Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk**
Development Reserve Trespasser	1	1	1	1	1	1	1	1	1	A
	2	1	1	1	1	1	1	1	1	A
	3	1	1	1	1	1	1	1	1	A
Construction Worker	1	6	1	5	5	4	4	4	5	D
	2	6	1	5	5	3	4	4	5	E
	3	6	1	5	5	4	4	4	5	E
Outdoor Maintenance Worker	1	6	1	4	5	4	4	4	5	D
	2	6	1	4	5	2	4	4	4	E
	3	6	1	4	5	2	4	4	4	E
Development Reserve Recreational User	1	1	1	2	1	1	4	1	1	A
	2	1	1	2	1	1	4	1	1	A
	3	1	1	2	1	1	4	1	1	A
Indoor Worker	1	1	1	1	1	1	4	1	1	A
	2	1	1	1	1	1	4	1	1	A
	3	1	1	1	1	1	4	1	1	A
Adult/ Child Resident	1	6	1	4	5	4	4	2	5	D
	2	6	1	4	5	2	4	2	2	C
	3	6	1	4	5	2	4	2	2	D

* No MEC items were found on the surface in the Parker Flats MRA Development Reserve

****Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-18. MRS-13B Development Reserve After-action Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface*	Migration / Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk**
Development Reserve Trespasser	1	1	1	1	1	1	1	1	1	A
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Construction Worker	1	6	1	5	5	4	4	4	5	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Outdoor Maintenance Worker	1	6	1	4	5	4	4	4	5	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Development Reserve Recreational User	1	1	1	2	1	1	4	1	1	A
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Indoor Worker	1	1	1	1	1	1	4	1	1	A
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Adult/ Child Resident	1	6	1	4	5	4	4	2	5	D
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***

* No MEC items were found on the surface in the MRS-13B Development Reserve

****Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

***NA – Not Applicable because no MEC Hazard Type 2 or 3 items were found in the MRS-13B Development Reserve.

Table 4-19. MST Park and Ride After-action Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface	Migration / Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk*
MST Park and Ride Trespasser	1	1	1	1	1	1	3	1	1	A
	2	1	1	1	1	1	3	1	1	A
	3	1	1	1	1	1	3	1	1	A
Construction Worker	1	6	1	5	5	3	4	4	5	D
	2	6	1	5	5	2	4	4	4	E
	3	6	1	5	5	1	4	4	1	C
MST Park and Ride Recreational User	1	1	1	1	1	1	1	1	1	A
	2	1	1	1	1	1	1	1	1	A
	3	1	1	1	1	1	1	1	1	A
Indoor Worker	1	1	1	1	1	1	4	1	1	A
	2	1	1	1	1	1	4	1	1	A
	3	1	1	1	1	1	4	1	1	A
Public Facility Visitor	1	1	1	1	1	1	4	1	1	A
	2	1	1	1	1	1	4	1	1	A
	3	1	1	1	1	1	4	1	1	A

***Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

Table 4-20. MST Maintenance Center After-action Analysis Results

Receptor	MEC Hazard Type	MEC Depth Below Ground Surface*	Migration / Erosion Potential	Level of Intrusion	Accessibility Factor	MEC Density	Frequency of Entry	Intensity of Contact with Soil	Exposure Factor	Overall MEC Risk**
MST Maintenance Center Trespasser	1	1	1	1	1	1	3	1	1	A
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Construction Worker	1	6	1	5	5	1	4	4	1	B
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
MST Maintenance Center Recreational User	1	1	1	1	1	1	1	1	1	A
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
Indoor Worker	1	1	1	1	1	1	4	1	1	A
	2	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***
	3	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***	NA***

* No MEC items were found on the surface in the MST Maintenance Center

****Overall MEC Risk Scoring**

- A = Lowest Risk
- B = Low Risk
- C = Medium Risk
- D = High Risk
- E = Highest Risk

***NA – Not Applicable because no MEC Hazard Type 2 or 3 items were found in the MST Maintenance Center.