

Appendix E
Physical Alteration Data

Natural Alterations

| SITE | Beaver Activity | Insect Infestation | Storm damage | Flood events | Other |
|--------------------|-----------------|--------------------|--------------|--------------|-------|
| LowerOtter1_Plot | 0 | 0 | 0 | 1 | 0 |
| LowerOtter1_buffer | 0 | 0 | 0 | 2 | 0 |
| LowerOtter2_plot | 0 | 0 | 0 | 0 | 0 |
| LowerOtter2_buffer | 0 | 0 | 0 | 0 | 0 |
| LowerOtter3_plot | 0 | 0 | 0 | 0 | 0 |
| LowerOtter3_buffer | 0 | 0 | 0 | 0 | 0 |
| LowerOtter4_plot | 0 | 0 | 1 | 0 | 0 |
| LowerOtter4_buffer | 0 | 0 | 0 | 0 | 0 |
| LowerOtter5_plot | 0 | 0 | 0 | 0 | 0 |
| LowerOtter5_buffer | 0 | 0 | 0 | 0 | 0 |
| UpperOtter1_Plot | 0 | 0 | 0 | 0 | 0 |
| UpperOtter1_Buffer | 0 | 0 | 0 | 0 | 0 |
| UpperOtter2_Plot | 0 | 0 | 0 | 0 | 0 |
| UpperOtter2_buffer | 0 | 0 | 0 | 0 | 0 |
| UpperOtter3_Plot | 0 | 0 | 0 | 0 | 0 |
| UpperOtter3_Buffer | 0 | 0 | 0 | 0 | 0 |
| UpperOtter4_Plot | 1 | 0 | 0 | 0 | 0 |
| UpperOtter4_Buffer | 1 | 0 | 0 | 0 | 0 |
| UpperOtter5_Plot | 0 | 0 | 1 | 0 | 0 |
| UpperOtter5_Buffer | 0 | 0 | 0 | 0 | 0 |
| Blackstone1_Plot | 0 | 0 | 0 | 0 | 0 |
| Blackstone1_Buffer | 0 | 0 | 0 | 0 | 0 |
| Blackstone2_Plot | 0 | 0 | 0 | 2 | 0 |
| Blackstone2_buffer | 0 | 0 | 0 | 3 | 0 |
| Blackstone3_Plot | 0 | 0 | 0 | 1 | 0 |
| Blackstone3_Buffer | 0 | 0 | 0 | 2 | 0 |
| Blackstone4_Plot | 0 | 0 | 0 | 0 | 0 |
| Blackstone4_buffer | 0 | 0 | 0 | 0 | 0 |
| Blackstone5_plot | 0 | 0 | 0 | 1 | 0 |
| Blackstone5_buffer | 0 | 0 | 0 | 2 | 0 |
| Kettle1_plot | 0 | 0 | 0 | 0 | 0 |
| Kettle1_buffer | 0 | 0 | 0 | 0 | 0 |
| Kettle2_plot | 0 | 0 | 0 | 0 | 0 |
| Kettle2_buffer | 0 | 0 | 0 | 0 | 0 |
| Kettle3_plot | 0 | 0 | 0 | 0 | 0 |
| Kettle3_buffer | 0 | 0 | 0 | 0 | 0 |
| Kettle4_plot | 0 | 0 | 0 | 0 | 0 |
| Kettle4_buffer | 1 | 0 | 0 | 0 | 0 |
| Kettle5_plot | 0 | 0 | 0 | 0 | 0 |
| Kettle5_buffer | 0 | 0 | 0 | 0 | 0 |

0 = No disturbance present, 1 = 1-24% of the plot is impacted, 2 = 25-49% of the plot is impacted, 3 = 50-74% of the plot is impacted, and 4 = 75-100% of the plot is impacted

Anthropogenic Alterations

| SITE | Water Control Structures | Ditching | Roads | Impervious Surface | Structures | Landscaped Areas | Soil Disturbance |
|--------------------|--------------------------|----------|-------|--------------------|------------|------------------|------------------|
| LowerOtter1_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter1_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter2_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter2_buffer | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| LowerOtter3_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter3_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter4_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter4_buffer | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| LowerOtter5_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter5_buffer | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| UpperOtter1_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter1_Buffer | 0 | 0 | 1 | 1 | 0 | 1 | 0 |
| UpperOtter2_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter2_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter3_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter3_Buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter4_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter4_Buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter5_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| UpperOtter5_Buffer | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Blackstone1_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone1_Buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone2_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone2_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone3_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone3_Buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone4_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone4_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone5_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone5_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle1_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle1_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle2_plot | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Kettle2_buffer | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Kettle3_plot | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Kettle3_buffer | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Kettle4_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle4_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle5_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle5_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

0 = No disturbance present, 1 = 1-24% of the plot is impacted, 2 = 25-49% of the plot is impacted, 3 = 50-74% of the plot is impacted, and 4 = 75-100% of the plot is impacted

Anthropogenic Alterations

| SITE | Spills | Trash, Litter | Dumping, debris | ATV Use | Vegetation removal | Herbicide | Fire | Other |
|--------------------|--------|------------------|--------------------|---------|-----------------------|-----------|------|-------|
| LowerOtter1_Plot | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| LowerOtter1_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| LowerOtter2_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| LowerOtter2_buffer | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 4 |
| LowerOtter3_plot | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| LowerOtter3_buffer | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| LowerOtter4_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter4_buffer | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter5_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LowerOtter5_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter1_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter1_Buffer | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 |
| UpperOtter2_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter2_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter3_Plot | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 4 |
| UpperOtter3_Buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| UpperOtter4_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| UpperOtter4_Buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| UpperOtter5_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| UpperOtter5_Buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone1_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone1_Buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone2_Plot | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| Blackstone2_buffer | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 4 |
| Blackstone3_Plot | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| Blackstone3_Buffer | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| Blackstone4_Plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Blackstone4_buffer | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 |
| Blackstone5_plot | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| Blackstone5_buffer | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 |
| Kettle1_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle1_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle2_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle2_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle3_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle3_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle4_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle4_buffer | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle5_plot | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kettle5_buffer | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |

0 = No disturbance present, 1 = 1-24% of the plot is impacted, 2 = 25-49% of the plot is impacted, 3 = 50-74% of the plot is impacted, and 4 = 75-100% of the plot is impacted

Anthropogenic Alterations

| SITE | Comments |
|--------------------|---|
| LowerOtter1_Plot | trash is drift material from flood |
| LowerOtter1_buffer | small portion of buffer plot is open water (otter river) |
| LowerOtter2_plot | |
| LowerOtter2_buffer | Municipal (Mun) well is just outside of buffer plot. Dirt road within. |
| LowerOtter3_plot | Small area of buffer plot is within active hayfield. |
| LowerOtter3_buffer | Veg removal is active hayfield |
| LowerOtter4_plot | Storm event blow downs and broken branches present |
| LowerOtter4_buffer | Portion of buffer intersects route 2 |
| LowerOtter5_plot | |
| LowerOtter5_buffer | Small portion of buffer is road |
| UpperOtter1_Plot | |
| UpperOtter1_Buffer | Small portion of buffer plot is paved parking area. Forestry on Eastern and Southern end. |
| UpperOtter2_Plot | |
| UpperOtter2_buffer | |
| UpperOtter3_Plot | Hiking Trail |
| UpperOtter3_Buffer | Hiking Trail |
| UpperOtter4_Plot | Mun well |
| UpperOtter4_Buffer | Beaver: gnawing and abandoned lodge. Mun well and WTP is just outside of buffer plot |
| UpperOtter5_Plot | Sedimentation due to both natural events and storm water from nearby development. |
| UpperOtter5_Buffer | Sedimentation and gully erosion from storm water runoff from adjacent development. |
| Blackstone1_Plot | |
| Blackstone1_Buffer | |
| Blackstone2_Plot | Trash and litter is drift material from flood event |
| Blackstone2_buffer | Trash and litter is drift material from flood event |
| Blackstone3_Plot | Plot is a little higher in elevation than buffer |
| Blackstone3_Buffer | |
| Blackstone4_Plot | |
| Blackstone4_buffer | Approximately 25% of buffer plot within large recent clear cut ((northwest end) |
| Blackstone5_plot | |
| Blackstone5_buffer | |
| Kettle1_plot | |
| Kettle1_buffer | |
| Kettle2_plot | Old stone lined ditch present |
| Kettle2_buffer | Old stone lined ditch present |
| Kettle3_plot | Stream Channel is a man-made stone lined conduit. |
| Kettle3_buffer | Stream Channel is a man-made stone lined conduit. |
| Kettle4_plot | |
| Kettle4_buffer | |
| Kettle5_plot | |
| Kettle5_buffer | |

0 = No disturbance present, 1 = 1-24% of the plot is impacted, 2 = 25-49% of the plot is impacted, 3 = 50-74% of the plot is impacted, and 4 = 75-100% of the plot is impacted