

Kennecott Operations Plan

Table of Contents

1.0 Purpose and Need for Action	2
1.1 Purpose of Action	2
Figure 1: Kennecott Mines National Historic Landmark boundary	3
Figure 2: Kennecott Mill town land status	4
1.2 Need for Action	5
1.3 Management Goals and Management Concepts	5
Photo 1: Power Plant	6
Photo 2: Black bear	7
Photo 3: Public meeting	8
1.4 Relationship of Project to Other Documents	10
1.5 Applicable Federal Laws, Policies, and Regulations	15
1.6 Scoping Process	18
1.7 Issues of Concern Raised During Scoping	19
Photo 4: National Creek	20
1.8 Permits and Approvals Needed to Implement Project	22
Photo 5: Concentration Mill	23
2.0 Chapter 2 Alternatives	25
2.1 Introduction	25
2.2 Actions Common to all Action Alternatives	26
Photo 6: Shuttle turnaround	31
Photo 7: Footbridge, Kennicott River	32
2.3 Alternative Descriptions	34
2.3.1 Alternative 1, No Action	34
Photo 8: Kennecott view	35
Figure 3: Alternative 1, No Action	36
2.3.2 Alternative 2, Preferred Alternative	39
Photo 9: General Managers Office	40
Photo 10: Hospital	41
Figure 4: Alternative 2, Preferred Alternative	42
Photo 11: Company Store	44
Photo 12: National Creek	45
Photo 13: Inside the Concentration Mill	47
Photo 14: Power Plant	49
Photo 15: West Bunkhouse	51
Photo 16: East bunkhouse and National Creek bunkhouse	54
Photo 17: Root Glacier trail	57
Photo 18: Kennecott Cemetery	59
2.3.3 Alternative 3, Management Concepts	61

Figure 5: Alternative 3, Management Concepts	62
Photo 19: railroad trestle	64
Photo 20: Ore chute going into Leaching Plant	66
Photo 21: Tram tower	69
2.3.4 Alternative 4, Restoration	70
Figure 6: Alternative 4, Restoration	71
2.4 Environmentally Preferred Alternative	74
2.5 Preferred Alternative	74
2.6 Summary and Comparison of Alternatives	74
Table 2-1 Summary of Alternatives	76
Table 2-2 Summary of Impacts from Alternatives	77
Chapter 3, Affected Environment	80
3.0 Introduction and Background	80
Photo 23: Kennecott, 1935	80
3.1 Project Area	81
3.2 Water Resources	81
Table 3-1 Water Quality Measurements at Bonanza Creek	84
3.3 Vegetation	84
Table 3-2: Rare Plants	86
Table 3-3: Exotic Plant Species	87
3.4 Cultural Resources	87
3.5 Wildlife	90
3.6 Visual Resources	91
3.7 Visitor Use and Experience	91
3.8 Transportation and Access	94
3.9 Soundscape	95
Table 3-4: Example of Common Sounds	97
3.10 Socioeconomics	104
4.0 Chapter 4 Environmental Consequences	105
4.1 Impact Criteria	105
4.2 Cumulative Impacts	106
4.3 Water Resources	110
4.4 Vegetation	116
4.5 Cultural Resources	121
Table 4-1: Effects of Alternative 1 on historic structures	122
Table 4-2: Effects of Alternative 2 on historic structures	124
Table 4-3: Effects of Alternative 3 on historic structures	126
Table 4-4: Effects of Alternative 4 on historic structures	128
4.6 Wildlife	130

4.7 Visual Resources	135
4.8 Visitor Use and Experience	138
4.9 Transportation and Access	143
4.10 Soundscape	145
4.11 Socioeconomics	147
5.0 Consultation and Coordination	150
5.1: Public Involvement	150
5.2: List of Preparers and Contributors	151
6.0 References Cited	152
Appendices	
Appendix A: Impairment Determination	
Appendix B: ANILCA 810 Analysis	
Appendix C: Kennecott Covenants	
Appendix D: 2008 Systemwide Programmatic Agreement	
Appendix E: 2010 Kennecott Programmatic Agreement	