

CHAPTER I:
INTRODUCTION

Chapter I: Introduction

Scope of the Report

This combined *Cultural Landscape Report and Environmental Assessment* (CLR/EA) for the Calumet Unit of Keweenaw National Historical Park provides guidance for treatment and use of the above-ground resources associated with the significant historic landscapes in the project area. Cultural landscape reports (CLR) serve as the primary guides to treatment and use of cultural landscapes within the National Park Service. They prescribe treatment and management approaches for the physical attributes, biotic systems, and human use of the resources.¹ An environmental assessment (EA) provides an analysis of the possible impacts—positive or negative—that a proposed project may have on the environment, including collectively the natural, social and economic aspects. By combining the CLR and the EA in one report, the potential impacts of the treatment alternatives can be considered in the process. This approach streamlines the project process and integrates the environmental information into the development of the treatment alternatives.

A thorough investigation and evaluation of the historic landscapes was conducted in September and October 2010 using National Park Service (NPS) and the United States Secretary of the Interior’s guidelines. The documentation of historic significance and evaluation of integrity of the historic landscapes serves as a framework upon which treatment recommendations are developed. This report provides park managers with a comprehensive understanding of the physical evolution of the historic landscape and guidance for future landscape management. The report has been prepared by a project team composed of staff members from Quinn Evans Architects (QEA), Woolpert, Inc., and Keweenaw National Historical Park to fulfill a contract with the Midwest Regional Office of the National Park Service.

Purpose and Need for the Project

Purpose

The purpose of the combined CLR/EA is to document and record the history and current conditions of the historic landscapes within the Calumet Unit of Keweenaw National Historical Park and to provide guidance for the future treatment and use of these landscapes. The document informs preservation of significant cultural and natural resources while providing guidance for developing opportunities and facilities for visitor education and use. Keweenaw National Historical Park is a partnership park, with the majority of the land and resources within the Calumet Unit owned by entities other than the federal government. This document is meant to help inform the National Park Service, the Keweenaw Heritage Site (KHS) partners in the Calumet Unit, and other individuals and organizations that own or manage properties within the Calumet Unit regarding the historical development of the physical landscape and its significance. It also provides guidance for future treatment of the landscape.

¹ Robert R. Page, Cathy A. Gilbert, and Susan A. Dolan. *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques* (Washington, D.C., U.S. Department of the Interior, 1998), 129.

1 ***Need***

2 The combined CLR / EA is needed to guide treatment and use of the above-ground resources
3 associated with the significant historic landscapes within the Calumet Unit of Keweenaw
4 National Historical Park. The park’s General Management Plan indicates the need for a Cultural
5 Landscape Report for the Calumet Unit. It is needed to provide a comprehensive understanding
6 of the historic development of these landscapes and to evaluate their significance and provide
7 treatment recommendations that respond appropriately to their historic characteristics while
8 accommodating current and future needs. This is particularly necessary due to the makeup of
9 land ownership/management within this partnership park. The National Park Service owns only a
10 small percentage of properties within the park boundary. In contrast to the traditional national
11 parks, within partnership parks like Keweenaw National Historical Park the majority of the land
12 within the boundary is owned and managed by private owners, public entities, non-profit and
13 institutional organizations.

14
15 ***Project Objectives***

16
17 The objectives for the report include:

- 18 • Document the development of the historic landscapes within the Calumet Unit of
19 Keweenaw National Historical Park.
- 20 • Document the existing conditions of the historic landscapes within the Calumet Unit of
21 Keweenaw National Historical Park.
- 22 • Evaluate the significance and integrity of the historic landscapes within the Calumet Unit
23 of Keweenaw National Historical Park.
- 24 • Provide treatment recommendations for managing the historic landscape resources within
25 the Calumet Unit of the park.
- 26 • Recommend landscape treatments to address management needs identified by the NPS
27 and park partners in the Calumet Unit.
- 28 • Provide management recommendations and schematic designs for specific historic
29 landscapes within the park that accommodate current and future needs while preserving
30 the historic character and significant features present.
- 31 • Streamline planning and compliance processes for the historic landscapes within the
32 Calumet Unit of Keweenaw National Historical Park.
- 33 • Enhance visitor experience by providing information about the history of the
34 development of the park to interpreters and site managers.
- 35 • Provide recommendations for efficiently managing the historic landscapes within the
36 Calumet Unit of the park while taking into consideration budget constraints.

1 **Report Methodology**

2
3 The report was prepared according to federal standards guiding cultural landscape projects and
4 environmental assessments including *A Guide to Cultural Landscape Reports: Contents,*
5 *Process, and Techniques, The Secretary of Interior’s Standards for the Treatment of Historic*
6 *Properties with Guidelines for the Treatment of Cultural Landscapes,* federal regulations (40
7 CFR 1500-1508) implementing the *National Environmental Policy Act of 1969 (NEPA),*
8 regulations of the *Council on Environmental Quality (40 CFR 1508.9), NPS Director’s Order*
9 *12: Conservation Planning, Environmental Impact Analysis, and Decision-Making,* and the
10 *National Historic Preservation Act of 1966 (as amended).* Other applicable regulatory
11 requirements include: the *National Park Service Organic Act,* the *American Indian Religious*
12 *Freedom Act,* the *Act for the Preservation of American Antiquities of 1906,* the *Historic Sites Act*
13 *of 1935,* the *National Park Service Director’s Order #28, Cultural Resource Management,* and
14 the *Archaeological Resources Protection Act.*

15
16 Archival research and preparation of the landscape history chapter was conducted by Quinn
17 Evans Architects. The majority of the research was conducted at the park library and archives
18 and at the archives of Michigan Technological University. Field inventories of existing
19 conditions and landscape features were conducted by Quinn Evans Architects in fall 2010.

20
21 Project initiation meetings were held at Keweenaw National Historical Park headquarters in
22 Calumet, Michigan in September 2010. Field investigations were conducted in September and
23 November 2010 and June 2011. Internal and external scoping was conducted during June and
24 December 2011. The project originally included one public meeting, which was held in June
25 2011. Input from the community indicated the need for additional coordination with the public
26 and the project contract was modified to add meetings with stakeholders and the general public.
27 These meetings took place during December 2011. Meeting attendees and summaries are listed
28 in Appendix C: Consultation and Coordination.

29
30 The *Environmental Assessment (EA)* analyzes the impacts of each of the treatment alternatives
31 on natural and cultural resources. The EA portion of the project was coordinated by Woolpert,
32 Inc., a consulting firm that specializes in environmental planning. Quinn Evans Architects
33 assisted in the preparation of this portion of the report.

34
35 Although the federal government has standard guidelines for the preparation of CLR’s and EA’s,
36 there are no guidelines for preparing a combined report. The Midwest Regional Office of the
37 National Park Service has recognized that combining the two documents increases the efficiency
38 of the process by integrating the information generated through the CLR with the in-depth
39 evaluation process inherent to the *Environmental Assessment.* Merging the documents can
40 improve and validate the recommended treatment while reducing the costs associated with the
41 preparation and printing.

1 **Relation to Other Planning Projects**

2
3 Several previous planning projects undertaken for the National Park Service provided
4 background and management information for this CLR/EA including: the *Final General*
5 *Management Plan and Environmental Impact Statement* (1998), *Keweenaw National Historical*
6 *Park Visitor Study* (2004), the *Fire Management Plan* (2005), the *Environmental Assessment and*
7 *Finding of No Significant Impact for the Fire Management Plan* (2005), the *Strategic Plan for*
8 *Keweenaw National Historical Park, Fiscal Years 2005-2008, Collection Management Plan*
9 (draft), a *Front-end Planning Report for Italian Hall Memorial Park* (2011), and the *Keweenaw*
10 *National Historical Park Alternative Transportation Study* (2005).² *Historic Structure Reports*
11 have been prepared for the park headquarters building, Keweenaw History Center (draft 2008),
12 Union Building, the Russell Snow Plow, and C&H Warehouse Number 1.

13
14 The local community has undertaken planning projects that address resources within the Calumet
15 Unit. These planning efforts reflect goals deemed important by the local community and were
16 carefully reviewed and discussed to guide the development of landscape treatment alternatives
17 that are compatible with local needs. Reports reviewed for this purpose include: *Village of*
18 *Calumet Civic and Commercial Historic District Design Guidelines* (2006, Village of Calumet
19 Historic District Commission and Keweenaw National Historical Park), *Village of Calumet*
20 *Downtown Development Plan* (no date, UP Engineers & Architects, Inc.), *Village of Calumet*
21 *Recreation Plan* (1998 and 1992), *Agassiz Park Master Plan* (1995, UP Engineers & Architects,
22 Inc.), *Calumet Downtown Historic District Plan* (1981 version prepared by John Roger Johansen
23 Architect, and 1979 version prepared by Preservation Urban Design).

24
25 A *Long Range Interpretive Plan* (LRIP) is being developed for the park to provide an overall
26 direction for interpretation of the resources. Kathleen Harter, Chief of Interpretation and
27 Education, has been included in development of the CLR treatment alternatives and selection of
28 a preferable alternative for the CLR/EA to ensure that the CLR/EA and LRIP processes are
29 integrated.

30
31 The park *Resource Stewardship Strategy* is in draft form. It has been utilized to inform the
32 development of treatment alternatives. The park recently installed wayfinding signs to the
33 Keweenaw Heritage Sites and NPS owned facilities. This sign program will help inform
34 treatment alternatives.

35
36 A combined *Cultural Landscape Report (CLR) and Environmental Assessment* was completed
37 for the Quincy Unit in 2010. The plans for the Quincy Unit included in the CLR have informed
38 the development of landscape treatment alternatives and the consideration of visitor experiences
39 for the Calumet Unit.

40
41 These documents, along with research conducted as part of this CLR/EA, inform the
42 development of treatment alternatives and analysis of potential impacts to park resources.

43
² The reports listed were prepared by the National Park Service, with the following exceptions: *Front-end Planning Report for Italian Hall Memorial Park, Calumet, Michigan* (Fort Collins, CO: Wells Resources, Inc., 2011); *Keweenaw National Historical Park Alternative Transportation Study* (Shrewsbury, MA: Jonathan Church, 2005).

1 **Park Purpose/Significance**
2

3 Keweenaw National Historical Park was established by Public Law 102-543 in October 1992 to
4 commemorate the copper mining history of the Keweenaw Peninsula. The purpose of the park is
5 defined by the *General Management Plan*:
6

- 7 • Tell the story of the role of copper in the development of an American
8 industrial society and the effects on the Keweenaw Peninsula of providing
9 that copper.
- 10 • Identify, study, and preserve the nationally significant historical and
11 cultural sites, structures, districts, landscapes, and other resources of the
12 Keweenaw Peninsula for the education, benefit, and inspiration of present
13 and future generations.
- 14 • Interpret the historic synergism among the geological, aboriginal,
15 sociological, cultural, technological, economic, and corporate influences
16 that relate the stories of copper on the Keweenaw Peninsula.
- 17 • Develop and sustain into the 21st century the park and the community
18 through a blend of private, local, state, and federal management,
19 investment, and ownership.³
20

21 The park has been described as, “both a physical place and a concept that challenges our
22 traditional notions of national parks.” Only 30 years after the end of copper mining in the
23 region, this park was established to preserve and interpret the “memories of the working
24 days on the Keweenaw Peninsula.”⁴
25
26

³ United States Department of the Interior, National Park Service, *Final General Management Plan and Environmental Impact Statement, Keweenaw National Historical Park* (1998)13-14.

⁴ United States Department of the Interior, National Park Service, *Final General Management Plan and Environmental Impact Statement, Keweenaw National Historical Park* (1998) iii.

Location and Description of the Project Area

Keweenaw National Historical Park is located in the western portion of Michigan’s Upper Peninsula (see Figure I-1). The Keweenaw Peninsula extends approximately 100 miles north into Lake Superior and includes the Lake Superior Copper Range, a “highland that forms a spine along the length of the peninsula and beyond.”⁵ The Copper Range held vast deposits of copper, attracting mining companies and workers who came to extract the copper. Keweenaw National Historical Park is located along the Copper Range spine, near the center of the peninsula. The park is made up of Keweenaw Heritage Sites partners and two units (Quincy and Calumet) that include extensive heritage resources associated with the copper mining industry (see Figure I-2).⁶ The current project is focused on the Calumet Unit of the park. The Calumet Unit is located near the center of the Keweenaw Peninsula and includes approximately 750 acres of land.



Figure I- 1: Regional Location of Keweenaw National Historical Park
(Source: Quinn Evans Architects)

The Calumet Unit includes extensive historic resources related to copper mining activities in the form of neighborhoods, towns, and industrial sites. Included are mine shafts and large scale industrial structures, schools, a theater, a railroad depot, fire station, churches, commercial buildings, and a wide range of housing types.⁸

The boundary of the Calumet Unit includes the entire Calumet National Historic Landmark District, the Calumet Civic and Commercial Historic District, the entire Village of Calumet, and portions of Calumet Township, including several significant housing locations (see Figures I-3

⁵ United States Department of the Interior, National Park Service, *Final General Management Plan and Environmental Impact Statement, Keweenaw National Historical Park* (1998) 5.

⁶ United States Department of the Interior, National Park Service, *Final General Management Plan and Environmental Impact Statement, Keweenaw National Historical Park* (1998) 5.

⁸ United States Department of the Interior, National Park Service, *Final General Management Plan and Environmental Impact Statement, Keweenaw National Historical Park* (1998) iii.

1 through I-6). The landscape character areas illustrated in Figure I-4 are explained in the next
 2 section.



3
 4 **Figure I- 2: Keweenaw Heritage Sites, 2008** (source: http://www.nps.gov/kewe/planyourvisit/upload/Keweenaw-Heritage-Sites_2008_web.pdf, accessed 25 March 2011)

6

1 **National Register Status**
2

3 The Calumet Civic and Commercial Historic District and Calumet Industrial District were listed
4 on the National Register of Historic Places in 1974. In 1987 a report prepared by Kathleen
5 Lidfors indicated that the Keweenaw Peninsula contained historic copper mining sites that were
6 potentially eligible as a National Historic Landmark (NHL).⁹ In 1989, the Calumet Historic
7 District was listed as a NHL for its national significance related to mining, mining technology,
8 immigration and ethnic settlement, paternalism and company towns, and labor organization from
9 1864 through 1930.¹⁰ The boundary of the NHL is illustrated in Figure I-3. It includes the
10 headquarters, industrial, and administrative buildings built by the Calumet and Hecla Mining
11 Company, and

12
13 ...sites of shafts sunk by the company in areas where no intrusive buildings have
14 been constructed. The boundary also includes the key streets of the downtown
15 commercial district of Calumet, formerly Red Jacket. The downtown blocks
16 within the boundary reflect the close connection between the mines (and those
17 who worked for the company) and the support services of Red Jacket. The
18 boundary also includes a representative sampling of housing that served company
19 employees. This sampling includes the neighborhoods and streetscapes that
20 appear to possess the highest degree of integrity for the period that ended in 1930.
21 The sample was designed to represent the various types of housing used by
22 miners and other company employees. Thus, the resources within the boundary
23 reflect not only the technological aspects of Calumet's history, but also the social
24 history of the Calumet community.¹¹
25

26 When the park was established, the U.S. Congress stipulated that the National Park Service and
27 the park's advisory commission would partner with sites owned and operated by state and local
28 governments, private businesses and nonprofit organizations. The Keweenaw Heritage Sites
29 program, administered by the Keweenaw National Historical Park Advisory Commission, is one
30 aspect of the partnership. Keweenaw Heritage Sites contain significant cultural and/or natural
31 resources and make a unique contribution to the copper mining story. Embodying stories of
32 hardship, ingenuity, struggle and success, the sites provide access to resources related to the
33 story of the role mining played in people's lives. Keweenaw Heritage Sites are illustrated in
34 Figure I-4. Heritage sites operate independently of the National Park Service. Designated
35 Keweenaw Heritage Sites within the Calumet Unit include: Calumet Theatre, Coppertown
36 Mining Museum, Keweenaw Heritage Center at St. Anne's, and the Upper Peninsula Firefighters
37 Memorial Museum. The Laurium Manor Mansion Tours heritage site is located in the Village of
38 Laurium, which is adjacent to the Calumet Unit. Numerous individuals and organizations own
39 property within the Calumet Unit. Several residential neighborhoods are present, as well as
40 commercial districts. Stakeholders include Keweenaw Heritage Sites, local governments,
41 individual property owners, and others listed in Appendix C: Consultation and Coordination.
42

⁹ Lidfors, *Potential National Historic Landmark Eligibility of Historic Copper Mining Sites on the Keweenaw Peninsula, Michigan*, 1987.

¹⁰ Lidfors, Hrenchr and Feller, *Calumet Historic District, National Register Nomination*, 1988.

¹¹ Lidfors, Hrenchr and Feller, *Calumet Historic District, National Register Nomination*, 1988.

1
2
3
4
5
6
7
8
9
10
11
12
13

Next pages:

Figure I- 3: Calumet Unit Boundary and National Historic Landmark Boundary (source: QEA)

Figure I- 4: Calumet Unit Landscape Character Areas (source: QEA)

Figure I- 5: Boundaries of Village of Calumet and Calumet Civic and Commercial Historic District (source: QEA)

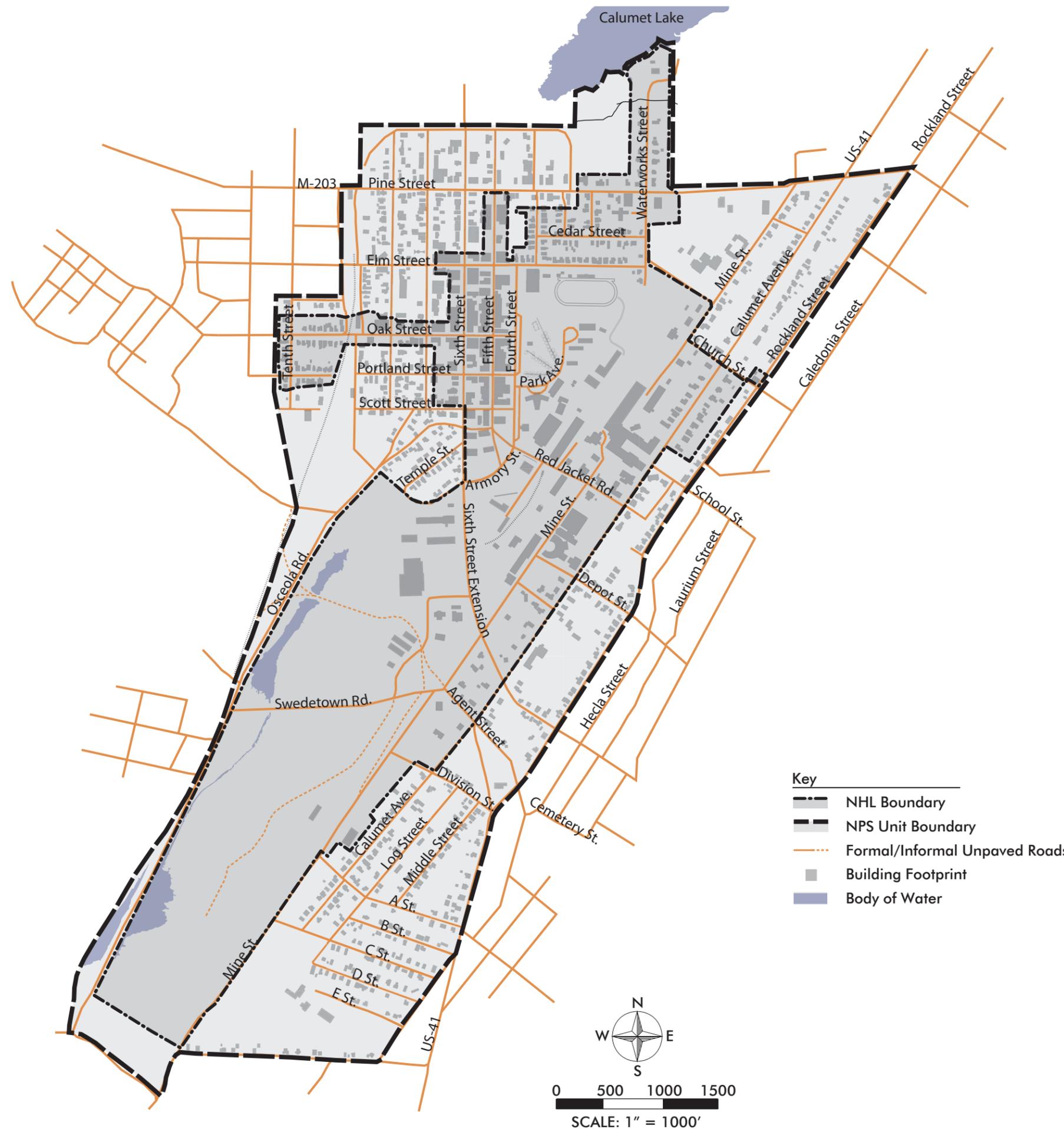
Figure I- 6: Calumet Unit Housing Locations (source: QEA)

1 This page intentionally left blank.

Calumet Unit

Keweenaw National Historical Park
Cultural Landscape Report & Environmental Assessment

Calumet Unit Boundary and National Historic Landmark Boundary



Map Notes

1. Locations of elements on plan are approximate based on best available sources. Plan sources are provided in the adjacent CLR narrative.

Created/Revised
February, 2012

Calumet Unit

Keweenaw National Historical Park
Cultural Landscape Report & Environmental Assessment

Landscape Character Areas

Legend

- (A) Calumet Civic & Commercial Historic District
- (B) Agassiz Park
- (C) North Mine Street Industrial Corridor
- (D) Red Jacket Road Corridor
- (E) South Mine Street Industrial Corridor
- (F) Railroad / Recreational Corridor
- (G) Sixth Street Extension & Mine Street Station
- (H) Osceola No. 13
- (I) Temple Square
- (J) Housing Location/Residential Neighborhood

Key

- NPS Unit Boundary
- Formal/Informal Unpaved Roads
- Building Footprint
- X Underground Mine/Buildings Removed

Map Notes

1. Plan sources are provided in the adjacent CLR narrative.

Created/Revised

September 2012

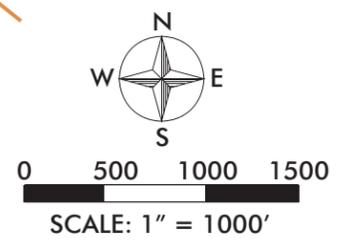
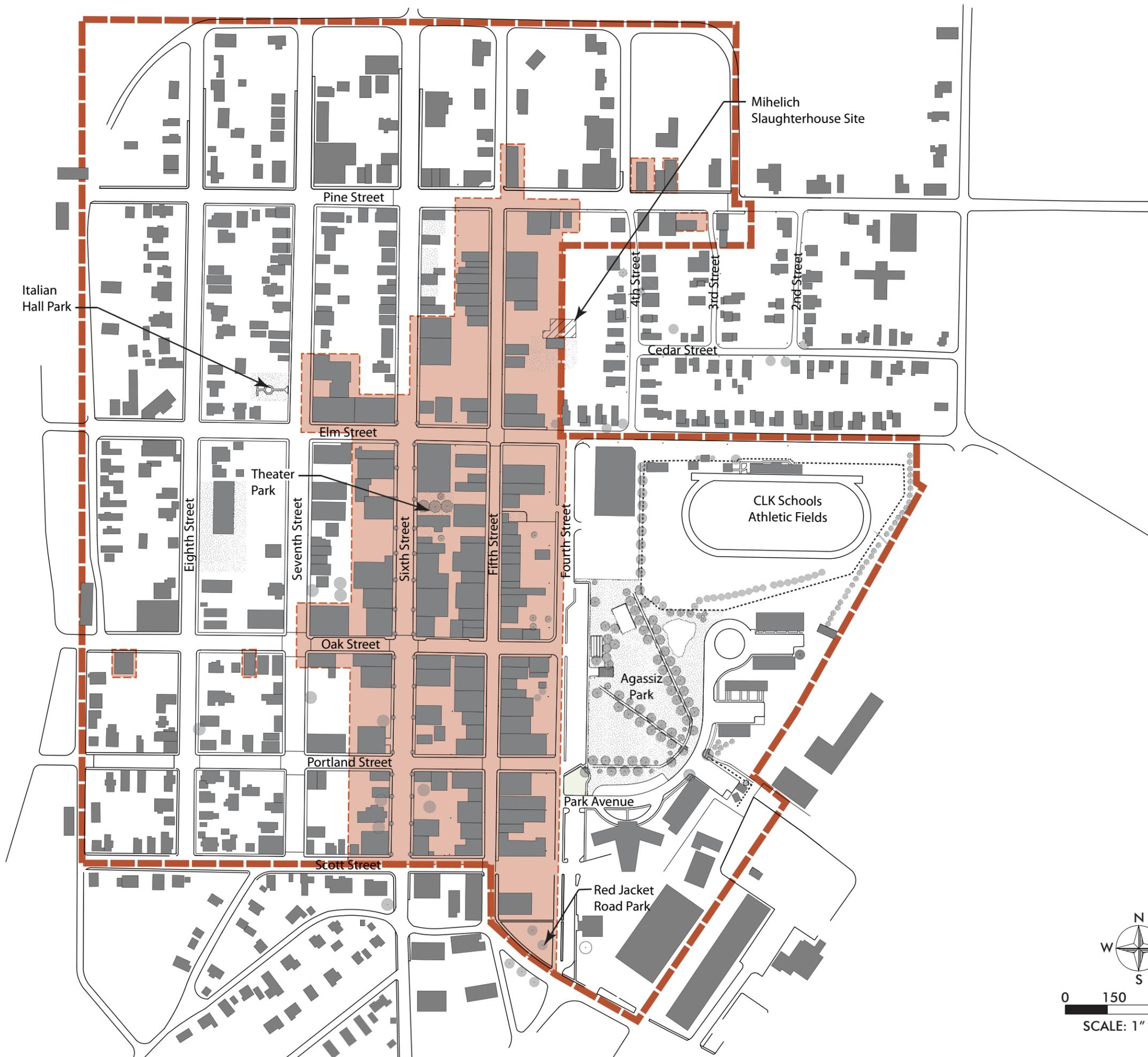


Figure I-4

Calumet Unit

Keweenaw National Historical Park
Cultural Landscape Report & Environmental Assessment

Calumet Village and Downtown Historic District Boundaries



- Key**
- Calumet Civic & Commercial Historic District
 - Calumet Village Limits
 - Buildings
 - Ruin

Map Notes

1. Plan sources are provided in the adjacent CLR narrative.

Created/Revised
November 2012

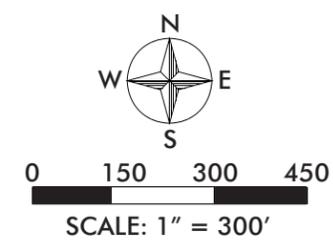


Figure I-5

Calumet Unit

Keweenaw National Historical Park
Cultural Landscape Report & Environmental Assessment

Housing Locations

Legend

- (A) Albion Housing Location
- (B) Calumet Housing Location
- (C) Blue Jacket Housing Location
- (D) Red Jacket Housing Location
- (E) Village of Calumet (formerly Red Jacket)
- (F) Newtown Housing Location
- (G) Yellow Jacket Housing Location
- (H) Tamarack Housing Location
- (I) Swedetown Housing Location
- (J) Hecla Housing Location
- (K) Village of Laurium (formerly Calumet)
- (L) Raymbaultown Housing Location
- (M) Osceola Housing Location (formerly Opechee)
- (N) Florida Housing Location

Map Notes

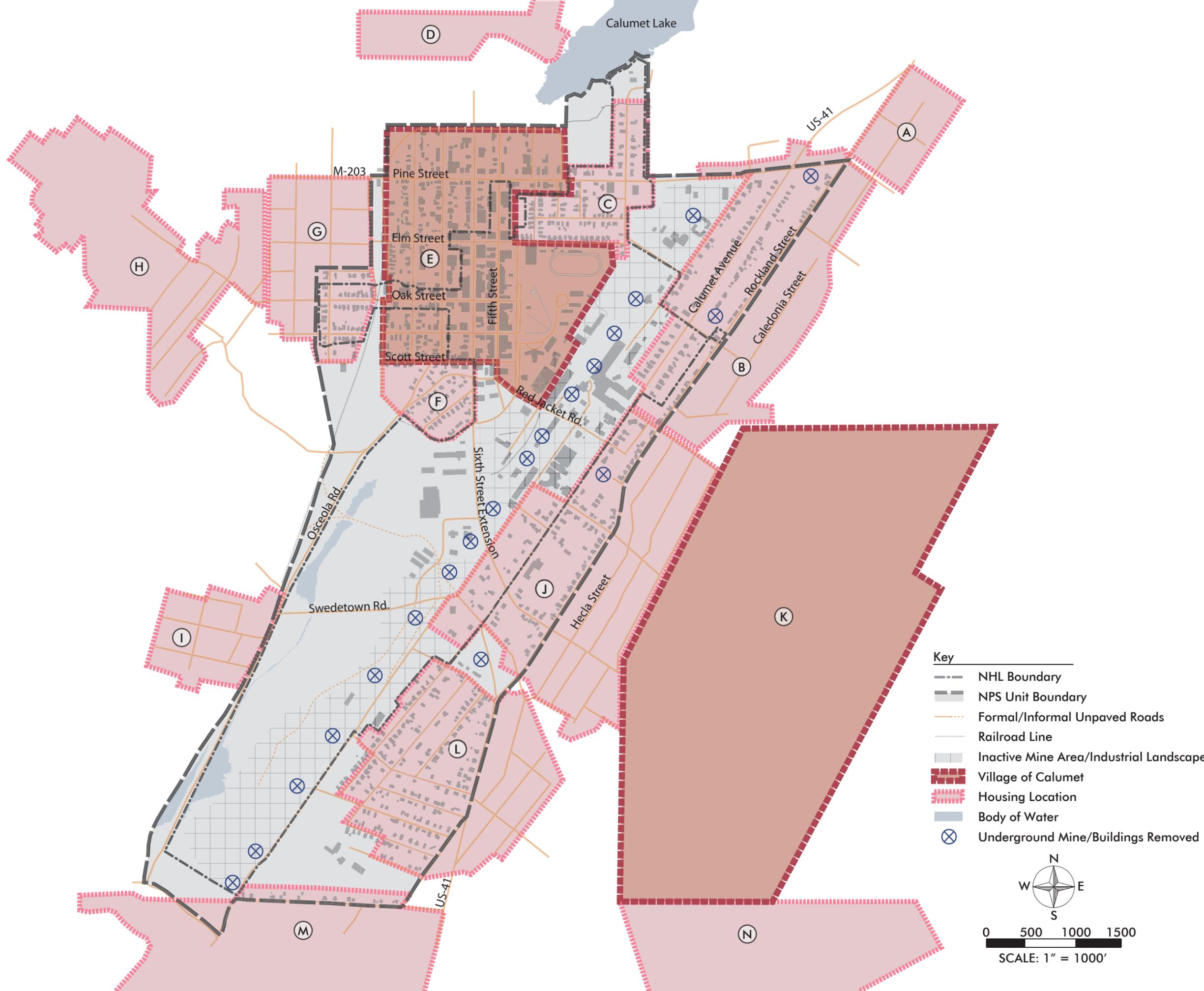
1. Locations of elements on plan are approximate based on best available sources. Plan sources are provided in the adjacent CLR narrative.

Created/Revised

September 2012



Figure I-6



Key

- NHL Boundary
- NPS Unit Boundary
- Formal/Informal Unpaved Roads
- Railroad Line
- Inactive Mine Area/Industrial Landscape
- Village of Calumet
- Housing Location
- Body of Water
- Underground Mine/Buildings Removed



0 500 1000 1500
SCALE: 1" = 1000'

1 **Calumet Unit Landscape Character Areas**

2
3 Landscape character areas are places containing similar physical characteristics, qualities,
4 attributes and associated cultural landscape resources. Historic resources included in the Calumet
5 Unit are extensive and have been addressed throughout this report as they relate to landscape
6 character areas. The landscape character areas are enumerated below and illustrated in Figures
7 I-4 and I-6. They are described in Chapter III: Existing Conditions and Landscape Analysis.
8

9 ***Calumet Landscape Character Areas (see Figure I-4)***

- 10
11 A. Village of Calumet and Civic & Commercial Historic District
12 B. Agassiz Park
13 C. North Mine Street Industrial Corridor
14 D. Red Jacket Road Corridor
15 E. South Mine Street Industrial Corridor
16 F. Railroad / Recreational Corridor
17 G. Sixth Street Extension & Mine Street Station
18 H. Osceola Number 13
19 I. Temple Square
20

21
22 ***Calumet Unit Housing Locations (see Figure I-6)***

- 23
24 A. Albion Housing Location
25 B. Calumet Housing Location
26 C. Blue Jacket Housing Location
27 D. Red Jacket Housing Location
28 E. Village of Calumet (formerly Red Jacket)
29 F. Newtown Housing Location
30 G. Yellow Jacket Housing Location
31 H. Tamarack Housing Location
32 I. Swedetown Housing Location
33 J. Hecla Housing Location
34 K. Village of Laurium (formerly Calumet)
35 L. Raymbaultown Housing Location
36 M. Osceola Housing Location (formerly Opechee)
37 N. Florida Housing Location
38
39

1 **Environmental Assessment Impact Topics**

2
3 ***Determining Impact Topics for Analysis***

4 Specific impact topics are identified for analysis and to allow comparison of the environmental
5 consequences of each treatment alternative. Impact topics that are analyzed for this project are:
6 cultural resources including all elements of the cultural landscape as well as archeological
7 resources, socioeconomics, environmental justice, visitor experience, and park operations.
8

9 Impact topics that were dismissed from further analysis in this document are: geology, soils,
10 prime and unique farmlands, wildlife, special status species, wetlands, floodplains, water quality,
11 air quality, hazardous materials, Indian trust resources, ethnographic resources, museum
12 collections, soundscape management, and lightscape management.
13

14 These impact topics were identified based on federal laws, regulations, and Executive Orders and
15 NPS *Management Policies 2006*. A brief rationale for the selection of each impact topic is given
16 below, as well as the rationale for dismissing specific topics from further consideration.
17

18 ***Impact Topics Selected for Analysis***

19 ***Cultural Resources***

20 The environmental analysis will include all landscape characteristics (natural systems and
21 features, vegetation, topography, spatial organization, land use, circulation and viewsheds).
22 Cultural resources at the park also include the exterior of historic structures and how they
23 interact with surrounding landscape. Most of the land within the Calumet Unit boundary is a
24 National Historic Landmark (NHL) District, which was established in 1989. The NHL includes
25 remnant buildings, structures, ruins and landscapes associated with the operation of the Calumet
26 and Hecla Mining Company (C&H), the Village of Calumet commercial district, and various
27 mine company housing locations, which are now privately owned homes.
28

29 In addition to the above-ground cultural resources, there is potential for both prehistoric and
30 historic archeological resources at this unit. Implementation of a treatment alternative could
31 affect cultural resources at Keweenaw NHP; therefore cultural resources will require further
32 analysis in this document.

33 ***Socioeconomics and Environmental Justice***

34 The local economy of Houghton County is based on higher education, healthcare and
35 professional services, light industry, tourism/outdoor recreation, and agricultural services.
36 Keweenaw National Historical Park and its partner organizations are an important part of the
37 region’s tourism and outdoor recreation economy. Potential treatments to the cultural landscape
38 of Keweenaw National Historical Park —when evaluated within the greater context of the region
39 and socioeconomic synergies with Keweenaw Heritage Sites partners—could have effects on the
40 regional economy.
41

42 Under a policy established by the Secretary of the Interior, to comply with Executive Order
43 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income*
44 *Populations*, departmental agencies should identify and evaluate, during the scoping and/or

1 planning processes, any anticipated effects, direct or indirect, from the proposed project or action
2 on minority and low-income populations and communities, including the equity of the
3 distribution of the benefits and risks. Although data from the U.S. Census Bureau reveals that
4 very few persons in the project area are minority, a relatively high percentage of the individuals
5 and families in the village live below the poverty level. It is unlikely that the proposed project
6 would disproportionately affect minority residents or low income families or individuals;
7 however, with a population of low income families and individuals within the project area,
8 affects to Environmental Justice (low income) communities will also be addressed in this
9 document. Environmental Justice associated with disproportionate effects to minority
10 populations, will not be addressed. Therefore, the discussion of socioeconomics and
11 environmental justice (low income community) will be integrated and further analyzed in this
12 document.

13 ***Visitor Experience***

14 Keweenaw National Historic Park staff does provide some guided tours; however, many of the
15 visitor contacts and services for Keweenaw National Historic Park are provided through the
16 Keweenaw Heritage Sites, the park's partners. Keweenaw National Historical Park has
17 established a comprehensive interpretive / education program for the park. Because
18 implementation of any treatment alternatives could affect the visitor experience at the Calumet
19 Unit, as well as the rest of Keweenaw National Historical Park and Keweenaw Heritage Sites,
20 this topic will require further analysis in this document.

21 ***Park Operations***

22 Keweenaw National Historical Park is open year-round, although many of the Keweenaw
23 Heritage Sites are closed during the winter. Keweenaw National Historical Park staff is primarily
24 based in park headquarters in Calumet, Michigan. Interpretation of the Calumet Unit is a
25 partnership with Keweenaw Heritage Sites. Implementation of potential alternatives may affect
26 staffing levels, logistics and costs for maintenance and interpretation at Keweenaw National
27 Historical Park; therefore, this topic will require further analysis in this document.

28

29 ***Impact Topics Considered But Eliminated from Further Analysis***

30 ***Geology***

31 Surficial geology in the region underlying the Calumet area of Keweenaw National Historical
32 Park consists of the Portage Lake lava series, Nonesuch shale, Copper Harbor conglomerate, and
33 Freda sandstone.¹² These Portage Lake volcanics are composed of pre-Cambrian andesites and
34 felsites, as well as basalts.¹³ Copper filled the cavities and pore spaces of the geologic features
35 forming the largest deposit of copper in the world. The proposed action would not disturb the
36 geologic resources of the area; therefore, further analysis of geology is not required in this
37 document.

38 ***Soils***

39 According to the United States Department of Agriculture - Natural Resources Conservation
40 Service (USDA-NRCS), there are nine soil types representing six soil series within the Calumet

¹² NPS, *Final General Management Plan and Environmental Impact Statement, Keweenaw National Historical Park*.

¹³ Michigan Technological University website <http://www.geo.mtu.edu/>.

1 Unit.¹⁴ The most dominant soils include Udipsamments and Udorthents, nearly level and Urban
2 land Udorthents-Udipsamments complex gently sloping. These soils account for 85 percent of
3 the Calumet Unit soils, and are well drained to excessively well drained sandy soils. Other soils
4 in the Calumet Unit include Lupton and Cathro mucks, Histosols and Aquents, Trimountain
5 soils; and Kalkaska-Waiska sands.
6

7 Because proposed cultural landscape treatment alternatives would result only in short-term,
8 direct negligible impacts, further analysis of soils is not required in this document. Nevertheless,
9 all soil disturbing activities are subject to applicable regulations, including the National Pollutant
10 Discharge Elimination System (NPDES) and Stormwater Pollution Prevention Plan (SWPPP)
11 requirements, such as implementation of NPS Best Management Practices (BMPs).

12 **Prime and Unique Farmlands**

13 In August 1980, the Council on Environmental Quality (CEQ) directed that Federal agencies
14 assess the effects of their actions on farmland soils classified by the USDA NRCS as prime or
15 unique. Prime or unique farmland is defined as soil that particularly produces general crops
16 including common foods, forage, fiber, and oil seed; unique farmland produces specialty crops
17 such as fruits, vegetables, and nuts. According to USDA data, there are no prime or unique
18 farmland soils within the Calumet Unit.¹⁵
19

20 Active farmland does not currently occur within the Calumet Unit or near the area of potential
21 impacts by the proposed cultural landscape alternatives. The proposed cultural landscape
22 alternatives are exempt from the requirements of the Farmland Protection Policy Act because
23 there is no prime farmland associated with the cultural landscape project area, and there are no
24 potential impacts that would directly affect wetland areas associated with agriculture.
25 Consequently, this topic will not be analyzed further in this document.

26 **Wildlife**

27 NEPA requires federal agencies to use all practicable means to restore and enhance the quality of
28 the human environment and to avoid or minimize all possible adverse effects of their actions
29 upon the environment. NPS policy is to protect the components and processes of naturally
30 occurring biotic communities, including the natural abundance, diversity, and ecological
31 integrity of plants and animals.¹⁶
32

33 Treatment actions are expected to result in loss of wildlife in an amount proportional to the
34 amount of habitat lost, which would be minimal. The project area has been previously affected
35 through years of disturbance, primarily in the form of land development for the Village of
36 Calumet and Calumet Township. Wildlife adapted to disturbed and partially disturbed habitats
37 that are likely to occur in the Calumet Unit include several mammals, least chipmunk, house
38 mouse, red squirrel, raccoon, coyote, and white-tailed deer, and birds including mourning dove,

¹⁴ United States Department of Agriculture website, <http://websoilsurvey.nrcs.usda.gov/app/>.

¹⁵ United States Department of Agriculture website, <http://websoilsurvey.nrcs.usda.gov/app/>.

¹⁶ U.S. Department of the Interior, National Park Service, *Management Policies* (Washington, DC, 2006).

1 northern flicker, American crow, black-capped chickadee, American robin, European starling,
2 chipping sparrow, song sparrow, and house sparrow.¹⁷

3
4 Wildlife in the area is habituated to human activity and noise, or has departed the area entirely.
5 Larger wildlife are likely to avoid a project area to a certain extent during construction activities.
6 During construction, some small animals, like rodents, may be killed or forced to relocate to
7 areas outside a project area. Overall, populations of affected species might be slightly and
8 temporarily lowered during construction, but no permanent negative effects to wildlife are
9 anticipated. Any treatment alternative may have short-term, negligible, localized, adverse
10 impacts on wildlife therefore; this topic is not addressed further in this document.

11 **Special Status Species**

12 The Endangered Species Act (ESA) of 1973 (16 USC 1531 et seq.) requires examination of
13 impacts on all federally-listed threatened, endangered, and candidate species. Section 7 of the
14 ESA requires all federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) to
15 ensure that any action authorized, funded, or carried out by the agency does not jeopardize the
16 continued existence of listed species or critical habitats. In addition, the NPS *Management*
17 *Policies 2006* and Director's Order 77 *Natural Resources Management Guidelines* require the
18 NPS to examine the impacts on federally-listed, endangered and candidate species, as well as
19 state-listed threatened, endangered, candidate, rare, declining and sensitive species.

20
21 Special status species and their habitats were evaluated based on species presence and the
22 potential effects of actions related to treatments to the cultural landscape at the Calumet Unit. For
23 this analysis, the USFWS and the Michigan Department of Natural Resources and Environment
24 (MDNRE) were contacted. Table 1-1 lists species that are known within Houghton County, MI.

¹⁷ United States Department of the Interior, National Park Service, *Fire Management Plan for Keweenaw National Historic Park* (February 3, 2005); Allen Kurta, *Mammals of the Great Lakes Region* (Ann Arbor, MI: University of Michigan Press, 1995); and United States Geological Survey website, <http://www.mbr-pwrc.usgs.gov/bbs/>.

1 **Table 1-1**
 2 **Federal and State Listed Species Known in Houghton County, Michigan**
 3

Common Name	Scientific Name	Federal Status / State Status ¹
Plants		
Climbing Fumitory	<i>Adlumia fungosa</i>	— / SC
Wild Chives	<i>Allium schoenoprasum</i>	— / T
Walking fern	<i>Asplenium rhizophyllum</i>	— / T
Northern Reedgrass	<i>Calamagrostis lacustris</i>	— / T
Purple Clematis	<i>Clematis occidentalis</i>	— / SC
Douglas’s Hawthorn	<i>Crataegus douglasii</i>	— / SC
Laurentian Fragile Fern	<i>Cystopteris laurentiana</i>	— / SC
Fragrant Cliff Woodfern	<i>Dryopteris fragrans</i>	— / SC
Blue Wild-rye	<i>Elymus glaucus</i>	— / SC
Farwell’s Water-milfoil	<i>Myriophyllum farwellii</i>	— / T
Butterwort	<i>Pinguicula vulgaris</i>	— / SC
Satiny Willow	<i>Salix pellita</i>	— / SC
Torrey’s Bulrush	<i>Scirpus torreyi</i>	— / SC
Northern Ragwort	<i>Senecio indecorus</i>	— / T
New England Violet	<i>Viola novae-angliae</i>	— / T
Animals		
Lake Sturgeon	<i>Acipenser fulvescens</i>	— / T
American Bittern	<i>Botaurus lentiginosus</i>	— / SC
Gray Wolf	<i>Canis lupus</i>	E / —
Cisco or Lake Herring	<i>Coregonus artedi</i>	— / T
Kiyi	<i>Coregonus kiyi</i>	— / SC
Peregrine Falcon	<i>Falco peregrinus</i>	— / E
Common Loon	<i>Gavia immer</i>	— / T
Wood Turtle	<i>Glyptemys insculpta</i>	— / SC
Bald Eagle	<i>Haliaeetus leucocephalus</i>	— / SC
Canada Lynx	<i>Lynx canadensis</i>	T / —
Bigmouth Shiner	<i>Notropis dorsalis</i>	— / SC
Osprey	<i>Pandion haliaetus</i>	— / SC
Sauger	<i>Sander canadensis</i>	— / T
Eastern Box Turtle	<i>Terrapene carolina carolina</i>	— / SC
¹ E= Endangered; T= Threatened; SC= Species of Special Concern Source: Michigan Natural Features Inventory, December 10, 2010 and USFWS, January 26, 2011.		

4
5

1 For Federally-listed species, the USFWS Region 3 Section 7 Consultation website was reviewed
2 on January 25, 2011 to determine the presence of federally-listed species in Houghton County,
3 Michigan. According to the list, species and critical habitat may be present in the county for
4 Canada lynx (*Lynx canadensis*), gray wolf (*Canis lupis*), pitcher's thistle (*Cirsium pitcherii*), and
5 Eastern prairie fringed orchid (*Plantathera leucophaea*). Because the project area is urban and
6 habitat for the listed species is not present, the project would have no effect on the Canada lynx,
7 pitcher's thistle, or Eastern prairie fringed orchid.

8
9 For the gray wolf, the project is not likely to adversely affect this species. Wolves may be
10 disturbed from noise during the project implementation, but the disturbances will be temporary
11 and wolves will likely avoid the area during the project implementation activities. Only a small
12 area of land—which is an urban area—would be impacted when compared with the total area
13 available for wolf foraging and breeding activities in the Upper Peninsula of Michigan. Further,
14 wolf prey availability and populations are unlikely to be affected by the project.

15
16 The Michigan Natural Features Inventory has indicated that there are occurrences of a state-
17 listed species of concern (Douglas' hawthorn-*Crataegus douglasii*) within Houghton County and
18 possibly within Keweenaw National Historical Park. There is no known record of this species
19 within the Calumet Unit. In addition, there are no known records of any other state-listed species
20 (Table 1-1) in the Calumet Unit.

21
22 The topic of special status species is dismissed from further analysis in this document. Section 7
23 consultation includes USFWS review of the draft report.

24
25 The Calumet Unit of Keweenaw National Historical Park is a combination of urban development
26 and heavily disturbed landscape from decades of urban growth associated with mining activities.
27 Although landscape modifications are likely to be proposed, any landscape modifications will be
28 in the already urbanized area of the Village of Calumet and Calumet Township.

30 **Water Resources**

31 *Wetlands*

32 Section 404 of the Clean Water Act (CWA) and Executive Order 11990 requires federal agencies
33 to avoid impacts to wetlands whenever possible. Further, the NPS Management Policies 2006,
34 section 4.6.5, Wetlands and DO-77-1 (Wetland Protection) provide guidelines for development
35 proposed in wetlands, which includes a sequenced approach. Based on the policy, the NPS
36 employs a sequence of:

- 37 a) Avoiding adverse wetland impacts to the extent practicable,
- 38 b) minimizing impacts that could not be avoided, and
- 39 c) compensating for remaining unavoidable adverse wetland impacts via restoration of degraded
40 wetlands.

41 Furthermore, the state of Michigan Department of Environmental Quality (DEQ) under the
42 authority of the Wetland Protection Act, Part 303 of the Natural Resources and Environmental
43 Protection Act, MCL 324.30301 et seq., also regulates impacts to wetlands within the state.

1
2 Calumet was developed on a high point with topography sloping away in all directions from the
3 town center. However, according to the USFWS National Wetlands Inventory mapping for the
4 area, wetlands are present in the southwest portion of the study area bounded on the west by
5 Osceola Road and a railroad and traversed by Swedetown Road.¹⁸ These wetlands are
6 impoundments with their flow to the west possibly hindered by the north-south oriented Osceola
7 Road and railroad. The wetlands are open water ponds and other wetlands vegetated by an
8 assemblage of emergent, scrub-shrub, and forested vegetation.

9
10 Impacts to wetlands can include losses of functions and values, diversion of contributing water
11 sources, vegetation removal, dredging, filling, and conversion to non-natural land cover. The
12 proposed action does not involve wetland impacts as described above, and federal or state
13 wetland permits are not foreseen to be needed. Therefore, wetlands are not addressed further in
14 this document.

15 *Floodplains*

16 Executive Order 11988 (Floodplain Management) directs Federal agencies and their actions to
17 avoid, to the extent possible, the long-term and short-term adverse impacts associated with the
18 occupancy and modification of floodplains, and to avoid direct and indirect support of floodplain
19 development wherever there is a practicable alternative. Although low-lying portions of the
20 study area abut Calumet Lake, the Federal Emergency Management Agency (FEMA) has not
21 mapped 100-year floodplains in the vicinity of the Calumet Unit.¹⁹ Also, the proposed action
22 does not entail filling or excavating of lowlands that could be potential floodplains as defined by
23 Executive Order 11988. Therefore, floodplains are dismissed from further analysis in this
24 document.

25 *Water Quality*

26 Section 404 of the Clean Water Act also requires federal agencies' actions to avoid impacts to
27 other waters of the United States, which includes lakes, ponds, streams, and rivers. According to
28 the United States Geological Survey (USGS) topographic quadrangle for Ahmeek and Laurium,
29 Michigan and the National Wetlands Inventory mapping by the USFWS, two ponds are depicted
30 within the Calumet Unit at the northeast corner of the intersection of Osceola Road and
31 Swedetown Road. There are no mapped streams or rivers within the Calumet Unit.²⁰

32
33 Michigan DEQ under the authority of the Shorelands Protection and Management Act, Part 323
34 of the Natural Resources and Environmental Protection Act, MCL 324.30301 et seq., regulates
35 impacts to coastal areas within the state. Coastal areas are defined as occurring within 1,000 feet
36 landward from the ordinary high water mark of a Great Lake or a connecting waterway. Within
37 this zone, the Act places emphasis on areas at high risk for erosion and flooding. Although
38 ponded areas are mapped within the project area, any proposed treatment alternative would have
39 negligible adverse impacts ponds, lakes, streams, or rivers and consequently water quality is
40 dismissed from further analysis in this document.

¹⁸ <http://www.fws.gov/wetlands/Data/Mapper.html>

¹⁹ <http://gis1.msc.fema.gov/Website/newstore/viewer.htm>

²⁰ USGS Topographic Quadrangle maps for Ahmeek and Laurium quadrangles and
<http://www.fws.gov/wetlands/Data/Mapper.html>

1 **Air Quality**

2 The 1970 Clean Air Act, as amended in 1990 (42 U.S.C. 7401 et seq.), requires federal land
3 managers to protect park air quality, while the 2006 NPS *Management Policies* address the need
4 to analyze air quality during park planning. The 1970 Clean Air Act provides that the federal
5 land manager (the Assistant Secretary for Fish and Wildlife and Parks and the Park
6 Superintendent) has an affirmative responsibility to protect the park's air quality related values
7 (including visibility, plants, animals, soils, water quality, cultural and historic resources and
8 objects, and visitor health) from adverse air pollution impacts. Section 118 of the 1970 Clean Air
9 Act requires the park to meet all federal, state, and local air pollution standards. Section 176(c)
10 of the 1970 Clean Air Act requires all federal activities and projects to conform to state air
11 quality implementation plans to attain and maintain national ambient air quality standards.
12

13 Keweenaw National Historical Park does not conduct air quality monitoring. The effects of air
14 pollution on the park's natural resources and historic structures are unknown. A Fire
15 Management Plan addresses air quality and various means to mitigate smoke impacts from
16 prescribed fires.²¹ If fires are prescribed as part of any treatment alternatives, the prescribed
17 burns will be conducted within the guidelines of the Fire Management Plan.
18

19 According to the US Environmental Protection Agency (EPA), Michigan has no non-attainment
20 areas for carbon monoxide, nitrogen dioxide, one-hour ozone, sulfur dioxide, particulates (and
21 <10 micrometers), and lead.²² As of June 2007, nine counties in the state are in non-attainment
22 for the eight-hour ozone and seven counties are in non-attainment for the < 2.5 micrometers
23 particulates standards. However, Houghton County is not among the counties in non-attainment
24 for these two criteria. Consequently, Keweenaw National Historical Park does not occur within
25 any areas of non-attainment for criteria air pollutants, and therefore this subject will not be
26 further analyzed.
27

28 Local air quality would be temporarily affected by dust and vehicle emissions during the period
29 of construction for any cultural landscape alternative. Operating equipment during this period
30 would result in increased vehicle exhaust and emissions. Hydrocarbons, nitrous oxide, and sulfur
31 dioxide emissions would be rapidly dissipated by air drainage since air stagnation is rare in the
32 park vicinity. To reduce equipment emissions, the park would apply appropriate mitigating
33 measures limiting idling of motorized vehicles.
34

35 Fugitive dust plumes from equipment would intermittently increase airborne particulates in the
36 area near the construction sites, but loading rates are not expected to be significant. To partially
37 mitigate these effects, project construction activity can be coupled with water sprinkling to
38 reduce dust.
39

40 Overall, there would be negligible, short-term, adverse impacts to local air quality due to dust
41 generated from motorized equipment. These effects would last only as long as the life of the
42 project so local and regional air quality is unlikely to be affected by any of the alternatives.
43 Therefore, air quality is dismissed from further analysis in this document.

²¹ NPS, *Fire Management Plan for Keweenaw National Historic Park*.

²² United States Environmental Protection Agency website,
<http://www.epa.gov/air/data/nonat.html?st~MI~Michigan>.

1 **Hazardous Materials**

2 A federal and state database search was conducted for the Calumet Unit and adjacent areas.²³ A
3 total of 51 records were obtained within the search area, which would be the expected amount
4 when searching an entire town the size of Calumet and Calumet Township. The machine shop
5 for the C & H mine at 9 Mine Street is listed as a Comprehensive Environmental Response
6 Compensation and Liability Act (CERCLA) site. The records show that there was an emergency
7 removal and clean up of over 1,600 containers of hazardous material at that site in 2007. Three
8 federally-designated brownfield sites [including the Mihelich Rendering Building (two sites) and
9 the Erkkila Building on 5th Street] were listed on the database search. Eighteen Resource
10 Conservation and Recovery Act (RCRA) generator sites were listed in the study area. These sites
11 are mainly automobile service stations, utility facilities, and governmental sites. Nine
12 State/Tribal Leaking Underground Storage Tank (LUST) sites and twenty State/Tribal
13 Underground Storage Tanks (USTs) and/or Above-Ground Storage Tanks (AST's) were also
14 listed. No National Priority List [(NPL), a.k.a. Superfund] sites were identified in this database
15 search.

16
17 Any site where the presence of hazardous materials is considered to be in question would be
18 attempted to be avoided in developing treatment alternatives; however if any potentially
19 hazardous sites are within an area designated for treatment, all appropriate measures will be
20 taken to mitigate hazardous working conditions. Park staff would adhere to appropriate NPS
21 policies and directives, Michigan EPA, and Occupational Safety and Health Administration
22 (OSHA) safety precautions for workers at the project sites. These actions are required of any
23 treatment alternative that is considered for the site. Therefore, this topic is dismissed from further
24 analysis in this document.

25 **Indian Trust Resources**

26 Secretarial Order 3175 requires any anticipated impacts to Indian trust resources from a proposed
27 project or action by Department of Interior agencies be explicitly addressed in environmental
28 documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on
29 the part of the United States to protect tribal lands, assets, resources, and treaty rights and it
30 represents a duty to carry out the mandates of federal law with respect to American Indian and
31 Alaskan Native tribes.

32
33 There are no Indian trust resources at the park. The lands comprising the park are not held in
34 trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians.
35 Therefore, the topic of Indian trust resources is dismissed from further analysis in this document.

36 **Ethnographic Resources**

37 Impacts associated with ethnographic resources typically deal with questions about
38 contemporary groups or peoples, their identity, and their heritage. As defined by the NPS, an
39 ethnographic resource is a site, structure, object, landscape, or natural resource feature assigned
40 traditional, legendary, religious, subsistence or other significance in the cultural system of a
41 group. The Keweenaw Bay Indian Community has identified no sacred Indian sites on the

²³ First Search Technology Corporation. *Environmental First Search Report for Calumet, Michigan* (February 4, 2011).

1 subject federal lands.²⁴ At this time the NPS has no knowledge of any other traditionally
2 affiliated organizations or groups.

3
4 Copies of this CLR / EA will be sent to the Keweenaw Bay Indian Community and any other
5 interested tribes for their review and comment. If the tribes subsequently identify the presence of
6 ethnographic resources, appropriate mitigation measures would be undertaken in consultation
7 with the tribes. Also, the park has requested an Ethnographic Overview and Assessment be
8 completed for Keweenaw National Historical Park. In the unlikely event human remains,
9 funerary objects, sacred objects, or objects of cultural patrimony are discovered during
10 implementation of the proposed action, provisions outlined in the Native American Graves
11 Protection and Repatriation Act of 1990 and Executive Order 13007 would be followed (25 USC
12 3001). Therefore, Ethnographic Resources is dismissed from further analysis in this document.

13 **Museum Collections**

14 Keweenaw National Historical Park has an extensive museum collection. The *draft Collection*
15 *Management Plan* will be finalized in 2012. It provides guidance for managing the park's
16 collections and the establishment of a multi-park museum collection storage facility at
17 Keweenaw NHP. The plan indicates that Keweenaw NHP facilities will provide storage for non-
18 exhibited/non-MWAC collections of Isle Royale National Park, Pictured Rocks National
19 Lakeshore, and possibly some of the Apostle Islands National Lakeshore collections.

20
21 As of August 2011, there are 501,167 items in the collection, stored in two locations. The two
22 facilities are the Keweenaw History Center and Warehouse No. 1. The park has a draft *Historic*
23 *Structure Report for the Keweenaw History Center* (2008) and completed a *Historic Structure*
24 *Report* (HSR) for Warehouse No. 1 in December 2011. The report includes recommendations for
25 improvements to the collection's processing and storage.

26
27 The park is upgrading collections facilities primarily to improve preservation standards per the
28 NPS *Checklist for the Preservation and Protection of Museum Collections*. The checklist is the
29 tool used by the agency to measure the level of care provided to collections. In addition, the
30 upgrades will provide more capacity for collections.

31
32 Although the park's collections continue to grow, it is not anticipated that implementation of
33 any treatment alternative would result in a large number of new items that require storage and
34 curation in the park's museum collections. During the preparation of the HSR for Warehouse No.
35 1, park staff stated that recommended improvements to Warehouse No. 1 would accommodate
36 collections storage. Implementation of any treatment alternative would result in negligible
37 impacts to museum collections. Therefore, this topic is dismissed from further analysis in this
38 document.

39
40
41
42

²⁴ United States Department of the Interior, National Park Service, *Environmental Assessment and Finding of No Significant Impact for Fire Management Plan for Keweenaw National Historic Park*.

1 **Soundscape Management**

2 In accordance with *NPS Management Policies 2006* and Director’s Order #47, *Sound*
3 *Preservation and Noise Management*, an important part of the NPS mission is preservation of
4 natural soundscapes associated with national park units. Natural soundscapes exist in the absence
5 of human-caused sound. The natural ambient soundscape is the aggregate of all natural sounds
6 that occur in park units, together with the physical capacity for transmitting natural sounds.
7 Natural sounds occur within and beyond the range of sounds that humans can perceive and can
8 be transmitted through air, water, or solid materials. The frequencies, magnitudes, and duration
9 of human-caused sound considered acceptable varies among NPS units, as well as potentially
10 throughout each park unit, being generally greater in developed areas and less in undeveloped
11 areas.

12
13 Human-caused noise that is experienced at the developed areas of the park is what a visitor
14 would expect from a small town. Visitors would likely expect to hear sounds from vehicle traffic
15 and general “white noise” emanating from an urban area. Construction associated with any
16 treatment alternative would be consistent with the normal background noise of a small town and
17 would only occur during the length of construction resulting in short-term, negligible adverse
18 impact to the soundscape of the Calumet Unit. Therefore, soundscape management is dismissed
19 from further analysis in this document.

20 **Lightscape Management**

21 In accordance with *NPS Management Policies 2006*, the NPS strives to preserve natural ambient
22 landscapes, which are natural resources and values that exist in the absence of human-caused
23 light. Keweenaw National Historical Park is located within a small town setting which includes
24 lighting associated with streets, businesses, and small neighborhood residential areas. No
25 extensive, new or modified sources of light are anticipated with the proposed action, therefore,
26 lightscape management is dismissed further analysis in this document.

27
28

1 **Terminology**
2

3 This section includes definitions of terminology used in the report.
4

Character area	An area defined by the physical qualities (such as vegetation, topography, and views) of a cultural landscape and the type and concentration of cultural resources present.
Character-defining feature	A prominent or distinctive aspect, quality, or characteristic of a cultural landscape that contributes significantly to its physical character. Land use patterns, vegetation, furnishings, decorative details and materials may be such features.
Component landscape	A discrete portion of the landscape which can be further subdivided into individual features. A component landscape may be individually eligible for listing on the National Register.
Cultural landscape	A geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.
Cultural landscape report	The primary management document for cultural landscapes within the National Park Service. A cultural landscape report documents the history and existing conditions of a cultural landscape, evaluates its significance according to the Secretary of the Interior's standards, and provides design and management recommendations for the property.
Environmental Assessment	An assessment of the possible positive or negative impact that a proposed project may have on the environment, together consisting of the environmental, social and economic aspects.
Feature	The smallest element(s) of a landscape that contributes to the significance and that can be the subject of a treatment intervention.
Historic character	The sum of all visual aspects, features, materials, and spaces associated with a cultural landscape's history. These qualities are often referred to as character-defining.
Historic designed landscape	A landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, engineer, or horticulturist according to design principles, or an amateur gardener working in a recognized style or tradition. The landscape

may be associated with a significant person, trend, or event in landscape architecture; or illustrate an important development in the theory and practice of landscape architecture. Aesthetic values play a significant role in designed landscapes.

Historic vernacular landscape	A landscape that evolved through use by the people whose activities or occupancy shaped it. Through social or cultural attitudes of an individual, a family, or a community, the landscape reflects the physical, biological, and cultural character of everyday lives. Function plays a significant role in vernacular landscapes.
Historic site	A landscape significant for its association with a historic event, activity or person.
Integrity	The authenticity of a property's historic identity, evinced by the survival of physical characteristics that existed during the property's historic or prehistoric period. The seven qualities of integrity as defined by the NR program are <i>location, setting, feeling, association, design, workmanship, and materials</i> .
NEPA	National Environmental Policy Act of 1969
Significance	The meaning or value ascribed to a cultural landscape based on the NR criteria for evaluation.
Vernacular	Term used to categorize methods of construction which use locally available resources and traditions to address local needs. These resources tend to evolve over time and reflect the environmental, cultural and historical context in which they exist.