

RFI 097
Pebble Project EIS

Request for Information

Title/Subject:	Cultural and Subsistence Figures Request
Requestor:	AECOM
Date Transmitted:	10/18/2018
Recipient:	Pebble Limited Partnership
Response Requested by:	10/24/2018
Rationale:	<p>The response to RFI 088 notes that SRB&A's agreement with PLP regarding the use and distribution of anthropological data (including subsistence and cultural resource information) does not allow for the receipt of GIS data to the USACE or AECOM. Instead, figures and GIS analysis needed for the EIS would be requested to SRB&A through PLP.</p> <p>There are some figures for subsistence that need to be created in the EIS figure template, and there are additional cultural resources figures that we need to conduct our analysis and would not be released to the public or included in the EIS document.</p> <p>We are including with this RFI a file with the EIS template and relevant GIS data.</p>
Describe the Information Requested and Level of Detail:	<p>For Cultural Resources:</p> <ol style="list-style-type: none"> 1. Maps and tables that show all of the interview-identified cultural resource features with the current project footprint, including alternatives (this may mean a small mapbook or mapbooks of different features – e.g. a trails/routes mapbook). <p>Tables that list all of these features that also highlight which of the cultural resource features are within the viewshed of the project and alternatives and also call out those features that intersect the footprint so that the total number of cultural resources features within the viewshed(s) and within the footprint(s) can be quantified.</p> <p>This would include linear features, polygons, and points. Features should include all data sources (e.g., place names, trails/routes, other interview-identified or research based sites/features, AHRS listed resources, etc.). These maps are not intended for use in any public documents, but the tables and calculations will be.</p> <ol style="list-style-type: none"> 2. A discrete list of which, if any, of these features were subject to field verification and synopsis of field results. 3. GIS analysis including maps and tables of each of the project component and alternative footprints that provide: <ol style="list-style-type: none"> a. Acreage surveyed (total acres and percent of footprint component) b. Acreage of low/high potential defined in the footprint c. Analysis that answers how many high vs low potential acres remain unsurveyed in the footprint? What areas have not been subject to any field survey? What areas have been subject to high vs low analysis? d. These maps, tables, and calculations may be used in public documents. 4. A narrative description of how low/high potential areas were determined or identified. <p>For Subsistence:</p> <p>Please create the following list of figures using the EIS figure template. All figures should be 8.5x11 (no 11x17). All will be used in the public EIS document. These are figures that are in Chapter 23 of the EBD or the 2018 Subsistence Data Review and will need to be re-created in the EIS template, with the project footprint (including all</p>

	<p>alternatives).</p> <ol style="list-style-type: none"> Figure number and title: 3.9-1 Subsistence Use Areas This will be one figure that includes all harvest areas in the project area for the 6 communities nearest to the project infrastructure (New Halen, Iliamna, Kokhanok, Iguigig, Pedro Bay, Nondalton) as well as all communities listed in Chapter 23 of the EBD document. It would look similar to Map 23-9 of the EBD. Six figures that include all resources from the 2018 report, and would look like Map A2 (Iliamna), Map A-3 (Newhalen), Map A-4 (Pedro Bay), Map A-1 (Nondalton), Map A-5 (Iguigig), and Map A-6 (Kokhanok), respectively. <p>Figure numbers and titles: Figure 3.9-3 Subsistence Use Areas, All Resources – Iliamna Figure 3.9-5 Subsistence Use Areas, All Resources - Newhalen Figure 3.9-7 Subsistence Use Areas, All Resources - Pedro Bay Figure 3.9-9 Subsistence Use Areas, All Resources - Nondalton Figure 3.9-11 Subsistence Use Areas, All Resources - Iguigig Figure 3.9-13 Subsistence Use Areas, All Resources - Kokhanok</p>
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Recipient Response Form

Date Received from USACE:	10/18/2018
Response from Recipient (Describe Information Requested to the Level of Detail Requested; Provide Attachments as Needed):	<p>Cultural Resources</p> <ol style="list-style-type: none"> Pending A discrete list of which, if any, of these features were subject to field verification and synopsis of field results. <ul style="list-style-type: none"> 2011 – Investigated TRL-067, TRV-089, TRL-109, TRL-106, and TRV-083. SRB&A field crews did not identify any physical evidence of the trails and routes within the exploratory drill sites' buffered areas. 2012 – Investigated TRL-067, TRV-019, TRV-033, TRV-093, TRV-094, TRL-133, TRL-137, TRV-055, TRL-142, TRL-002, TRL-019, TRV-126, TRV-100, TRL-007, TRL-008, TRL-009, TRL-038, TRL-039, TRL-040. SRB&A did not identify physical evidence of the reported trails and travel routes reported by local residents with the exception of one 7mm cartridge casing and a large game trail in proximity of TRV-033 and TRV-094. Pending A narrative description of how low/high potential areas were determined or identified. SRB&A employed three primary methods of determining low/high potential areas. These methods included "Controlled-Exclusive Survey Methods" for the mine and Cook Inlet surveys, "GIS Wetland and Slope Analysis" for the mine study area, and "GIS Coastal Subsistence and Coastal Geomorphology Analysis" for the Expanded Cook Inlet Baseline Study Area. Narrative descriptions as well as accompanying figures explaining how these areas were determined or identified can be found in SRB&A 2013 available at the State's Office of History and Archaeology (OHA), including OHA's online document repository. <i>SRB&A, (Braund, Stephen R. & Associates). 2013. Cultural Resources, Pebble Project: Cultural Resources Field Survey, 2012 Progress Report. Pebble Limited Partnership. Anchorage, Alaska.</i>
List Number and Type of Response Attachments:	Subsistence Figures: 3.9-1, 3.9-3, 3.9-5, 3.9-7, 3.9-9, 3.9-11, 3.9-13

Date Returned to USACE:	11/1/2018
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AECOM Intake Form

Date Response was Received:	11/1/2018
Received by:	AECOM
Describe any Follow-up Related to this RFI:	Pending response to items 1 and 3.

RFI 097
Pebble Project EIS

Request for Information

Title/Subject:	Cultural and Subsistence Figures Request
Requestor:	AECOM
Date Transmitted:	10/18/2018
Recipient:	Pebble Limited Partnership
Response Requested by:	10/24/2018
Rationale:	<p>The response to RFI 088 notes that SRB&A's agreement with PLP regarding the use and distribution of anthropological data (including subsistence and cultural resource information) does not allow for the receipt of GIS data to the USACE or AECOM. Instead, figures and GIS analysis needed for the EIS would be requested to SRB&A through PLP.</p> <p>There are some figures for subsistence that need to be created in the EIS figure template, and there are additional cultural resources figures that we need to conduct our analysis and would not be released to the public or included in the EIS document.</p> <p>We are including with this RFI a file with the EIS template and relevant GIS data.</p>
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	<p>alternatives).</p> <ol style="list-style-type: none"> Figure number and title: 3.9-1 Subsistence Use Areas This will be one figure that includes all harvest areas in the project area for the 6 communities nearest to the project infrastructure (New Halen, Iliamna, Kokhanok, Iguigig, Pedro Bay, Nondalton) as well as all communities listed in Chapter 23 of the EBD document. It would look similar to Map 23-9 of the EBD. Six figures that include all resources from the 2018 report, and would look like Map A2 (Iliamna), Map A-3 (Newhalen), Map A-4 (Pedro Bay), Map A-1 (Nondalton), Map A-5 (Iguigig), and Map A-6 (Kokhanok), respectively. <p>Figure numbers and titles: Figure 3.9-3 Subsistence Use Areas, All Resources – Iliamna Figure 3.9-5 Subsistence Use Areas, All Resources - Newhalen Figure 3.9-7 Subsistence Use Areas, All Resources - Pedro Bay Figure 3.9-9 Subsistence Use Areas, All Resources - Nondalton Figure 3.9-11 Subsistence Use Areas, All Resources - Iguigig Figure 3.9-13 Subsistence Use Areas, All Resources - Kokhanok</p>
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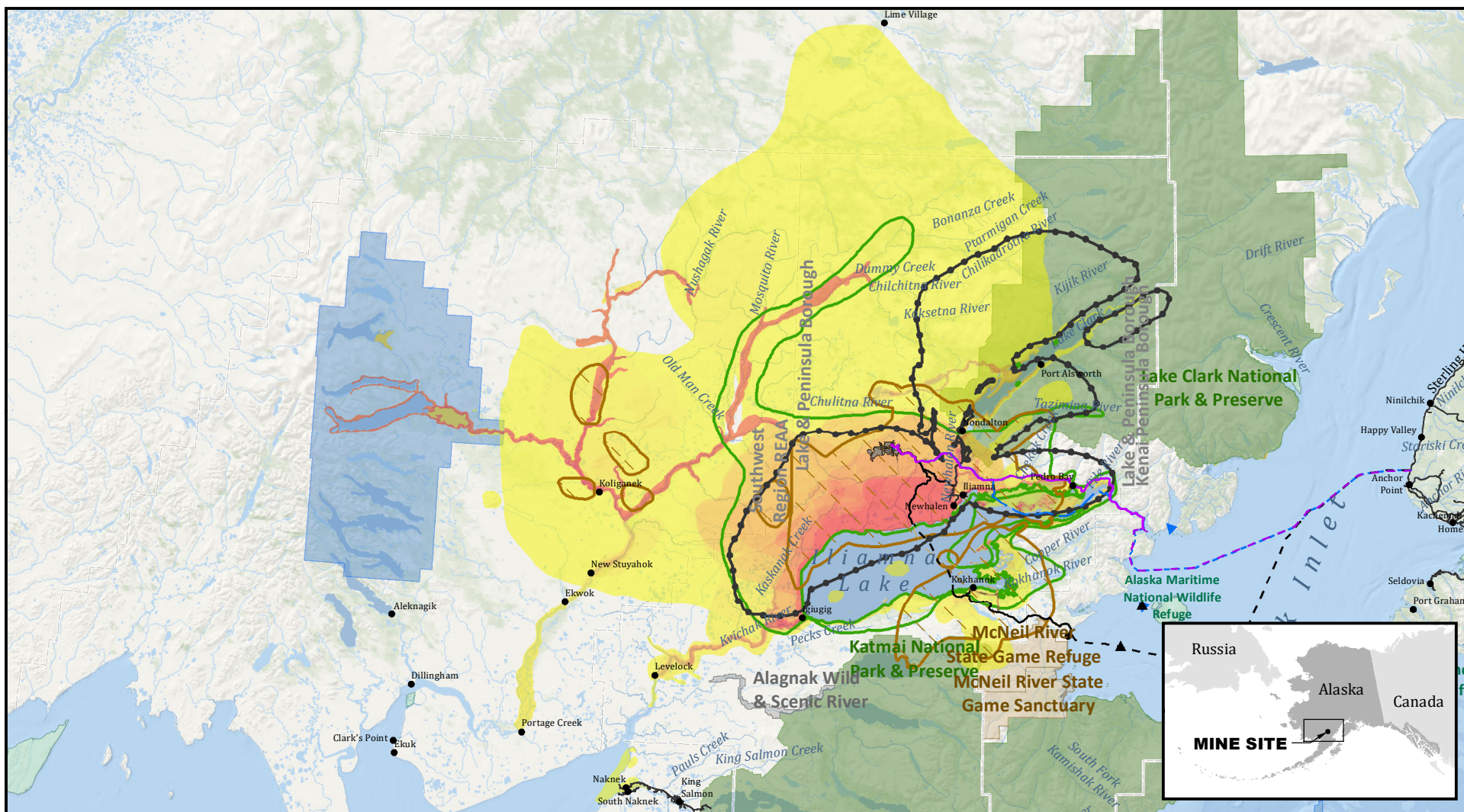
Recipient Response Form

Date Received from USACE:	10/24/2018
Response from Recipient (Describe Information Requested to the Level of Detail Requested; Provide Attachments as Needed):	<p>Cultural Resources 1. Pending</p> <p>2. A discrete list of which, if any, of these features were subject to field verification and synopsis of field results. <i>Previously submitted.</i></p> <p>3. GIS analysis including maps and tables of each of the project component and alternative footprints that provide:</p> <ol style="list-style-type: none"> Acreage surveyed (total acres and percent of footprint component) <ul style="list-style-type: none"> See the “Acres Analysis” tab in attached Excel file, Table 1 Acreage of low/high potential defined in the footprint <ul style="list-style-type: none"> See the “Acres Analysis” tab on attached Excel file, Table 2 Analysis that answers how many high vs low potential acres remain unsurveyed in the footprint? What areas have not been subject to any field survey? What areas have been subject to high vs low analysis? <ul style="list-style-type: none"> See the “Acres Analysis” tab in attached Excel file, Table 3 and the attached maps of Alternatives 1, 2 and 3 These maps, tables, and calculations may be used in public documents. <ul style="list-style-type: none"> Confirmed. <p>4. A narrative description of how low/high potential areas were determined or identified. <i>Previously submitted.</i></p>
List Number and Type of Response Attachments:	<ol style="list-style-type: none"> 1. Surveys_Alternative1.pdf 2. Surveys_Alternative2.pdf 3. Surveys_Alternative3.pdf 4. PebbleSurveys_RFI097.xlsx
Date Returned to USACE:	11/05/2018

AECOM Intake Form

Date Response was Received:	11/5/2018
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Received by:	AECOM
Describe any Follow-up Related to this RFI:	None at this time. Note: attachments to this RFI are considered culturally sensitive material and are not for public distribution.



Sources: Pebble; USGS; ADNIR
Subsistence use areas by
Stephen R. Braund & Associates



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10 0 10 20
Miles

Other Features

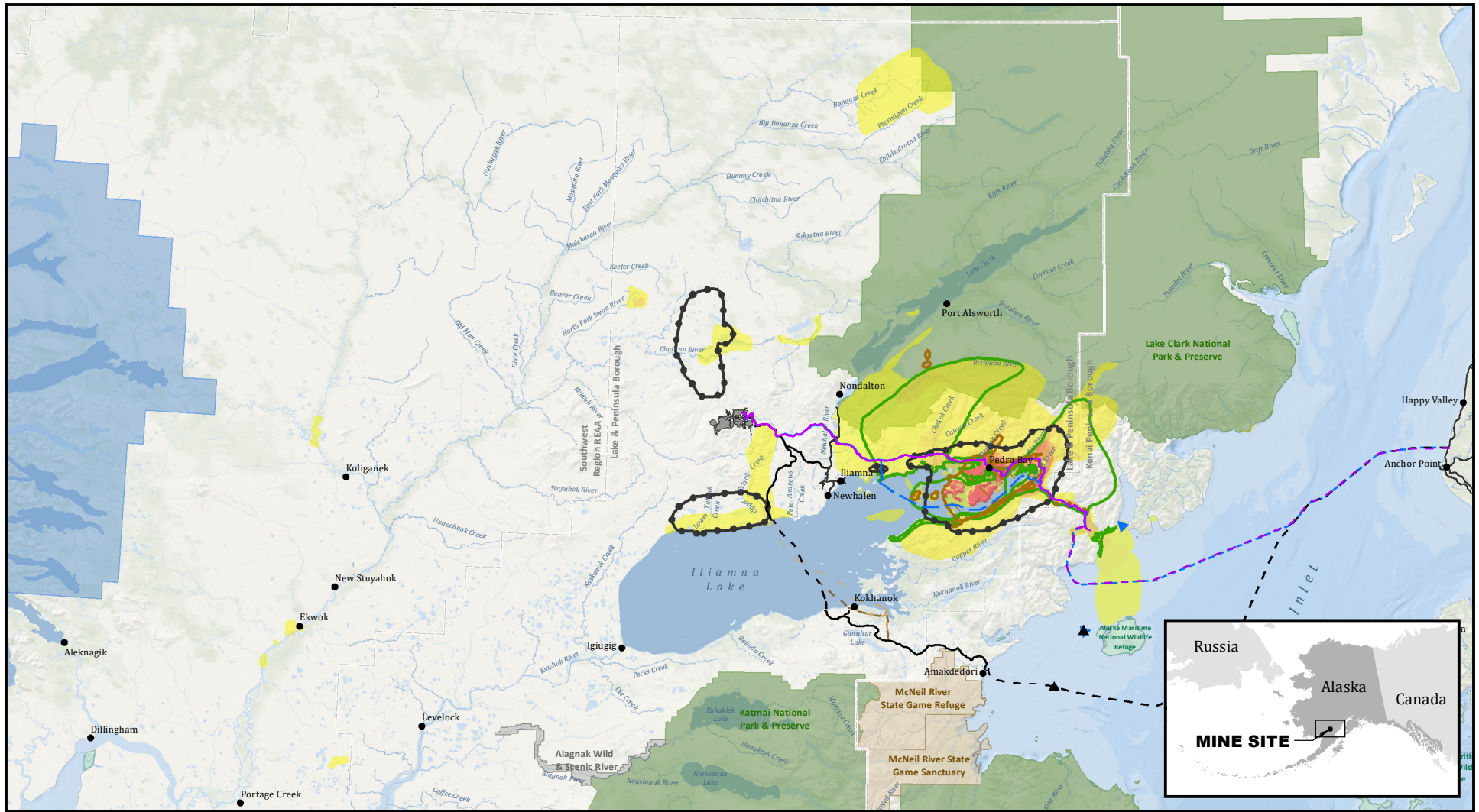
- Borough Boundary
- Wild and Scenic River
- State Game Refuge/Sanctuary
- Alaska State Park
- National Wildlife Refuge

- National Park
- City/Town
- Roads
- River/Stream
- Lake/Pond
- Large Land Mammals, 1980-2002 (Holen et al., 2005)
- All Resources, 2004 (Fall et al., 2006)
- All Resources, 1960-82 (Wright, Morris, and Schroeder, 1985)
- Overlapping Subsistence Use Areas All Resources 1996/97 - 2005/06 (SRB&A 2009c)

- Action Alternative 1
- Alternative 1 Kokhanok East Variant
- Alternative 2
- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - NEWHALEN

FIGURE 3.9-5



Sources: Pebble; USGS; ADNR
Subsistence use areas by
Stephen R. Braund & Associates



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Other Features

--- Borough Boundary

Wild and Scenic River

State Game Refuge/Sanctuary

Alaska State Park

National Wildlife Refuge

National Park

City/Town

Roads

River/Stream

Lake/Pond

Large Land Mammals, 1980-2002
(Holen et al., 2005)

All Resources, 2004
(Fall et al., 2006)

All Resources, 1960-82
(Wright, Morris, and Schroeder, 1985)

Overlapping Subsistence Use Areas
All Resources
1996-2005
(SRB&A 2010d)

--- Action Alternative 1

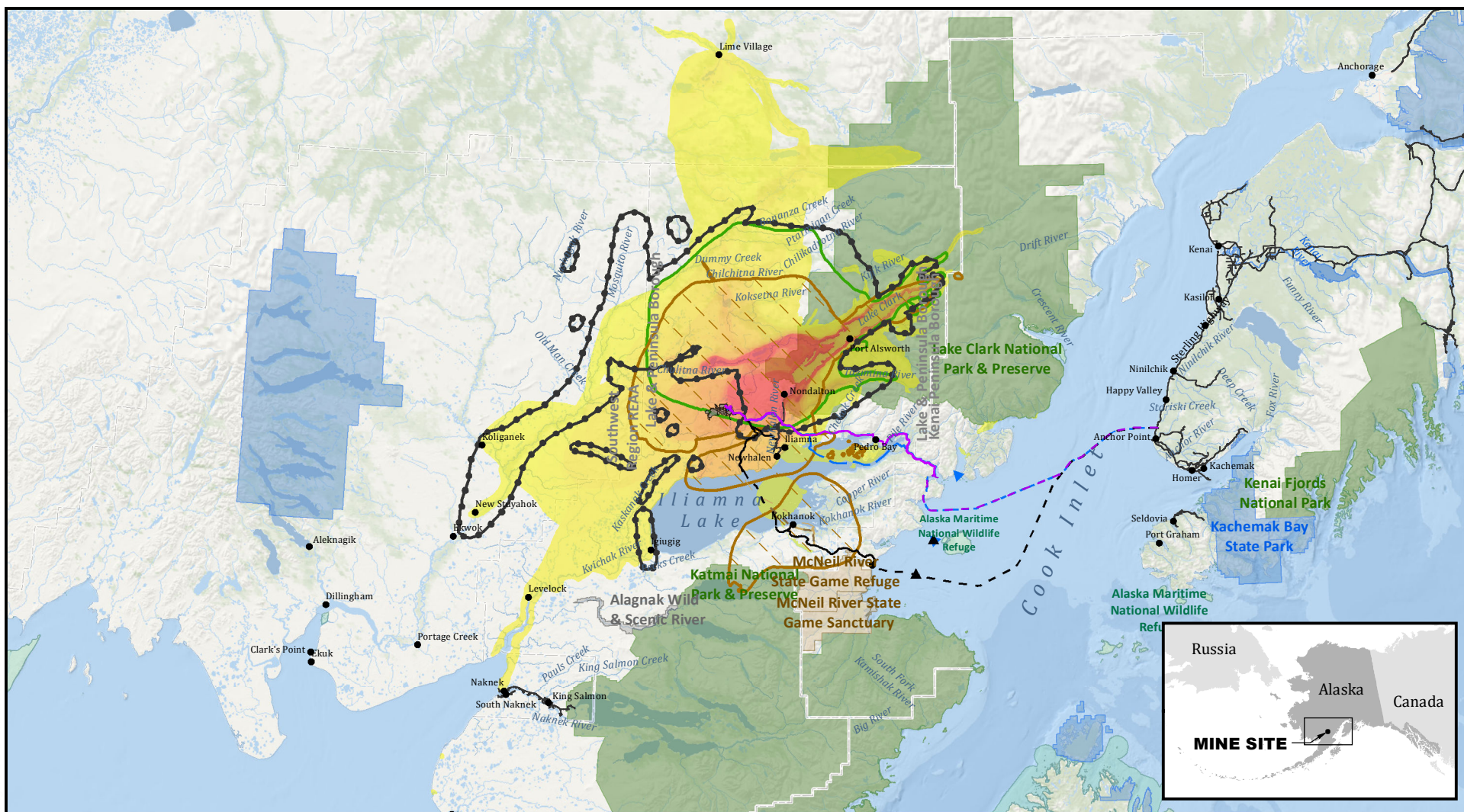
--- Alternative 1 Kokhanok East Variant

--- Alternative 2

--- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - PEDRO BAY

FIGURE 3.9-7



Sources: Pebble; USGS; ADN
Subsistence use areas by
Stephen R. Braund & Associates



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Other Features

--- Borough Boundary

Wild and Scenic River

State Game Refuge/Sanctuary

Alaska State Park

National Wildlife Refuge

National Park

City/Town

Roads

River/Stream

Lake/Pond

Large Land Mammals, 1980-2002
(Holen et al., 2005)

All Resources, 2004
(Fall et al., 2006)

All Resources, 1960-82
(Wright, Morris, and Schroeder, 1985)

Overlapping Subsistence Use Areas
All Resources
1996/97 - 2005/06
(SRB&A 2013b)

--- Action Alternative 1

--- Alternative 1 Kokhanok East Variant

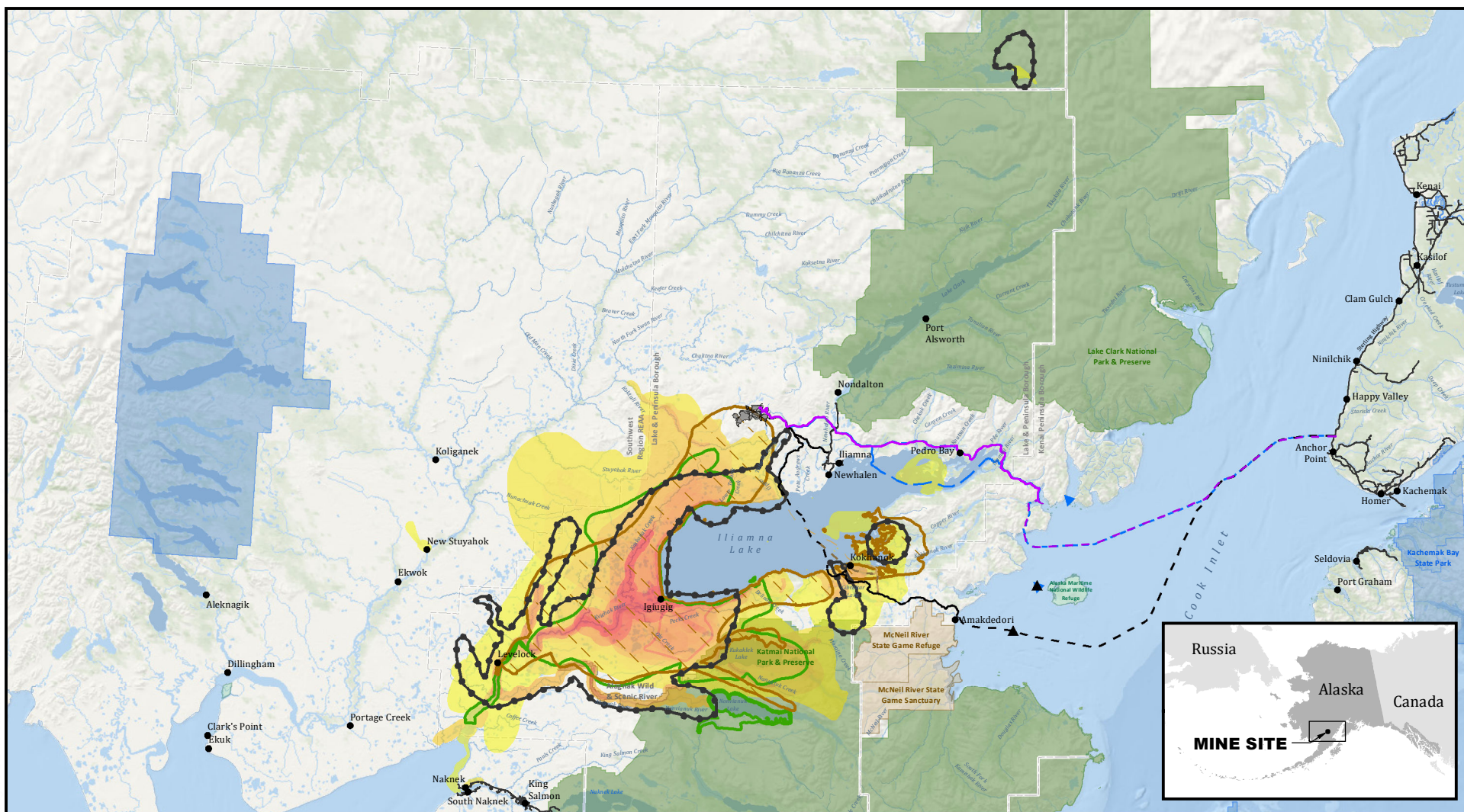
--- Alternative 2

--- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - NONDALTON

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FIGURE 3.9-9



Sources: Pebble; USGS; ADNR
Subsistence use areas by
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Other Features

--- Borough Boundary

Wild and Scenic River

State Game Refuge/Sanctuary

Alaska State Park

National Wildlife Refuge

National Park

City/Town

Roads

River/Stream

Lake/Pond

Large Land Mammals, 1980-2002
(Holen et al., 2005)

All Resources, 2005
(Krieg et al., 2009)

All Resources, 1960-82
(Wright, Morris, and Schroeder, 1985)

Overlapping Subsistence Use Areas
All Resources
1996/97 - 2005/06
(SRB&A 2010b)

--- Action Alternative 1

--- Alternative 1 Kokhanok East Variant

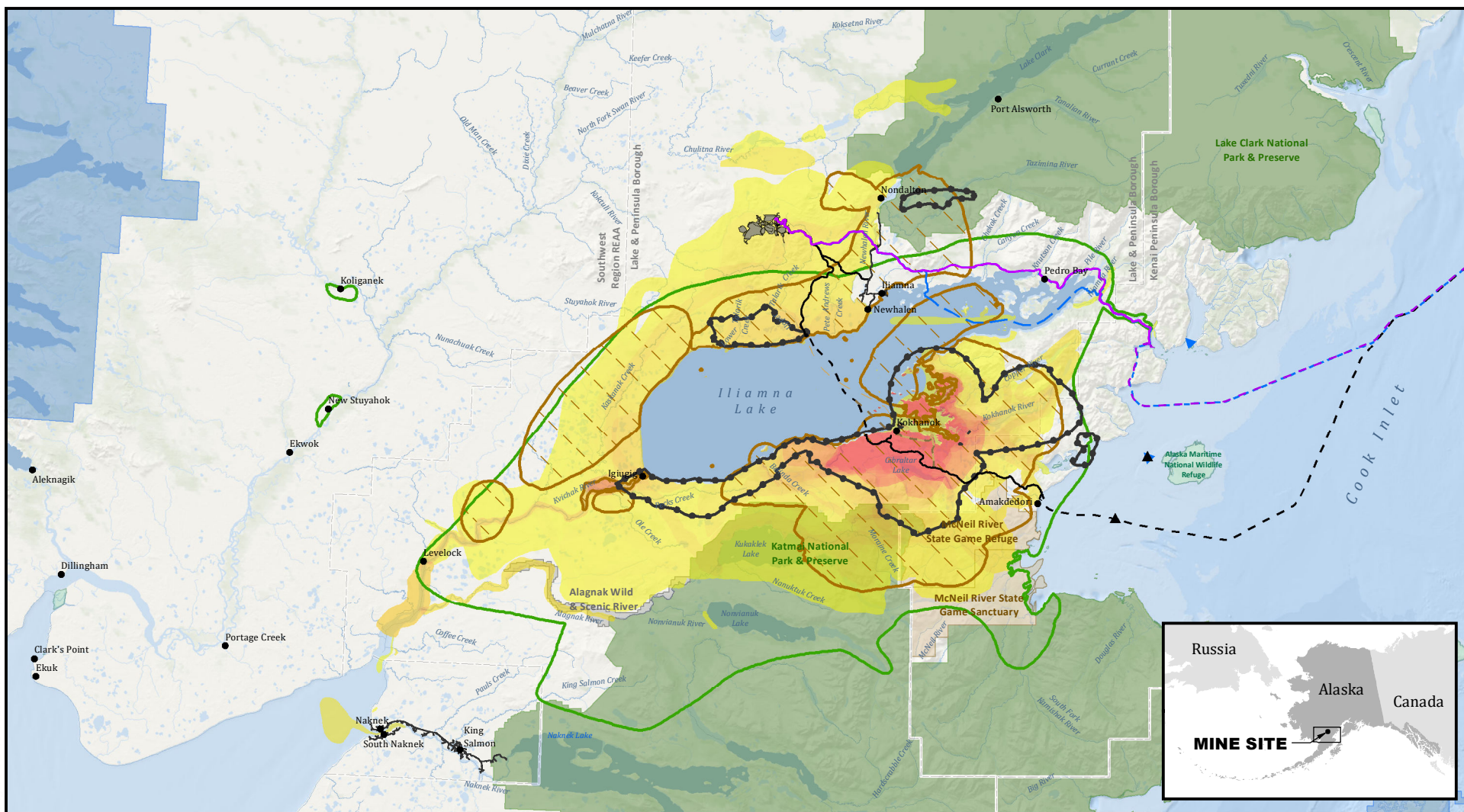
--- Alternative 2

--- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - IGIUGIG

FIGURE 3.9-11

PEBBLE PROJECT EIS



Sources: Pebble; USGS; ADNR
Subsistence use areas by
Stephen R. Braund & Associates



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Other Features

--- Borough Boundary

Wild and Scenic River

State Game Refuge/Sanctuary

Alaska State Park

National Wildlife Refuge

National Park

City/Town

Roads

River/Stream

Lake/Pond

Large Land Mammals, 1980-2002
(Holen et al., 2005)

All Resources, 2005
(Krieg et al., 2009)

All Resources, 1960-82
(Wright, Morris, and Schroeder, 1985)

Overlapping Subsistence Use Areas
All Resources
1996-2005
(SRB&A 2010c)

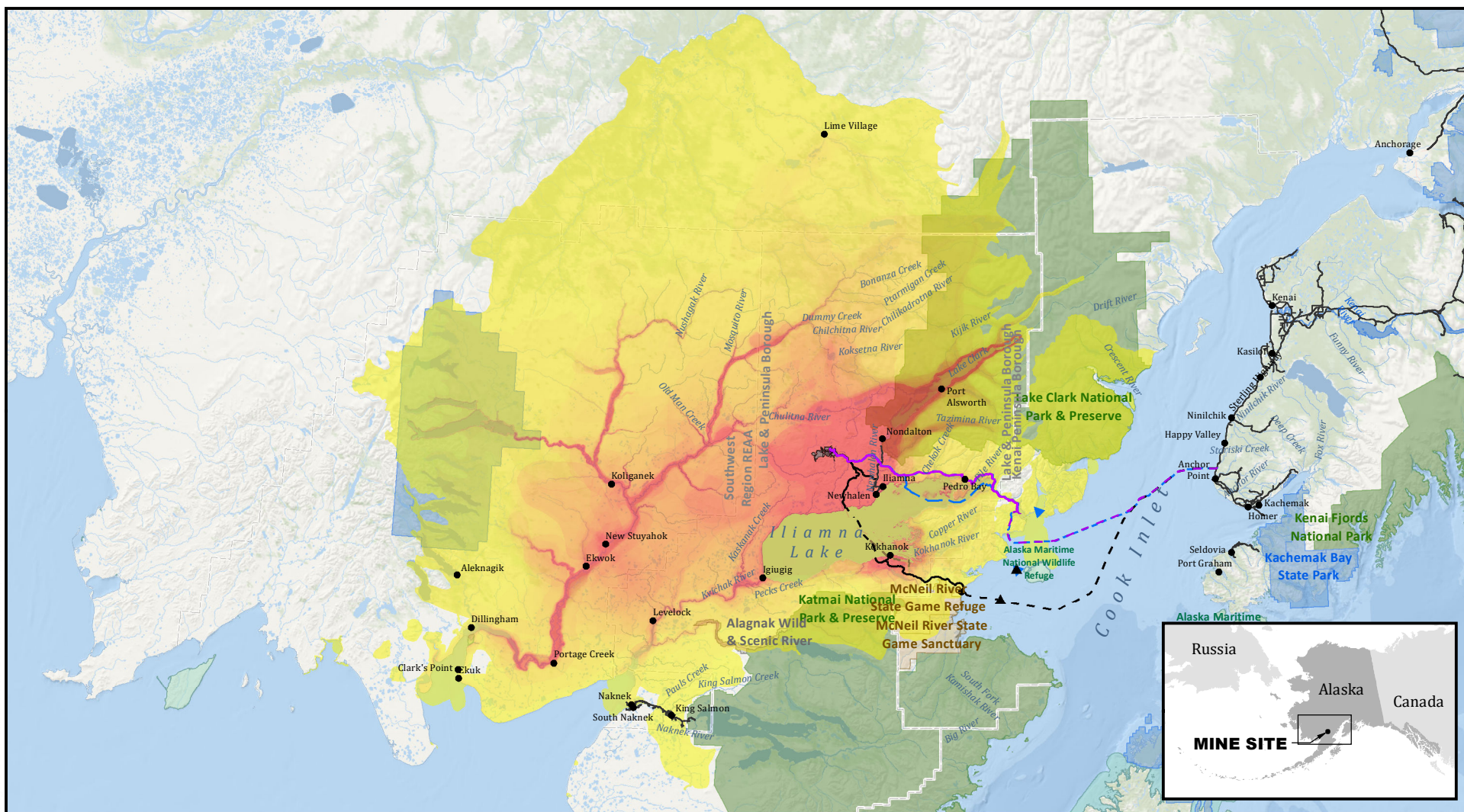
--- Action Alternative 1

--- Alternative 1 Kokhanok East Variant

--- Alternative 2

--- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - KOKHANOK



Sources: Pebble; USGS; ADNRR
Subsistence use areas by
Stephen R. Braund & Associates



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Other Features

- Borough Boundary
- Wild and Scenic River
- State Game Refuge/Sanctuary
- Alaska State Park
- National Wildlife Refuge

- National Park
- City/Town
- Roads
- River/Stream
- Lake/Pond

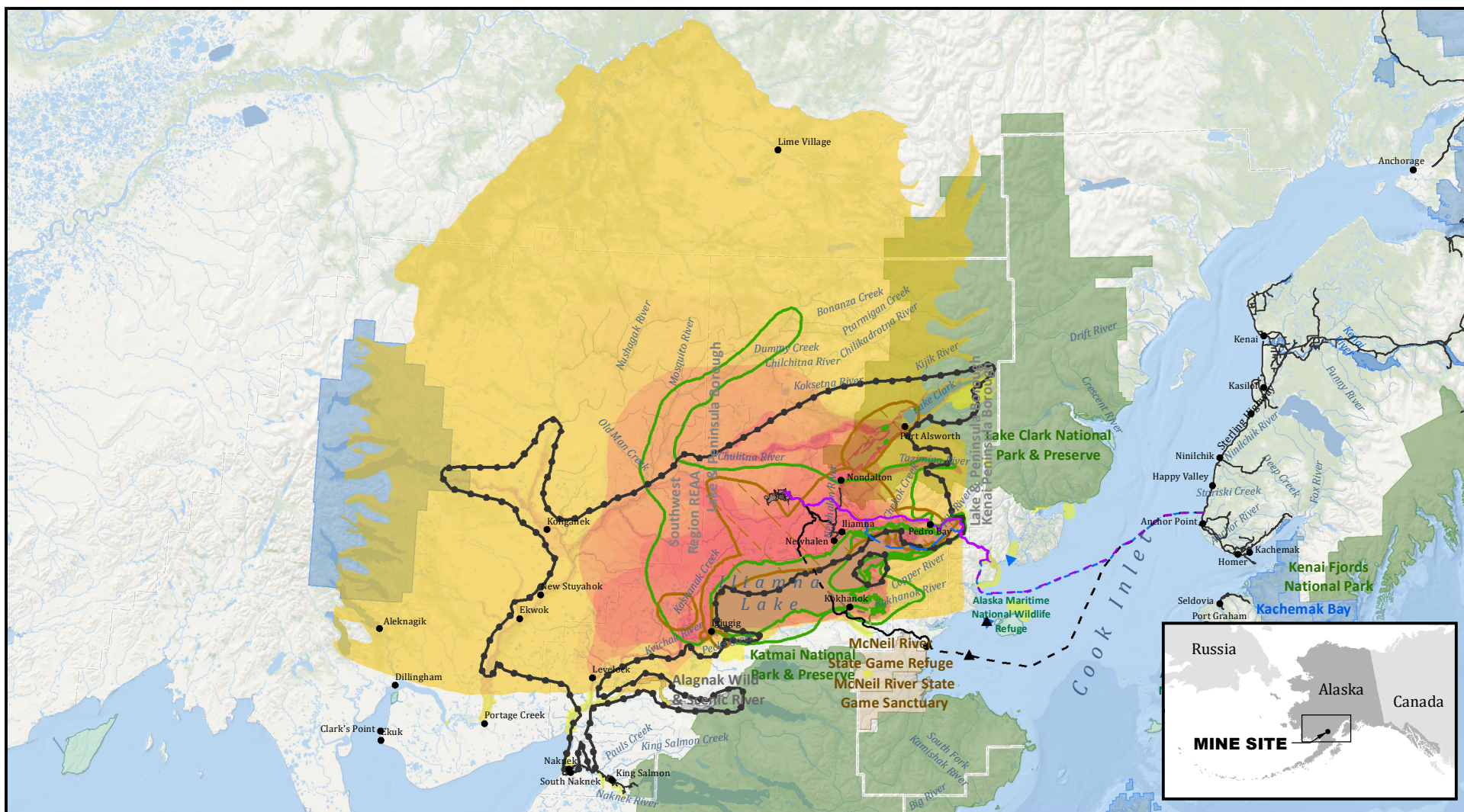
Overlapping Subsistence Use Areas
All Resources
12 Communities
1996/97 - 2005/06
(Pebble Limited Partnership, 2012)

- - - Action Alternative 1
- - - Alternative 1 Kokhanok East Variant
- - - Alternative 2
- - - Alternative 3

PEBBLE PROJECT EIS

SUBSISTENCE USE AREAS

FIGURE 3.9-1



Sources: Pebble; USGS; ADNRR
Subsistence use areas by
Stephen R. Braund & Associates



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Other Features

- Borough Boundary
- Wild and Scenic River
- State Game Refuge/Sanctuary
- Alaska State Park
- National Wildlife Refuge

- National Park
- City/Town
- Roads
- River/Stream
- Lake/Pond

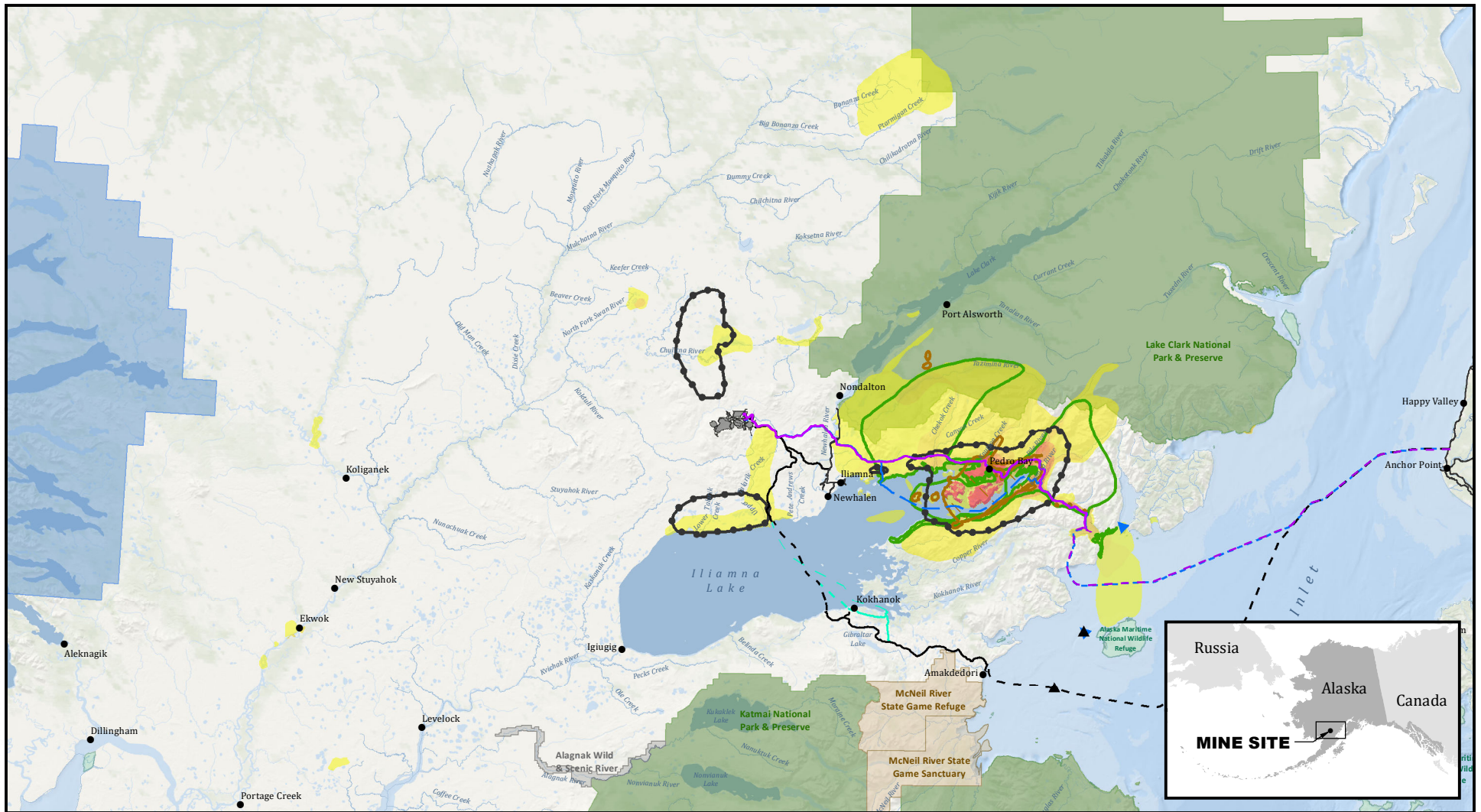
- Large Land Mammals, 1980-2002 (Holen et al., 2005)
- All Resources, 2004 (Fall et al., 2006)
- All Resources, 1960-82 (Wright, Morris, and Schroeder, 1985)
- Overlapping Subsistence Use Areas All Resources 1996/97 - 2005/06 (SRB&A 2009b)

- Action Alternative 1
- Alternative 1 Kokhanok East Variant
- Alternative 2
- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - ILIAMNA

PEBBLE PROJECT EIS

FIGURE 3.9-3



Sources: Pebble; USGS; ADNRS
Subsistence use areas by
Stephen R. Braund & Associates



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Administrative Boundaries

- Wild and Scenic River
- State Game Refuge/Sanctuary
- Alaska State Park
- National Wildlife Refuge

- National Park
- City/Town
- Roads
- River/Stream
- Lake/Pond

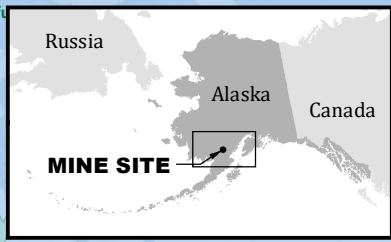
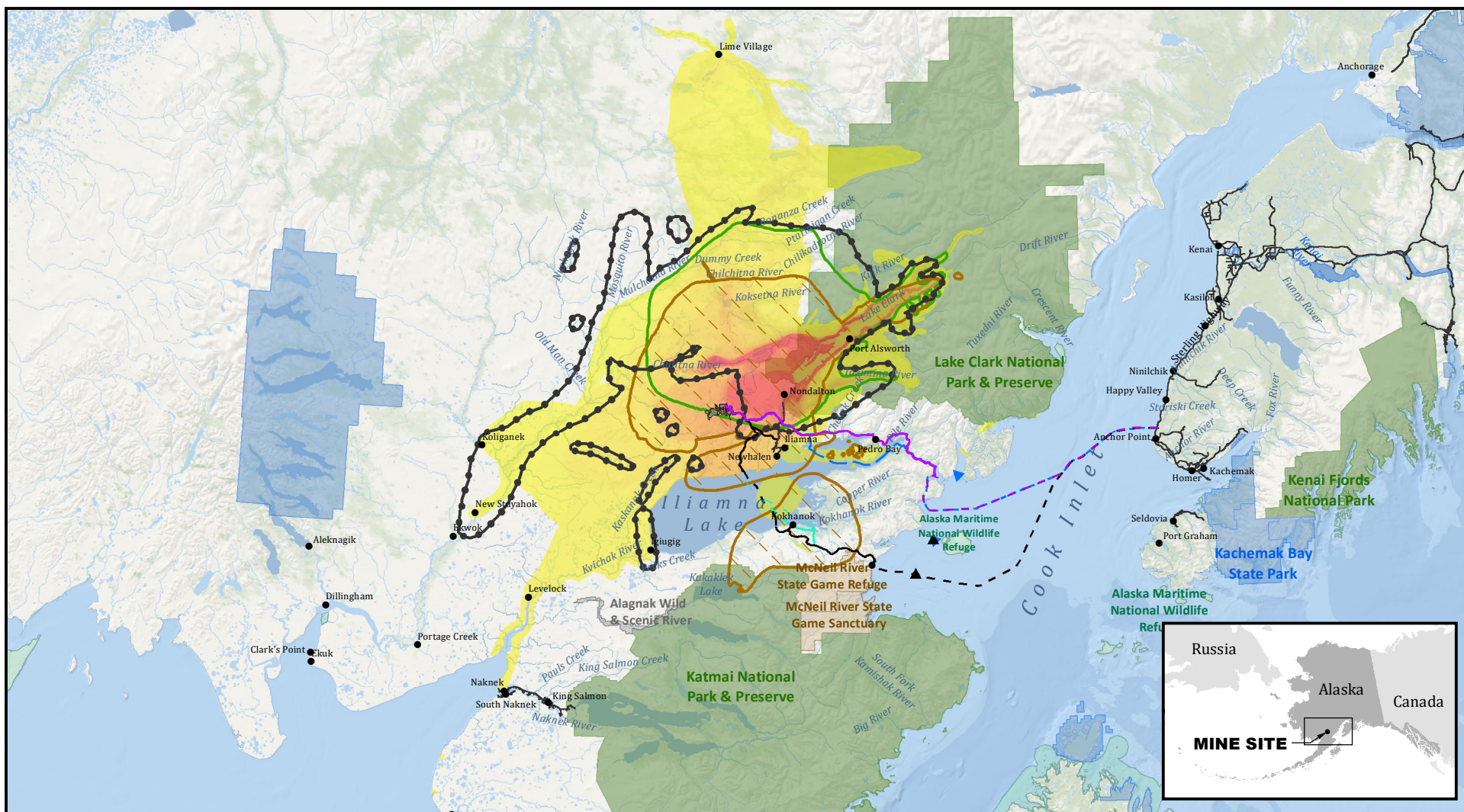
- Large Land Mammals, 1980-2002
(Holen et al., 2005)
- All Resources, 2004
(Fall et al., 2006)
- All Resources, 1960-82
(Wright, Morris, and Schroeder, 1985)
- Overlapping Subsistence Use Areas
All Resources
1996-2005
(SRB&A 2018)

- Alternative 1
- Kokhanok East Ferry Terminal Variant
- Alternative 2
- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - PEDRO BAY

FIGURE 3.9-7

PEBBLE PROJECT EIS



Sources: Pebble; USGS; ADN
Subsistence use areas by
Stephen R. Braund & Associates



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Administrative Boundaries

- Wild and Scenic River
- State Game Refuge/Sanctuary
- Alaska State Park
- National Wildlife Refuge

- National Park
- City/Town
- Roads
- River/Stream
- Lake/Pond

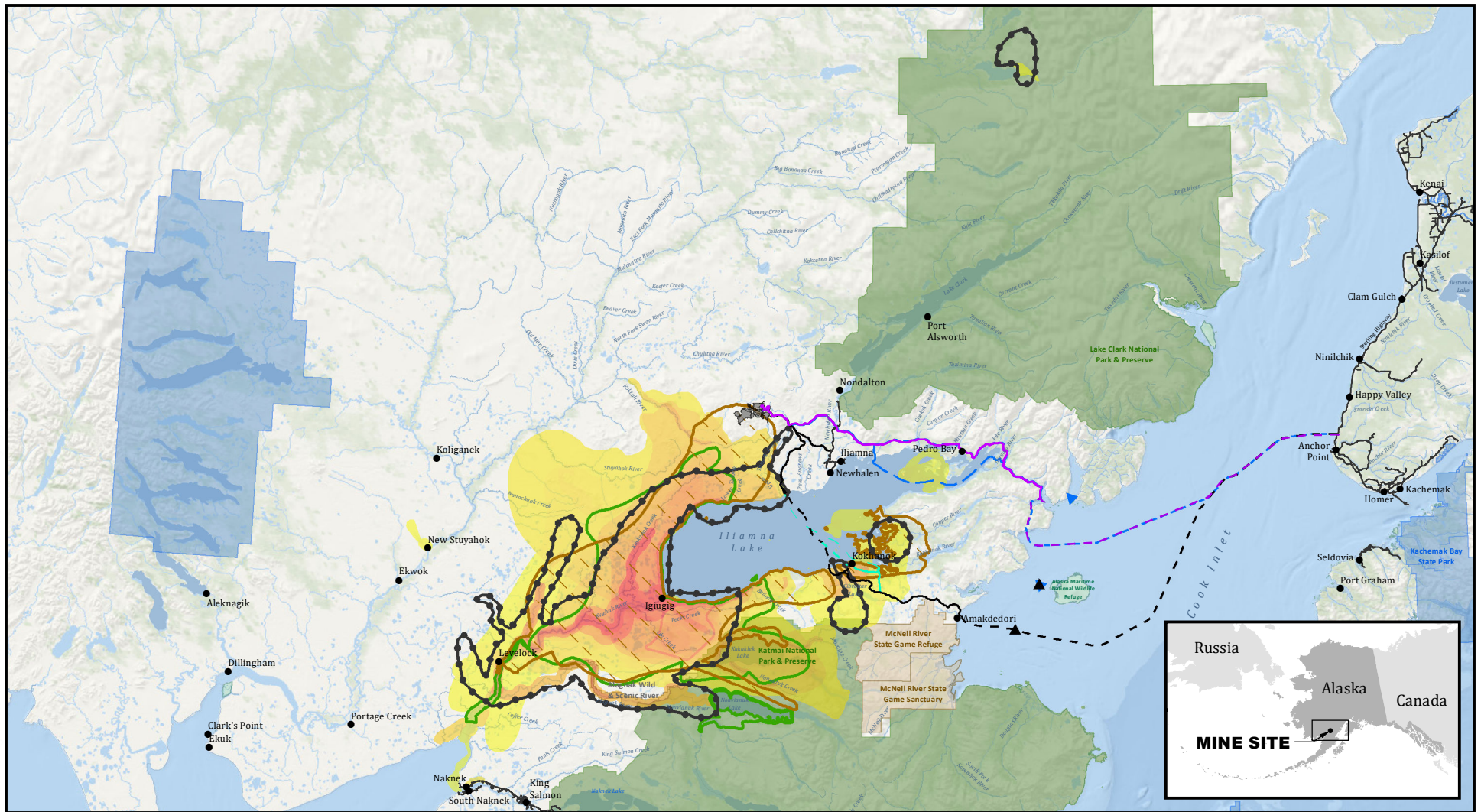
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- All Resources, 1960-82 (Wright, Morris, and Schroeder, 1985)
- Overlapping Subsistence Use Areas All Resources 1996/97 - 2005/06 (SRB&A 2018)

- Alternative 1
- Kokhanok East Ferry Terminal Variant
- Alternative 2
- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - NONDALTON

PEBBLE PROJECT EIS

FIGURE 3.9-9



Sources: Pebble; USGS; ADNR
Subsistence use areas by
Stephen R. Braund & Associates



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Administrative Boundaries

- Wild and Scenic River
- State Game Refuge/Sanctuary
- Alaska State Park
- National Wildlife Refuge

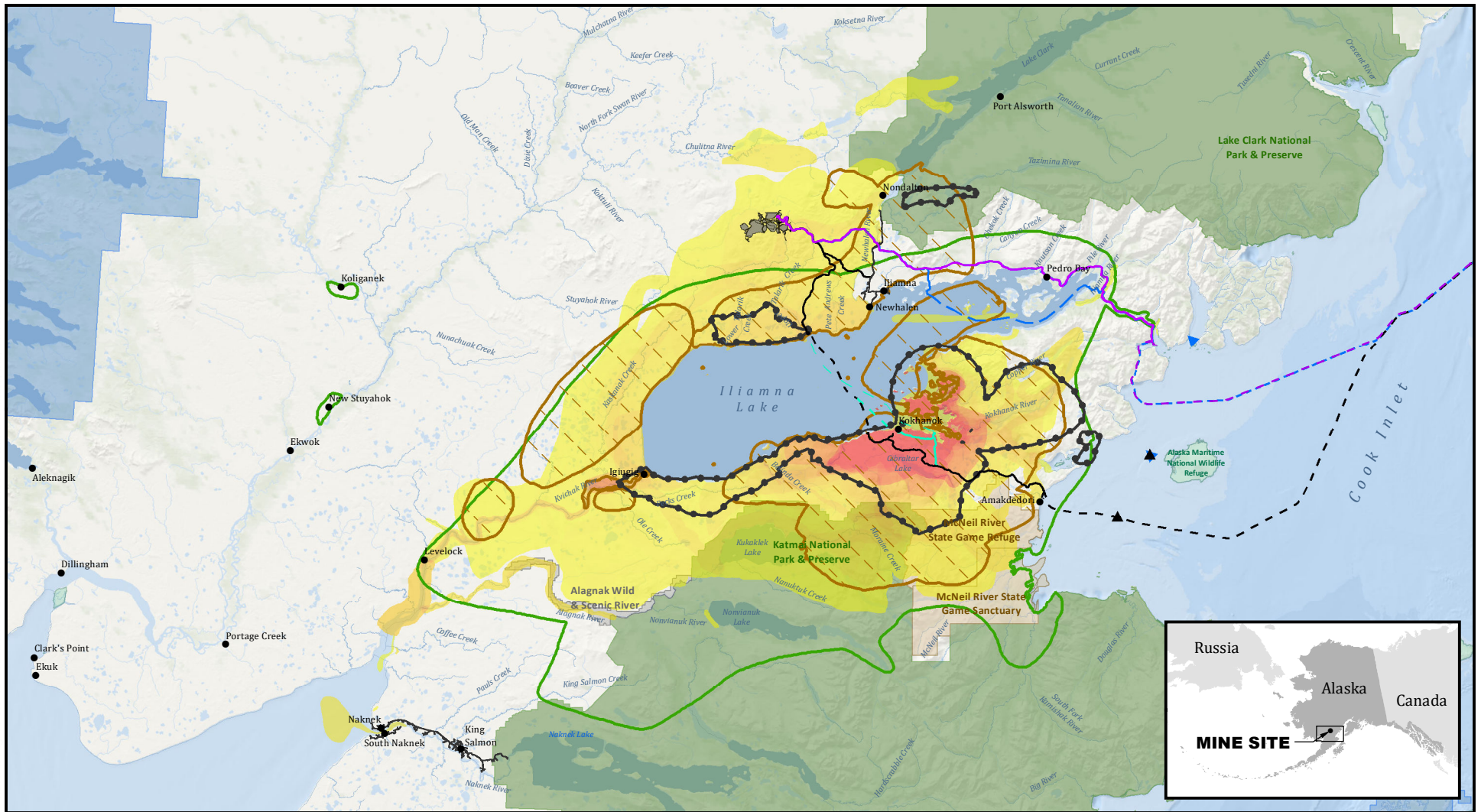
- National Park
- City/Town
- Roads
- River/Stream
- Lake/Pond

- Large Land Mammals, 1980-2002 (Holen et al., 2005)
- All Resources, 2005 (Krieg et al., 2009)
- All Resources, 1960-82 (Wright, Morris, and Schroeder, 1985)
- Overlapping Subsistence Use Areas All Resources 1996/97 - 2005/06 (SRB&A 2018)

- Alternative 1
- Kokhanok East Ferry Terminal Variant
- Alternative 2
- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - IGIUGIG

FIGURE 3.9-11



Sources: Pebble; USGS; ADN
Subsistence use areas by
Stephen R. Braund & Associates



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Miles

Administrative Boundaries

- Wild and Scenic River
- State Game Refuge/Sanctuary
- Alaska State Park
- National Wildlife Refuge

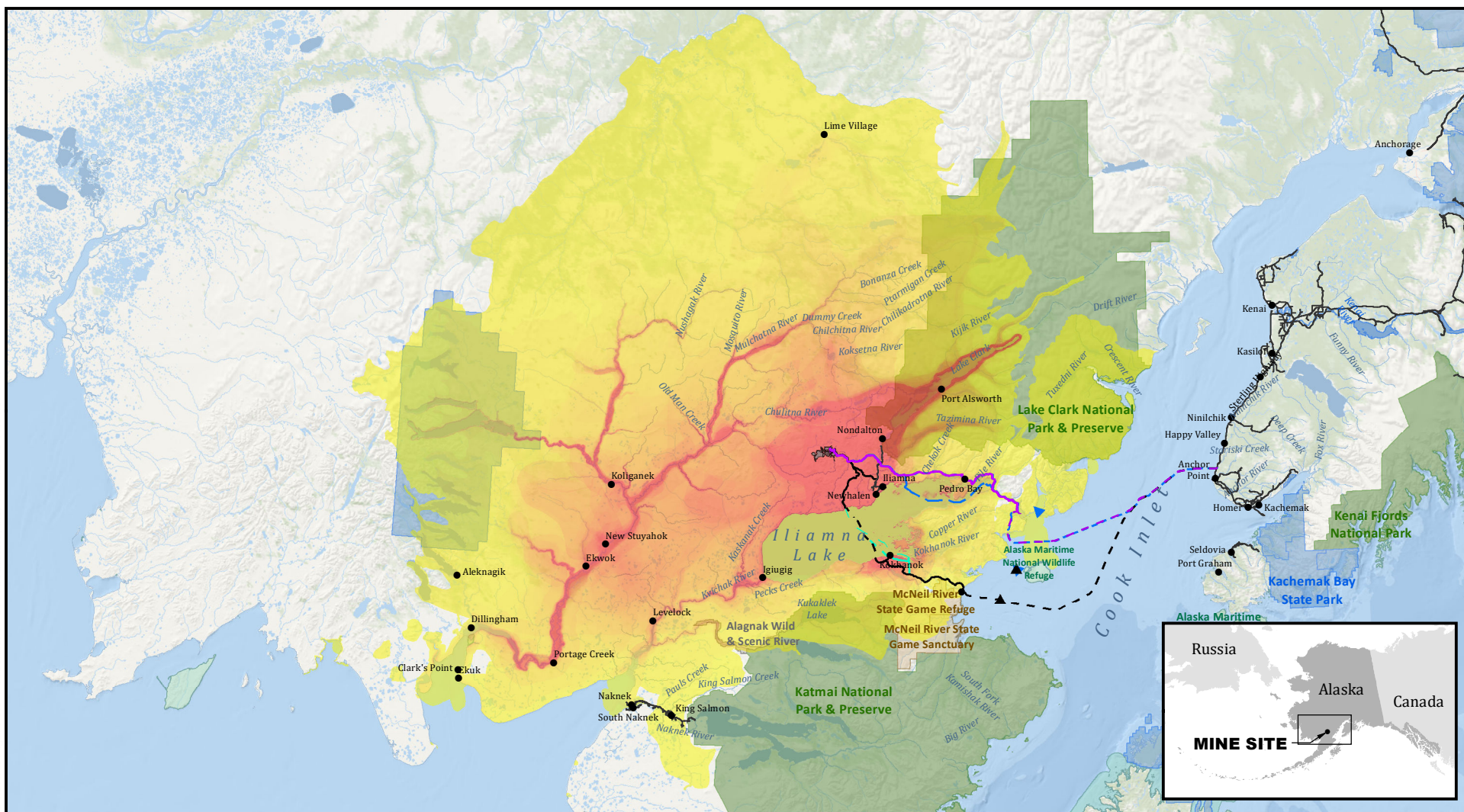
- National Park
- City/Town
- Roads
- River/Stream
- Lake/Pond

- Large Land Mammals, 1980-2002
(Holen et al., 2005)
- All Resources, 2005
(Krieg et al., 2009)
- All Resources, 1960-82
(Wright, Morris, and Schroeder, 1985)
- Overlapping Subsistence Use Areas
All Resources
1996-2005
(SRB&A 2018)

- Alternative 1
- Kokhanok East Ferry Terminal Variant
- Alternative 2
- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - KOKHANOK

FIGURE 3.9-13



Sources: Pebble; USGS; ADN
Subsistence use areas by
Stephen R. Braund & Associates



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Miles

Administrative Boundaries

- Wild and Scenic River
- State Game Refuge/Sanctuary
- Alaska State Park
- National Wildlife Refuge

- National Park
- City/Town
- Roads
- River/Stream
- Lake/Pond

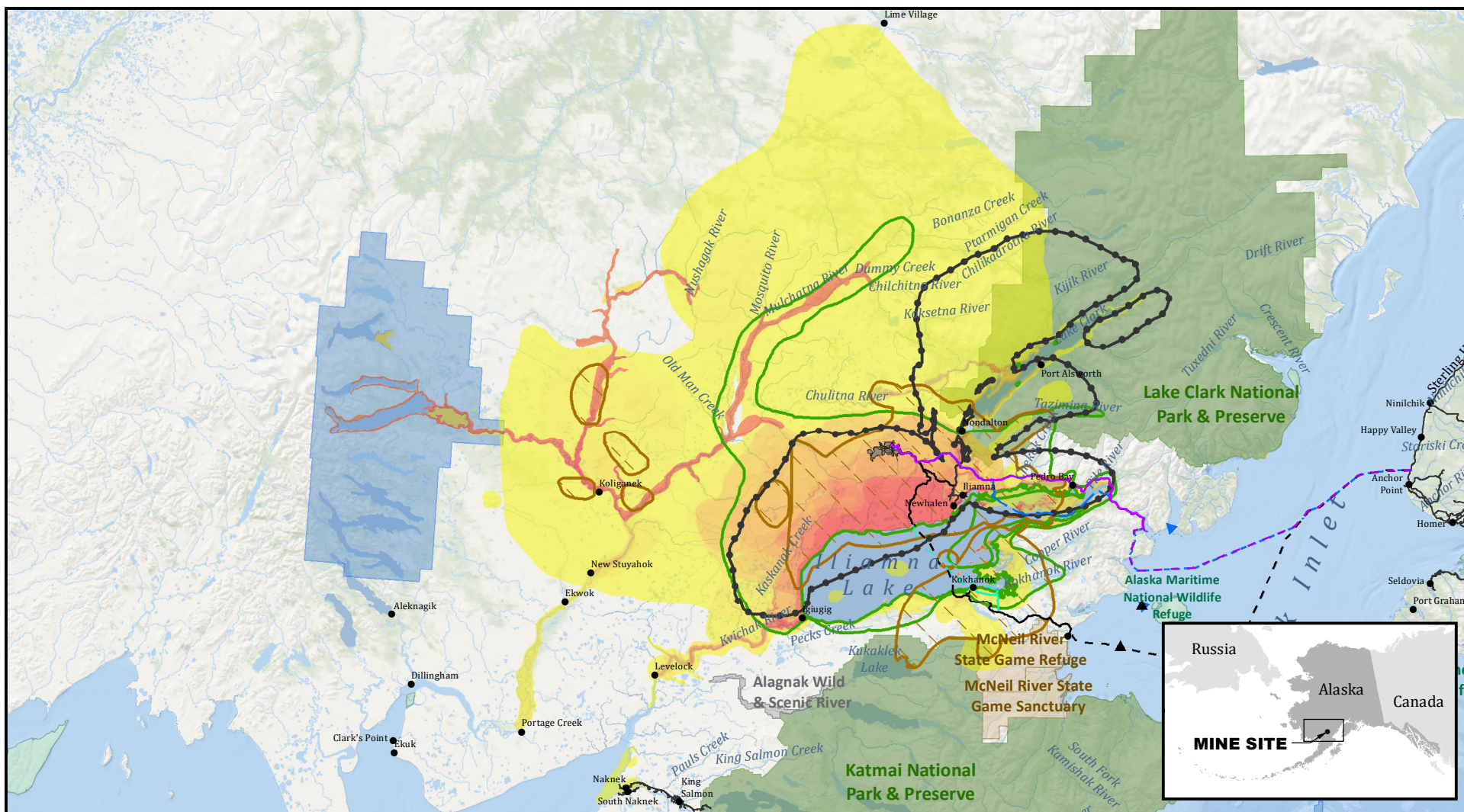
Overlapping Subsistence Use Areas
All Resources
12 Communities
1996/97 - 2005/06
(SRB&A 2018)

- Alternative 1
- Kokhanok East Ferry Terminal Variant
- Alternative 2
- Alternative 3

SUBSISTENCE USE AREAS

PEBBLE PROJECT EIS

FIGURE 3.9-1



Sources: Pebble; USGS; ADNIR
Subsistence use areas by
Stephen R. Braund & Associates



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Miles

Administrative Boundaries

- Wild and Scenic River
- State Game Refuge/Sanctuary
- Alaska State Park
- National Wildlife Refuge

- National Park
- City/Town
- Roads
- River/Stream
- Lake/Pond

- Large Land Mammals, 1980-2002 (Holen et al., 2005)
- All Resources, 2004 (Fall et al., 2006)
- All Resources, 1960-82 (Wright, Morris, and Schroeder, 1985)
- Overlapping Subsistence Use Areas All Resources 1996/97 - 2005/06 (SRB&A 2018)

- Alternative 1
- Kokhanok East Ferry Terminal Variant
- Alternative 2
- Alternative 3

SUBSISTENCE USE AREAS, ALL RESOURCES - NEWHALEN

FIGURE 3.9-5

PEBBLE PROJECT EIS