U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

Central Yukon

Proposed Resource Management Plan/Final Environmental Impact Statement

FINAL

Volume 2: Appendices A-K

April 2024



Prepared by:

U.S. Department of the Interior
Bureau of Land Management

In Cooperation with:

U.S. Fish and Wildlife Service
Allakaket Tribal Council
Ruby Tribal Council
Koyukuk Tribal Council
Tanana Tribal Council
Nulato Tribal Council
Venetie Tribal Council
State of Alaska

Mission

To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

Cover Photo: Dalton Highway Utility Corridor.

Photo by Craig McCaa (BLM).

DOI-BLM-AK-F030-2013-0062-RMP-EIS

BLM/AK/PL-21/002+1610+F03

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State of Alaska

Estimated lead agency total costs associated with producing this Final RMP/EIS:

$6,700,000

VOLUME 2: APPENDIXES A TO K

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B Collaboration and Coordination
C Land Tenure
D Relationship to BLM Policies, Plans, and Programs
E ANILCA Access—Implementing Sections 811 and 1110(a)
F Standard Operating Procedures and Fluid Mineral Leasing Stipulations
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Appendix A
Maps

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APPENDIX A
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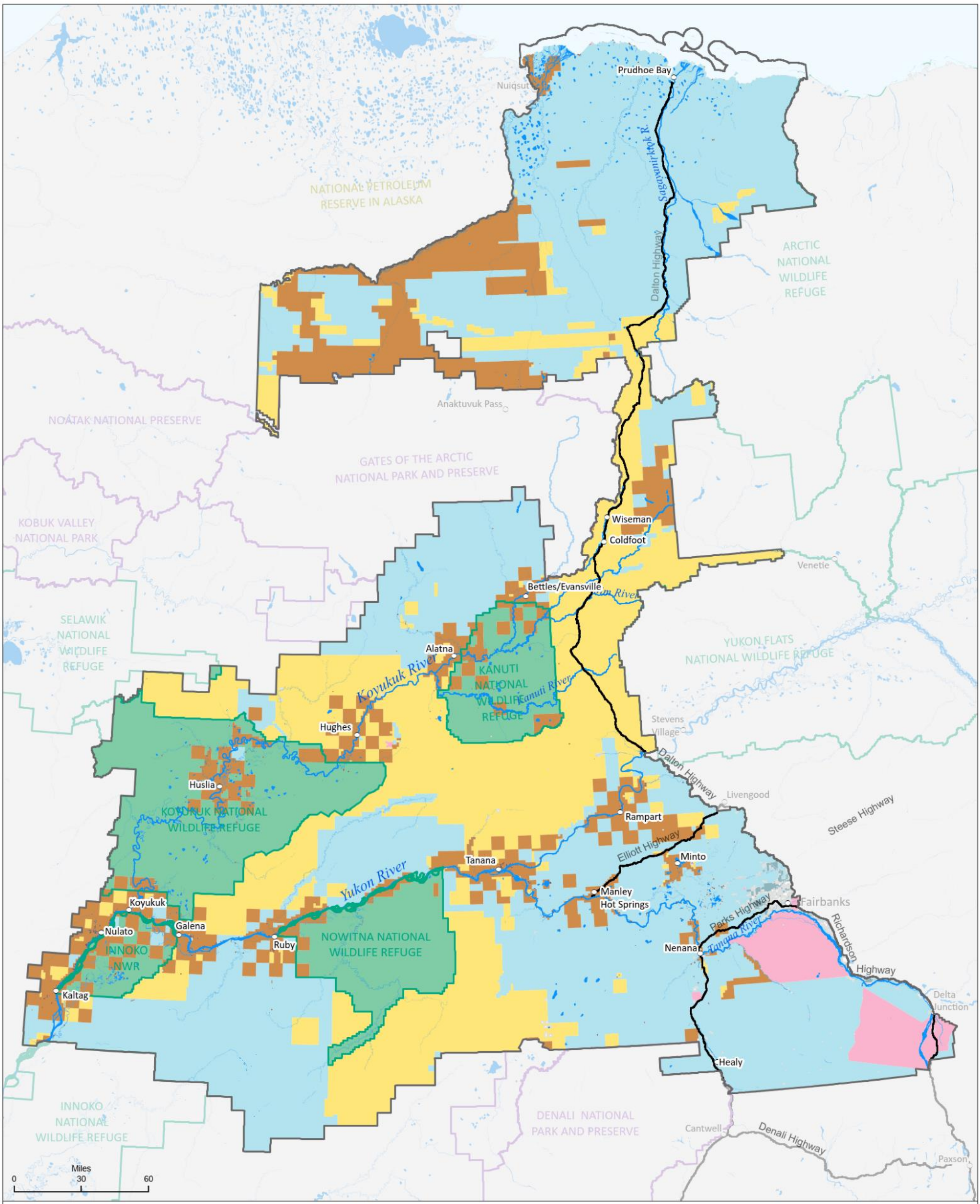
Geographic information system (GIS) data have been used to perform acreage calculations and to generate the maps in **Appendix A**, here. Calculations depend on the quality and availability of data. Most calculations in this RMP are rounded to the nearest 1,000 acres or 1 mile. Given the scale of the analysis, the compatibility constraints between datasets, and the lack of data for some resources, all calculations are approximate and serve for comparison and analytic purposes only. Likewise, the maps in **Appendix A** are provided for illustration only and are subject to the limitations discussed above. The BLM may receive additional or updated data, so acreages may be recalculated and revised later.

Maps in **Appendix A** display data on Bureau of Land Management surface or subsurface. The Department of Defense's surface and mineral estate are withdrawn, and the withdrawal will be retained for all alternatives. As such, this RMP does not make other decisions on DOD land, except for designating the travel management areas

Changes made between the publication of the Draft RMP/EIS and the Proposed RMP/Final EIS are the following:

Updates to GIS acres in the document to reflect more accurate GIS data.

- In all alternatives, the BLM made updates to GIS data to reflect surface administration changes that have occurred since the start of the RMP process. BLM-managed lands were conveyed from BLM to ASRC in in townships 009S011W, 009S012W, 009S013W, and 009S015W.
- The BLM identified needed factual corrections to the geographic extent of the ANCSA 17(d)(1) withdrawals. The corrections identified additional lands withdrawn by ANCSA 17(d)(1) Public Land Orders (PLOs) and BLM made associated updates to the alternatives and affected environment. A map of the additional lands now correctly identified as being under these PLOs is included in **Appendix A**, here.
- The GIS source for tables and maps was kept as "BLM GIS 2017" but the references' chapter full reference was updated to note that the GIS data were last updated in March 2024.

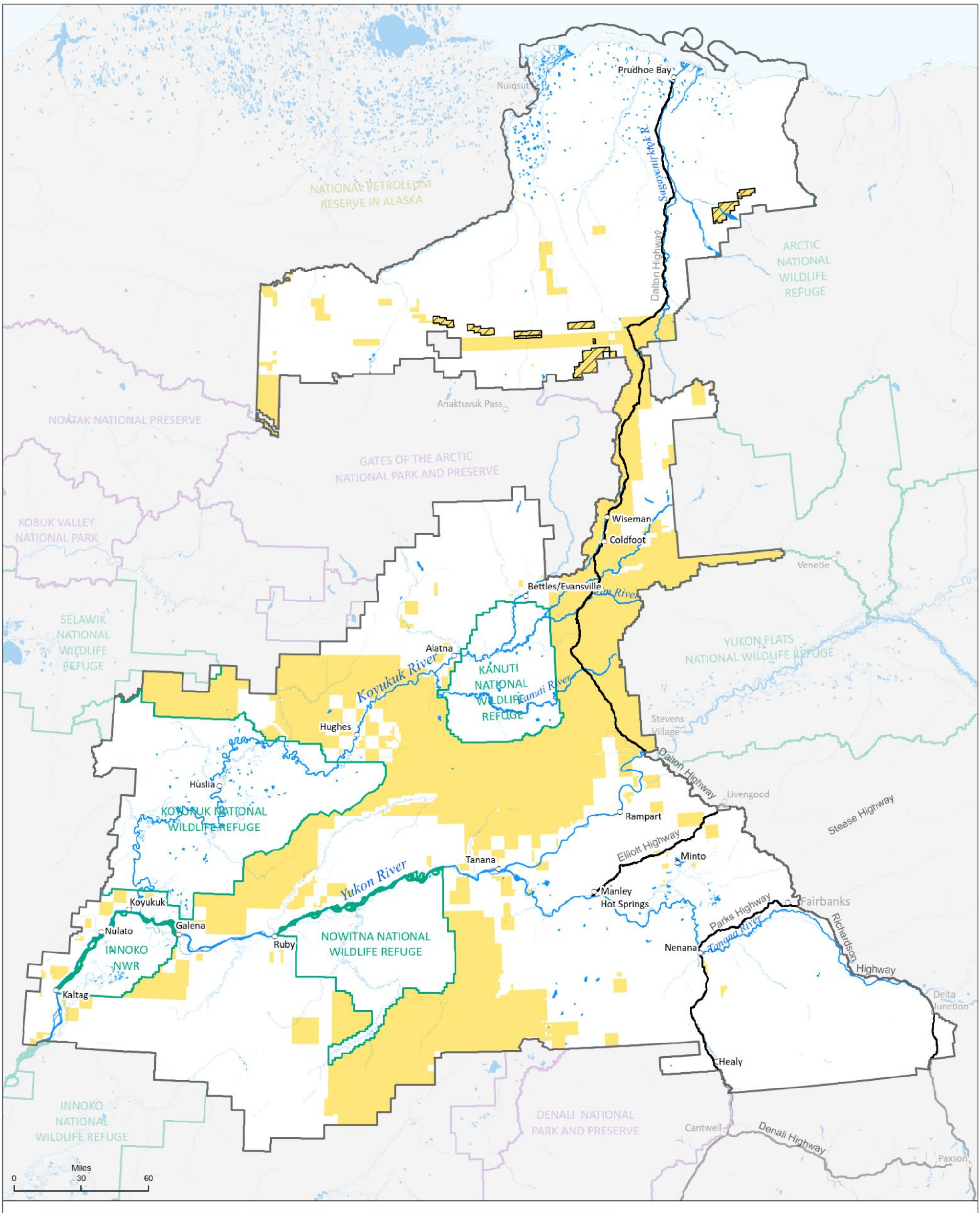


Map 1.1

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Data Source: BLM GIS 2017

Print Date: 04/03/2024



BLM-managed lands: In all alternatives, the BLM made updates to GIS data to reflect surface administration changes that occurred since the start of the RMP process. BLM-managed lands were conveyed from the BLM to Arctic Slope Regional Corporation (ASRC) in townships 009S011W, 009S012W, 2 009S013W, and 009S015W.

BLM surface, Native patent subsurface: BLM manages some privately owned subsurface lands through Native patents where the BLM makes no mineral decisions.

Map 1.2

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Data Source: BLM GIS 2017

Print Date: 04/03/2024

Nuiqsut
Prudhoe Bay
Sagavanirktok R.
NATIONAL PETROLEUM RESERVE IN ALASKA
PLO 5169
ARCTIC NATIONAL WILDLIFE REFUGE
PLO 5179
PLO 5169
PLO 5169
PLO 5169
PLO 5169
PLO 5179
Anaktuvuk Pass
PLO 5180
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
Wiseman
Coldfoot
KOBUK VALLEY NATIONAL PARK
PLO 5173
PLO 5180
Venetie
PLO 5242
PLO 5180
PLO 5179
Bettles/Evansville
PLO 5173
Alatna
SELAWIK NATIONAL WILDLIFE REFUGE
YUKON FLATS NATIONAL WILDLIFE REFUGE
KANUTI NATIONAL WILDLIFE REFUGE
PLO 5184
PLO 5184
PLO 5173
PLO 5184
PLO 5173
PLO 5179
PLO 5184
Hughes
Stevens Village
Dalton Highway
PLO 5173
Huslia
PLO 5184
Livengood
Rampart
PLO 5179
PLO 5173
PLO 5173
KOYUKUK NATIONAL WILDLIFE REFUGE
PLO 5184
PLO 5186
Steese Highway
Elliott Highway
Tanana
Minto
PLO 5180
PLO 5173
Yukon River
PLO 5184
Manley Hot Springs
Fairbanks
PLO 5184
PLO 5179
Koyukuk
Nulato
Galena
Ruby
PLO 5173
Parks Highway
Tanana River
Richardson Highway
Nenana
INNOKO NWR
NOWITNA NATIONAL WILDLIFE REFUGE
PLO 5184
PLO 5184
PLO 5184
PLO 5180
Kaltag
PLO 5179
PLO 5173
PLO 5179
PLO 5173
PLO 5173
PLO 5184
PLO 5173
PLO 5186
PLO 5184
PLO 5173
Healy
Innoko River
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

Dalton Utility Corridor public land order (PLO) 5150 (inner and outer corridor)

PLO 5150 outer utility corridor

PLO 5150 inner utility corridor

Alaska Native Claims Settlement Act (ANCSA) 17(d)(1) withdrawals are in place and generally close lands to all forms of appropriation under public laws, including mining and mineral leasing:

PLO 5169 PLO 5179 PLO 5184 PLO 5242

PLO 5173 PLO 5180 PLO 5186

BLM lands under PLOs in Draft EIS

BLM-managed lands

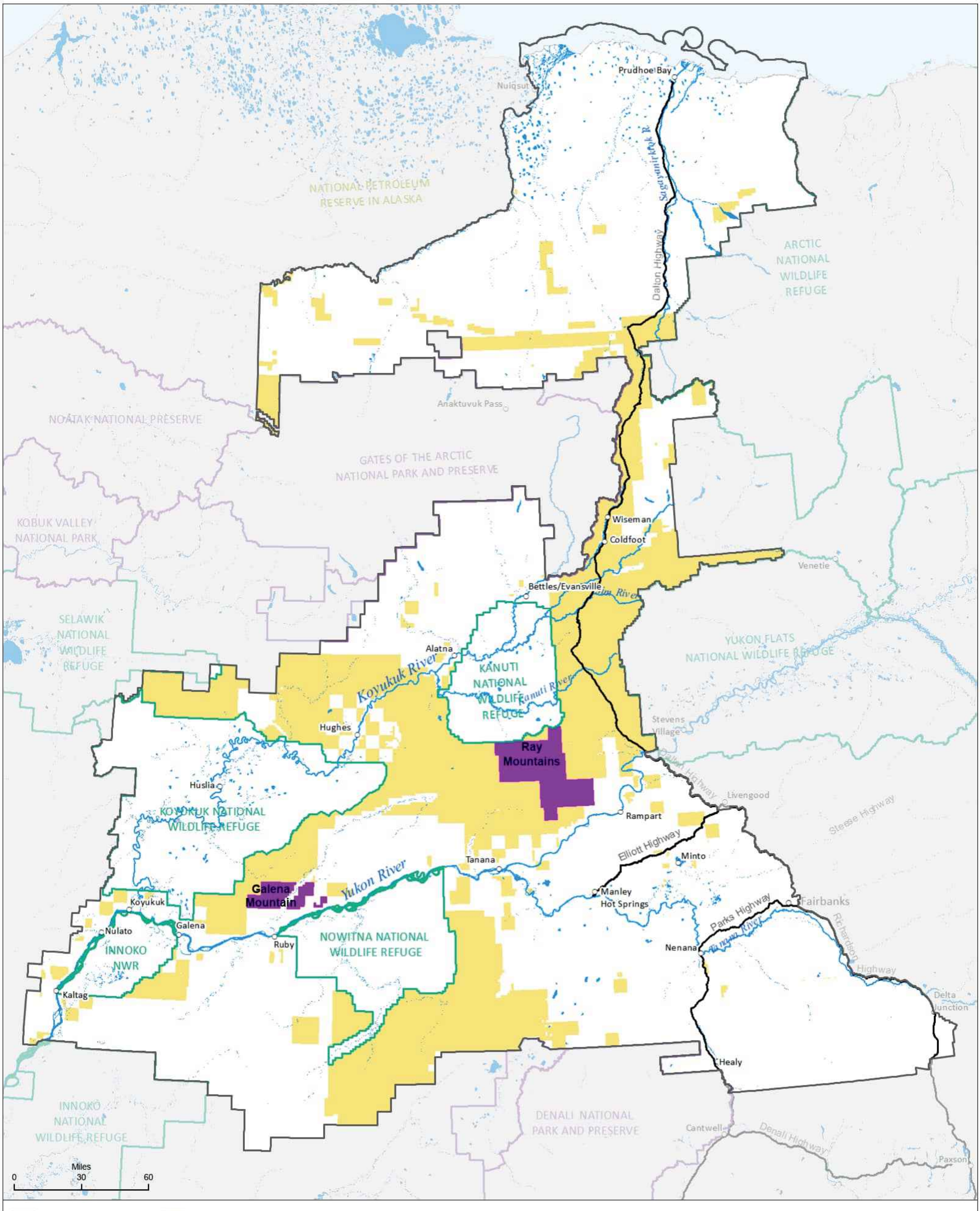
Withdrawn to the Department of Defense, withdrawal remains intact

Map 1.3

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Data Source: BLM GIS 2017

Print Date: 04/03/2024



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Data Source: BLM GIS 2017

Map 2.1

Print Date: 02/13/2024

Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Dalton Highway
Livengood
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Koyukuk
Nulato
Galena
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
INNOKO NWR
Parks Highway
Fairbanks
Tanana River
Nenana
Richardson Highway
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0 30 60

Dall sheep habitat area (DSHA)
Dall sheep movement corridor (DSMC)
Dall sheep study area (DSSA)
BLM-managed lands



Map 2.2

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Data Source: BLM GIS 2017

Print Date: 04/03/2024

Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
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Livengood
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Koyukuk
Nulato
Galena
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Nenana
Richardson Highway
INNOKO NWR
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

Dall sheep habitat area (DSHA)
BLM-managed lands

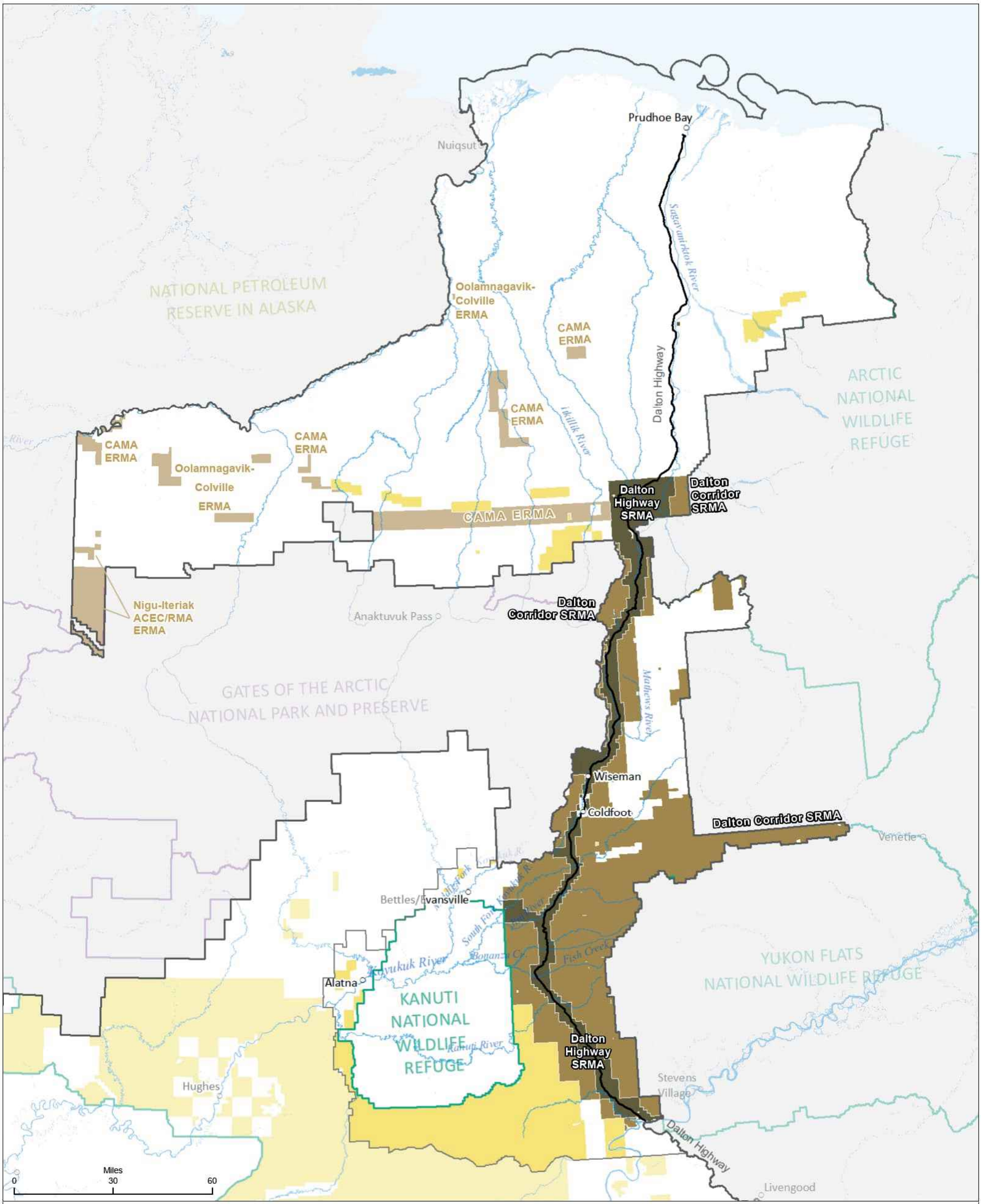


Map 2.3

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Print Date: 02/13/2024



Special Recreation Management Area (SRMA) Dalton Highway
Special Recreation Management Area (SRMA) Dalton Corridor
Extensive Recreation Management Area (ERMA)
BLM-managed lands

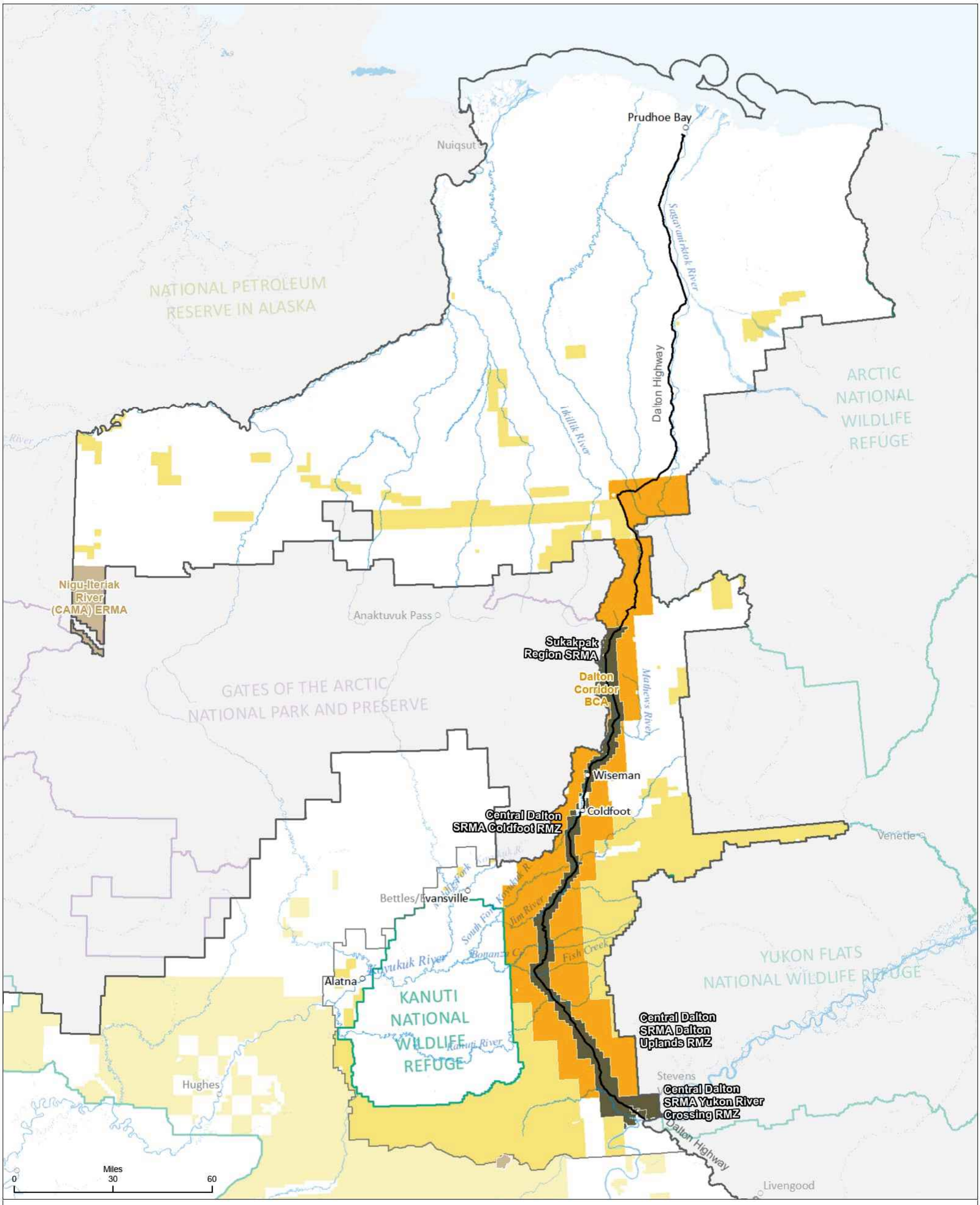


Map 2.4

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Data Source: BLM GIS 2017

Print Date: 02/13/2024



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Data Source: BLM GIS 2017

Map 2.5

Print Date: 02/13/2024

Prudhoe Bay
Nuiqsut
Sagavanirktok River
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Itkillik River
Dalton Highway Corridor SRMA
Brooks Range North/ Galbraith Lake RMZ
Nigu-Iteriak River (CAMA) ERMA
Anaktuvuk Pass
Dalton Highway Corridor SRMA
Outer Corridor RMZ
Dalton Highway Corridor SRMA
Brooks Range South RMZ
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
Mathews River
Wiseman
Dalton Highway Corridor SRMA
Coldfoot RMZ
Coldfoot
Venetie
Dalton Highway Corridor SRMA
Chapman Lake RMZ
Dalton Highway Corridor SRMA Grayling Lake RMZ
Bettles/Evansville
Dalton Highway Corridor SRMA
Arctic Circle RMZ
Alatna
Koyukuk River
YUKON FLATS NATIONAL WILDLIFE REFUGE
KANUTI NATIONAL WILDLIFE REFUGE
Dalton Highway Corridor SRMA
Finger Mountain RMZ
Kanuti River
Hughes
Stevens Village
Dalton Highway Corridor SRMA
Yukon River RMZ
Dalton Highway
Spooky Valley ERMA
Livengood
Miles
0
30
60

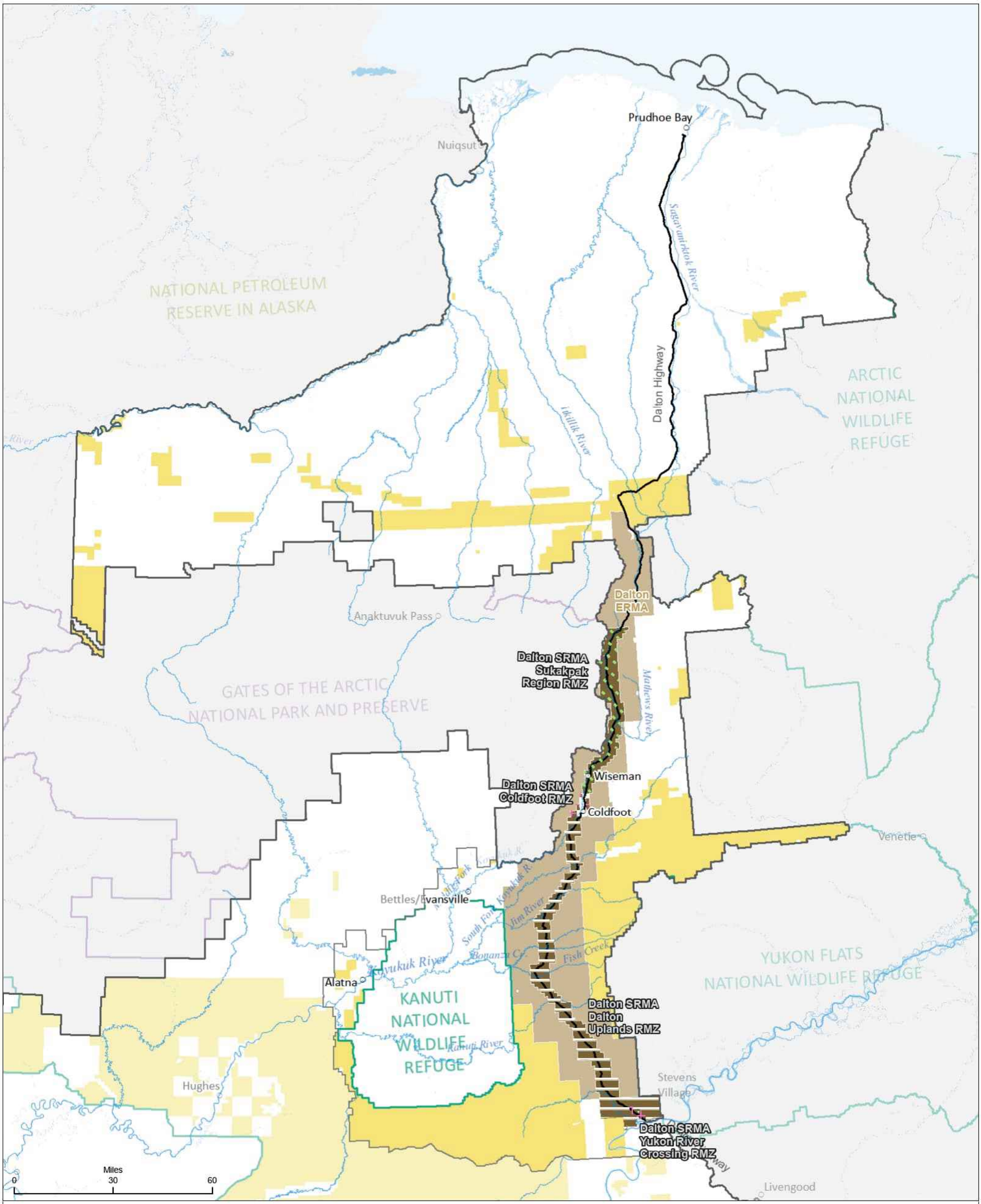
Special Recreation Management Area (SRMA), semiprimitive
SRMA, front country recreation management zone (RMZ)
SRMA, rural RMZ
SRMA, backcountry RMZ
Extensive Recreation Management Area (ERMA)
BLM-managed lands

Map 2.6

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Data Source: BLM GIS 2017

Print Date: 02/13/2024

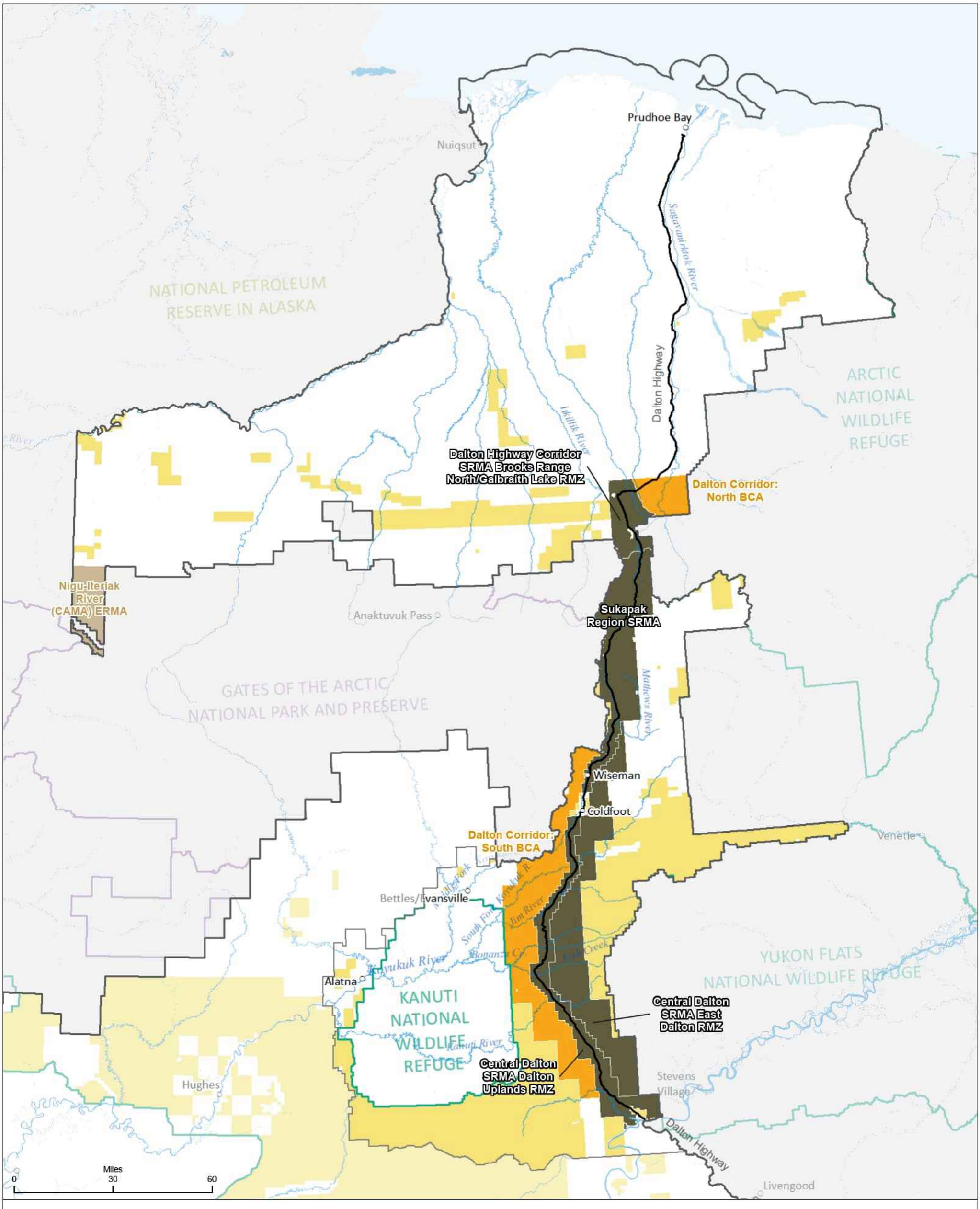


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Data Source: BLM GIS 2017

Map 2.7

Print Date: 02/13/2024

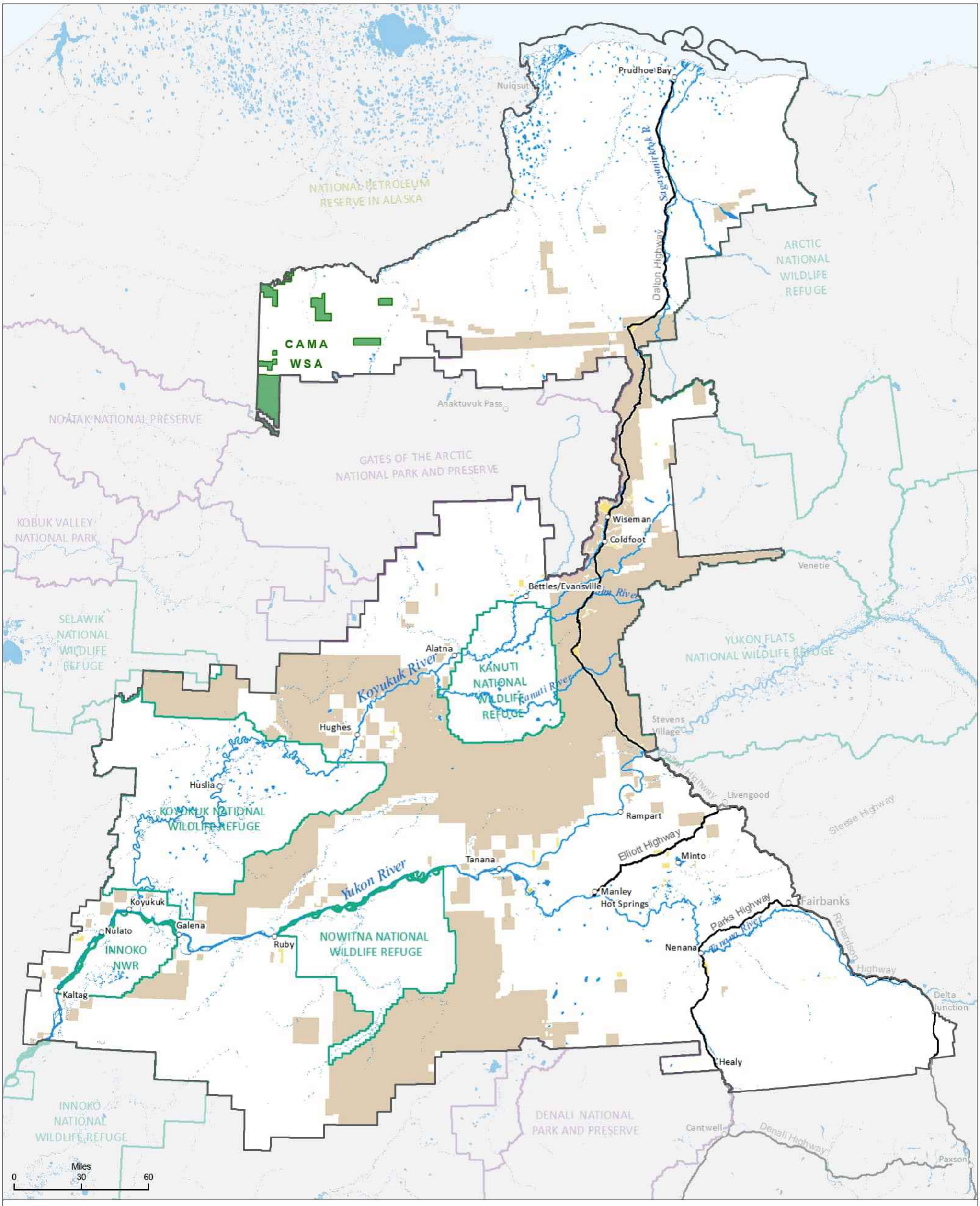


Map 2.8

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Data Source: BLM GIS 2017

Print Date: 02/13/2024



Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses

Lands managed to emphasize other multiple uses while applying management restrictions to reduce impacts on wilderness characteristics

Lands with wilderness characteristics managed to emphasize other resource values and multiple uses

Central Arctic Management Area (CAMA) Existing Wilderness Study Area (WSA)

BLM-managed lands without wilderness characteristics

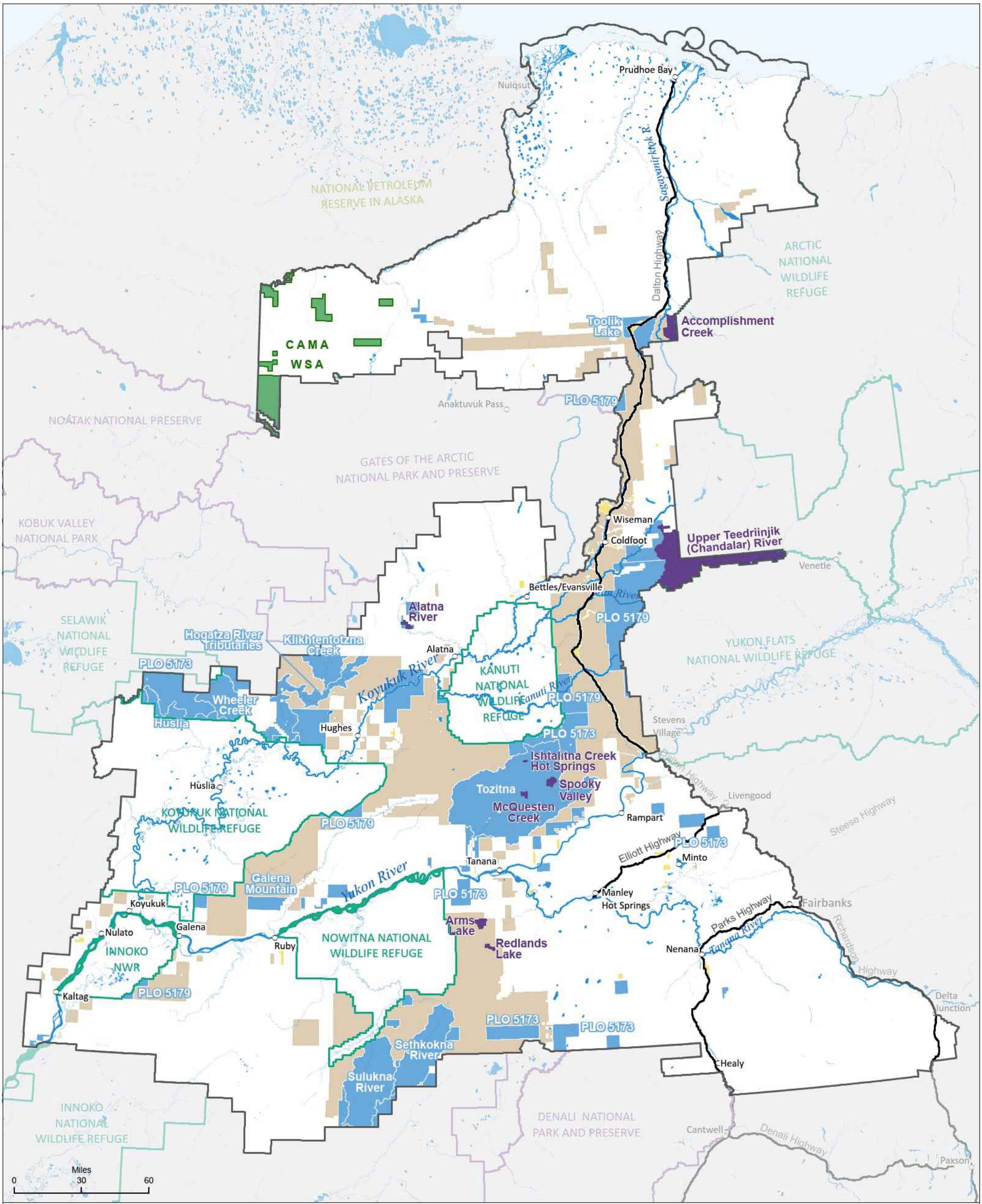


Map 2.9

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Data Source: BLM GIS 2017

Print Date: 02/13/2024



Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses

Lands managed to emphasize other multiple uses while applying management restrictions to reduce impacts on wilderness characteristics

Lands with wilderness characteristics managed to emphasize other resource values and multiple uses

Central Arctic Management Area (CAMA) Existing Wilderness Study Area (WSA)

BLM-managed lands without wilderness characteristics

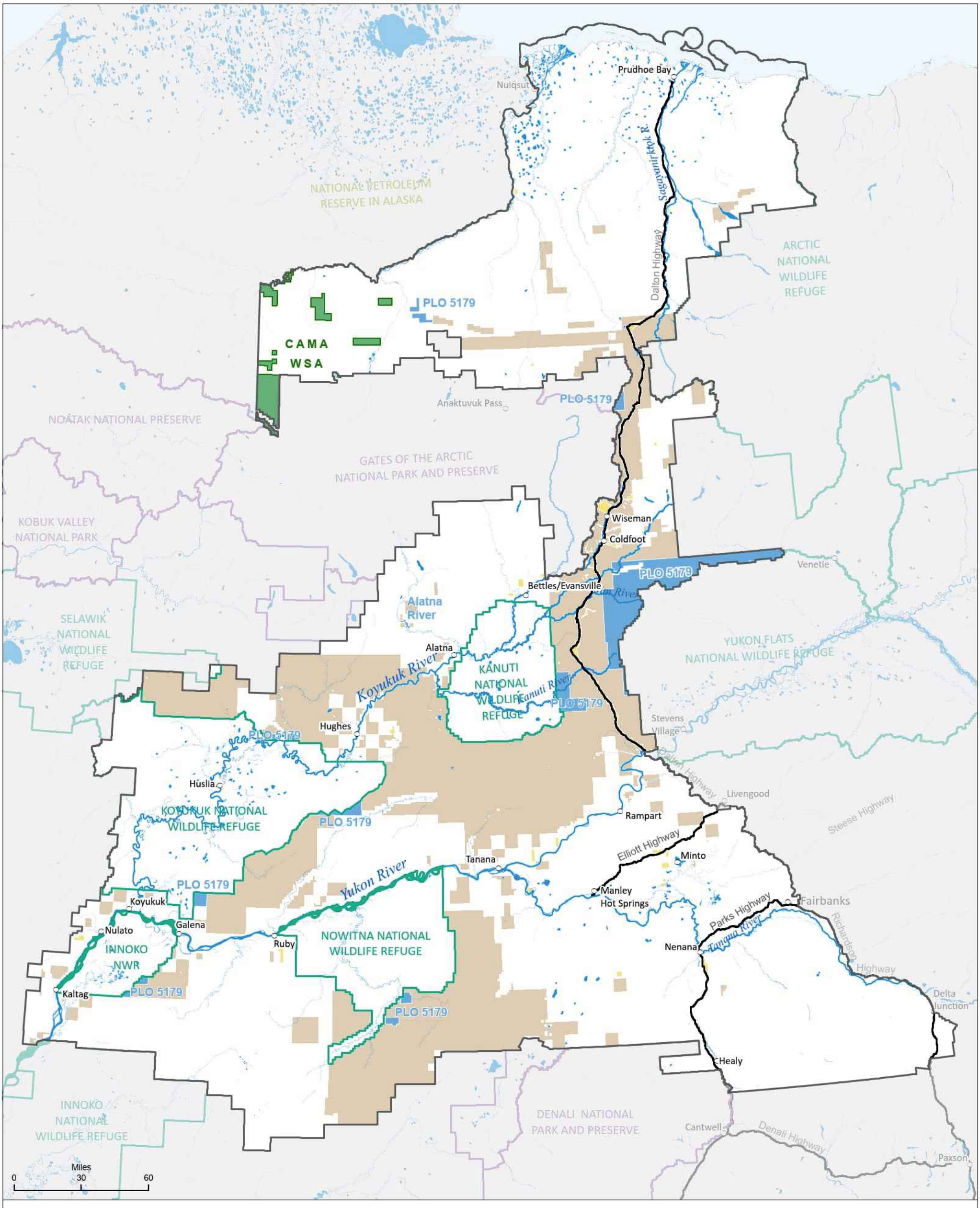


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Data Source: BLM GIS 2017

Map 2.10

Print Date: 04/03/2024



Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses

Lands managed to emphasize other multiple uses while applying management restrictions to reduce impacts on wilderness characteristics

Lands with wilderness characteristics managed to emphasize other resource values and multiple uses

Central Arctic Management Area (CAMA) Existing Wilderness Study Area (WSA)

BLM-managed lands without wilderness characteristics



Map 2.11

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 04/03/2024

Wild and Scenic River (WSR) segment eligible (Alternative A) or suitable (Alternative B) for inclusion in the National Wild and Scenic River System

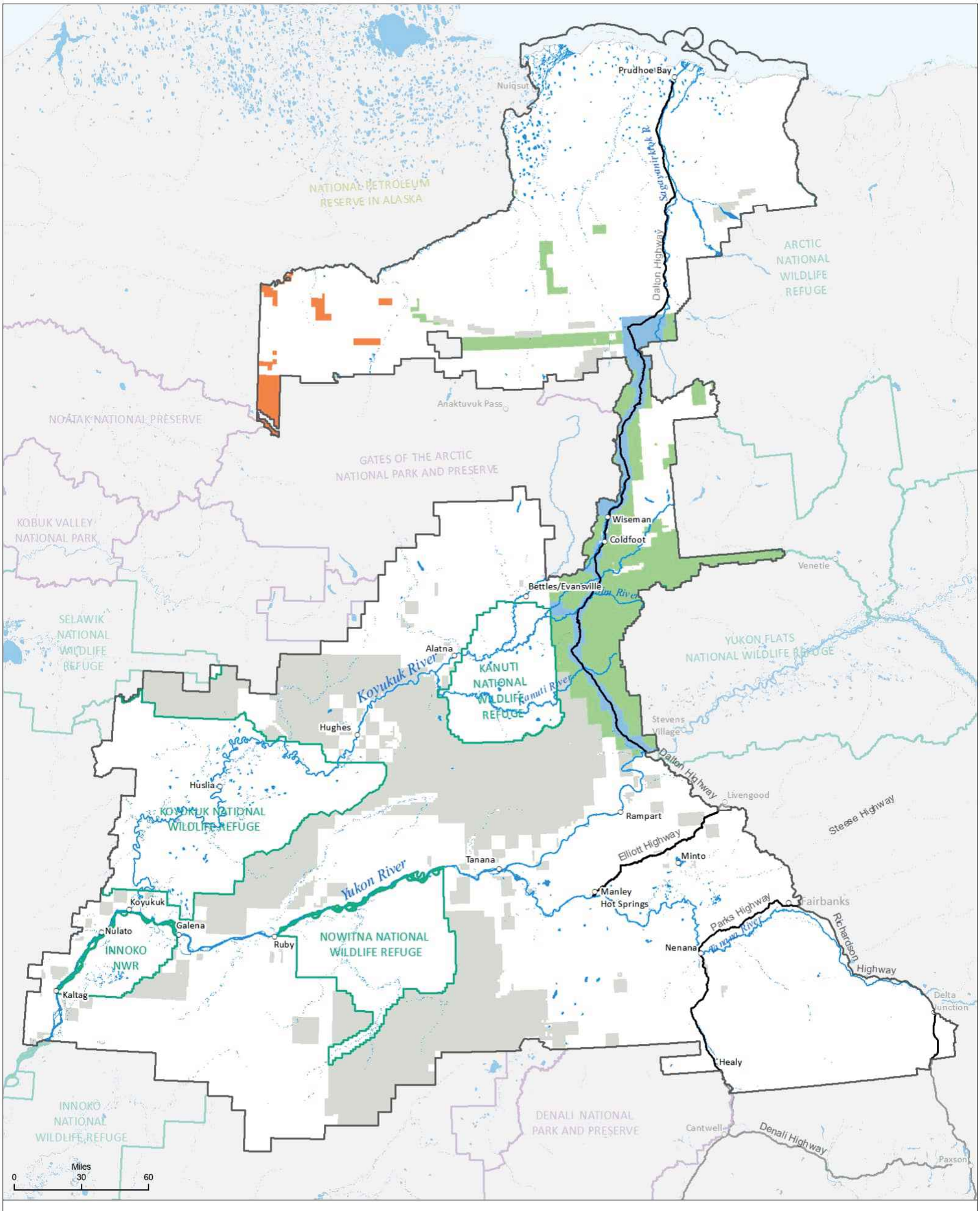
- Segment classified as wild
- Segment classified as recreational
- BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.12

Print Date: 02/13/2024



Visual Resource Management (VRM) Class I

VRM Class II

VRM Class III

VRM Class IV

Unclassified

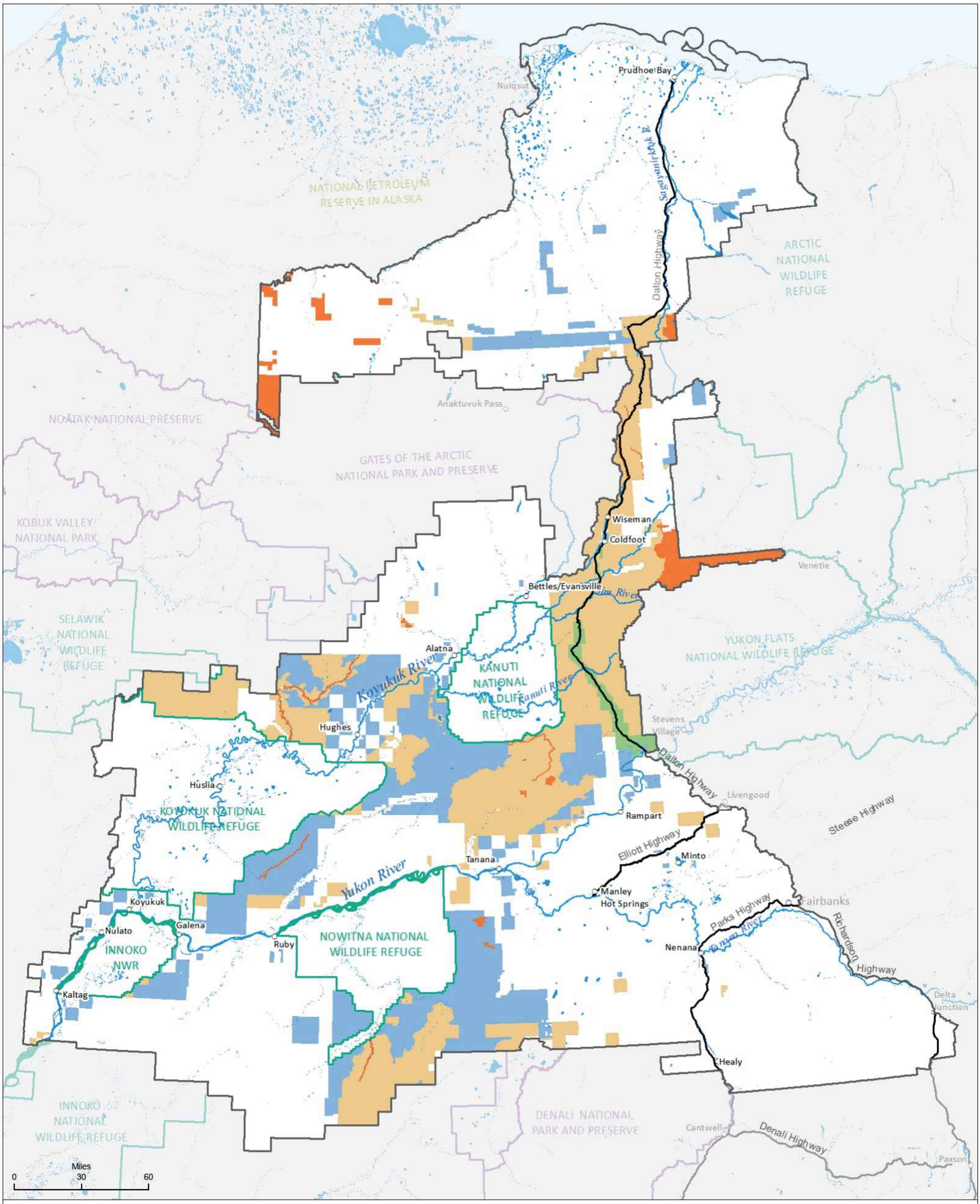


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.13

Print Date: 02/13/2024



Visual Resource Management (VRM) Class I

VRM Class II

VRM Class III

VRM Class IV

Unclassified

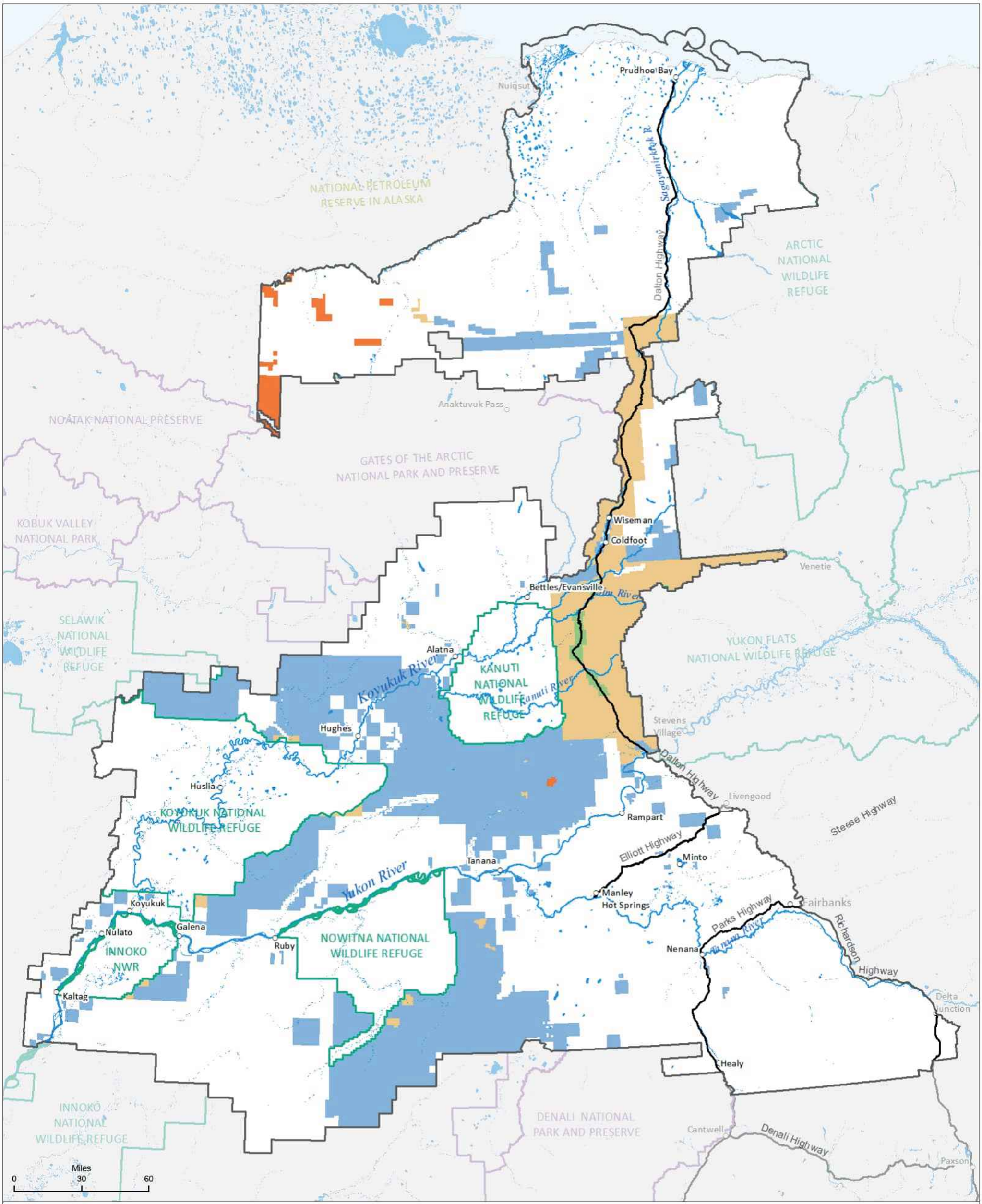


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.14

Print Date: 02/13/2024



Visual Resource Management (VRM) Class I

VRM Class II

VRM Class III

VRM Class IV

Unclassified

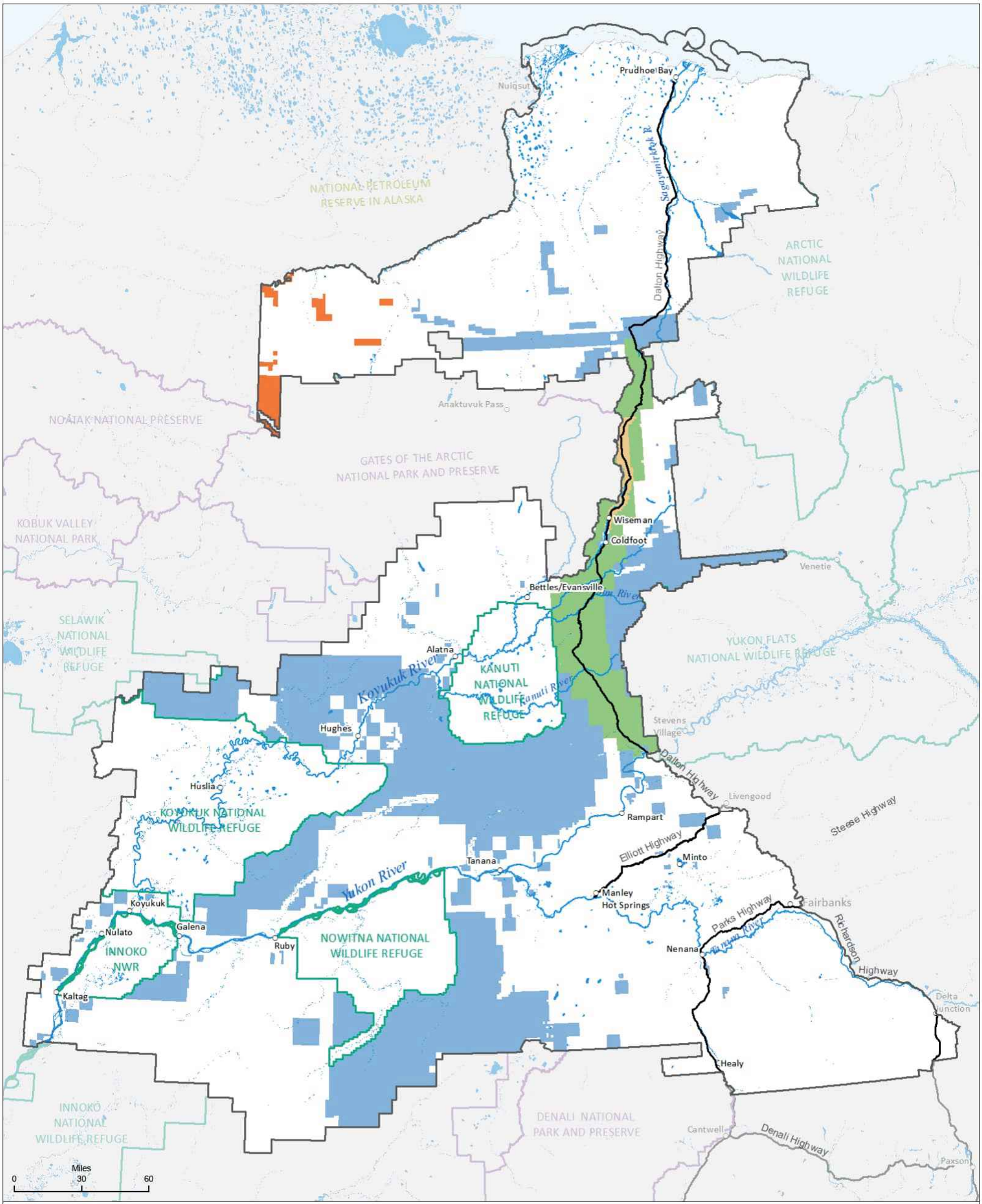


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.15

Print Date: 02/13/2024



Visual Resource Management (VRM) Class I

VRM Class II

VRM Class III

VRM Class IV

Unclassified

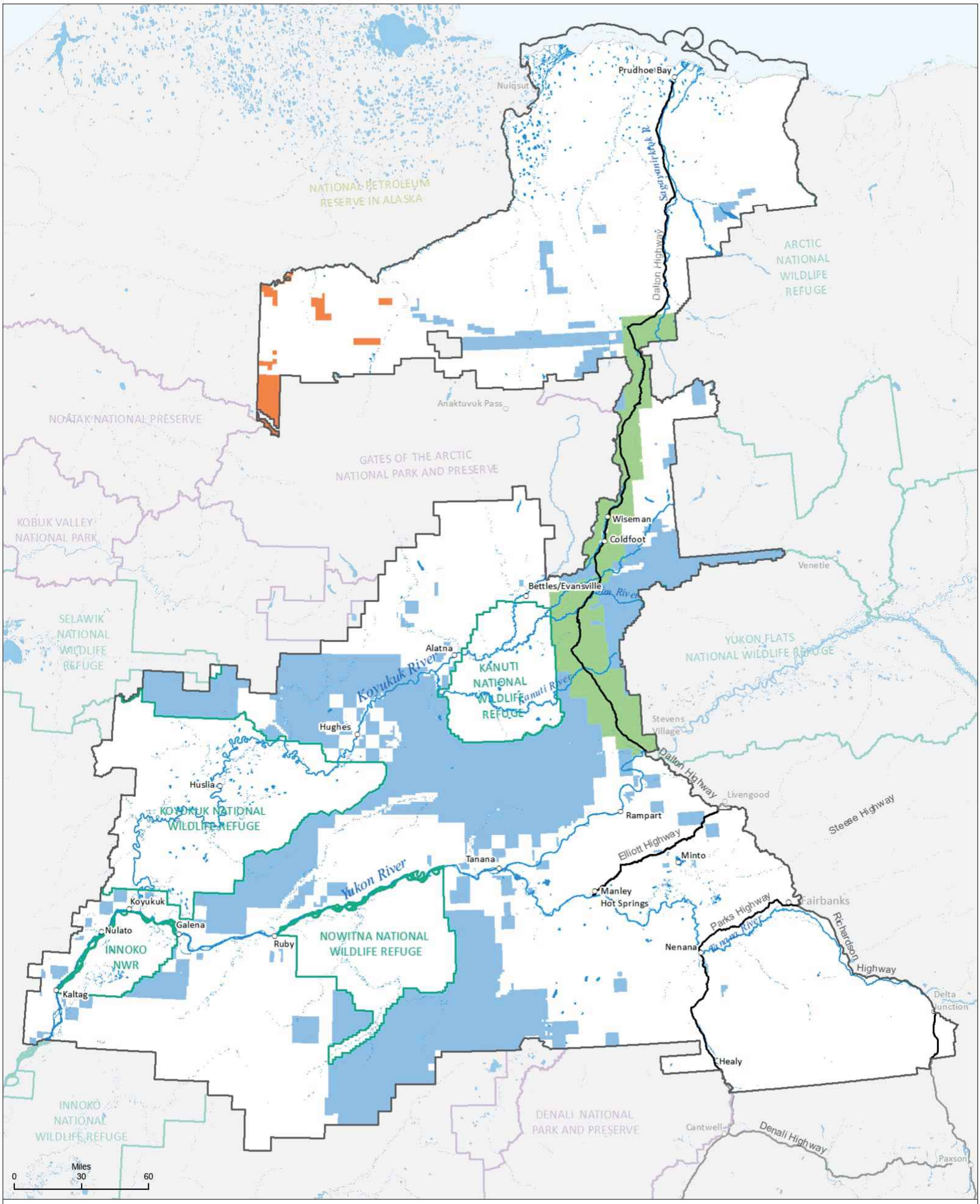


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.16

Print Date: 02/13/2024



Visual Resource Management (VRM) Class I

VRM Class II

VRM Class III

VRM Class IV

Unclassified

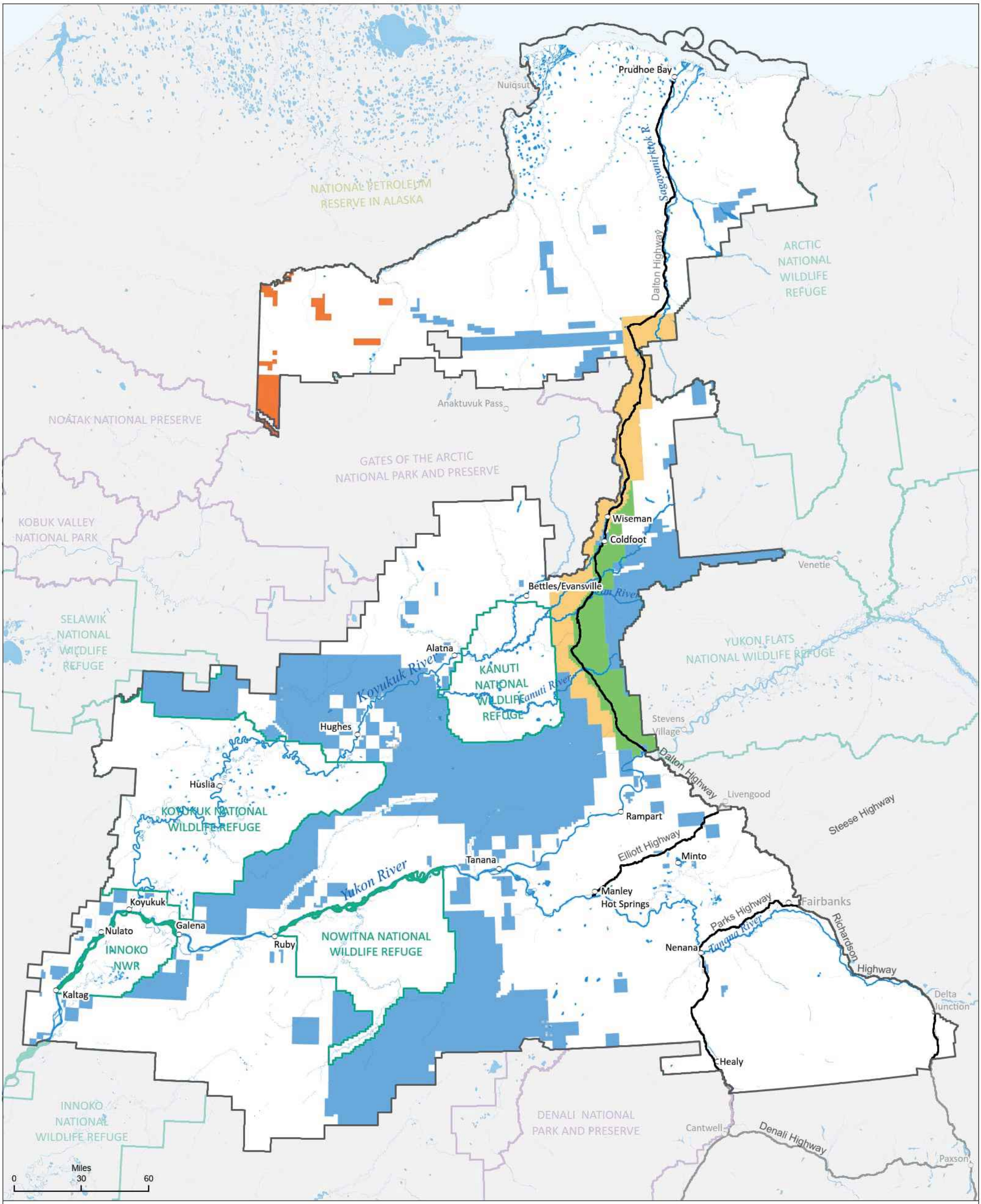


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.17

Print Date: 02/13/2024



Visual Resource Management (VRM) Class I

VRM Class II

VRM Class III

VRM Class IV

Unclassified

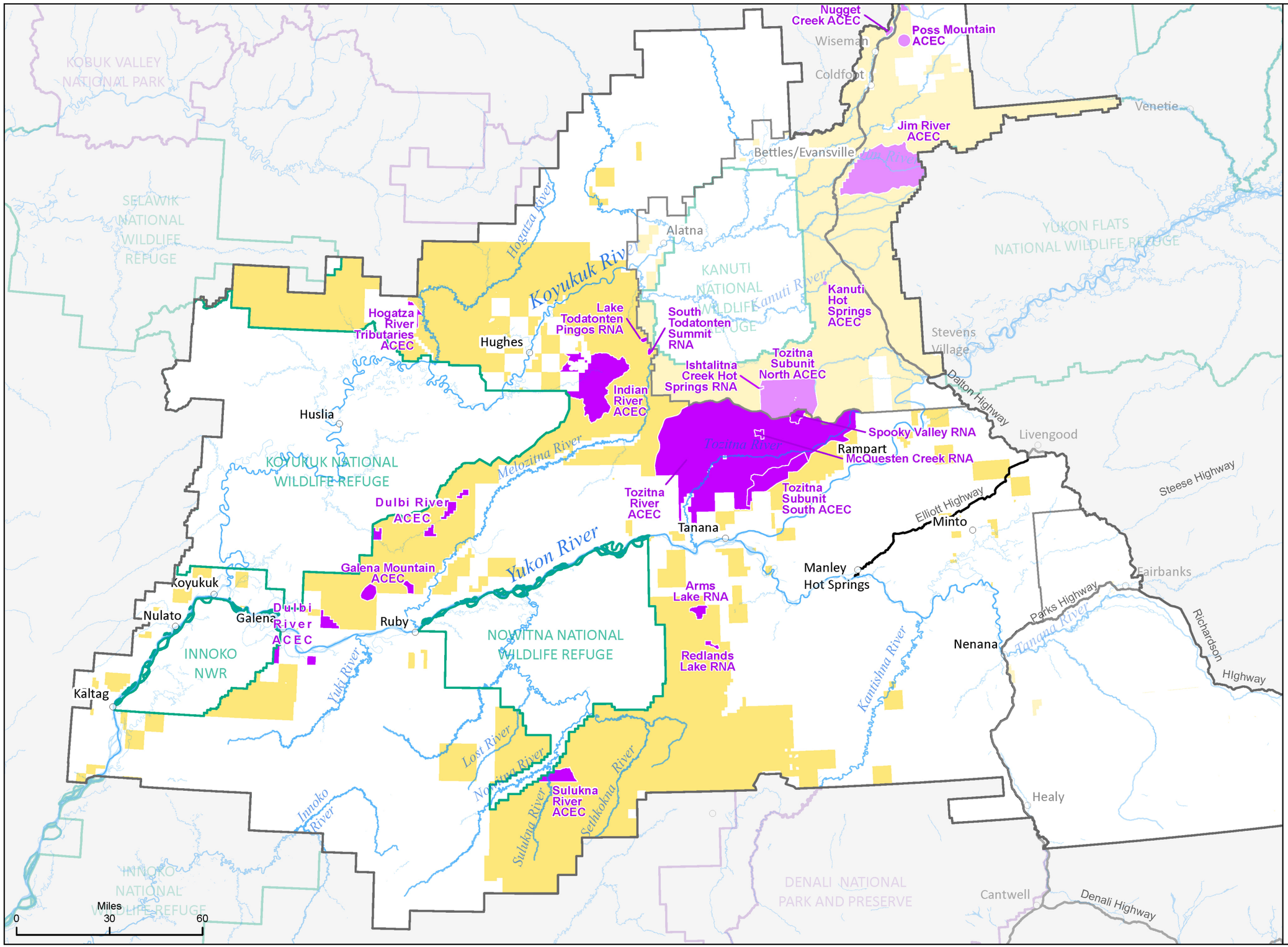


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.18

Print Date: 04/03/2024

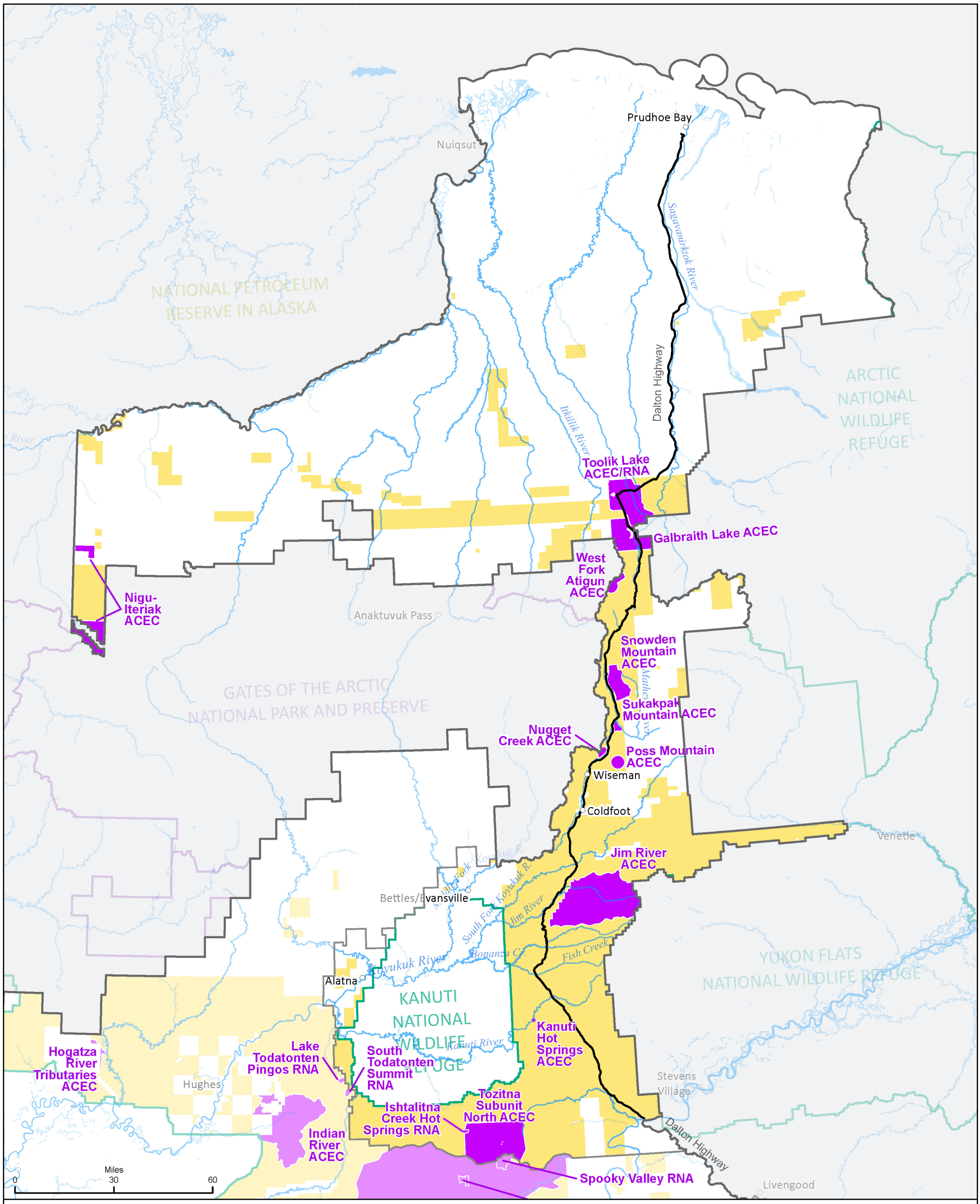


Data Source: BLM GIS 2017

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Map 2-19

Print Date: 04/09/2024

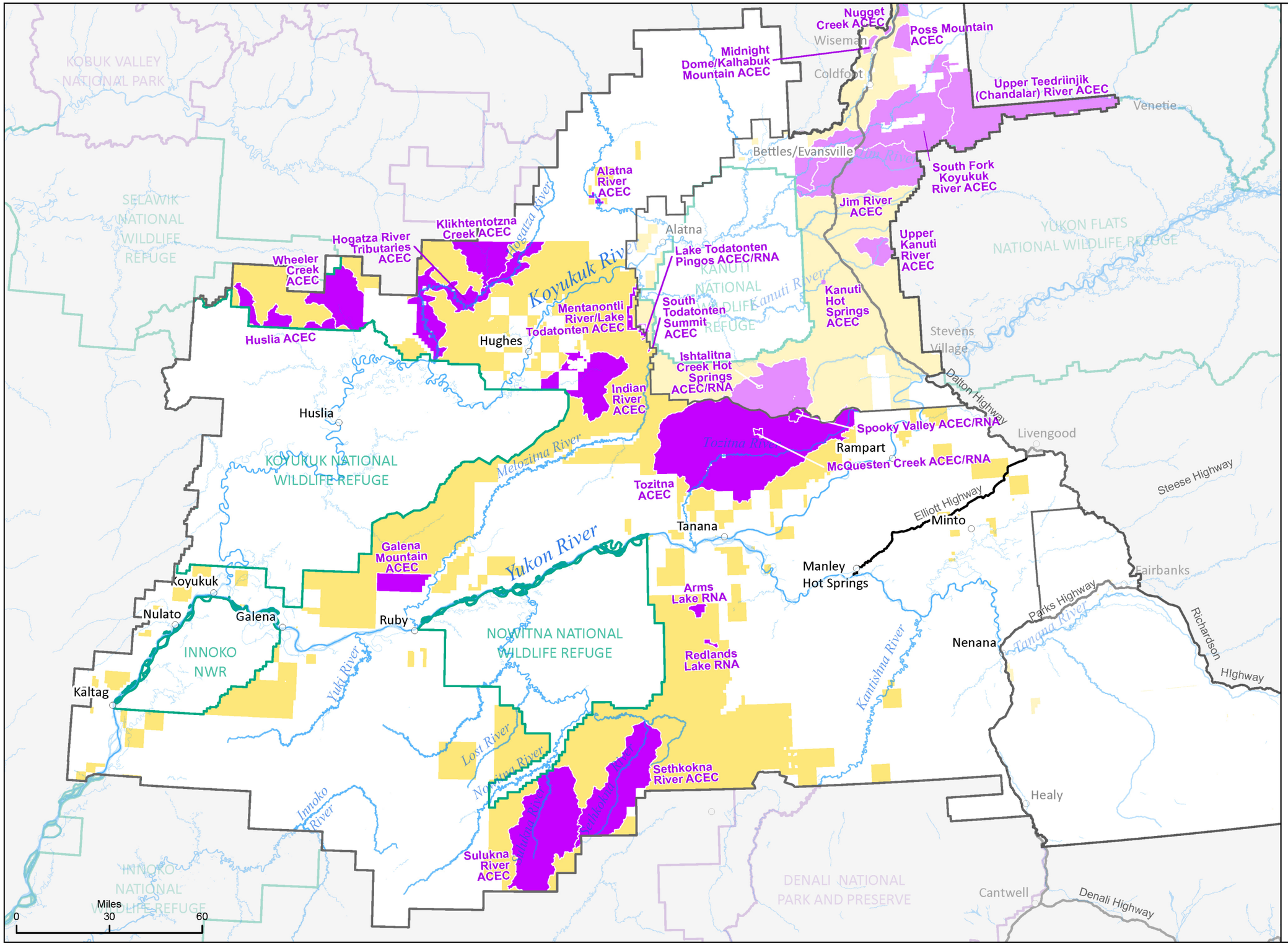


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2-20

Print Date: 04/09/2024



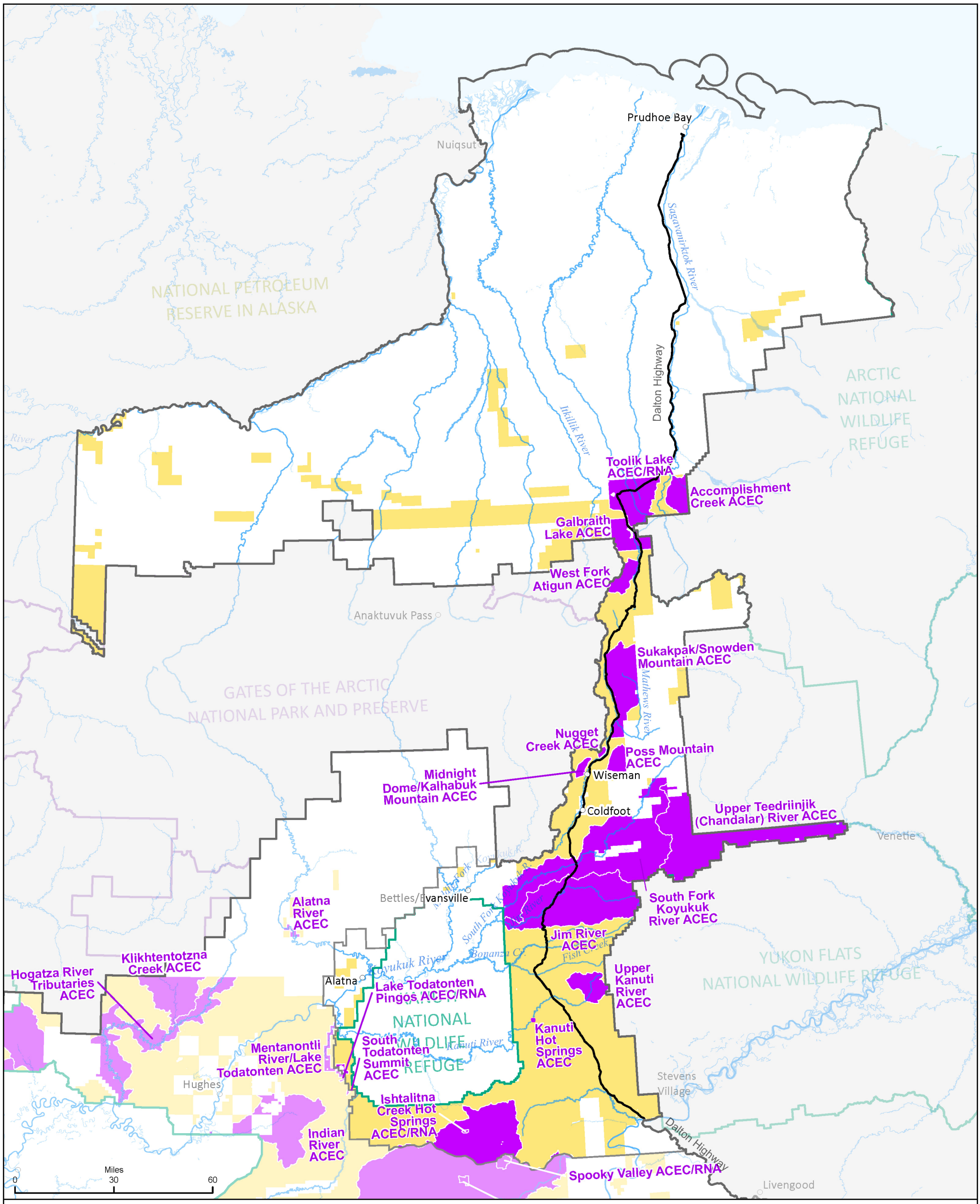
The BLM Navigability Recommendations Memo dated December 30, 1980 determined the Alatna River *navigable* to the mouth of Helpmejack Creek based upon use by paddlewheel steamer during the gold rush of 1898 and 1899. The state holds title to the bed of the Alatna River within the Proposed Alatna River ACEC.

Data Source: BLM GIS 2017

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Map 2-21

Print Date: 04/10/2024

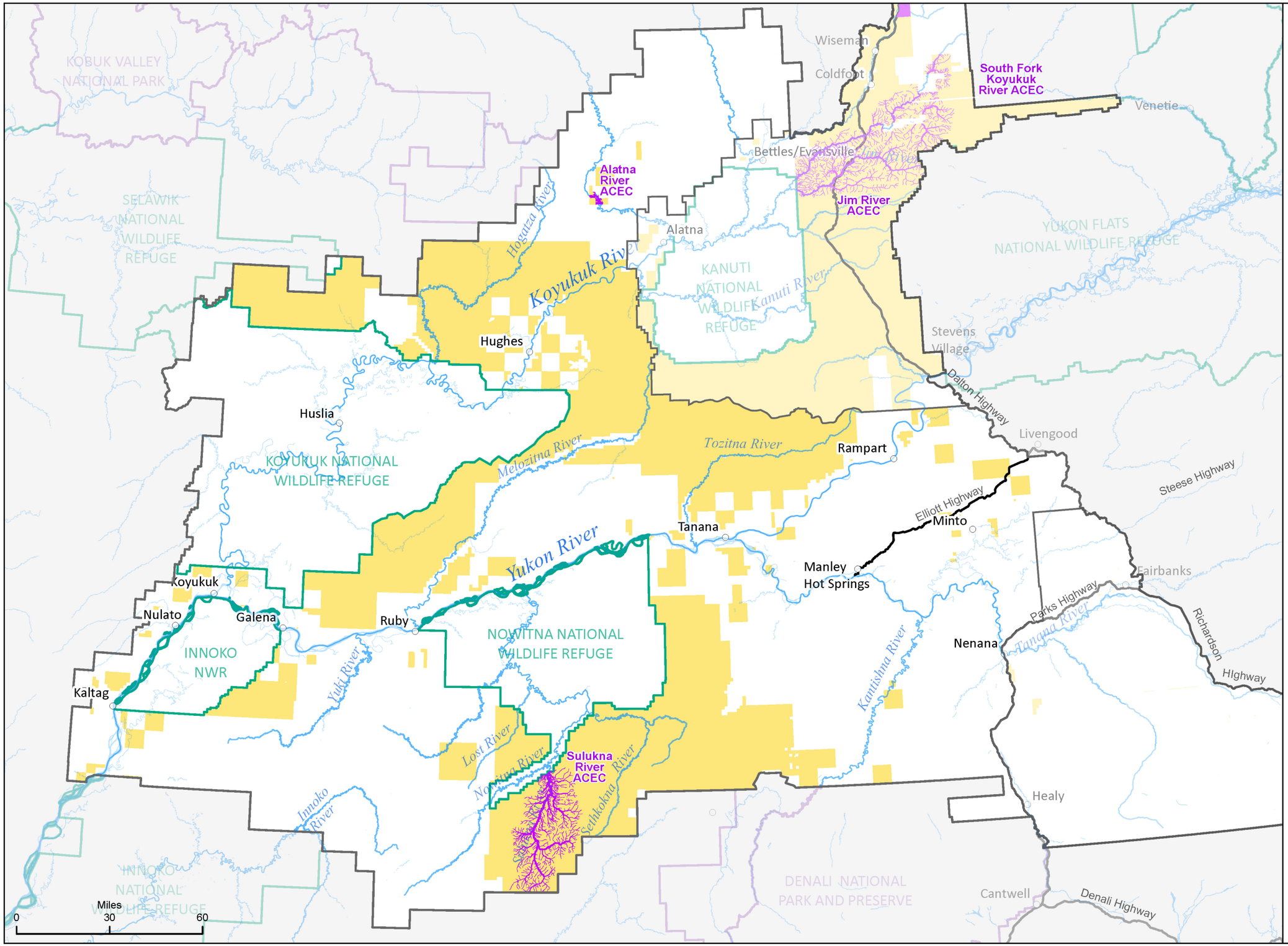


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2-22

Print Date: 04/09/2024



Areas of Critical Environmental Concern (ACECs) or Research Natural Areas (RNAs)

BLM-managed lands

The BLM Navigability Recommendations Memo dated December 30, 1980 determined the Alatna River *navigable* to the mouth of Helpmejack Creek based upon use by paddlewheel steamer during the gold rush of 1898 and 1899. The state holds title to the bed of the Alatna River within the Proposed Alatna River ACEC.

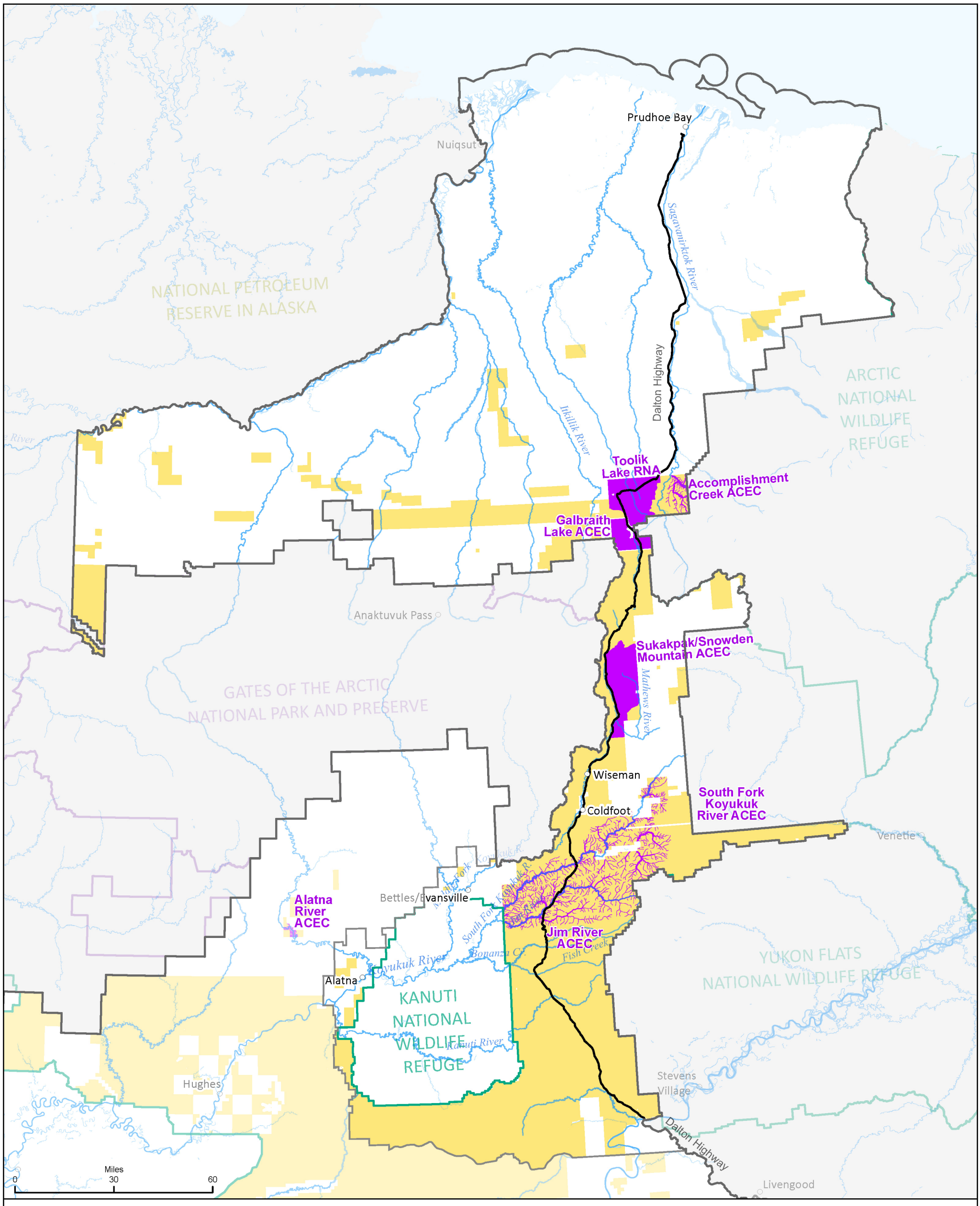
Data Source: BLM GIS 2017

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.



Map 2-23

Print Date: 04/09/2024

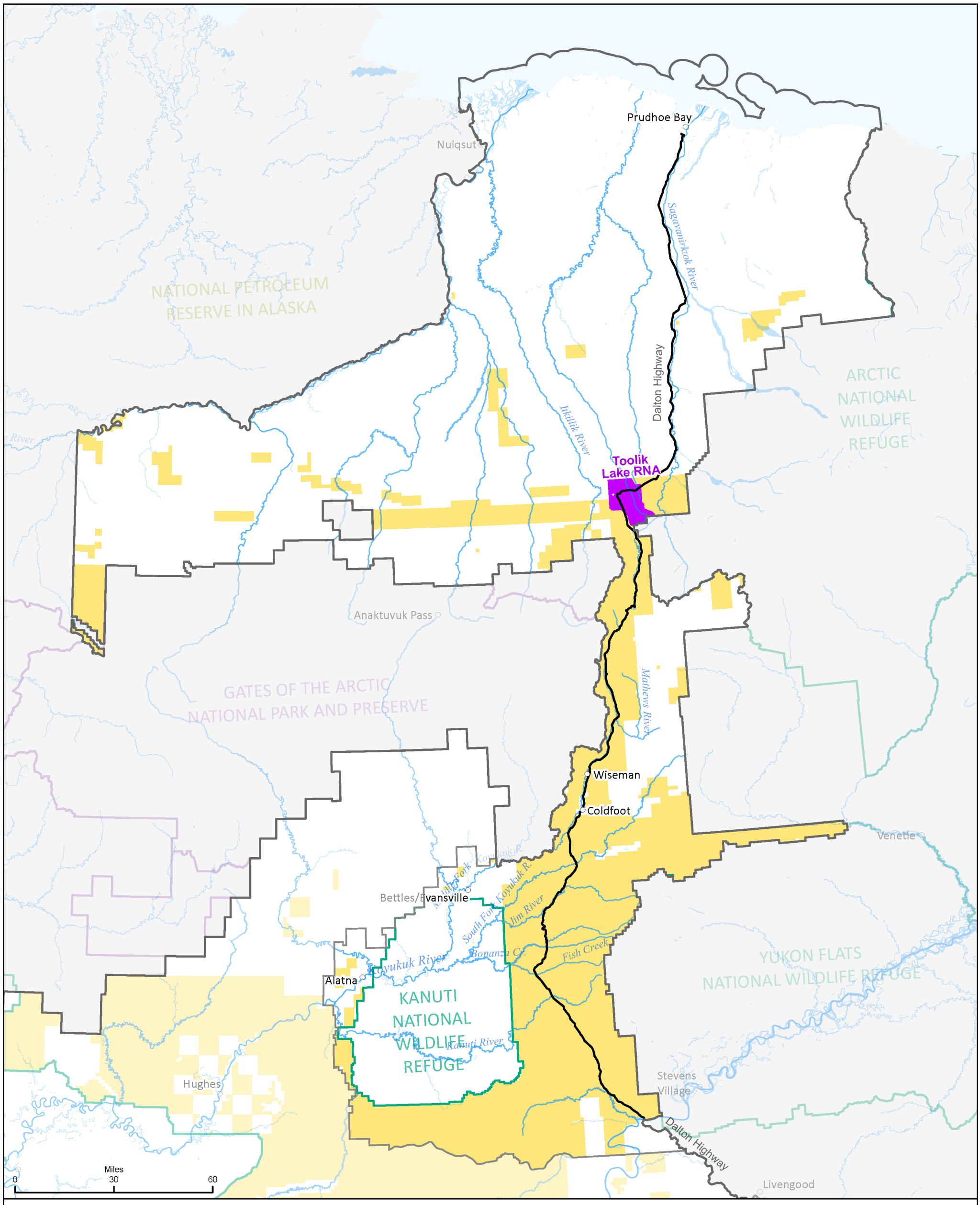


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2-24

Print Date: 04/09/2024

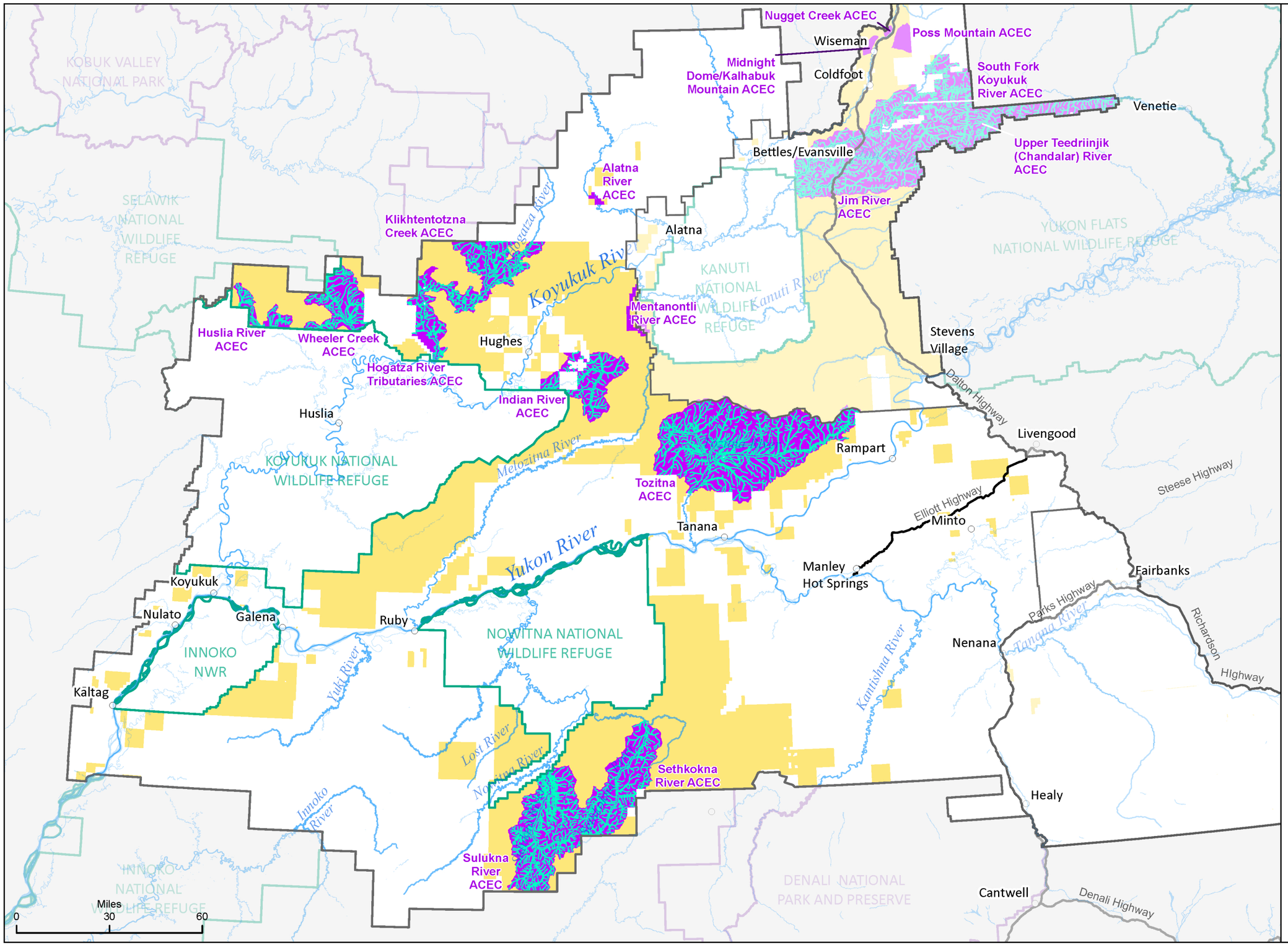


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2-25

Print Date: 04/09/2024



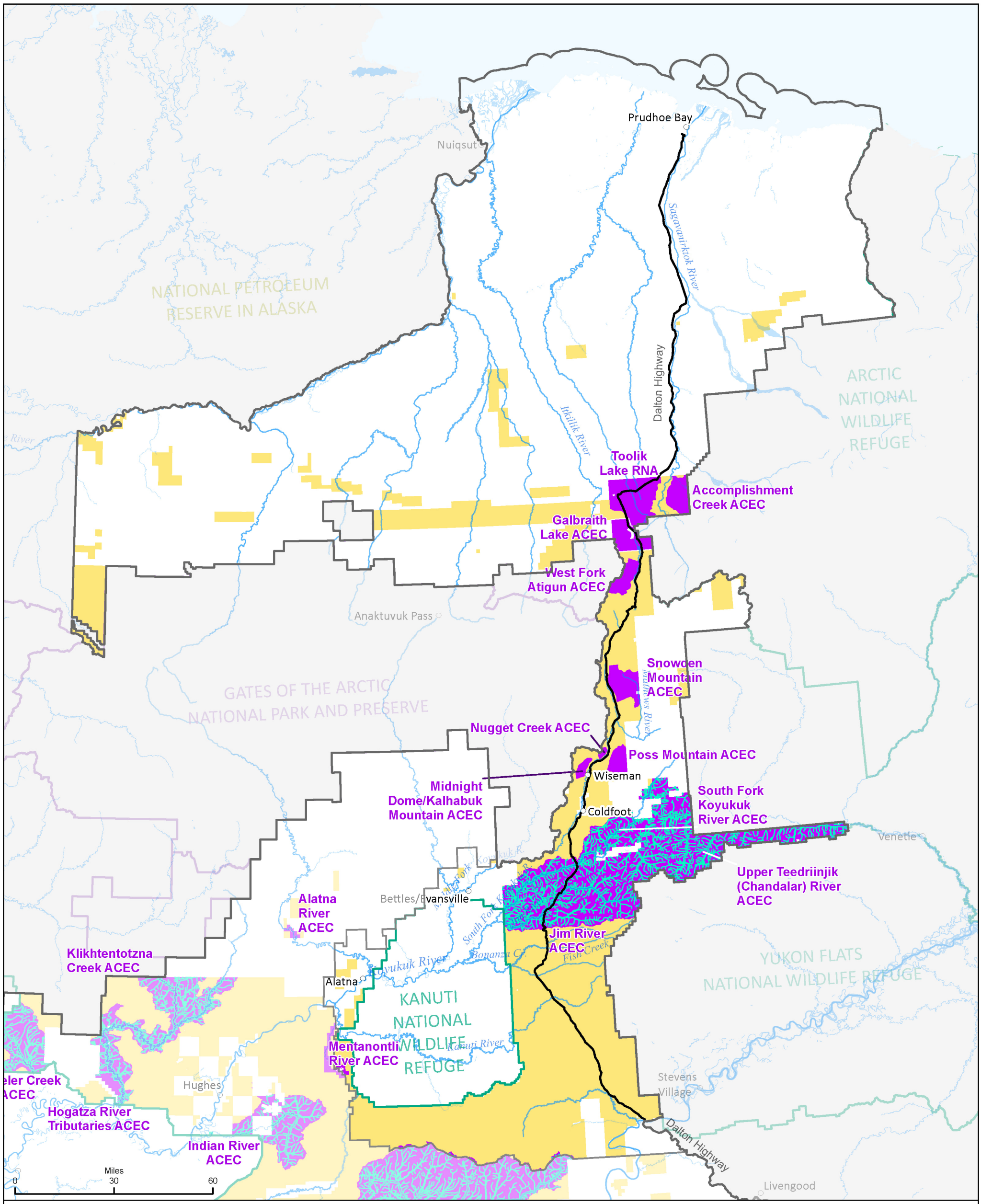
The BLM Navigability Recommendations Memo dated December 30, 1980 determined the Alatna River *navigable* to the mouth of Helpmejack Creek based upon use by paddlewheel steamer during the gold rush of 1898 and 1899. The state holds title to the bed of the Alatna River within the Proposed Alatna River ACEC.

Data Source: BLM GIS 2017

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Map 2-26

Print Date: 04/10/2024

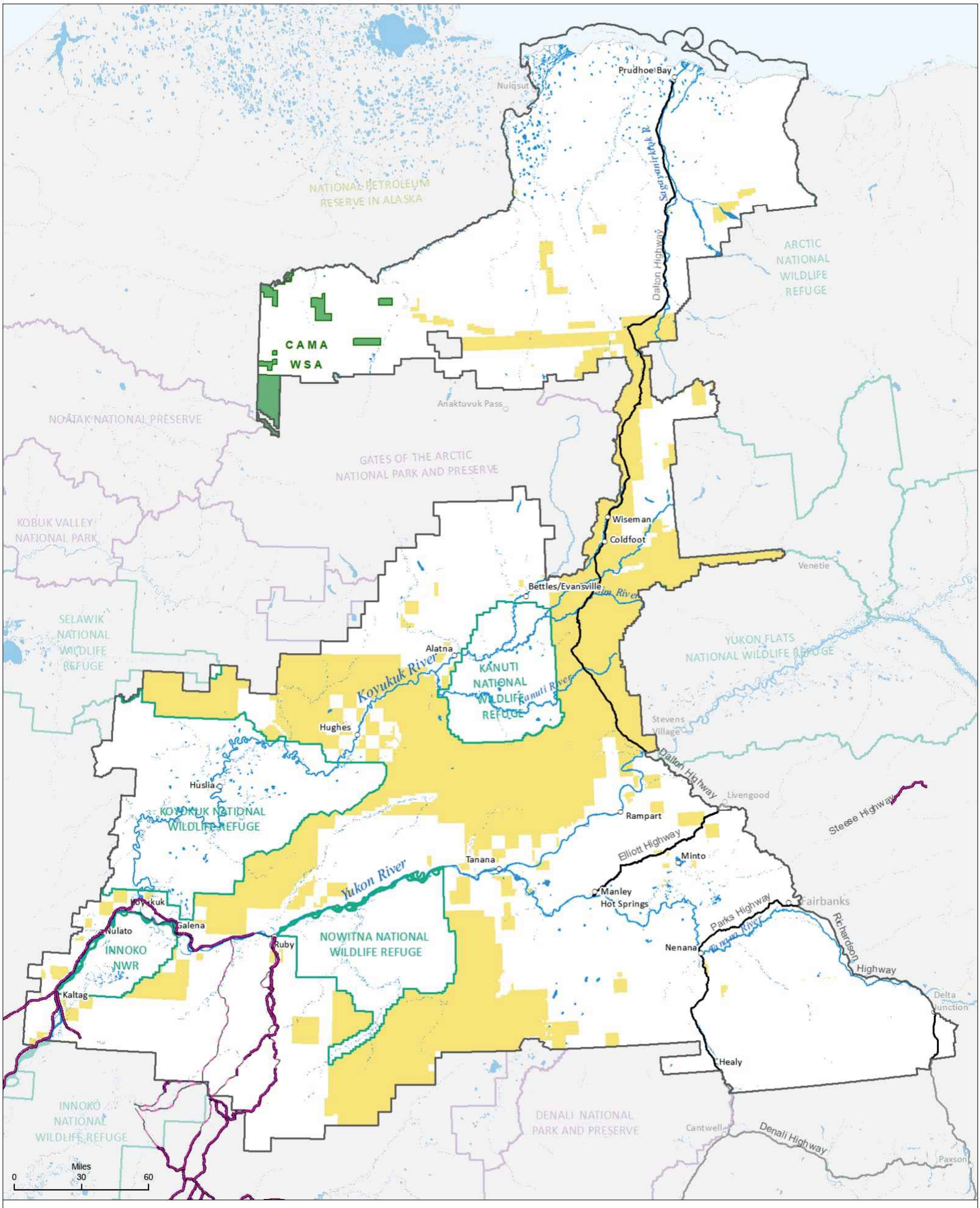


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Data Source: BLM GIS 2017

Map 2-27

Print Date: 04/09/2024



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Data Source: BLM GIS 2017

Map 2.28

Print Date: 02/13/2024

Prohibit commercial timber development; prohibit non-subsistence collection of live vegetation (subsistence use still requires a permit)

Open to commercial timber development, open to non-subsistence collection of live vegetation

Miles
0 30 60

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.29

Print Date: 04/03/2024

Prohibit commercial timber development; prohibit non-subsistence collection of live vegetation (subsistence use still requires a permit)

Open to commercial timber development, open to non-subsistence collection of live vegetation

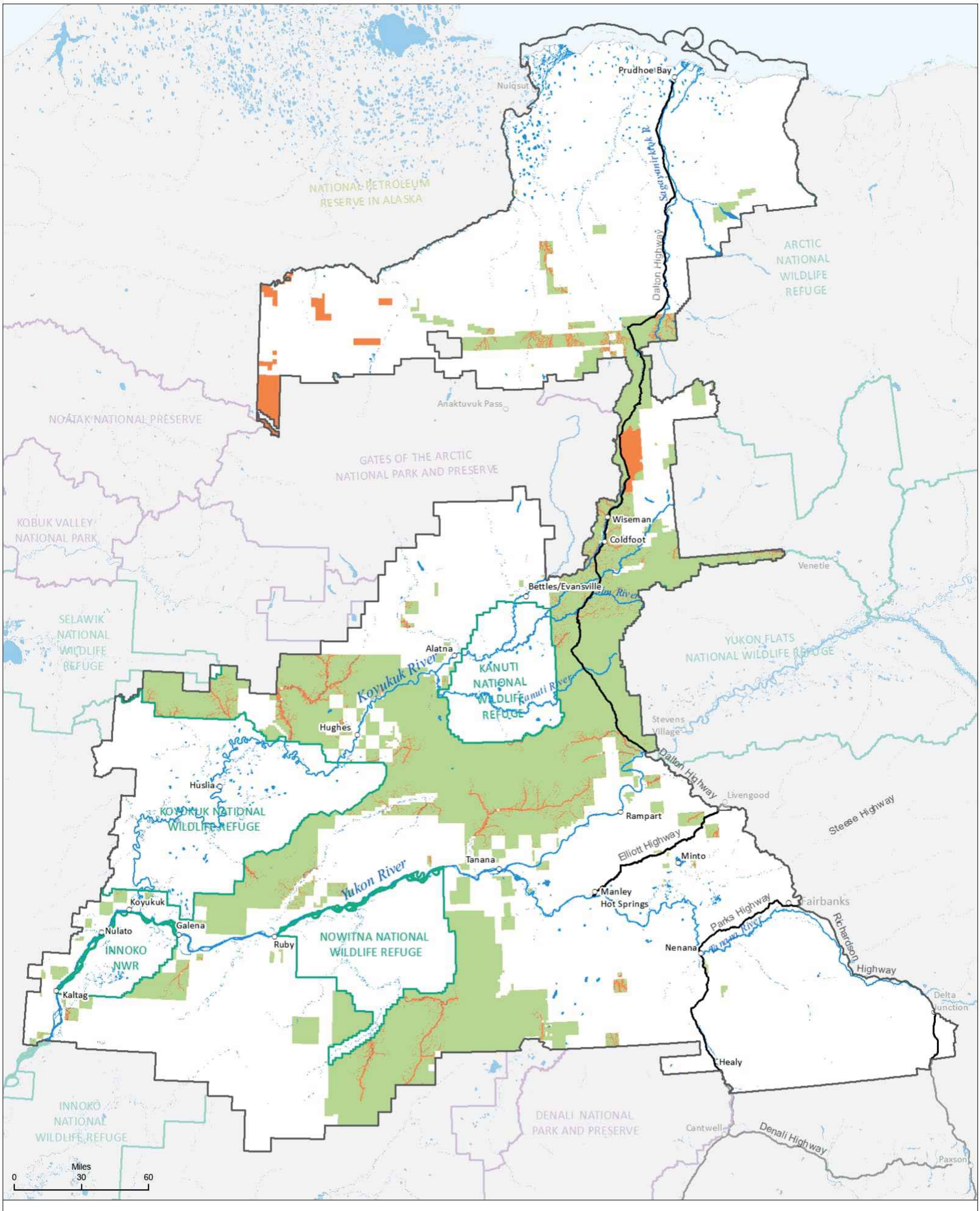
Miles
0 30 60

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.30

Print Date: 02/13/2024



Prohibit commercial timber development; prohibit non-subsistence collection of live vegetation (subsistence use still requires a permit)

Open to commercial timber development, open to non-subsistence collection of live vegetation



Map 2.31

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024

Prohibit commercial timber development; prohibit non-subsistence collection of live vegetation (subsistence use still requires a permit)

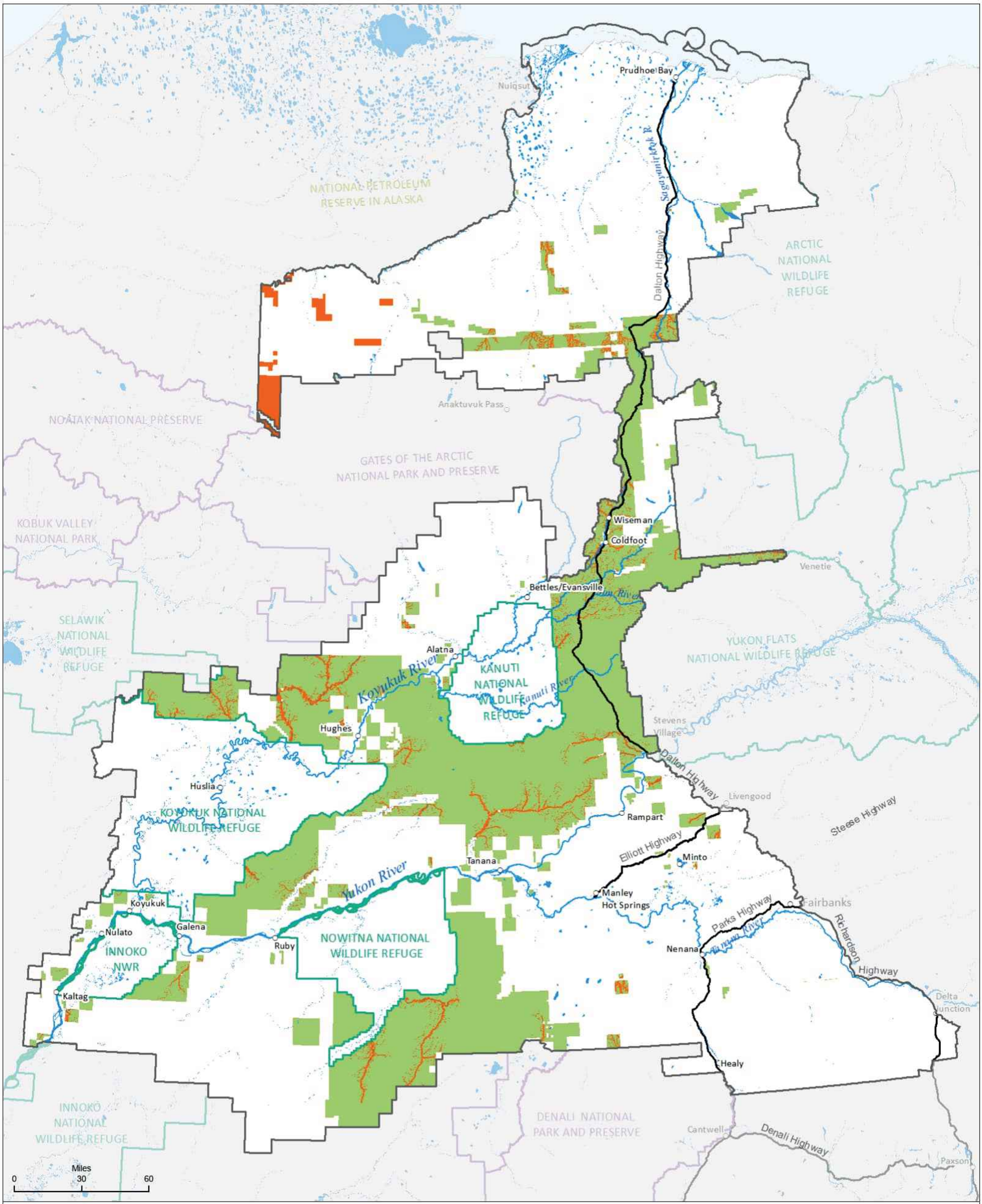
Open to commercial timber development, open to non-subsistence collection of live vegetation

Map 2.32

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 04/03/2024



Prohibit commercial timber development; prohibit non-subsistence collection of live vegetation (subsistence use still requires a permit)

Open to commercial timber development, open to non-subsistence collection of live vegetation



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.33

Print Date: 02/13/2024

Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Dalton Highway
Livengood
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Fairbanks
Parks Highway
Koyukuk
Nulato
Galena
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Tanana River
Nenana
Richardson Highway
INNOKO NWR
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

Lands that meet the criteria that are identified for exchange in all action alternatives (B, C1, C2, D, and E). Lands that meet the criteria that are identified for disposal only in Alternatives B and E.

BLM-managed lands

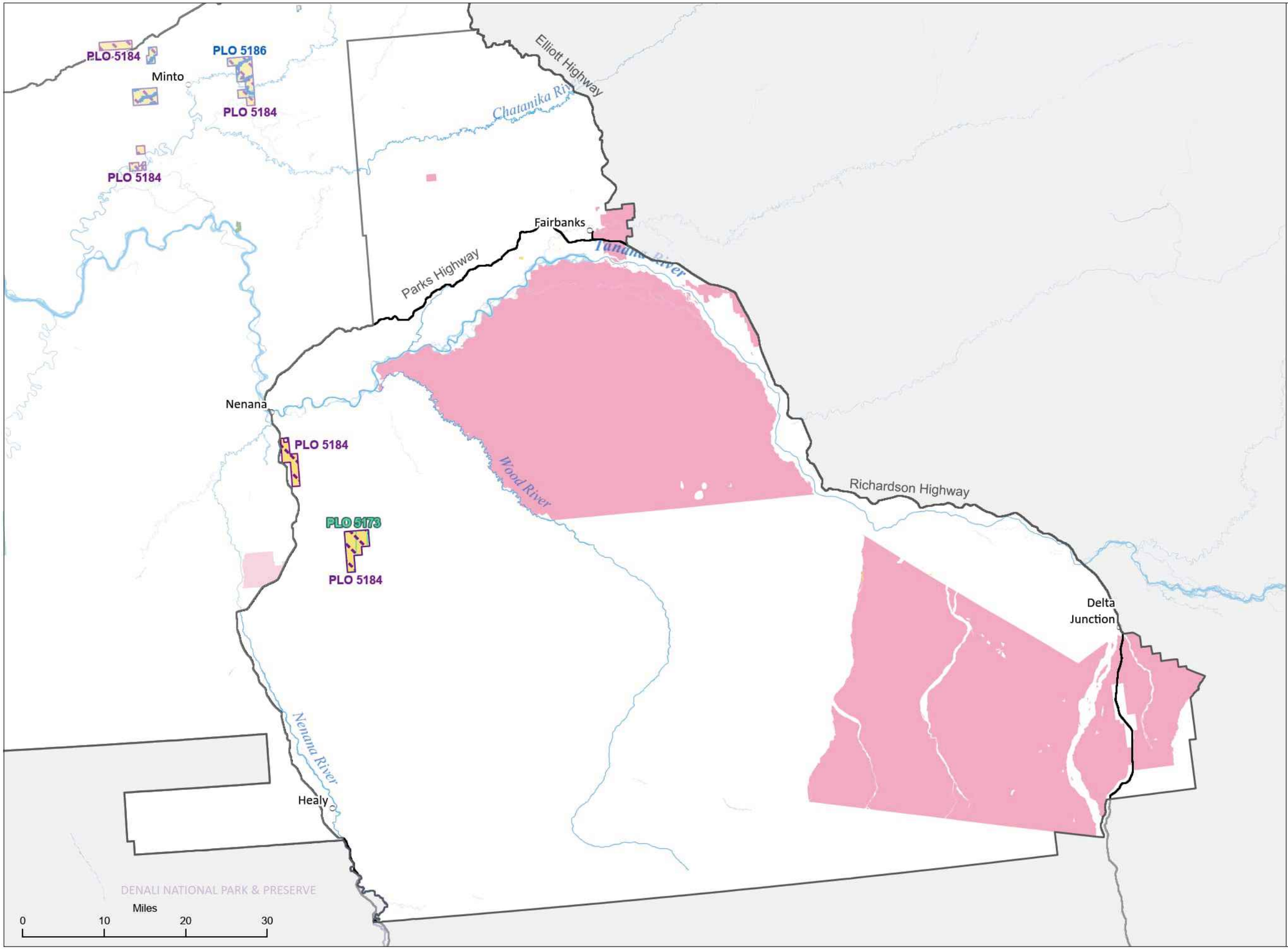


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Data Source: BLM GIS 2017

Map 2.34

Print Date: 04/03/2024



Alaska Native Claims Settlement Act (ANCSA) 17(d)(1) withdrawals are in place and generally close lands to all forms of appropriation under public laws, including mining and mineral leasing:

- Public land order (PLO) 5169
- PLO 5173
- PLO 5179
- PLO 5180
- PLO 5184
- PLO 5186
- PLO 5242
- BLM-managed lands
- Withdrawn to the Department of Defense, withdrawal remains intact

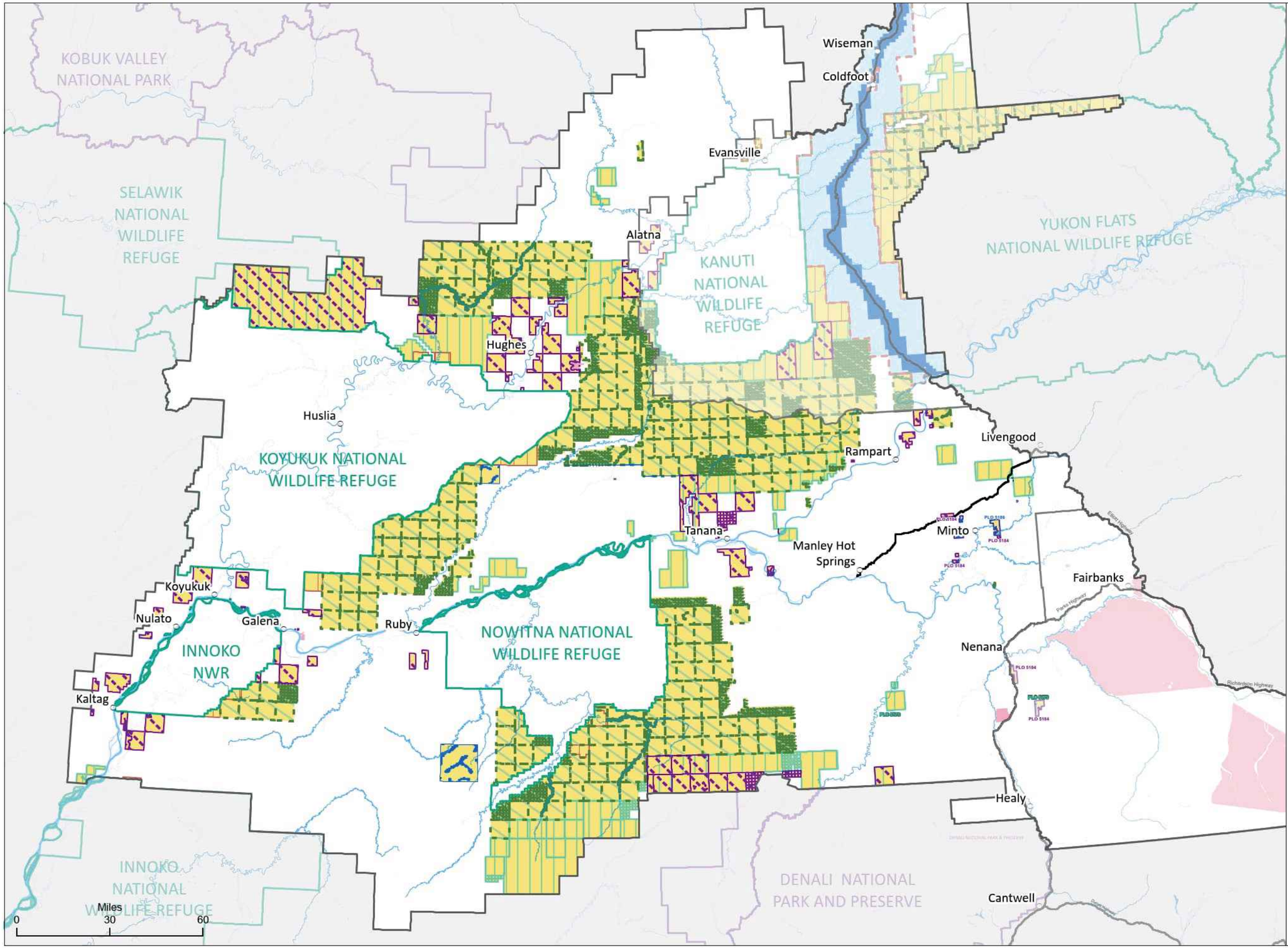
Data Source: BLM GIS 2017

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Map 2.35

Print Date: 03/14/2024



Dalton Utility Corridor public land order (PLO) 5150 (inner and outer corridor)

Dalton Utility Corridor public land order (PLO) 5150 lands to be retained (outer utility corridor) (Alternative A - lands are retained. Alternative E - BLM makes no decision.)

Dalton Utility Corridor public land order (PLO) 5150 lands to be retained (inner utility corridor) (Alternative A - lands are retained. Alternative E - BLM makes no decision.)

Alaska Native Claims Settlement Act (ANCSA) 17(d)(1) withdrawals are in place and generally close lands to all forms of appropriation under public laws, including mining and mineral leasing:

- PLO 5169
- PLO 5173
- PLO 5179
- PLO 5180
- PLO 5184
- PLO 5186
- PLO 5242

BLM-managed lands

Withdrawn to the Department of Defense, withdrawal remains intact

Data Source: BLM GIS 2017

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Map 2.36

Print Date: 03/14/2024

Prudhoe Bay
Nuiqsut
Sagavanirktok River
Dalton Highway
Itkillik River
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
PLO 5169
PLO 5179
PLO 5180
PLO 5173
PLO 5184
PLO 5242
Anaktuvuk Pass
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
Mathews River
Bettles/Evansville
Venetie
Alatna
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Livengood
Miles
0
30
60

Dalton Utility Corridor public land order (PLO) 5150 (inner and outer corridor)

Dalton Utility Corridor public land order (PLO) 5150 lands to be retained (outer utility corridor) (Alternative A - lands are retained. Alternative E - BLM makes no decision.)

Dalton Utility Corridor public land order (PLO) 5150 lands to be retained (inner utility corridor) (Alternative A - lands are retained. Alternative E - BLM makes no decision.)

Alaska Native Claims Settlement Act (ANCSA) 17(d)(1) withdrawals are in place and generally close lands to all forms of appropriation under public laws, including mining and mineral leasing:

PLO 5169 PLO 5180 PLO 5242
PLO 5173 PLO 5184
PLO 5179 PLO 5186

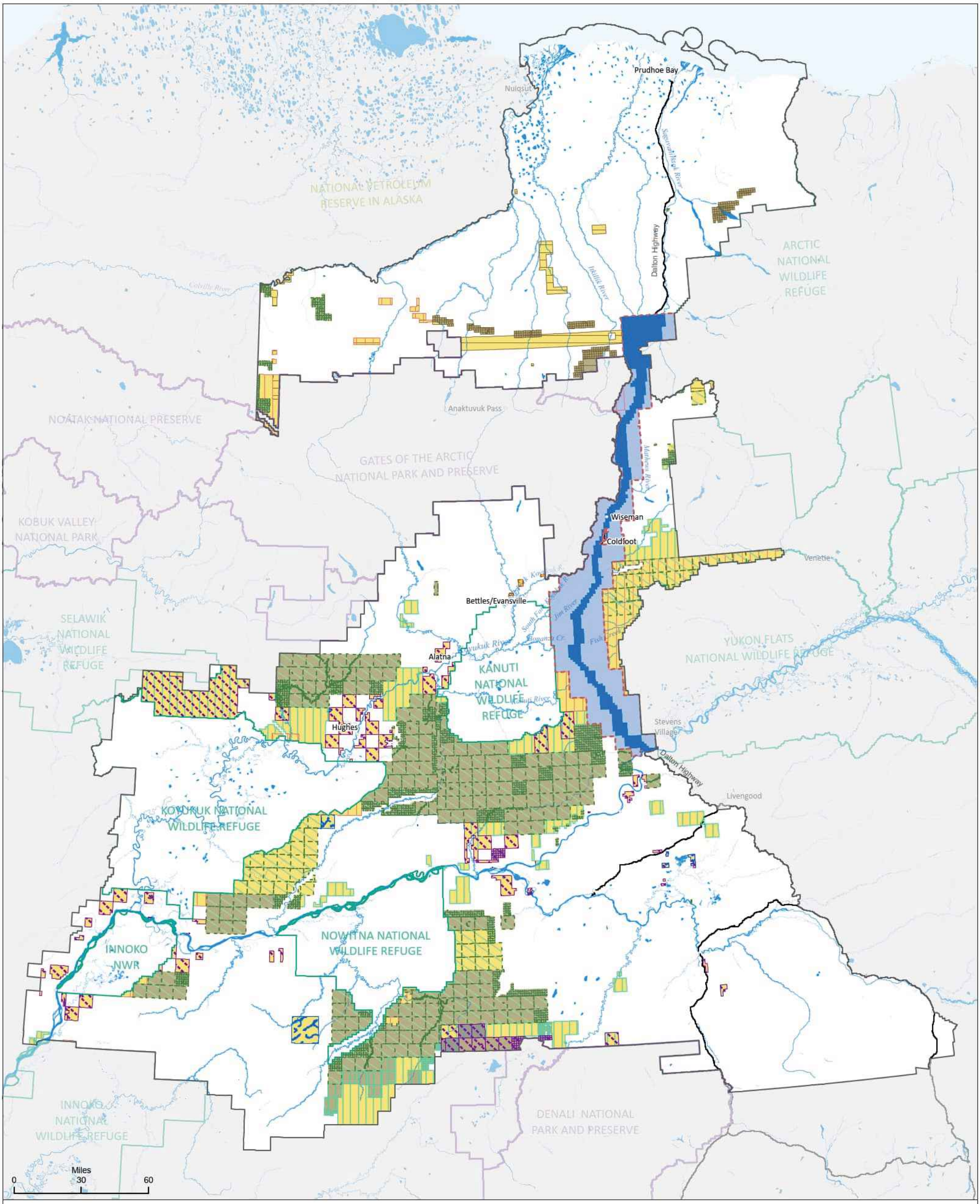
BLM-managed lands

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Data Source: BLM GIS 2017

Map 2.37

Print Date: 03/14/2024

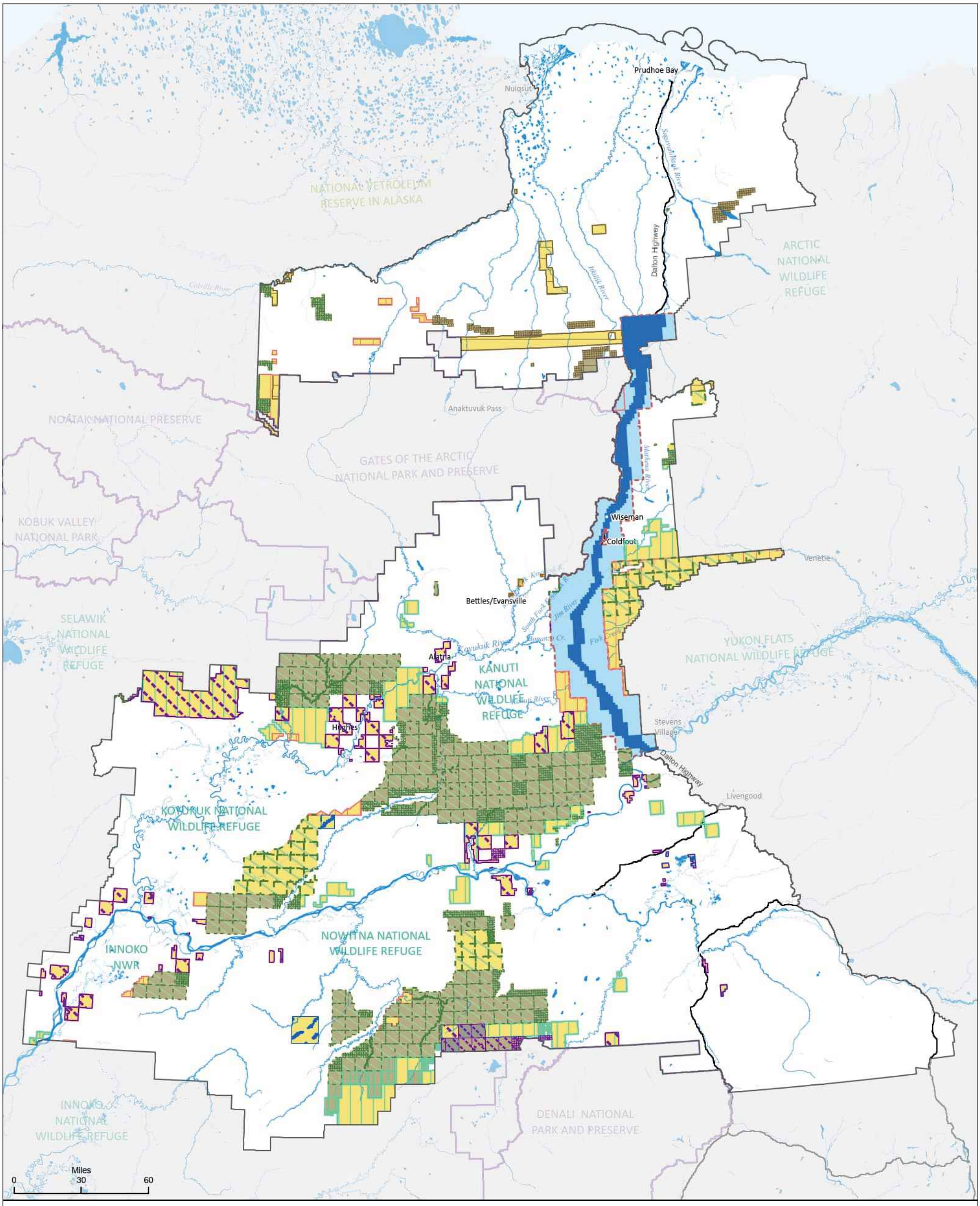


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Data Source: BLM GIS 2017

Map 2.38

Print Date: 04/03/2024

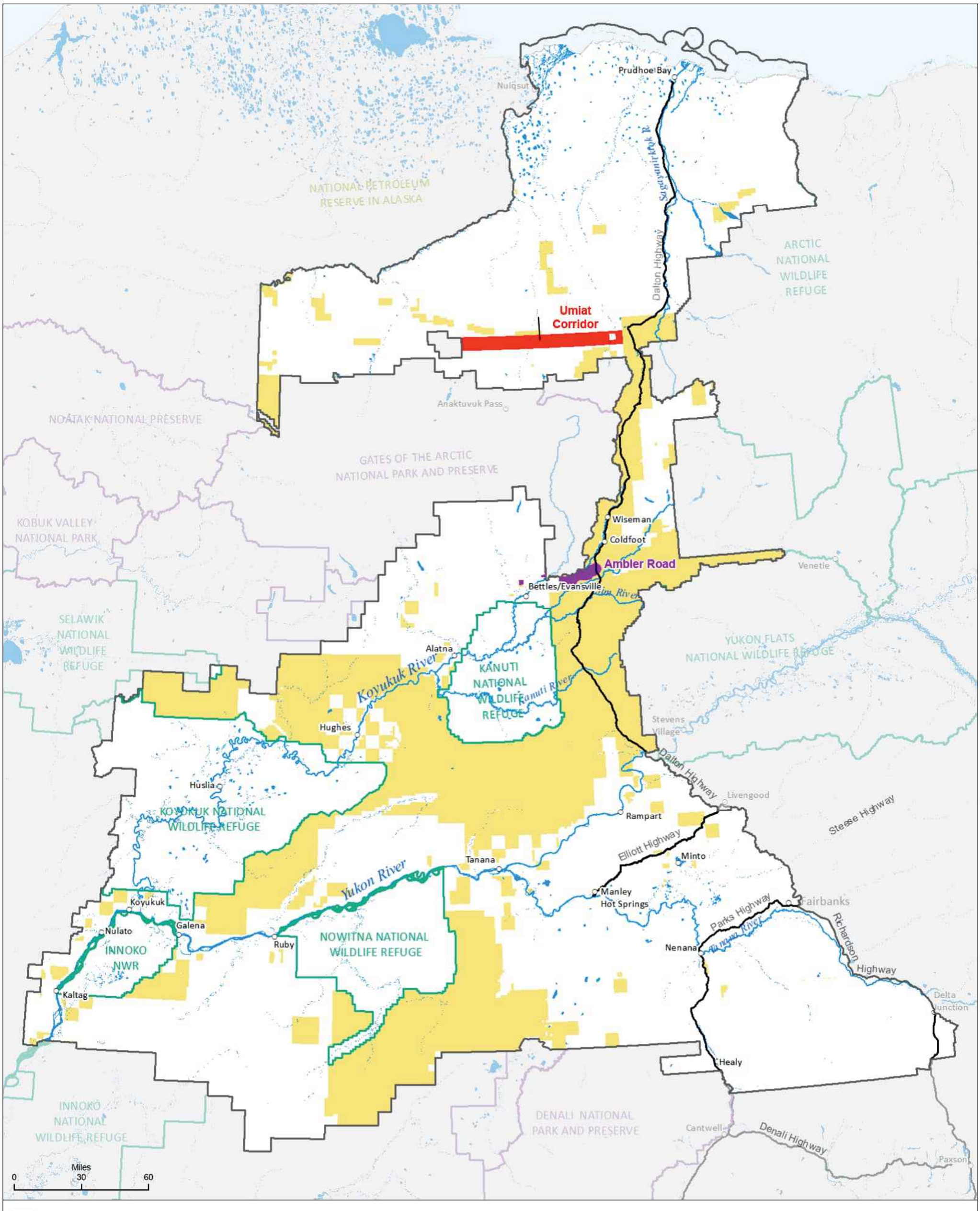


Map 2.39

Print Date: 04/03/2024

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Data Source: BLM GIS 2017

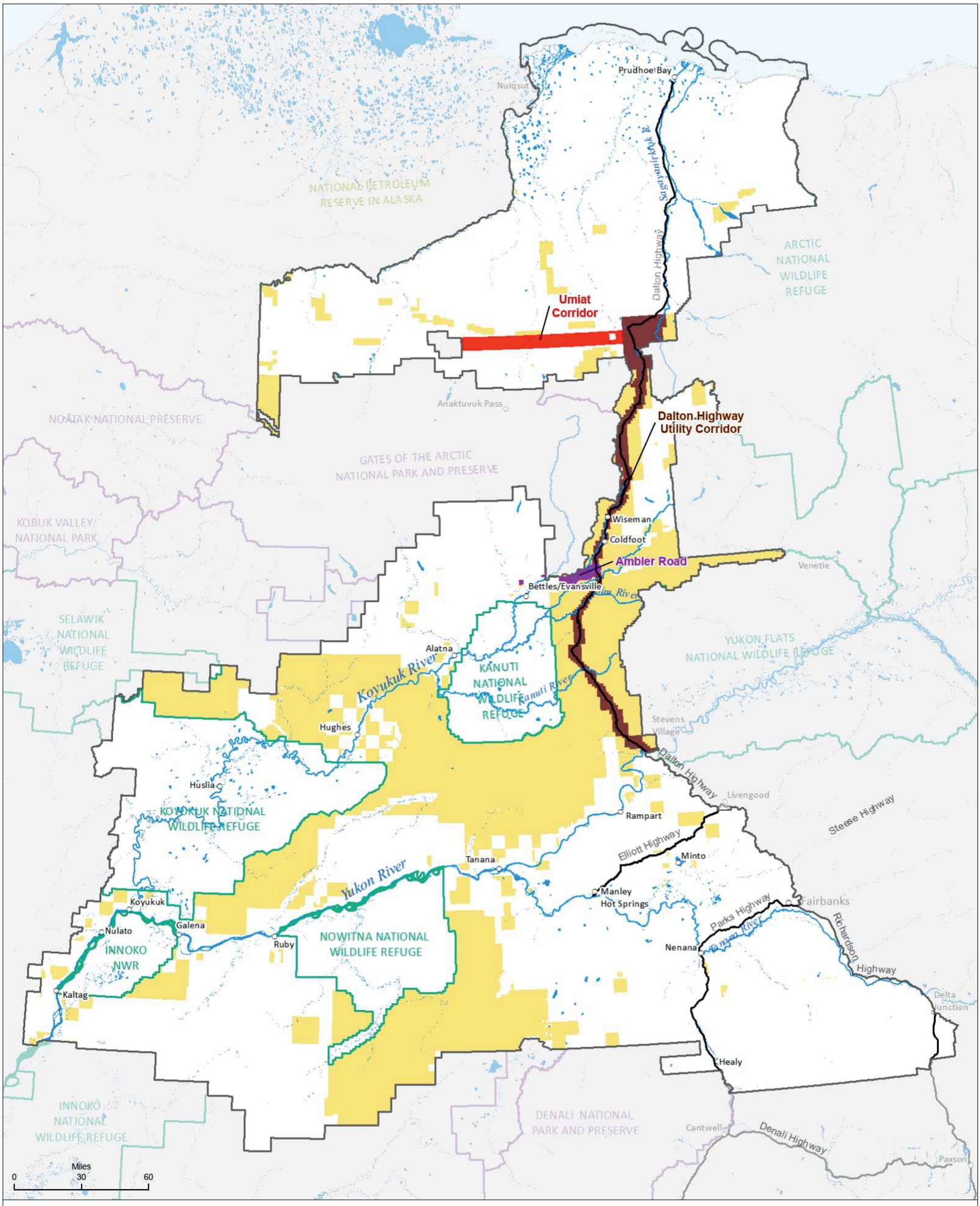


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Data Source: BLM GIS 2017

Map 2.40

Print Date: 02/13/2024



Ambler Road 5-mile Corridor

Dalton Highway Utility Corridor

Road to Umiat Corridor

BLM-managed lands

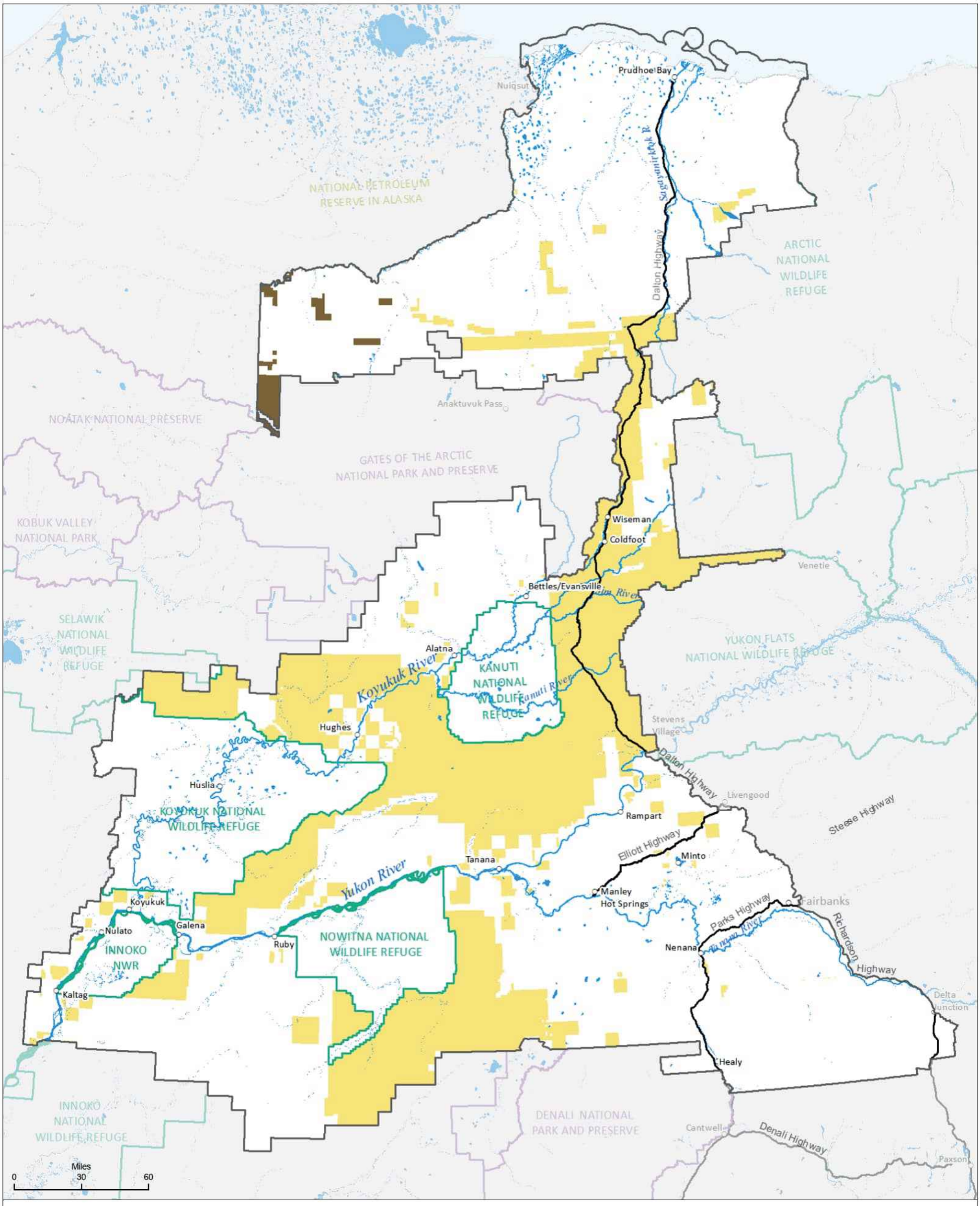


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.41

Print Date: 02/13/2024

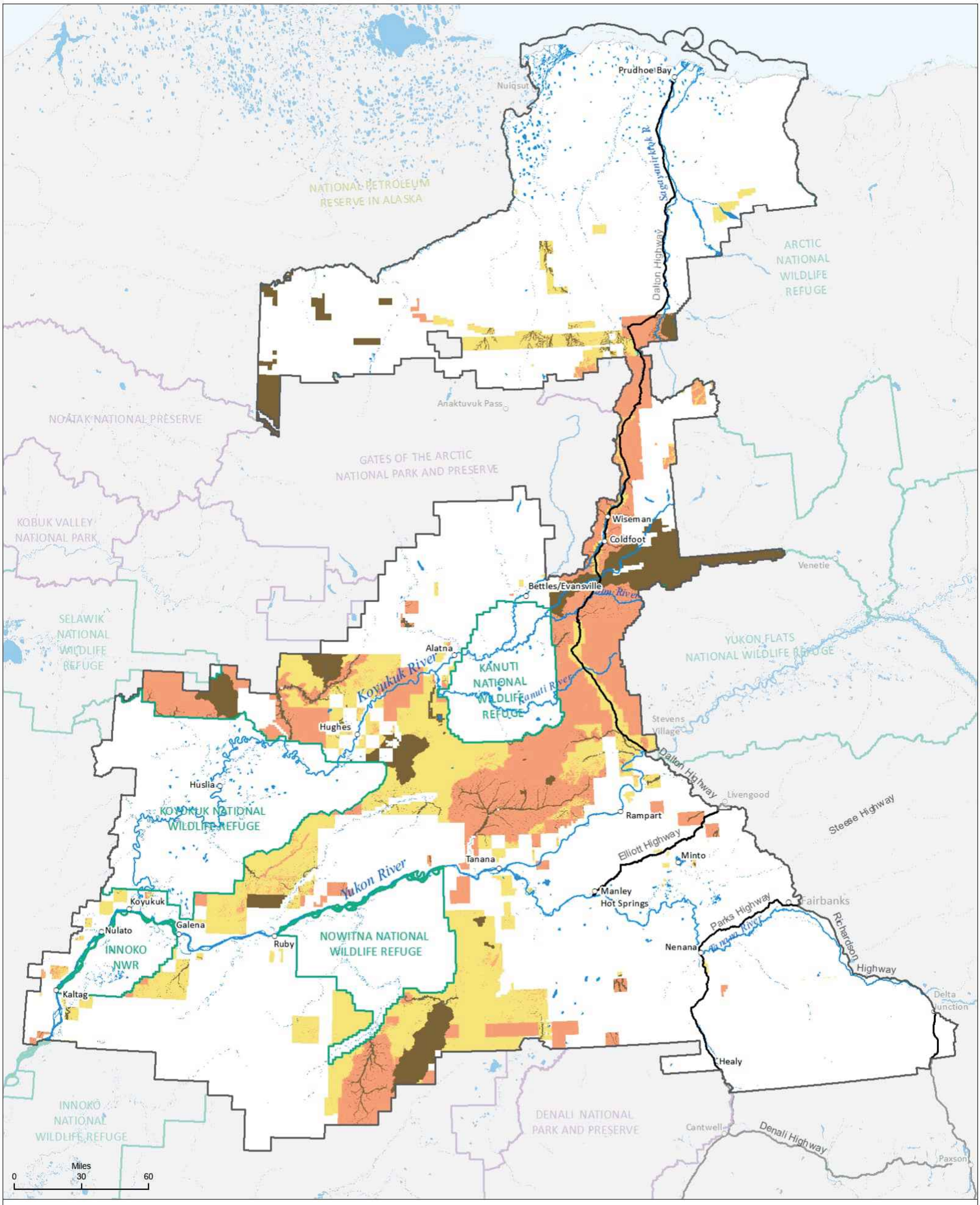


Map 2.42

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024

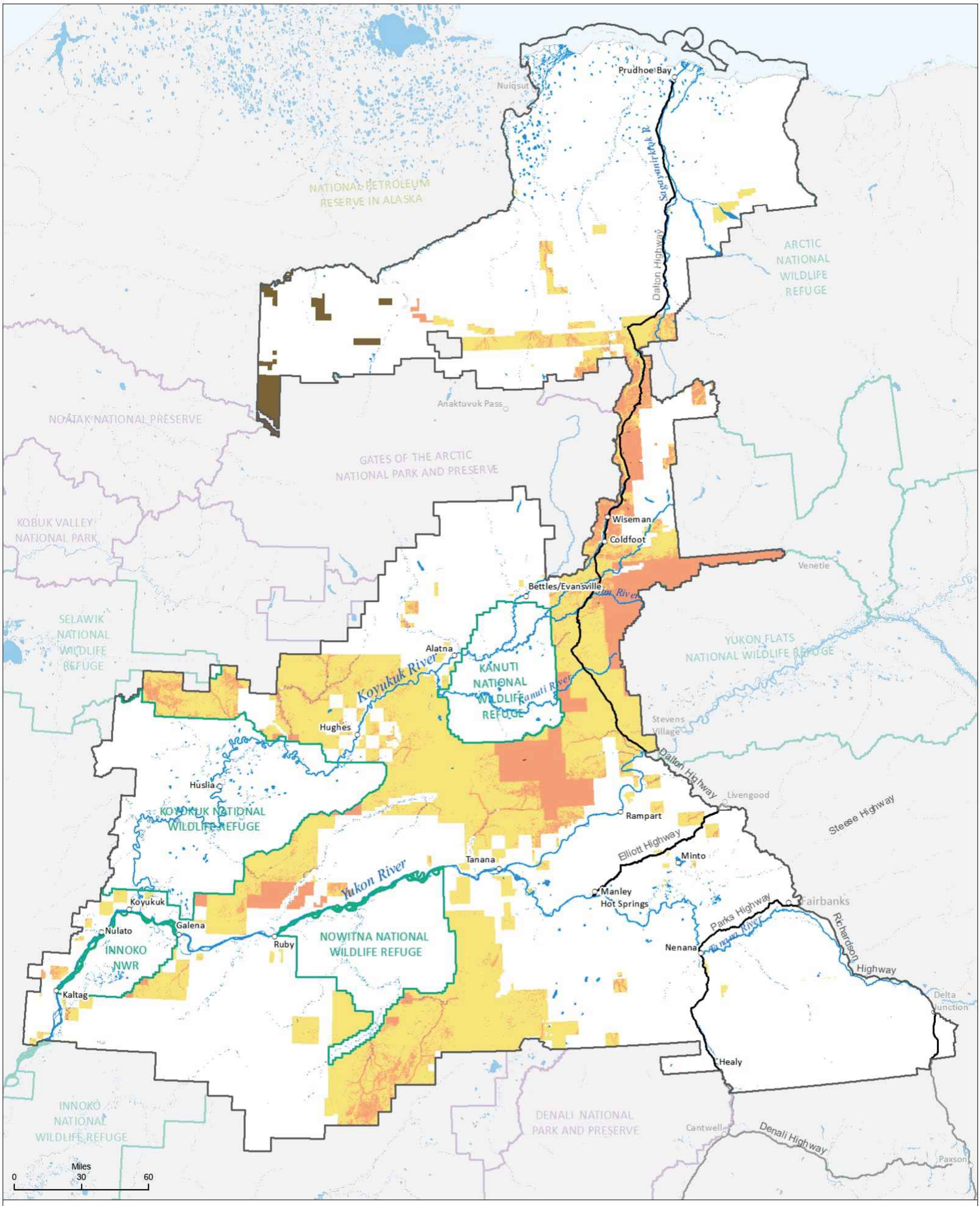


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.43

Print Date: 02/13/2024



Right-of-way (ROW) exclusion

ROW avoidance

Open to ROW location without ROW exclusion or avoidance

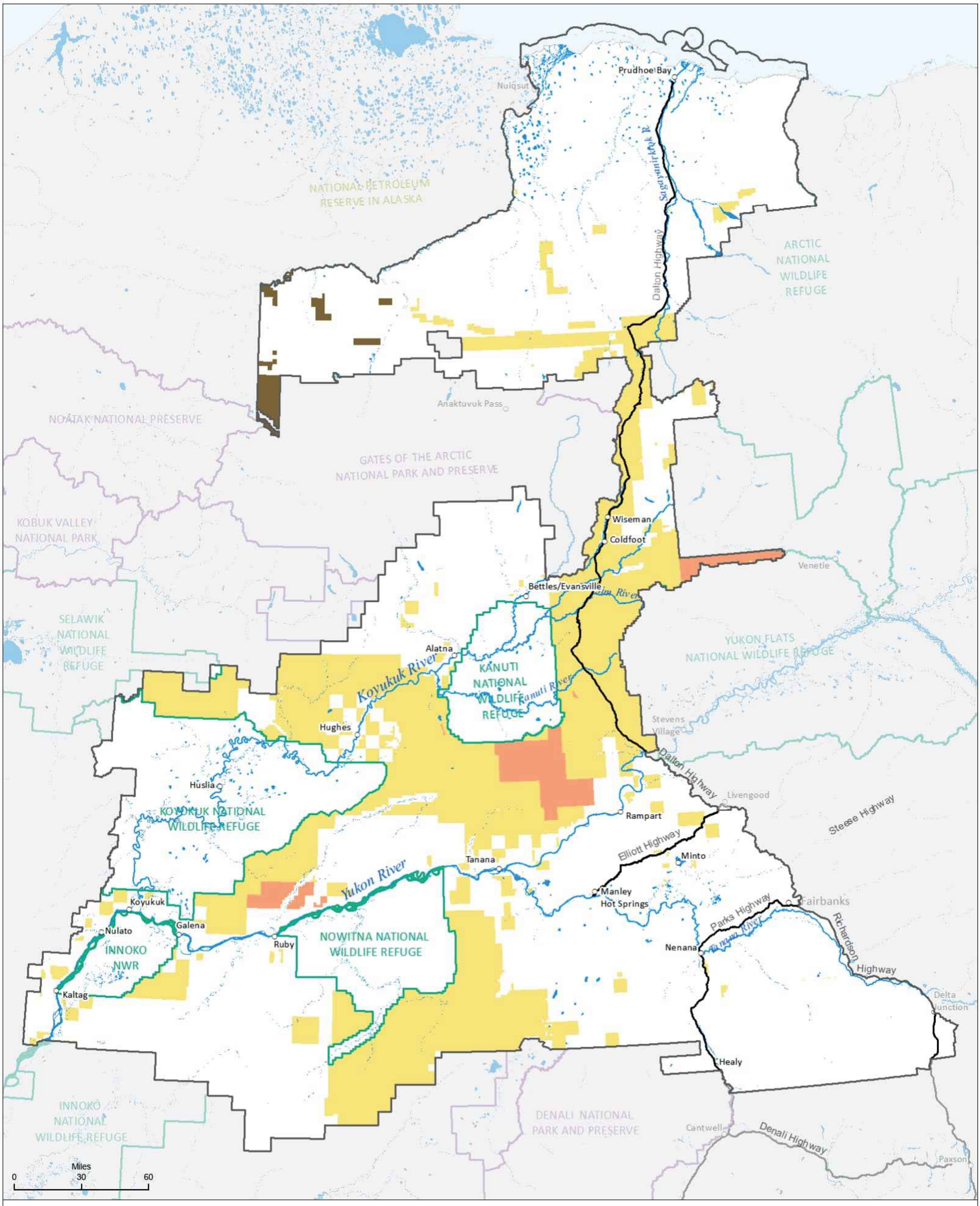


Map 2.44

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024



Right-of-way (ROW) exclusion

ROW avoidance

Open to ROW location without ROW exclusion or avoidance

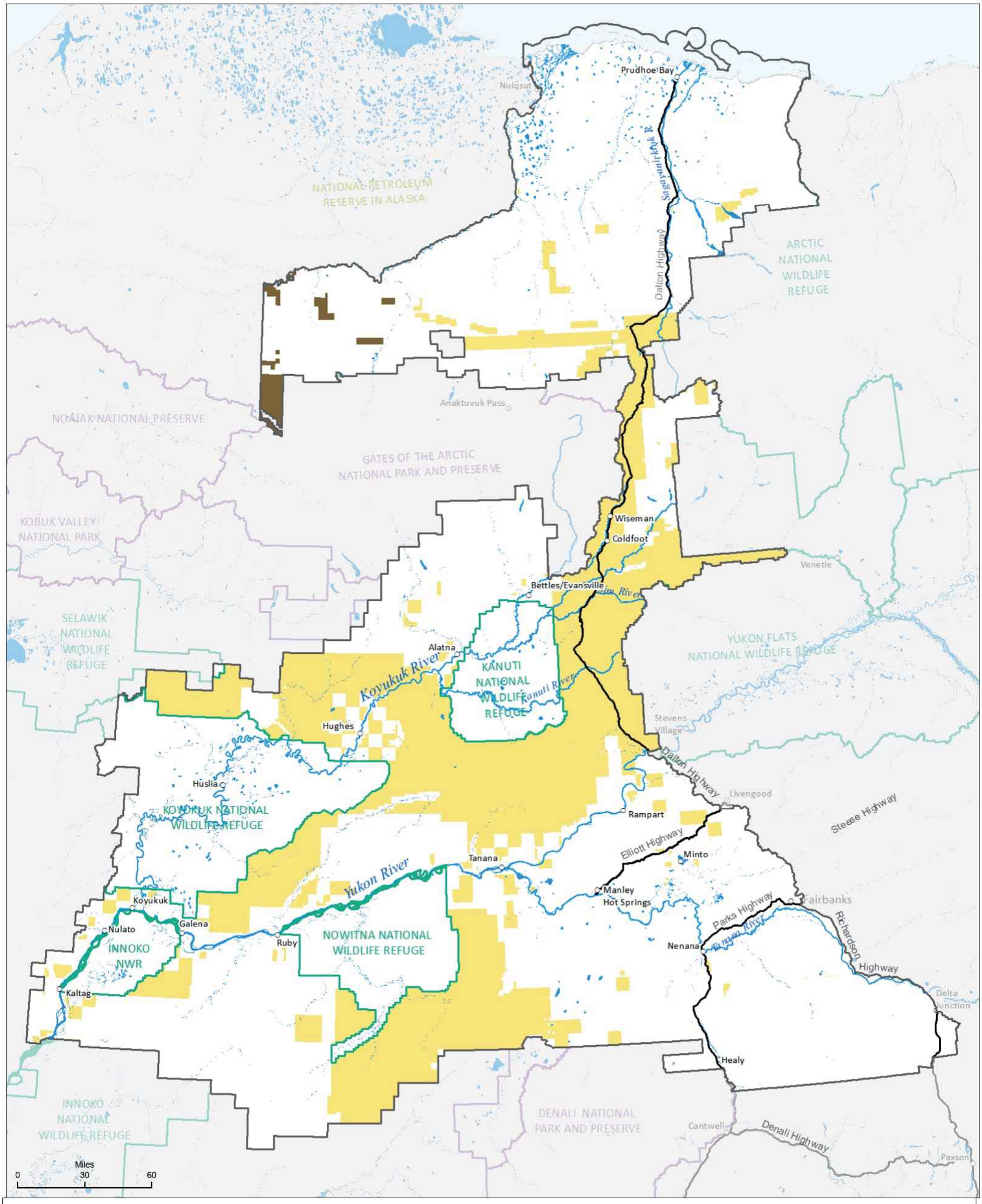


Map 2.45

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024



Right-of-way (ROW) exclusion

ROW avoidance

Open to ROW location without ROW exclusion or avoidance

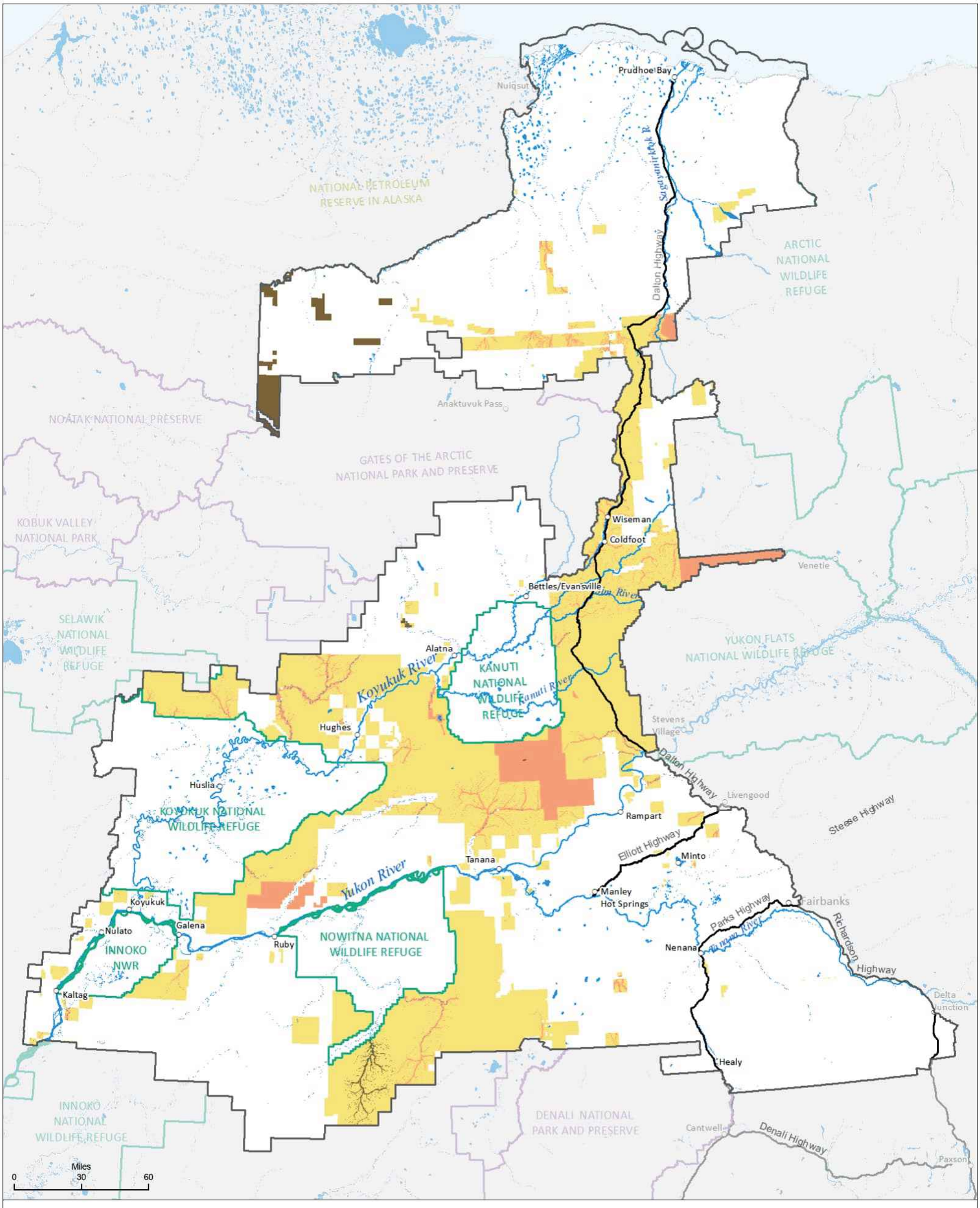


Map 2.46

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024



Right-of-way (ROW) exclusion

ROW avoidance

Open to ROW location without ROW exclusion or avoidance

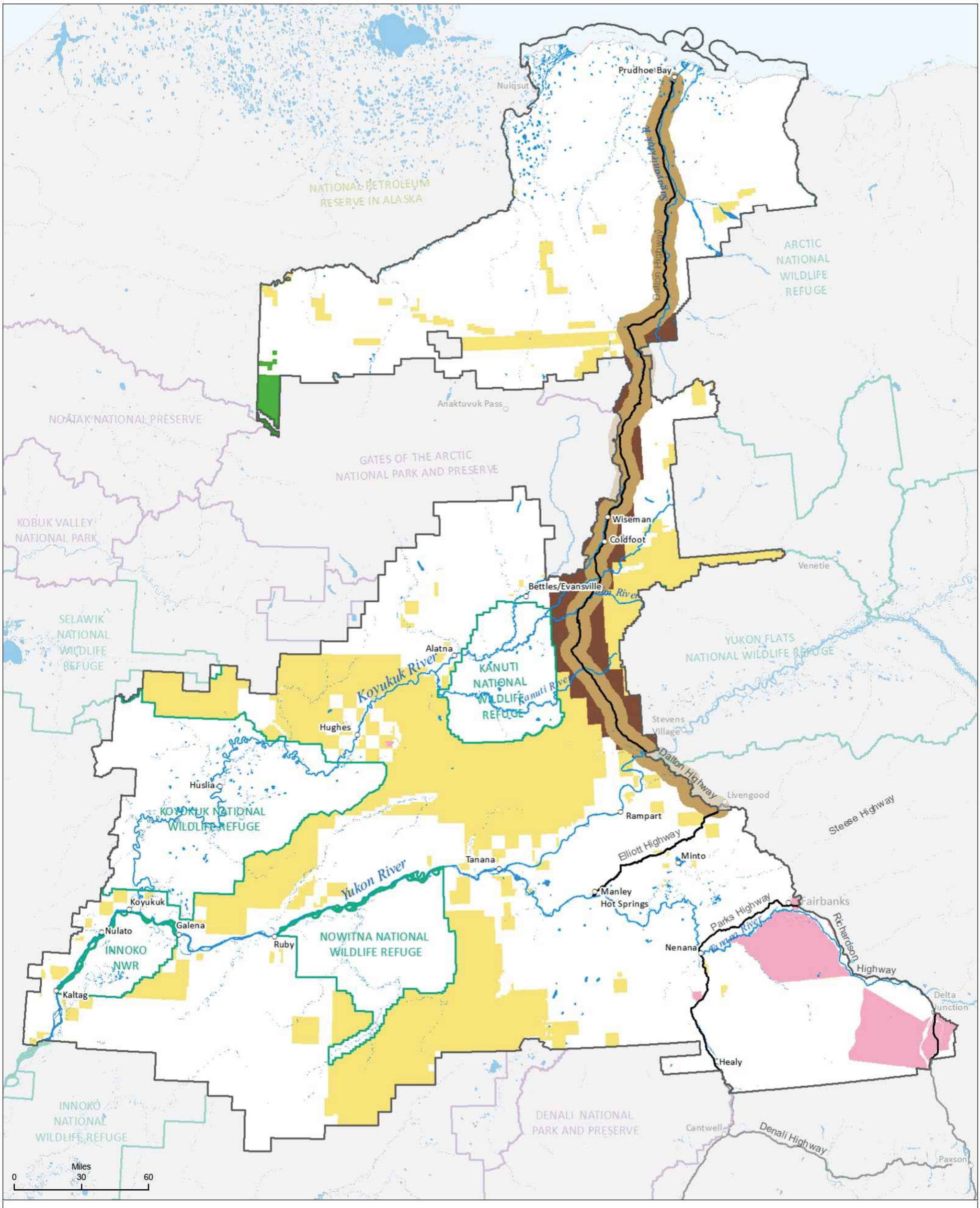


Map 2.47

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024



Manage the following as Travel Management Areas (TMAs):

- Within five miles of the Dalton Highway
- Upper Nigu
- Remainder of Dalton Plan Area
- Undefined or entire planning area
- Fairbanks/Military Lands TMA

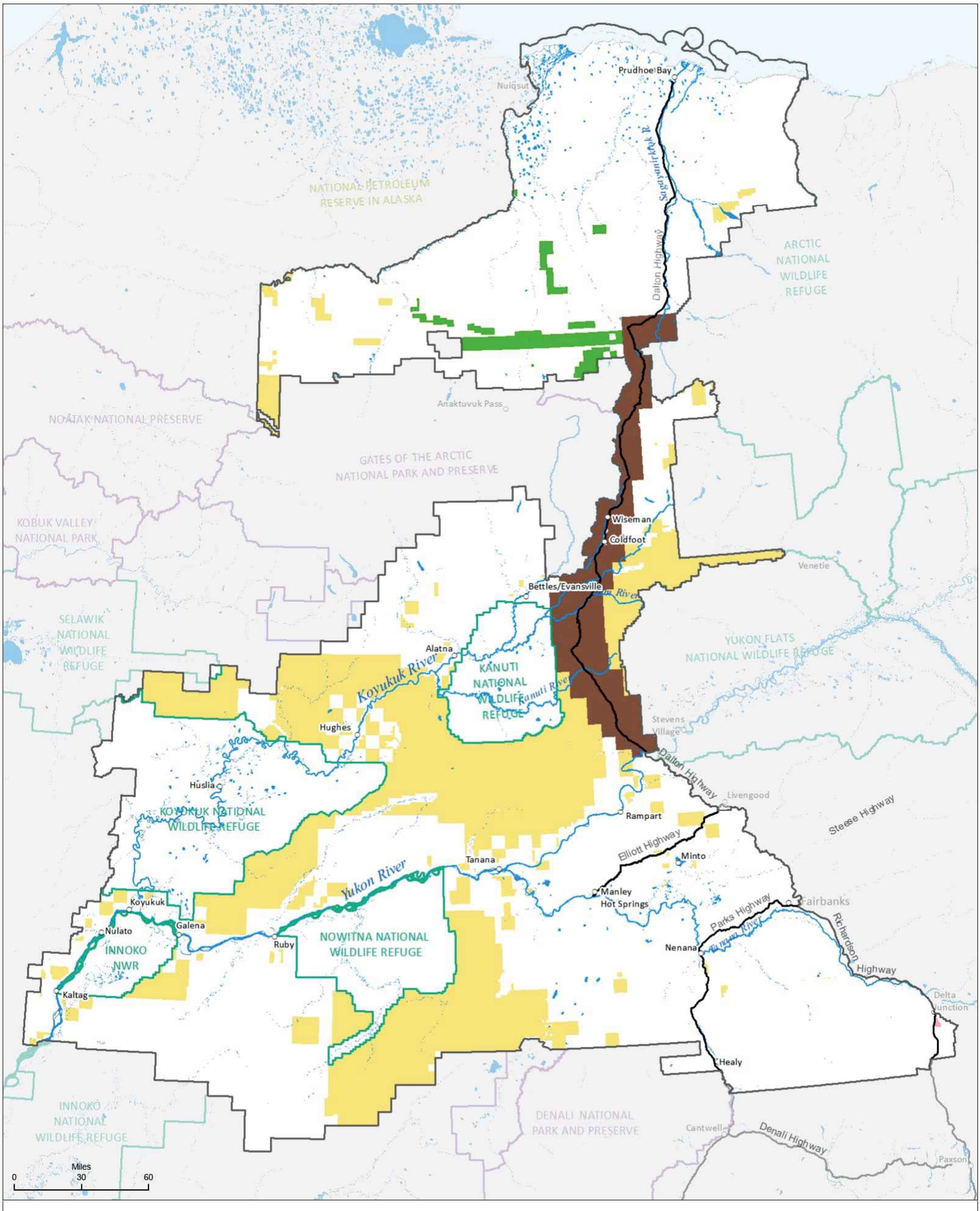


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.48

Print Date: 02/13/2024



Manage the following as Travel Management Areas (TMAs):

- Dalton Corridor
- Central Arctic Management Area (CAMA) lands outside the WSA
- Rest of planning area
- Fairbanks/Military Lands TMA

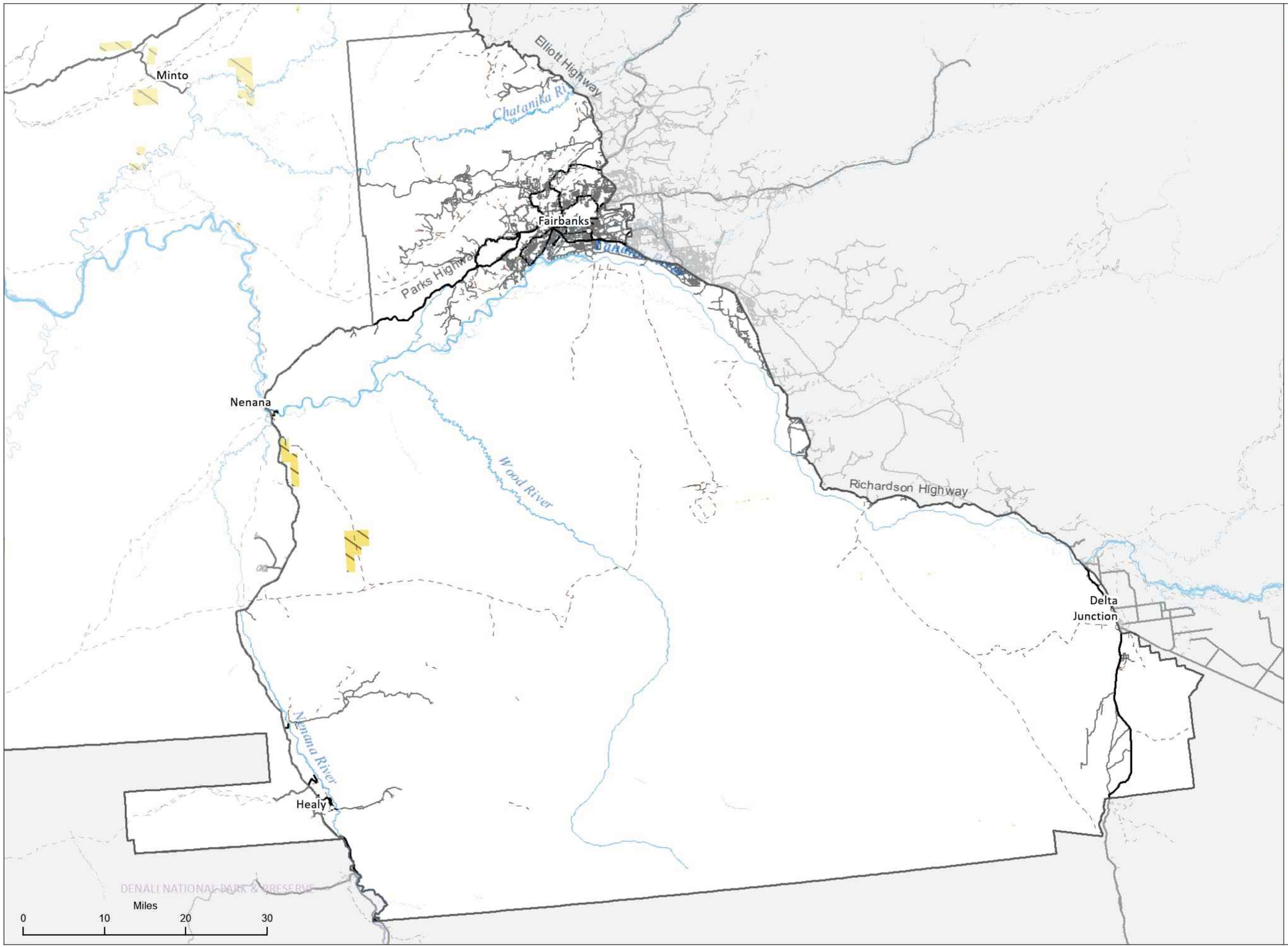


Map 2.49

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds gross vehicle weight (GVW), unless otherwise closed.

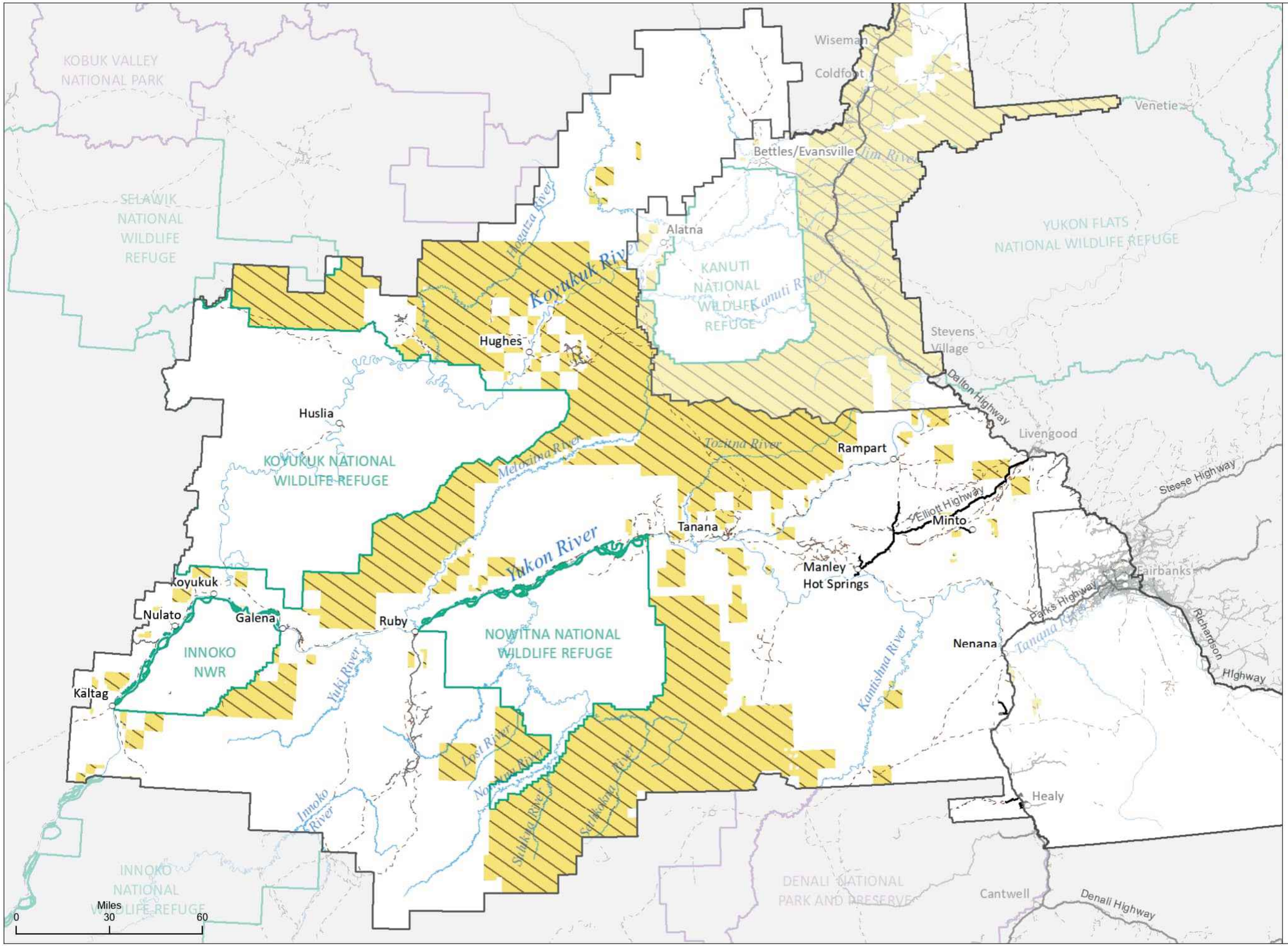
Data Source: BLM GIS 2017

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Map 2.50

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds gross vehicle weight (GVW), unless otherwise closed.

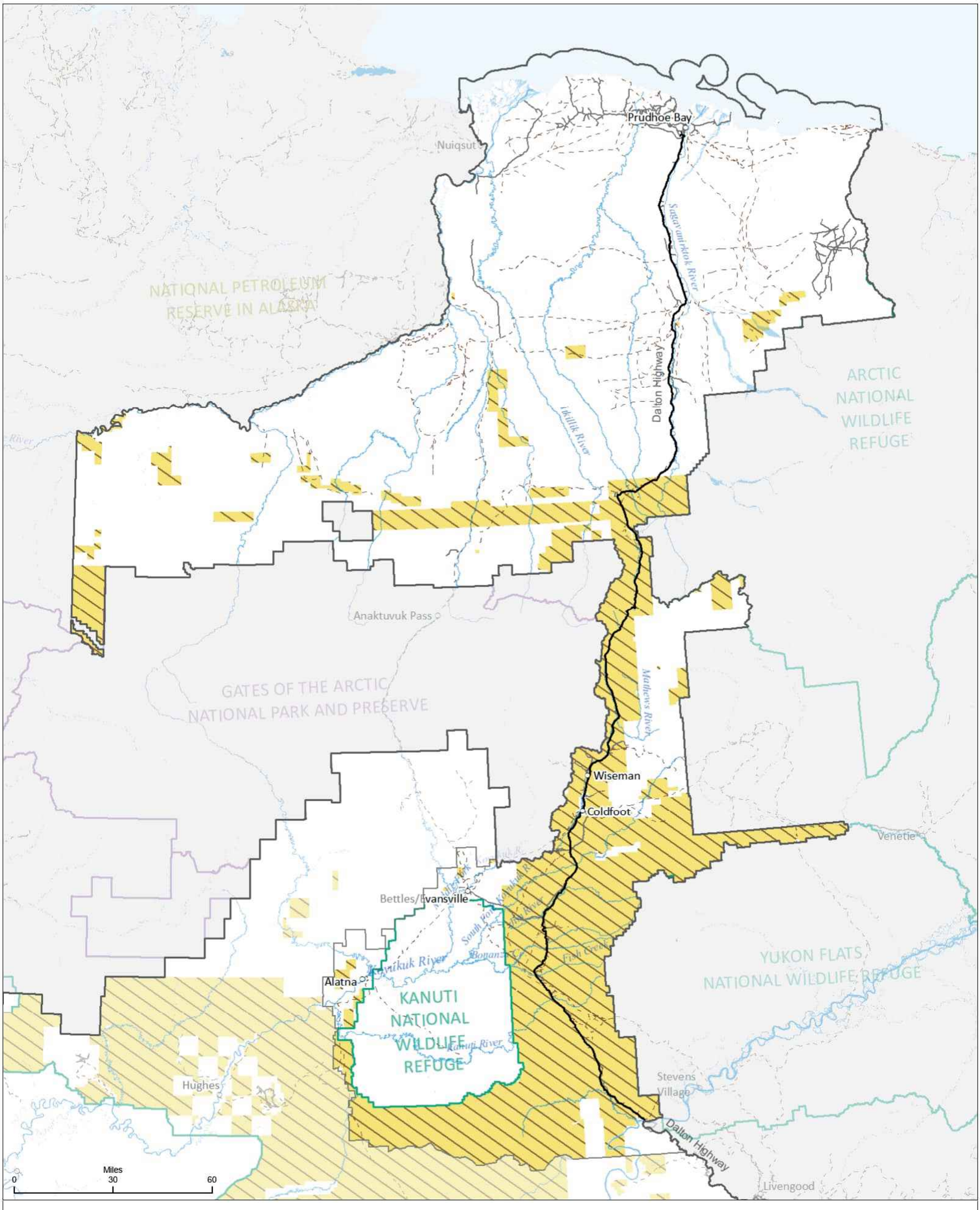
Data Source: BLM GIS 2017

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.



Map 2.51

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds gross vehicle weight (GVW), unless otherwise

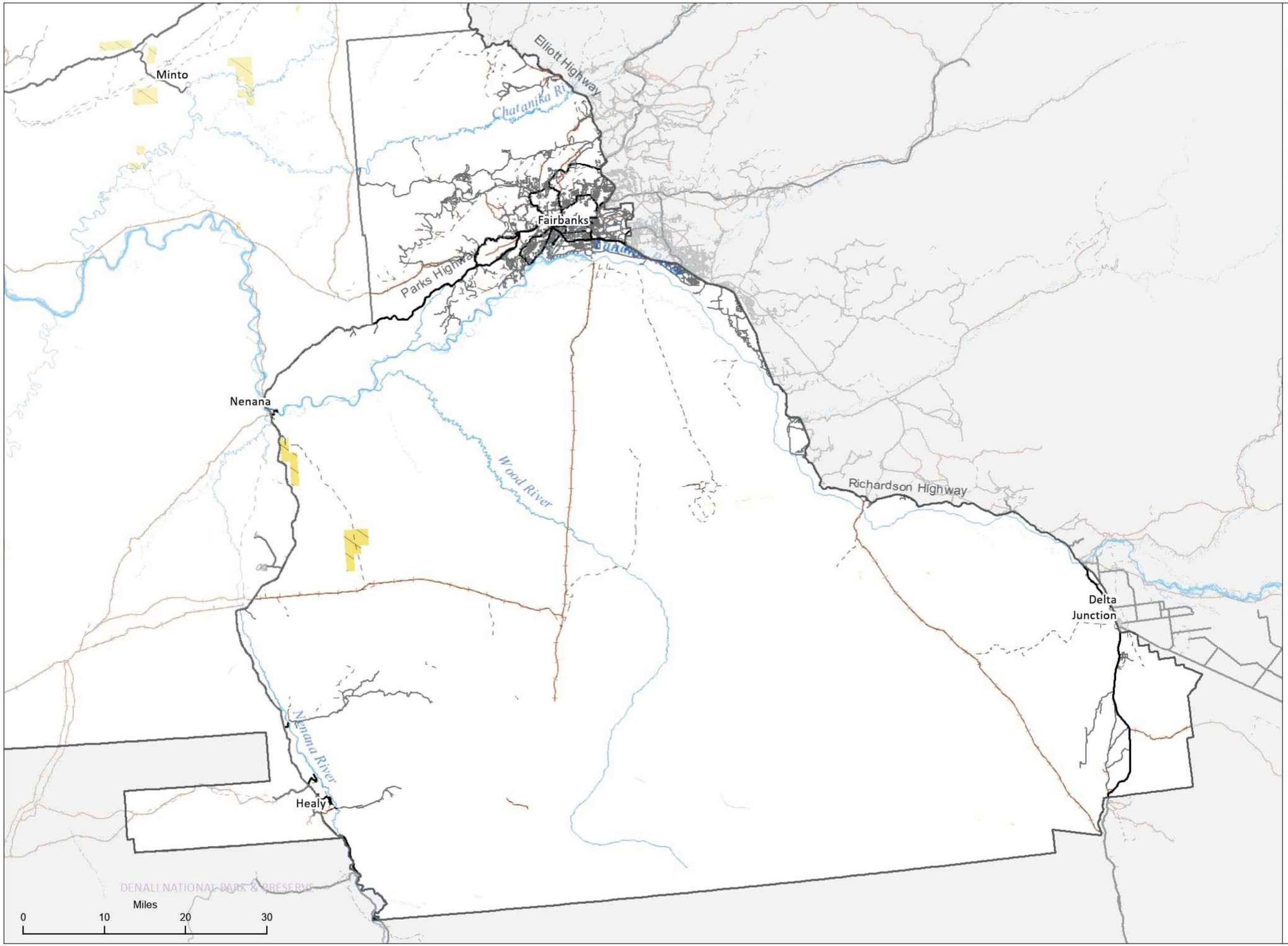


Map 2.52

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

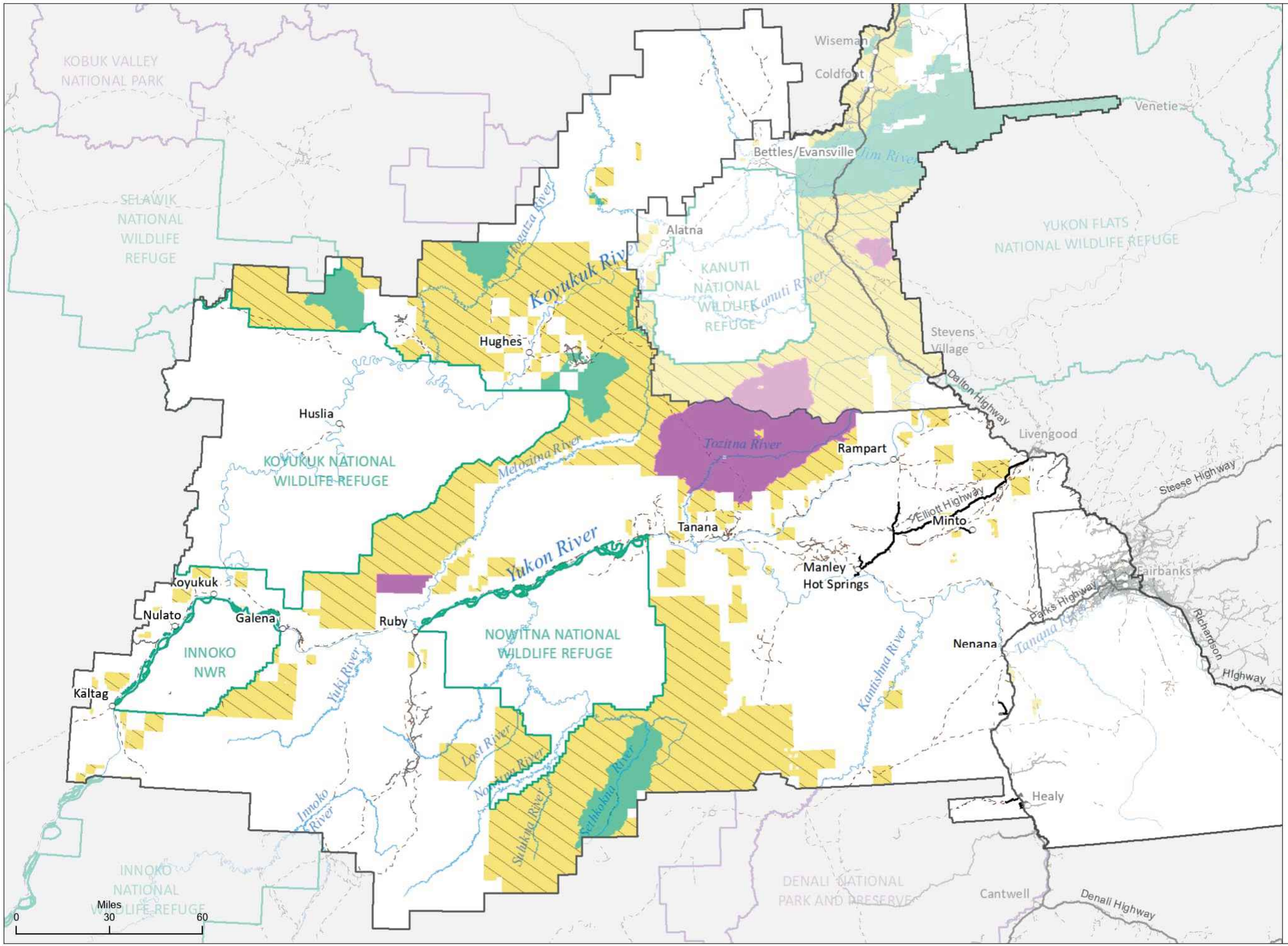
Data Source: BLM GIS 2017

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Map 2.53

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

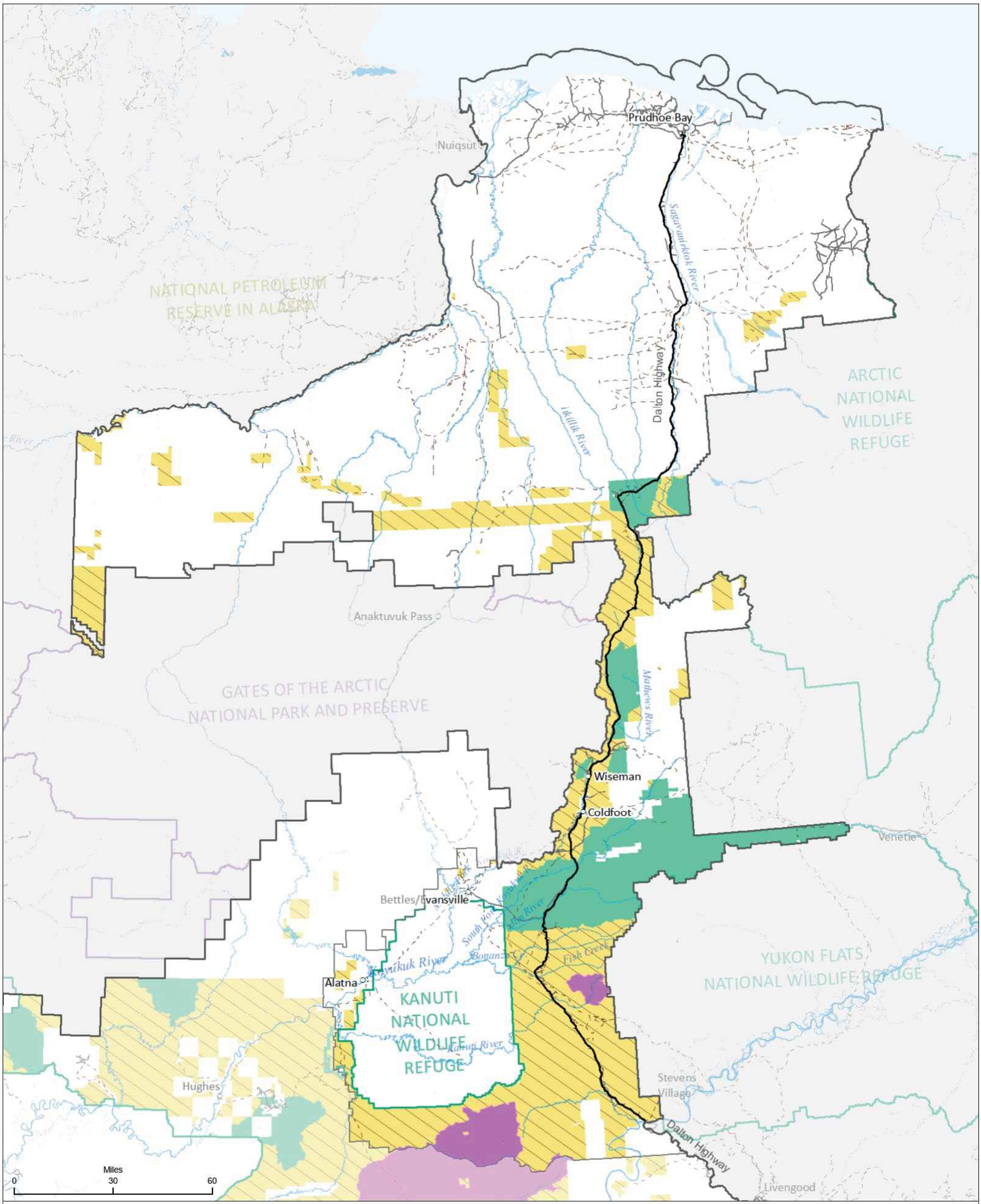
Data Source: BLM GIS 2017

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Map 2.54

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

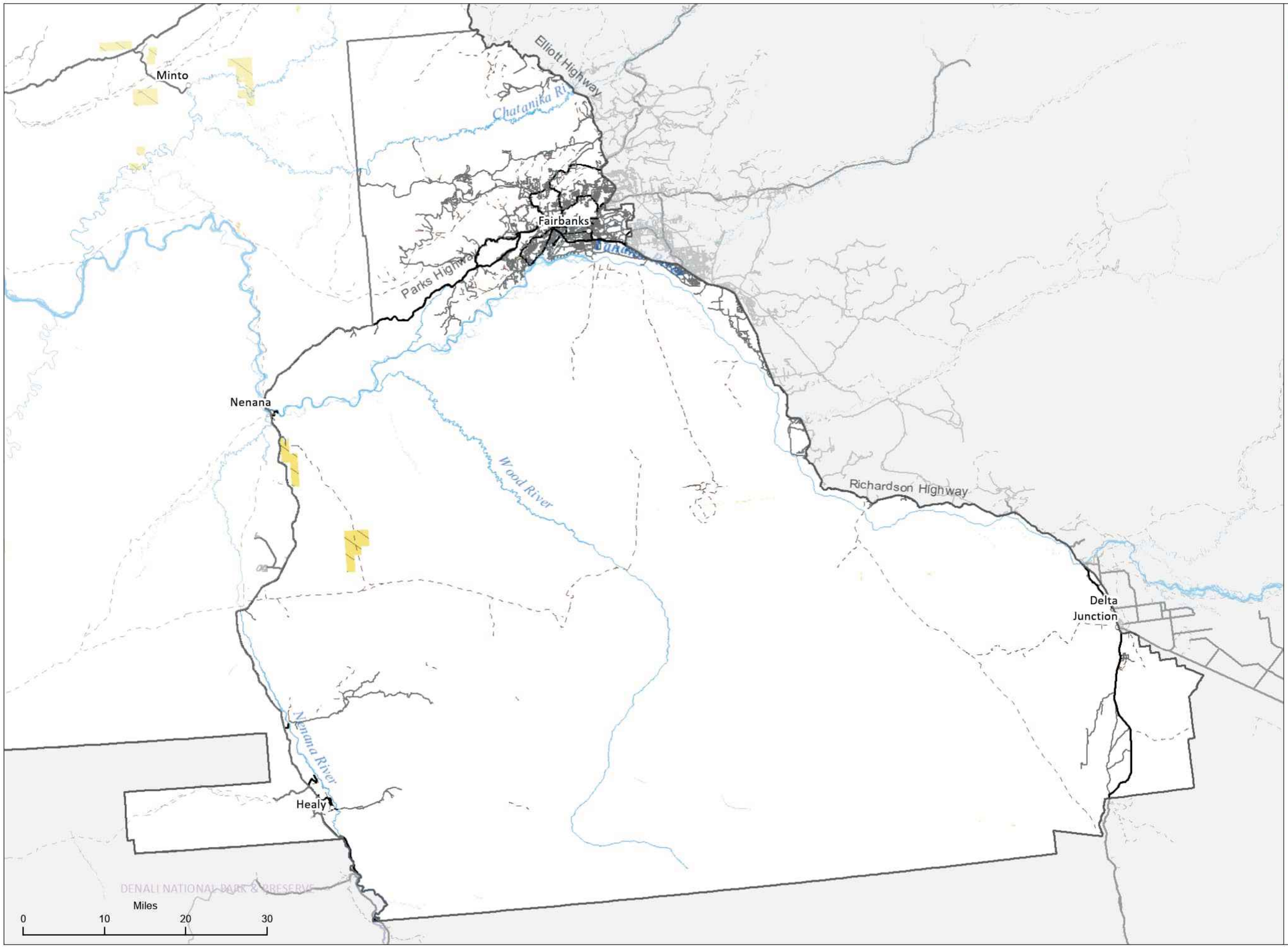


Map 2.55

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Data Source: BLM GIS 2017

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

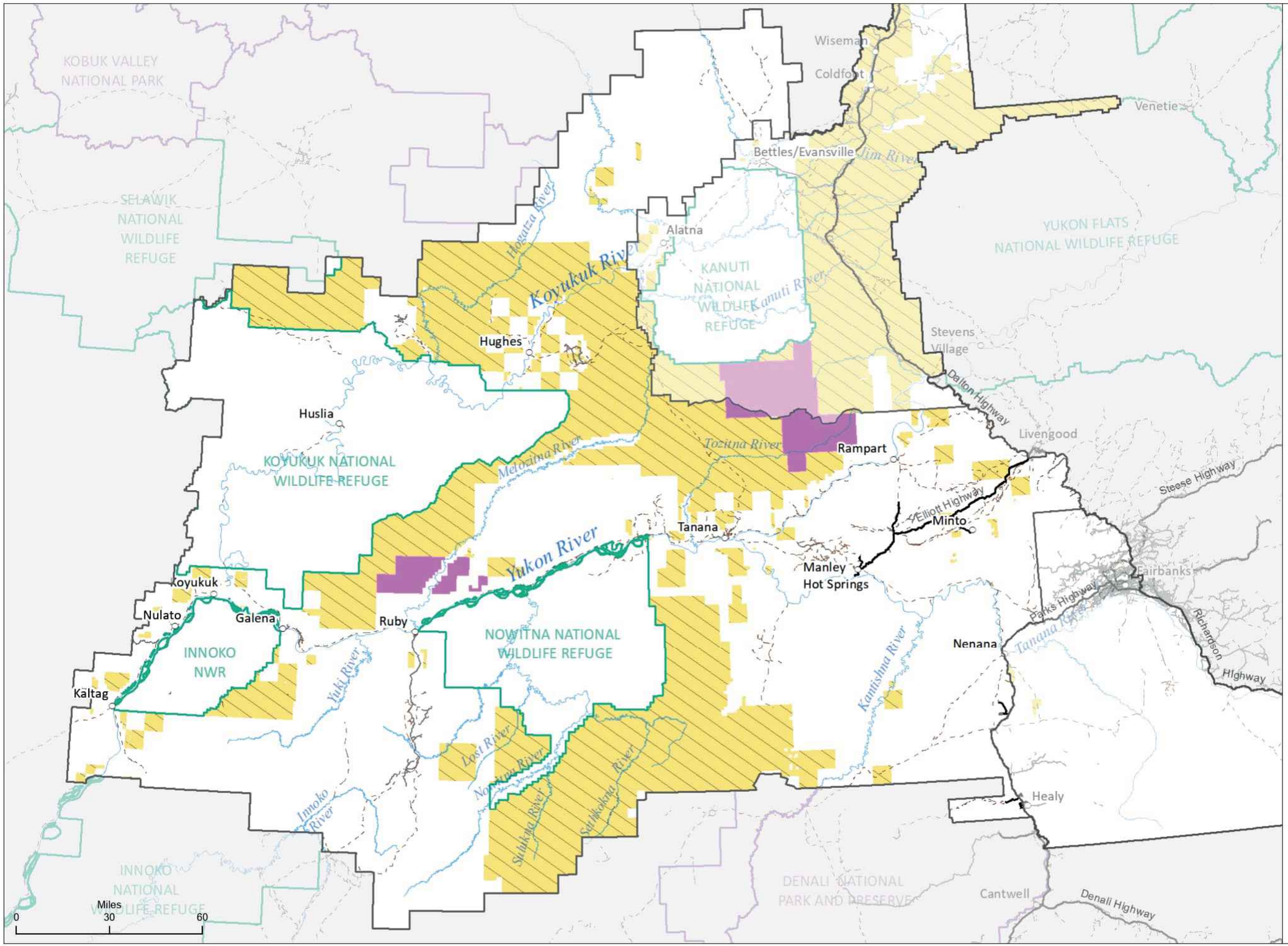
Data Source: BLM GIS 2017

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Map 2.56

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

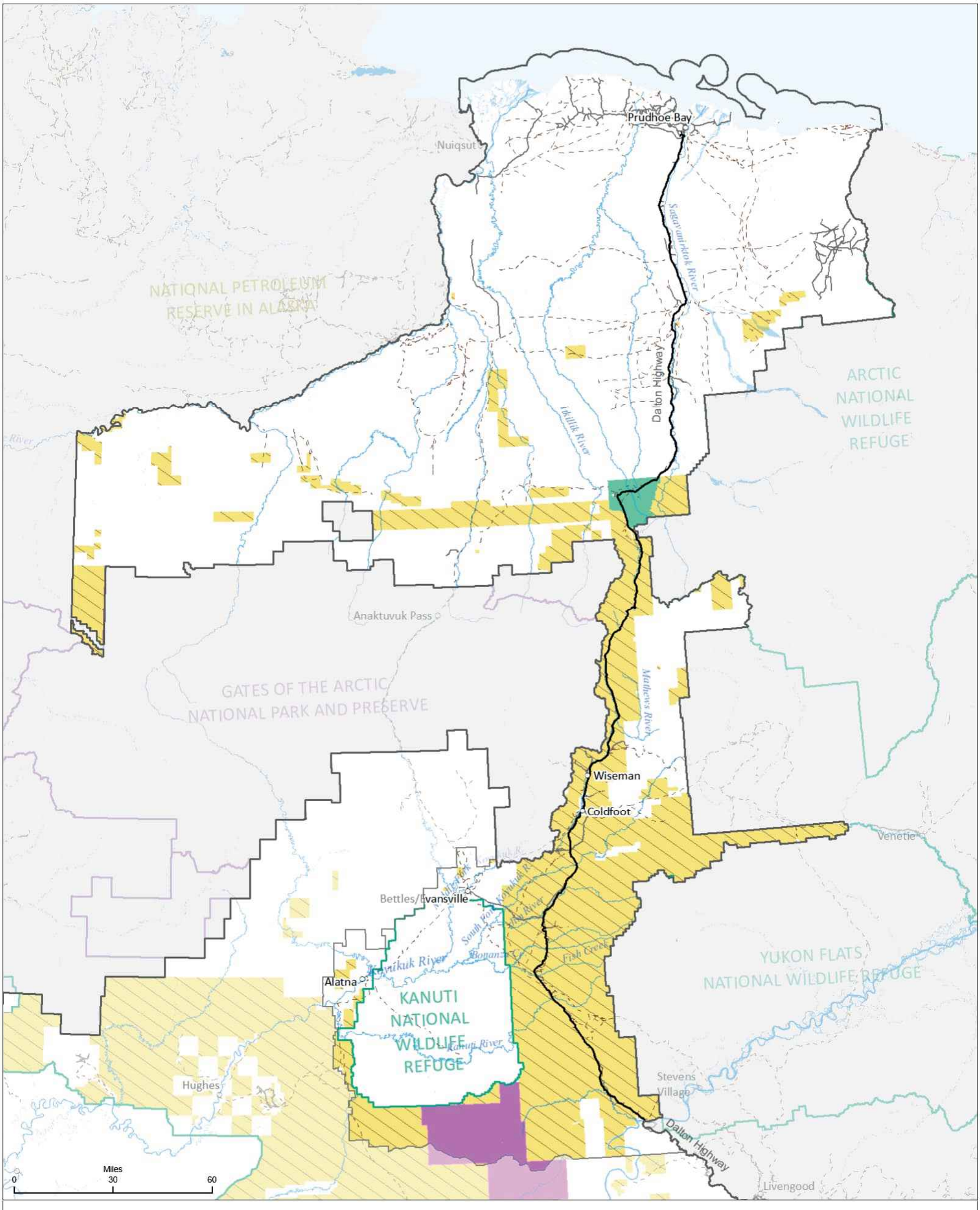
Data Source: BLM GIS 2017

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Map 2.57

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

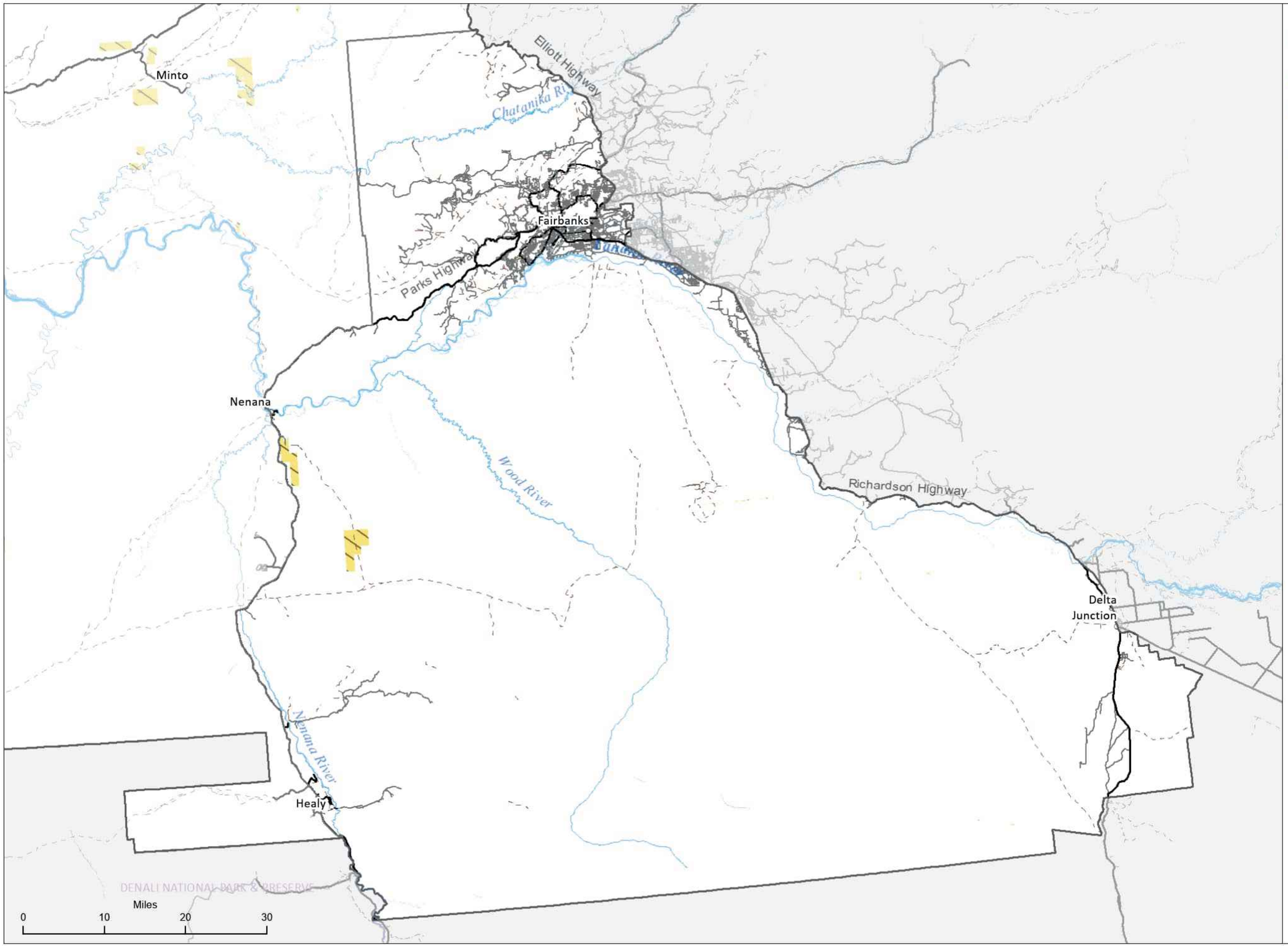


Map 2.58

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Data Source: BLM GIS 2017

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

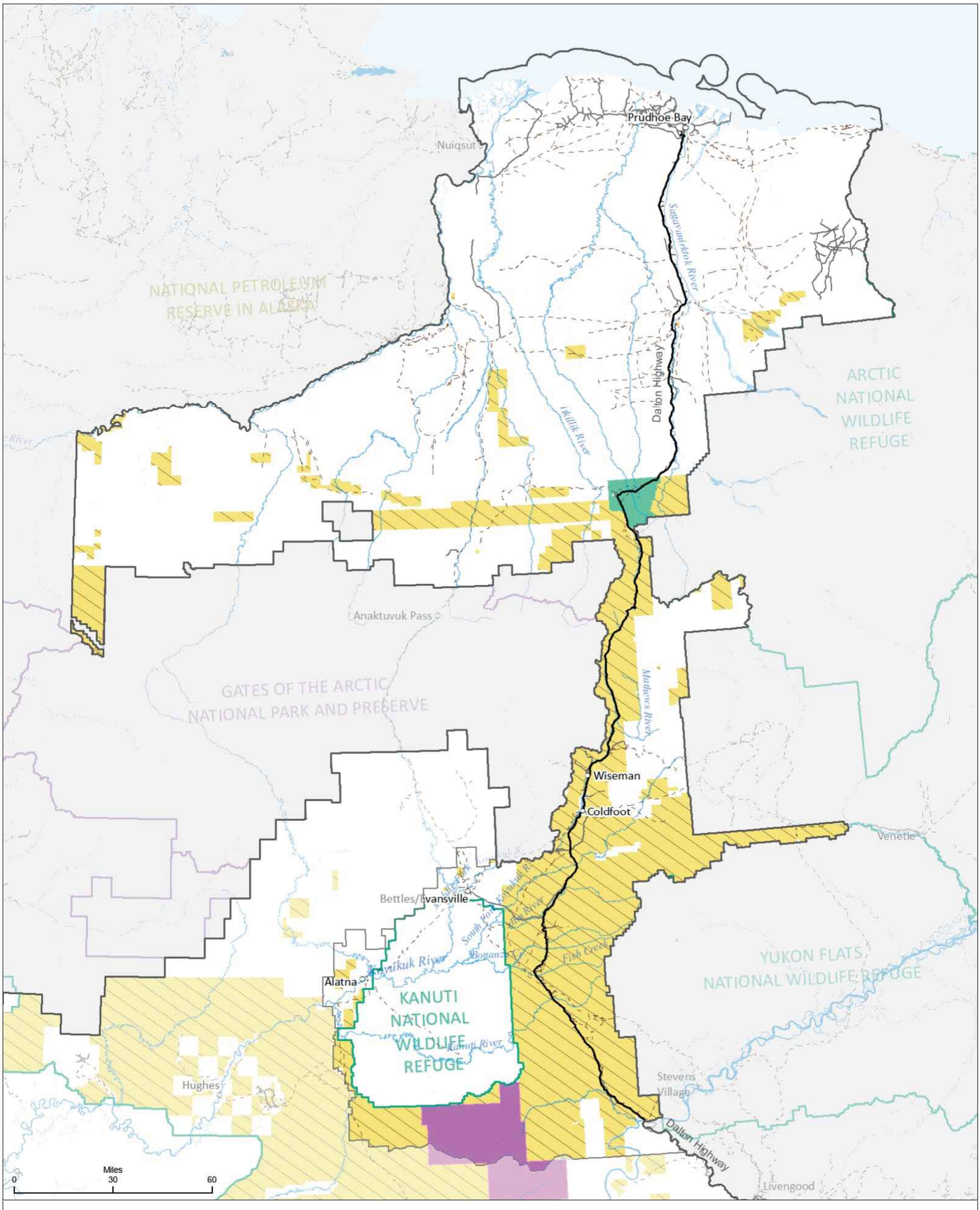
Data Source: BLM GIS 2017

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Map 2.59

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

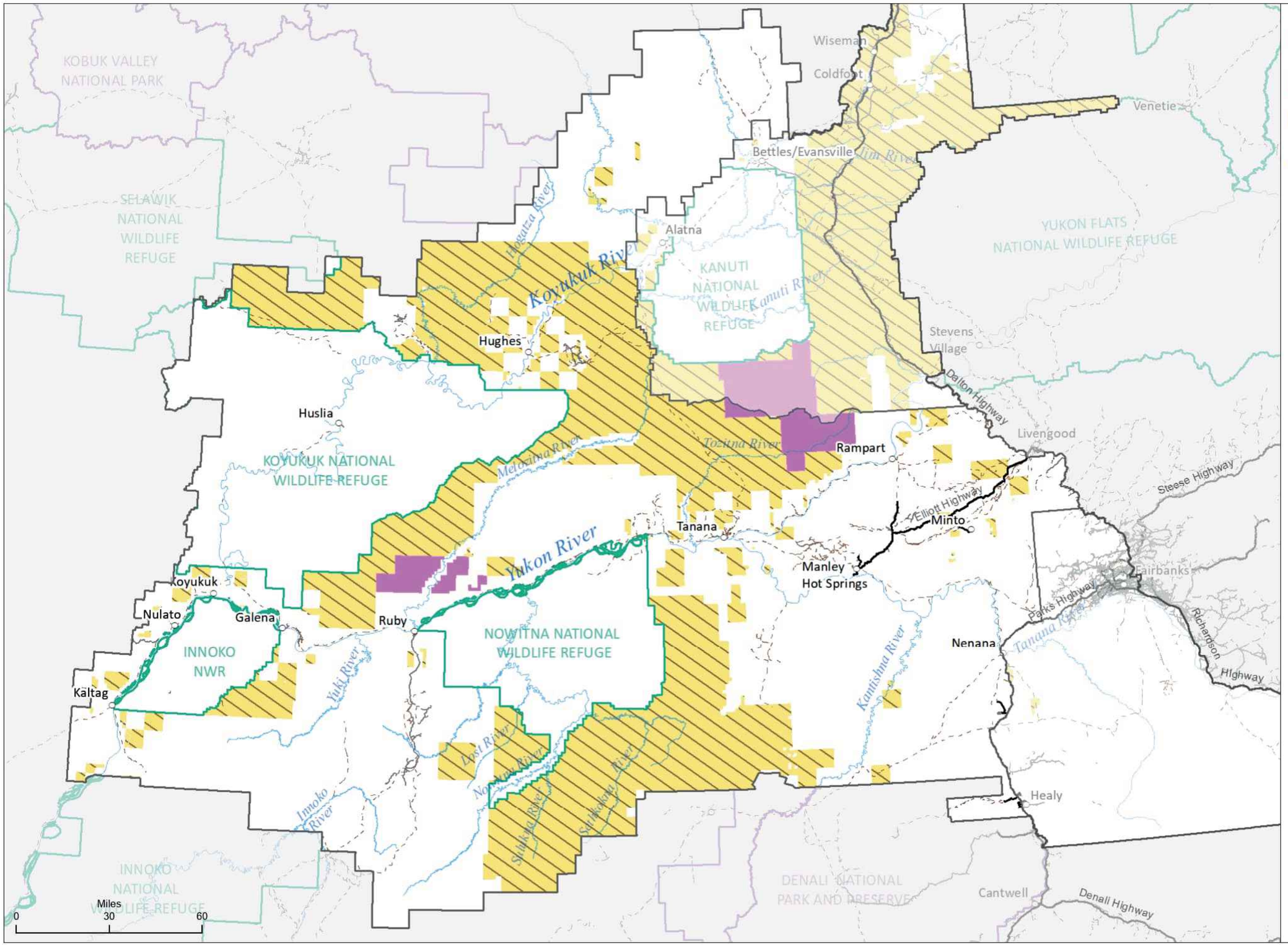
Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

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Data Source: BLM GIS 2017

Map 2.60

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

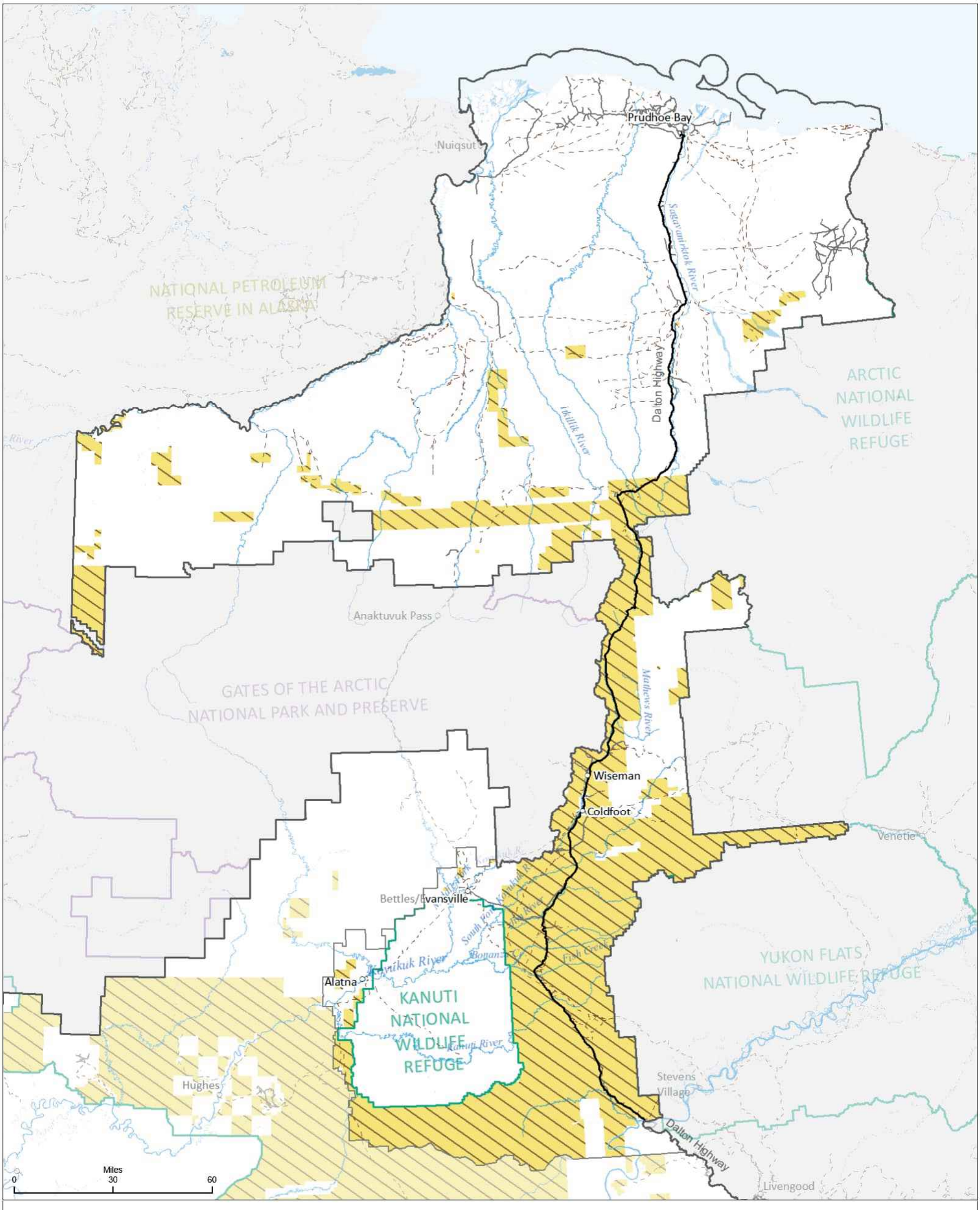
Data Source: BLM GIS 2017

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Map 2.61

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

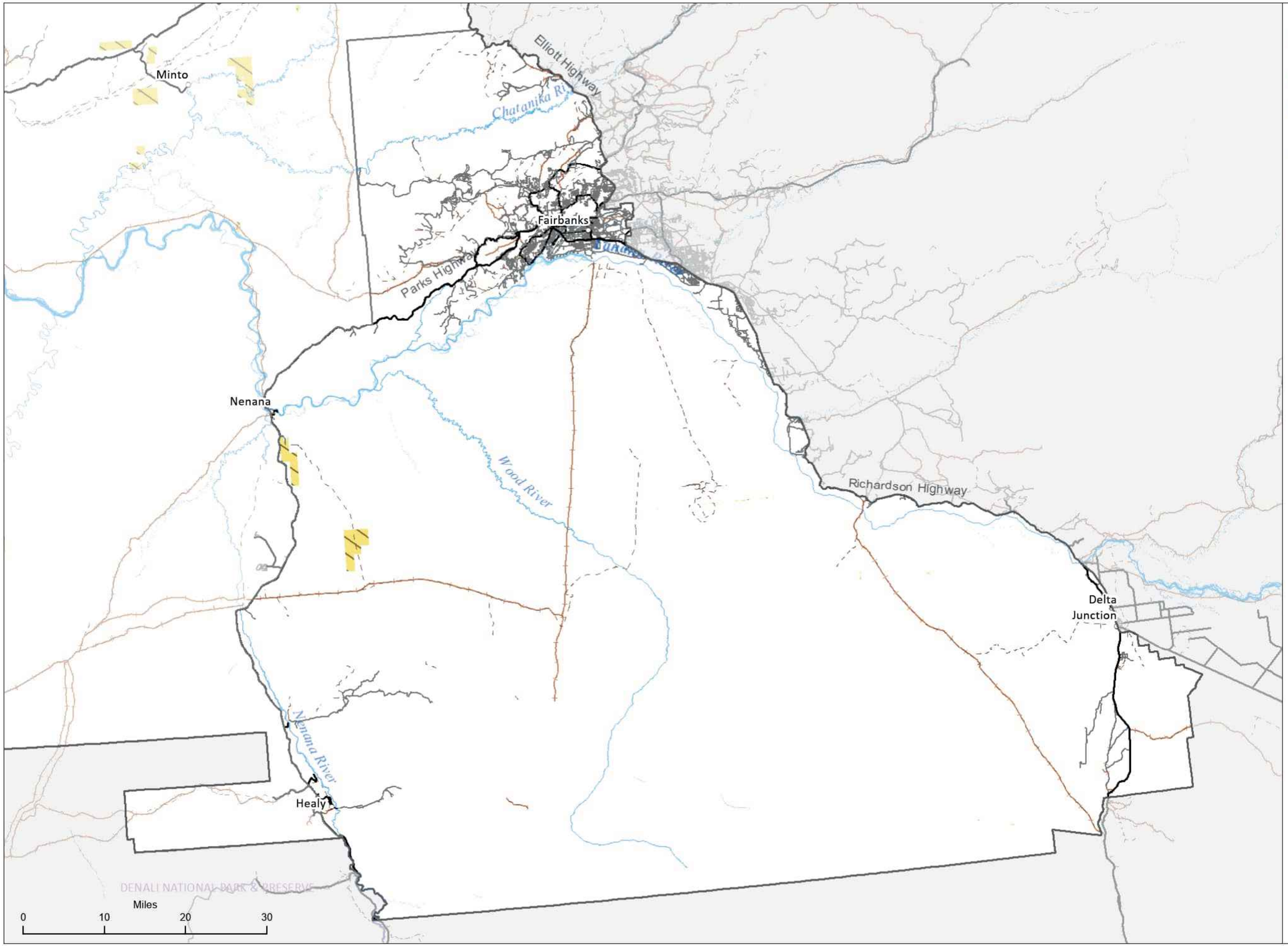


Map 2.62

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Data Source: BLM GIS 2017

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

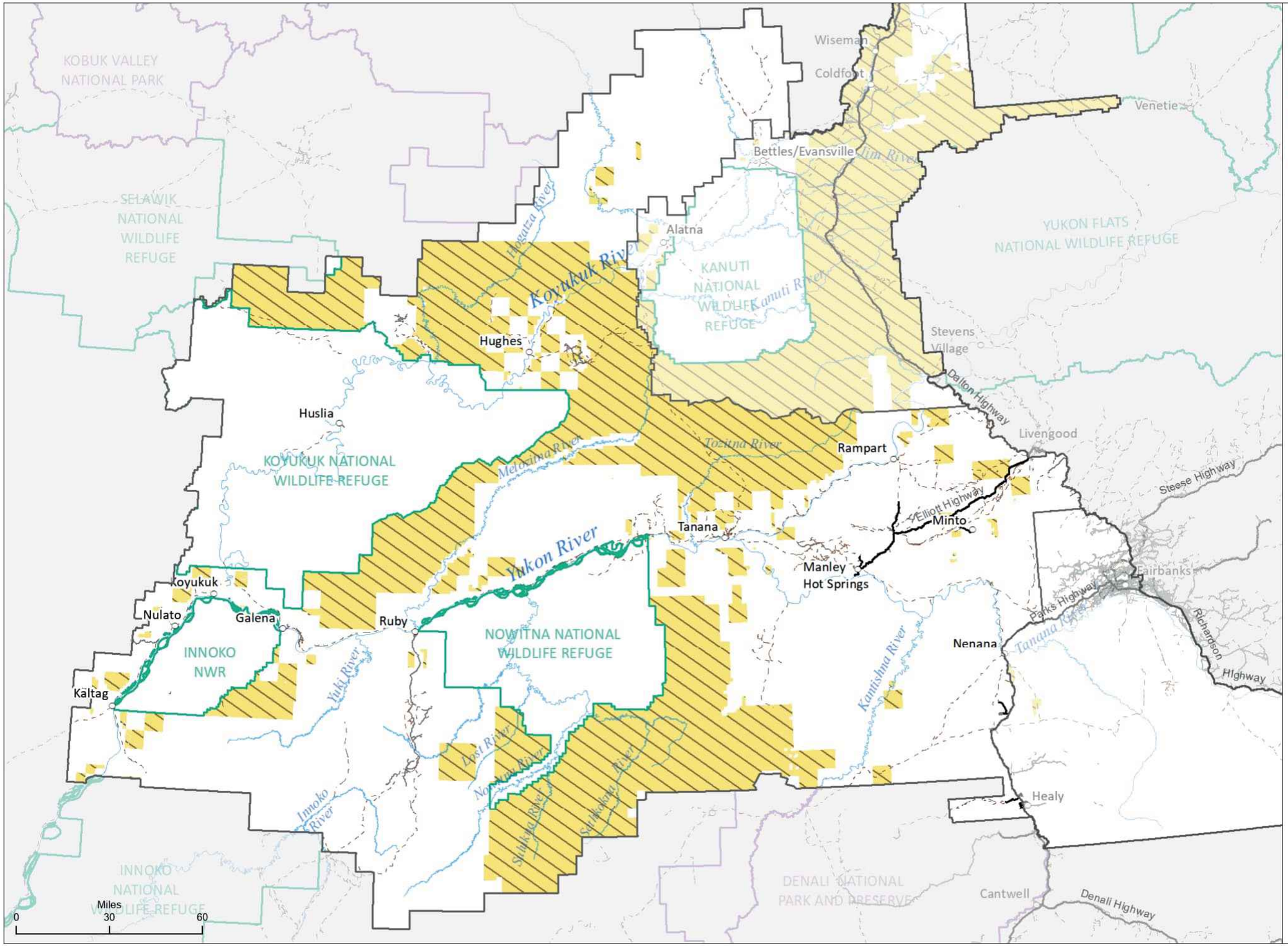
Data Source: BLM GIS 2017

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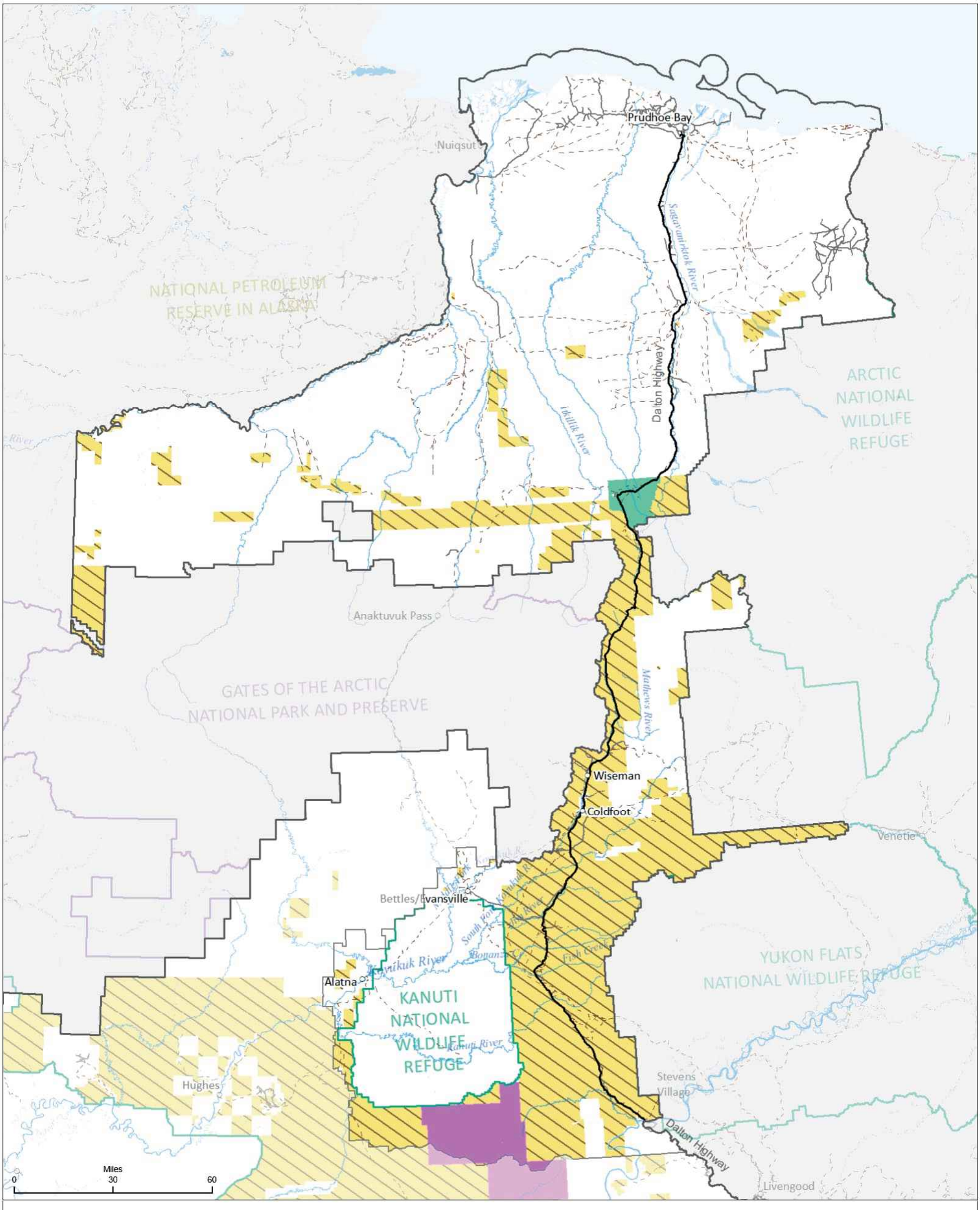
Map 2.63

Print Date: 02/13/2024



Map 2.64

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

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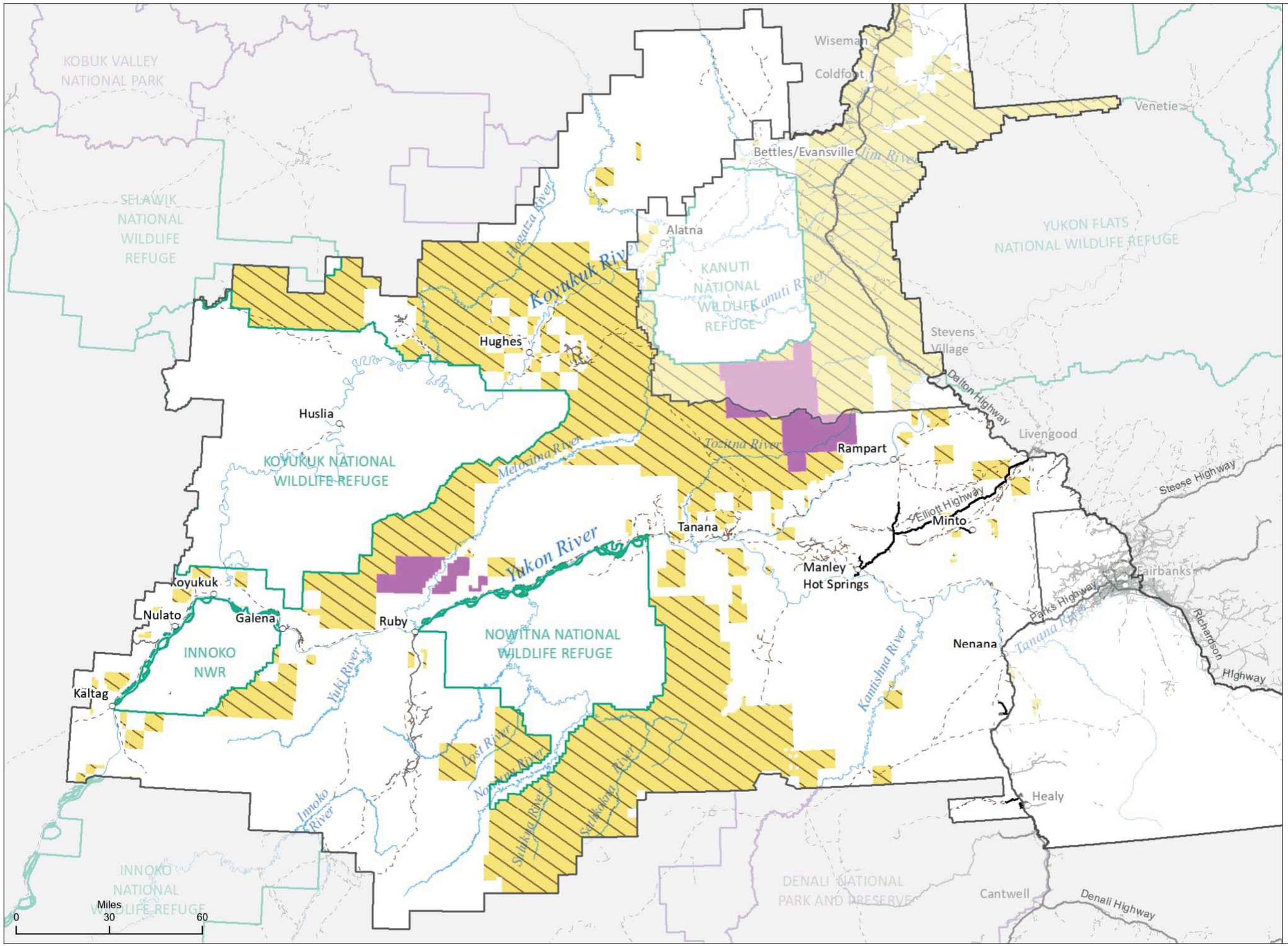


Map 2.65

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Data Source: BLM GIS 2017

Print Date: 02/13/2024



Seasonal limitations for off-highway vehicle (OHV) travel (closed in summer)*

Subject to timing limitations for OHV travel (no OHVs May 1 - June 30)*

Limited OHV travel

Roads

Trails

RS 2477

*This is an implementation decision.

Note: during the summer, vehicle use in the decision area is limited to 1,500 pounds curb weight, unless otherwise closed.

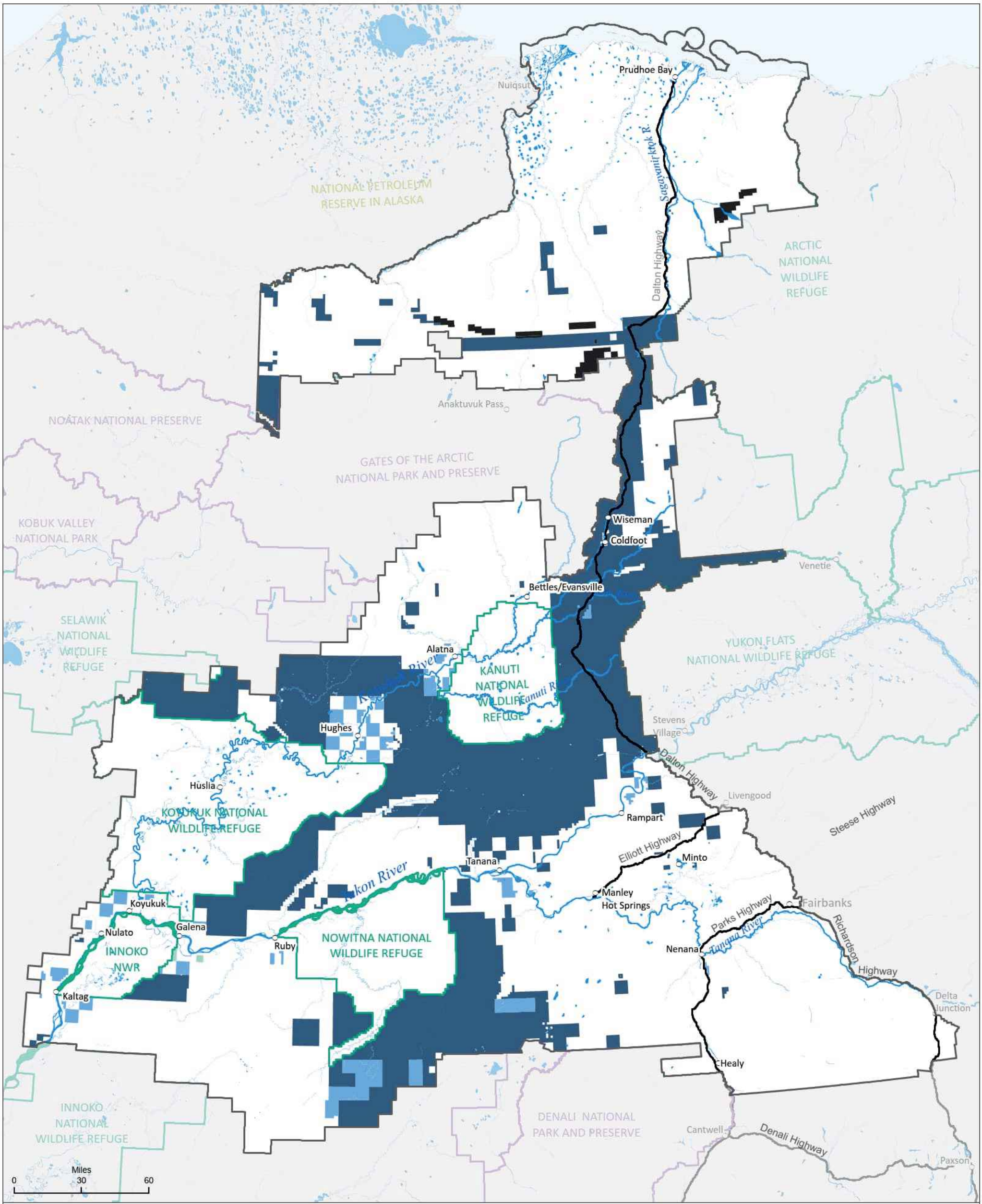
Data Source: BLM GIS 2017

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Map 2.66

Print Date: 02/13/2024

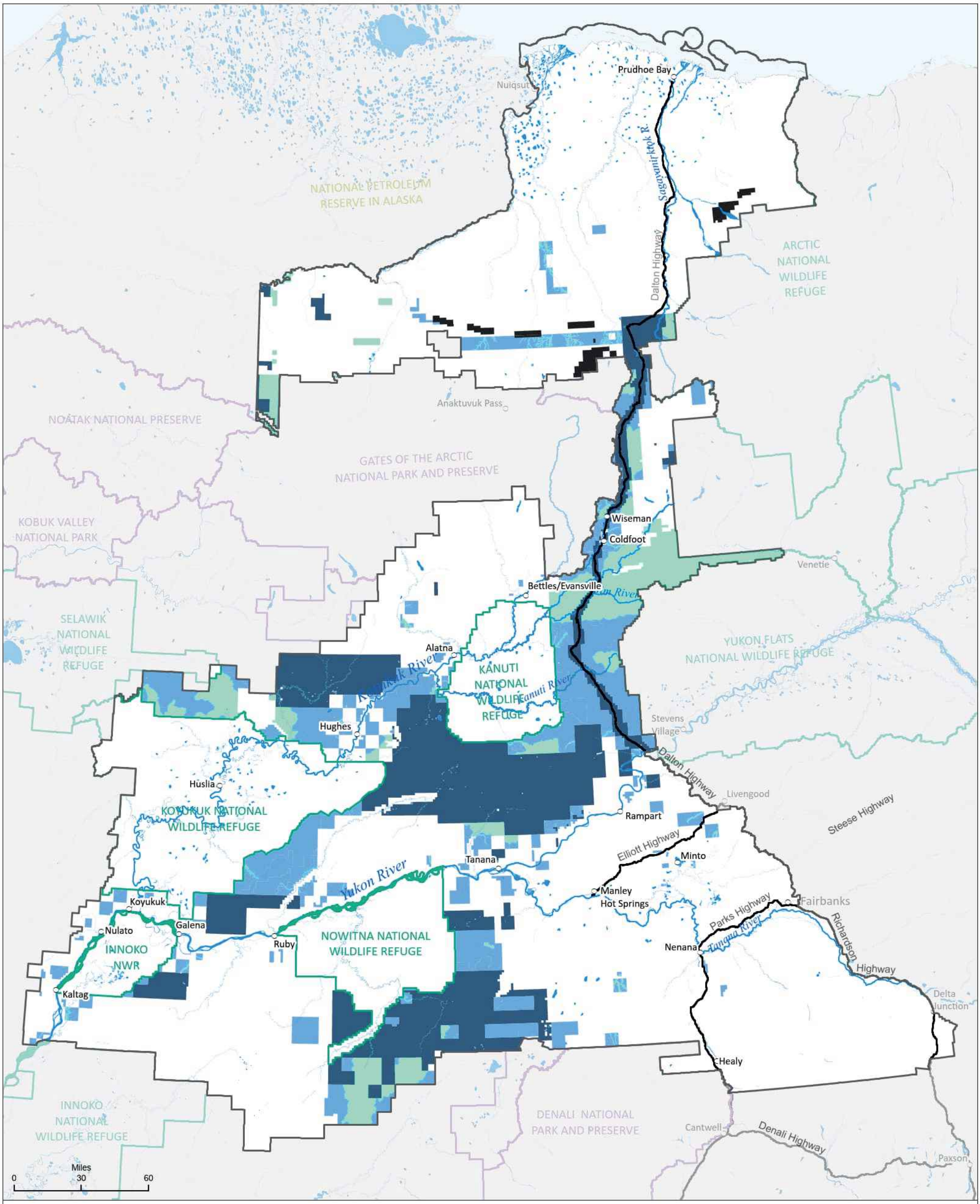


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Data Source: BLM GIS 2017

Map 2.67

Print Date: 04/03/2024

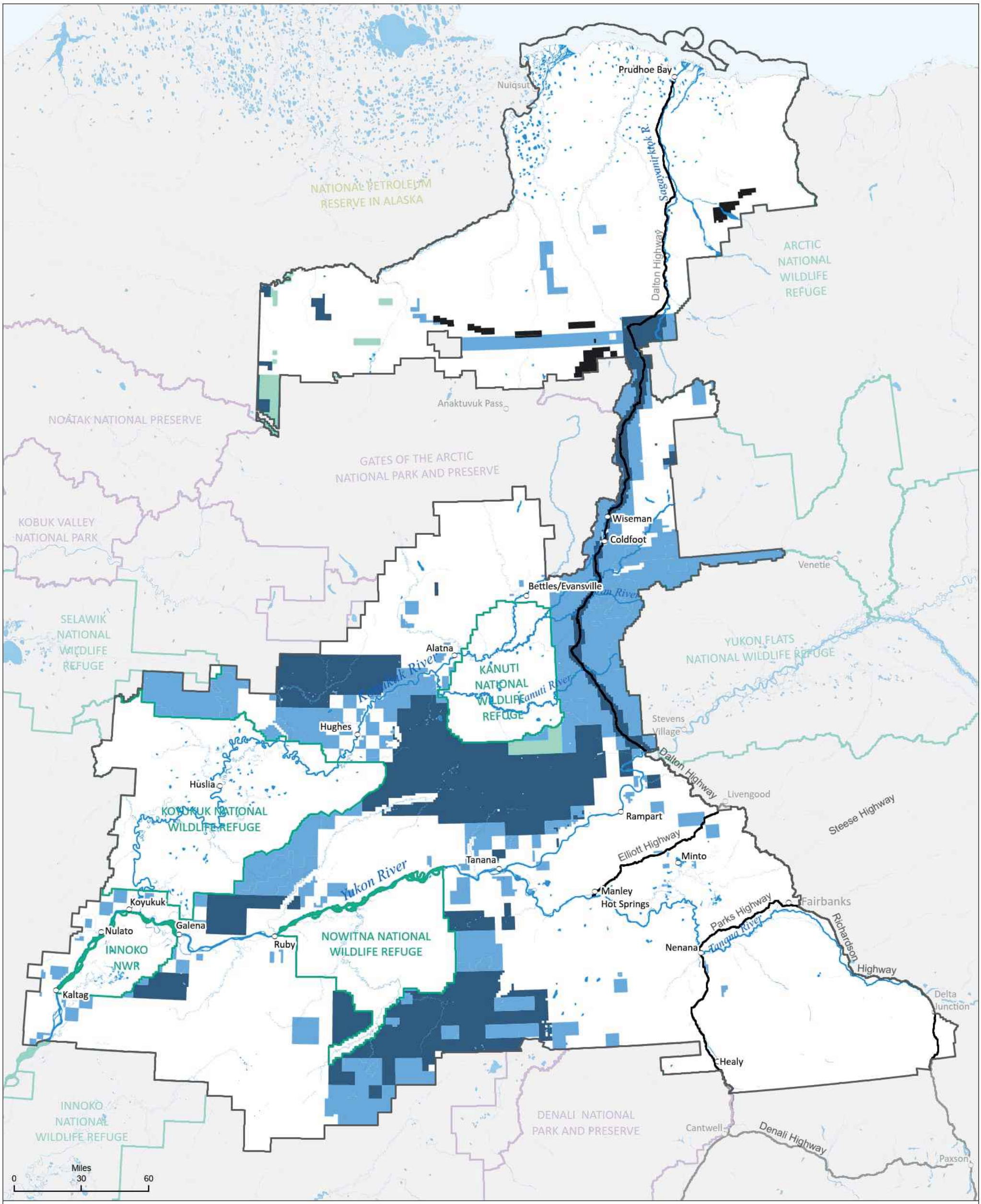


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Data Source: BLM GIS 2017

Map 2.68

Print Date: 04/03/2024



Withdrawn from fluid mineral leasing per Alaska Native Claims Settlement Act (ANCSA) public land orders (PLOs)

BLM surface, Native patent subsurface

Closed to fluid mineral leasing and development

Open to fluid mineral leasing and development

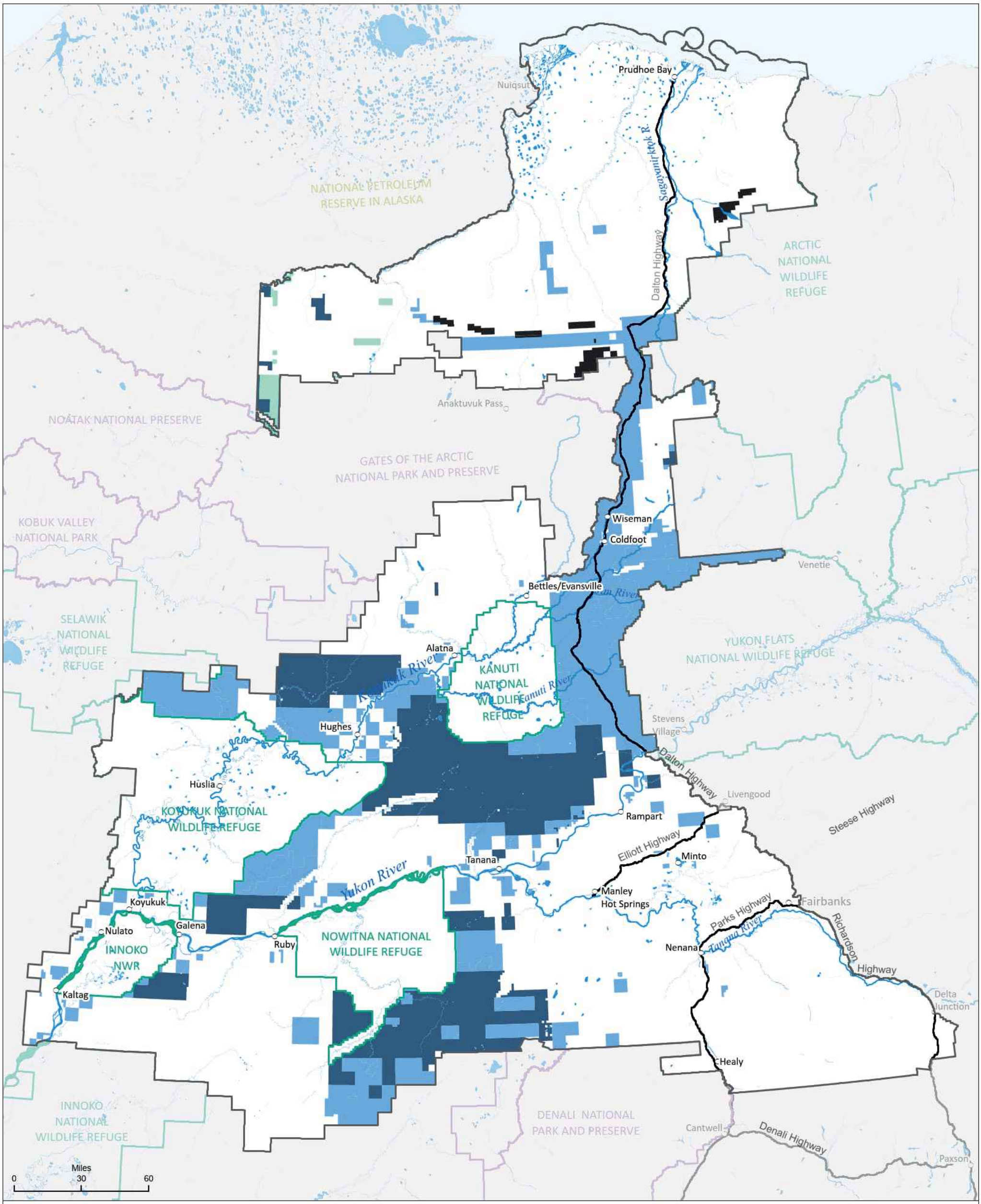


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.69

Print Date: 04/03/2024

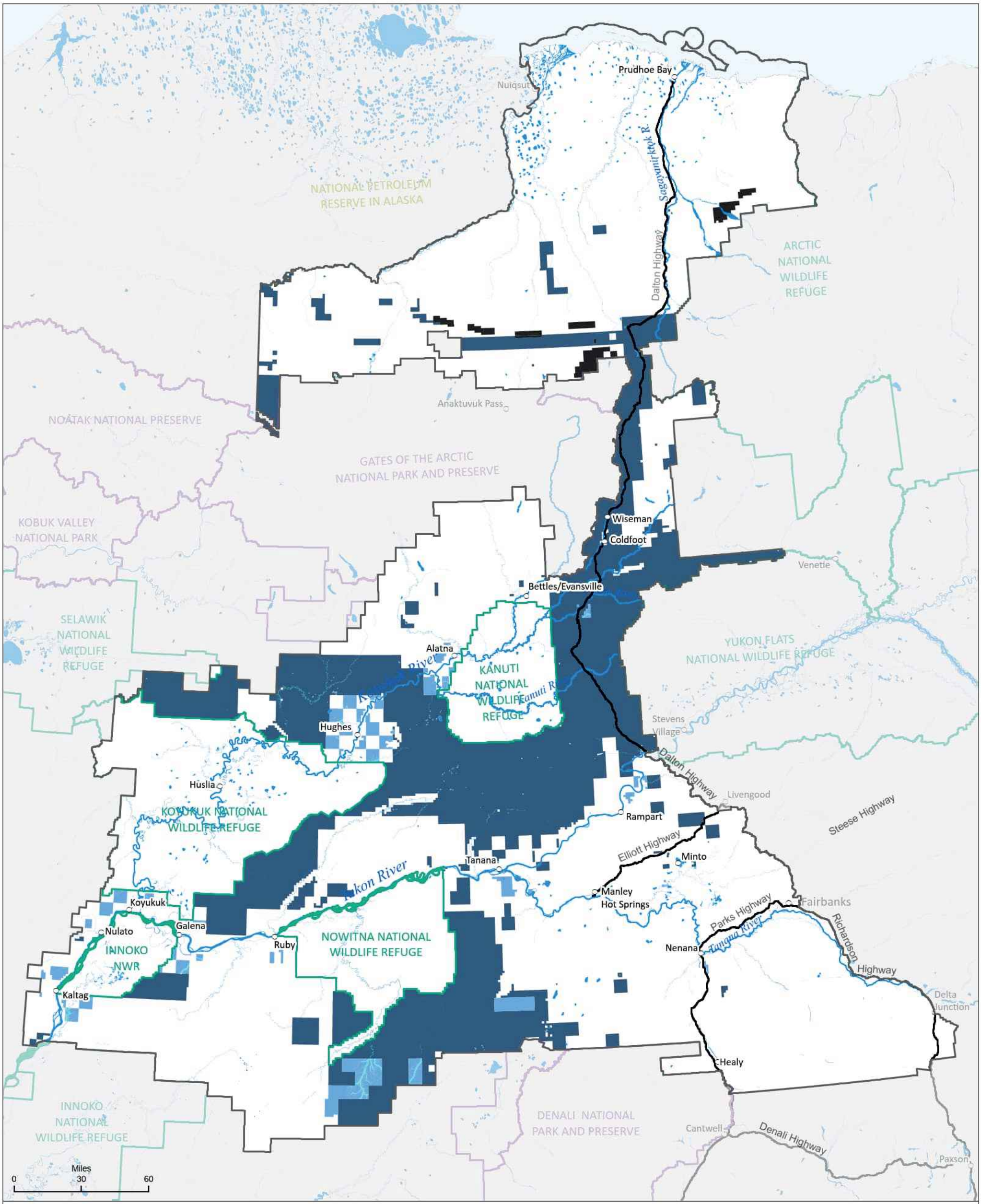


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.70

Print Date: 04/03/2024



Withdrawn from fluid mineral leasing per Alaska Native Claims Settlement Act (ANCSA) public land orders (PLOs)

BLM surface, Native patent subsurface

Closed to fluid mineral leasing and development

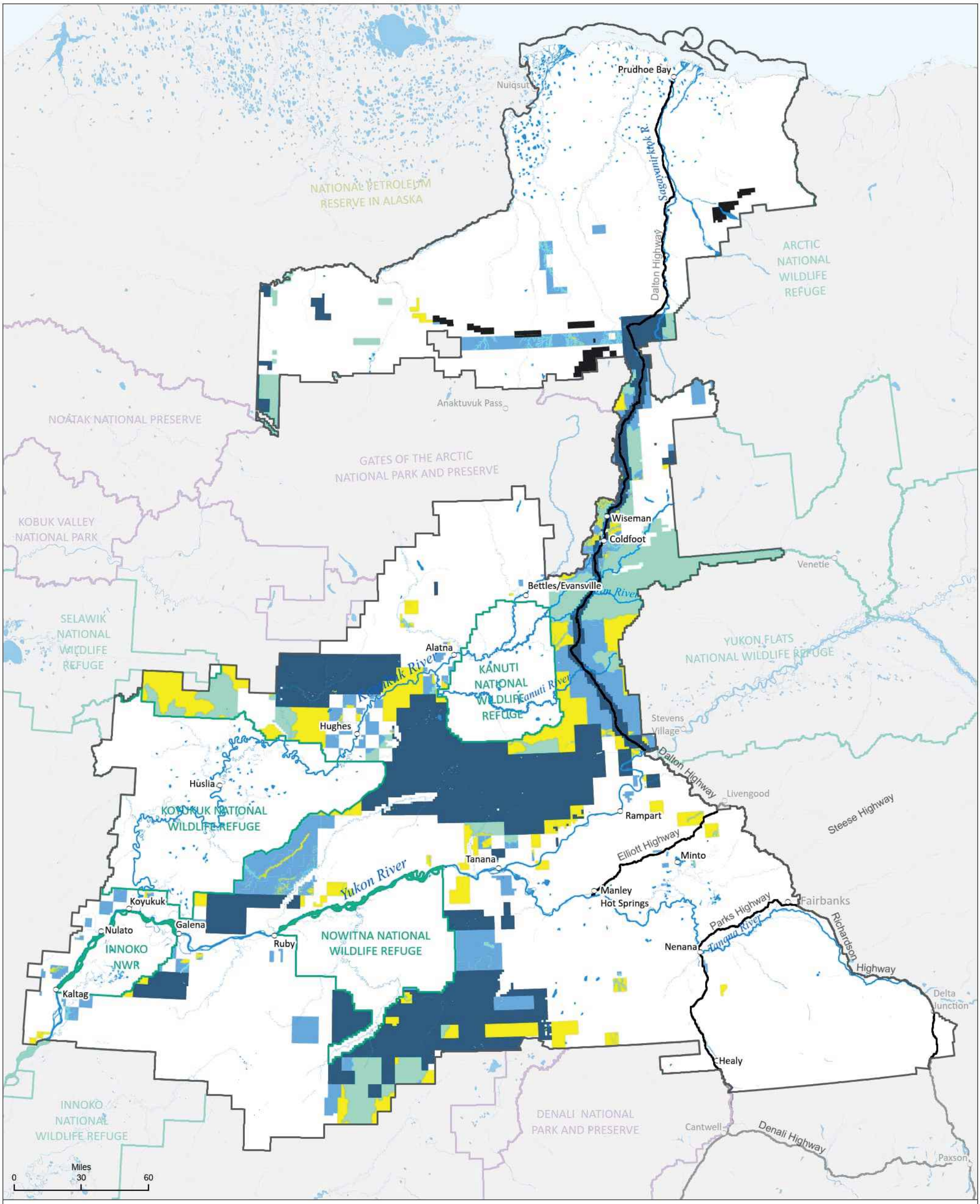
Open to fluid mineral leasing and development

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.71

Print Date: 04/03/2024

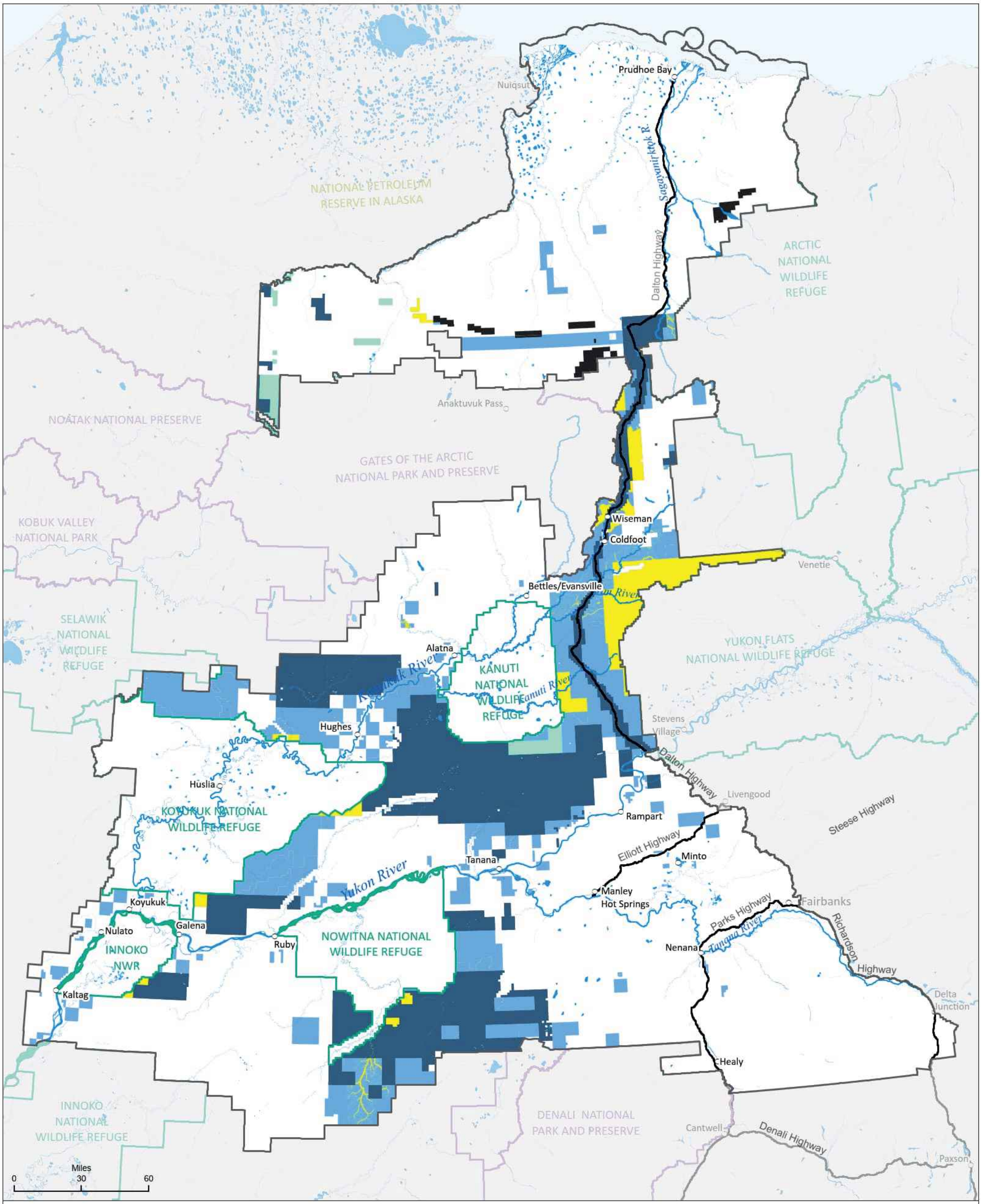


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.72

Print Date: 04/03/2024

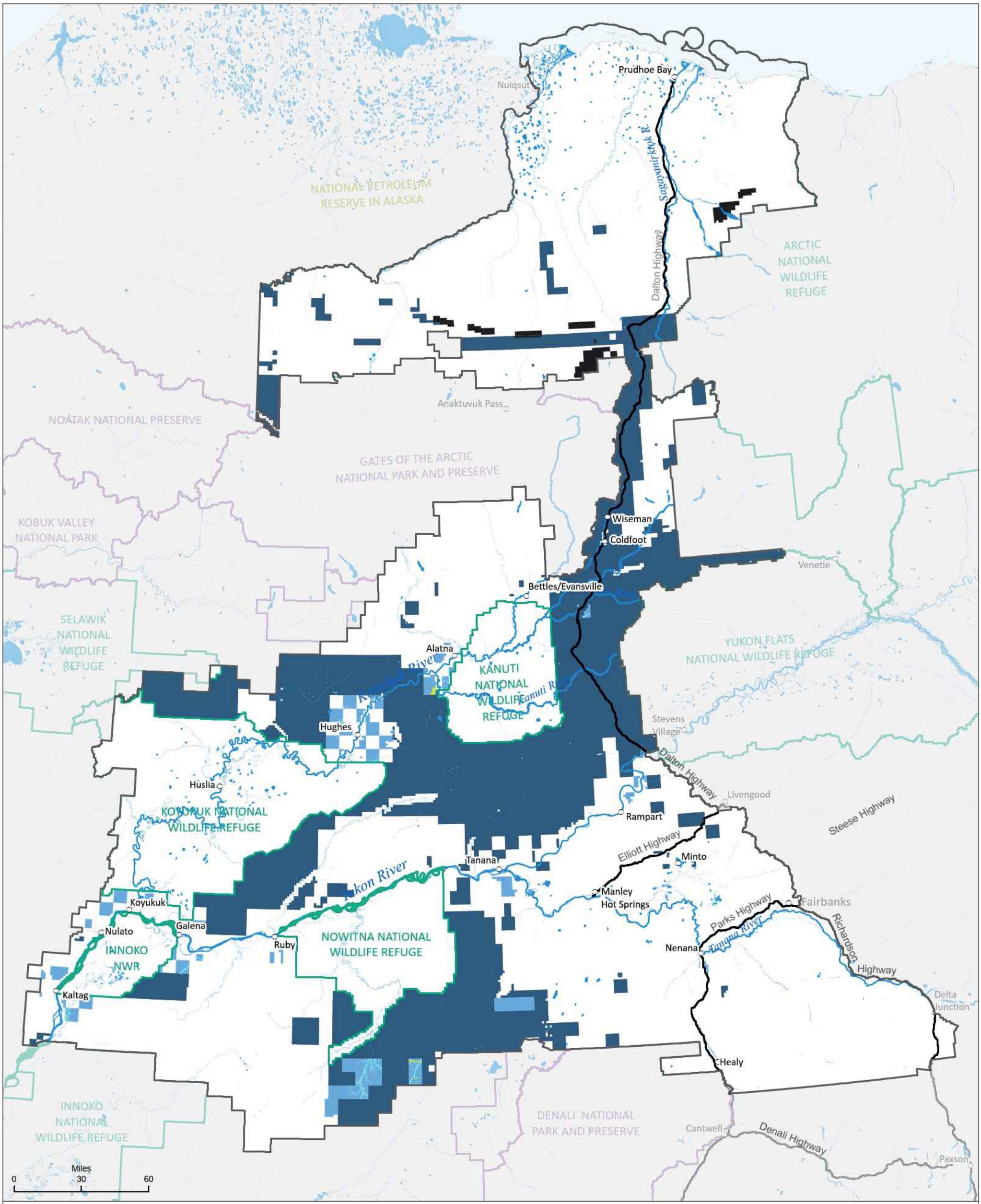


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.73

Print Date: 04/03/2024



Withdrawn from fluid mineral leasing per Alaska Native Claims Settlement Act (ANCSA) public land orders (PLOs)

Open to fluid mineral leasing subject to no surface occupancy

BLM surface, Native patent subsurface

Closed to fluid mineral leasing and development

Open to fluid mineral leasing and development

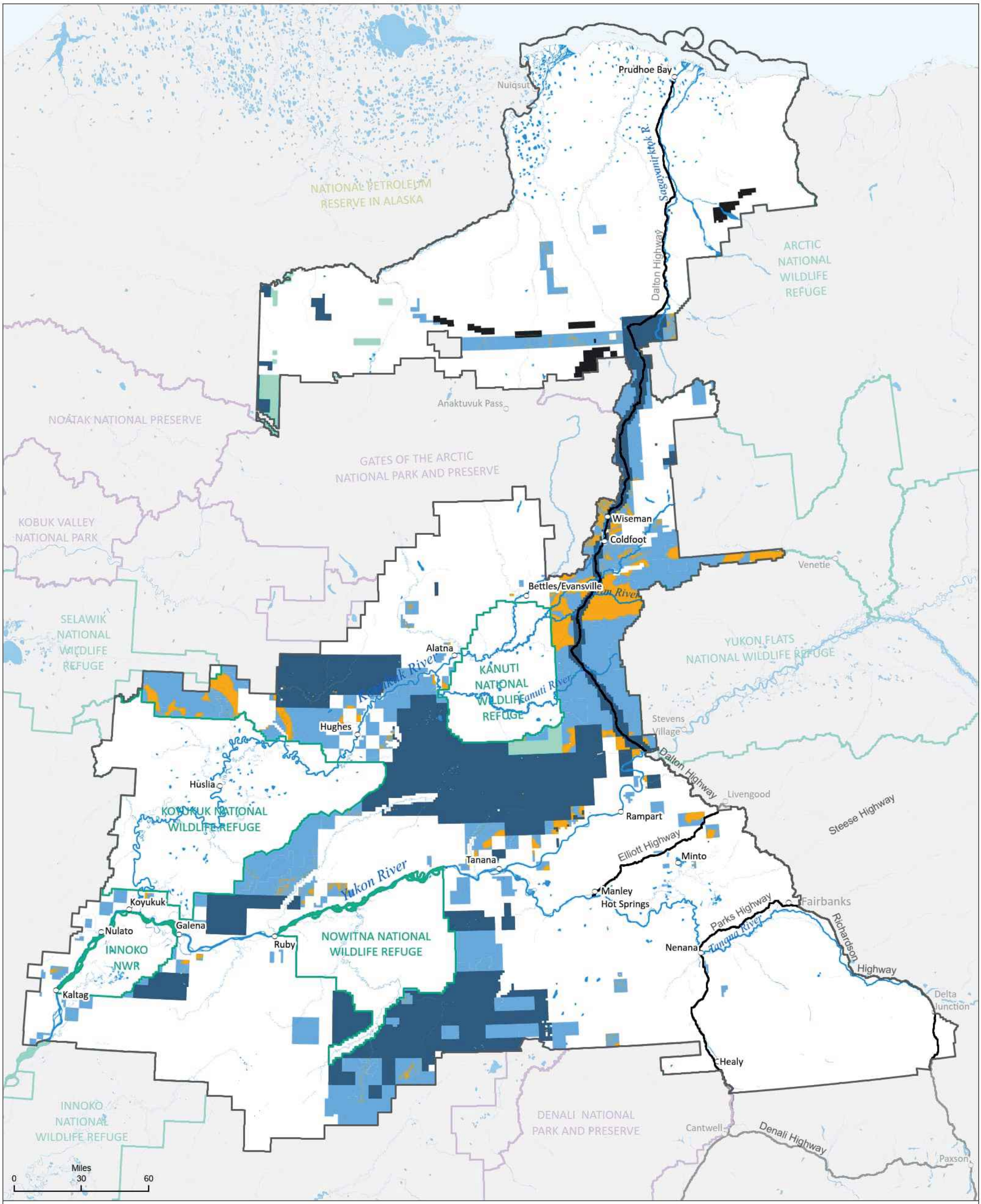


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.74

Print Date: 04/03/2024



Withdrawn from fluid mineral leasing per Alaska Native Claims Settlement Act (ANCSA) public land orders (PLOs)

Open to fluid mineral leasing subject to controlled surface use

BLM surface, Native patent subsurface

Closed to fluid mineral leasing and development

Open to fluid mineral leasing and development

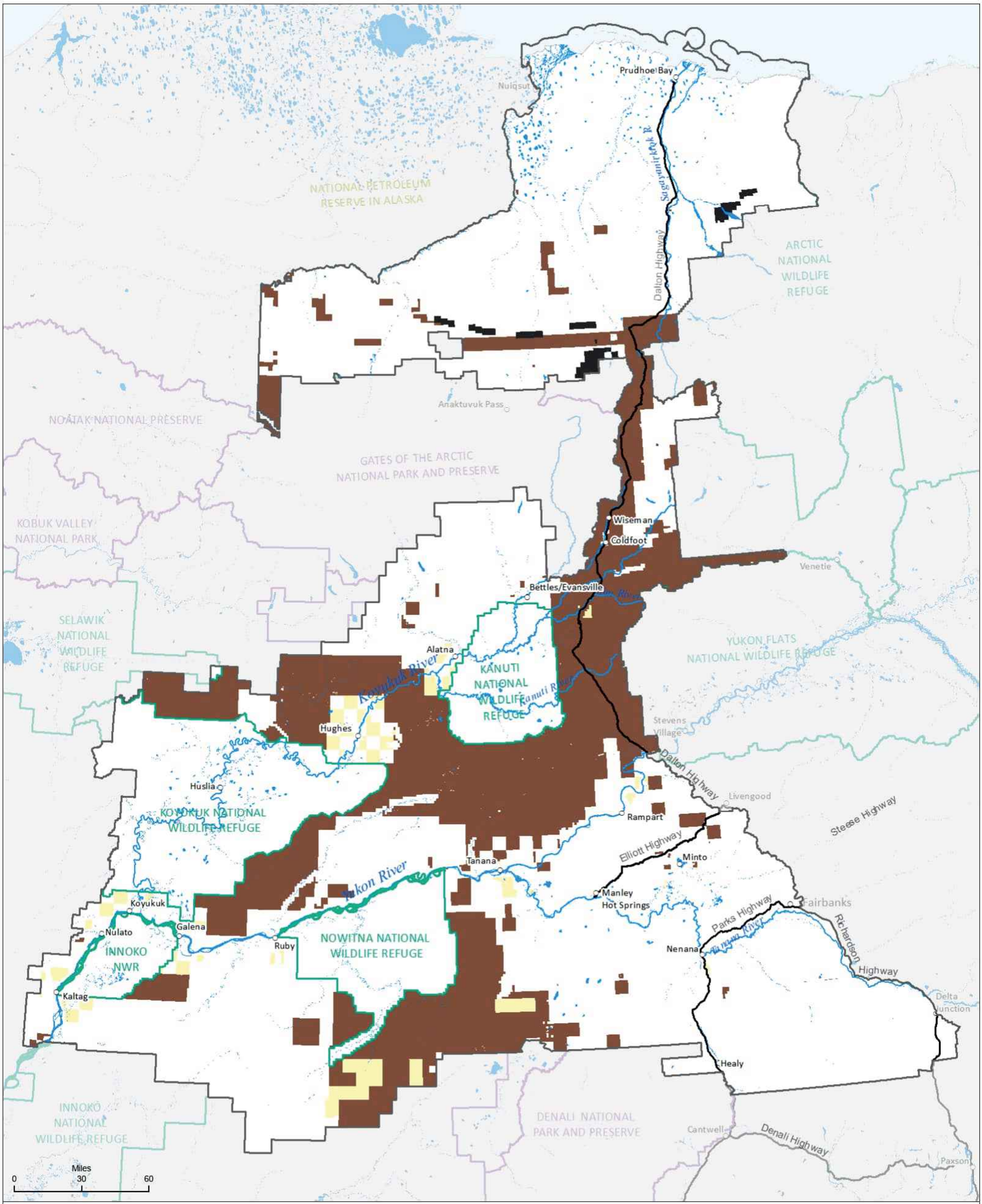


Map 2.75

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 04/03/2024



Closed to nonenergy solid mineral leasing per Alaska Native Claims Settlement Act (ANCSA) public land orders (PLOs)

Closed to nonenergy solid mineral leasing and development

Open to nonenergy solid mineral leasing and development

BLM surface, Native patent subsurface

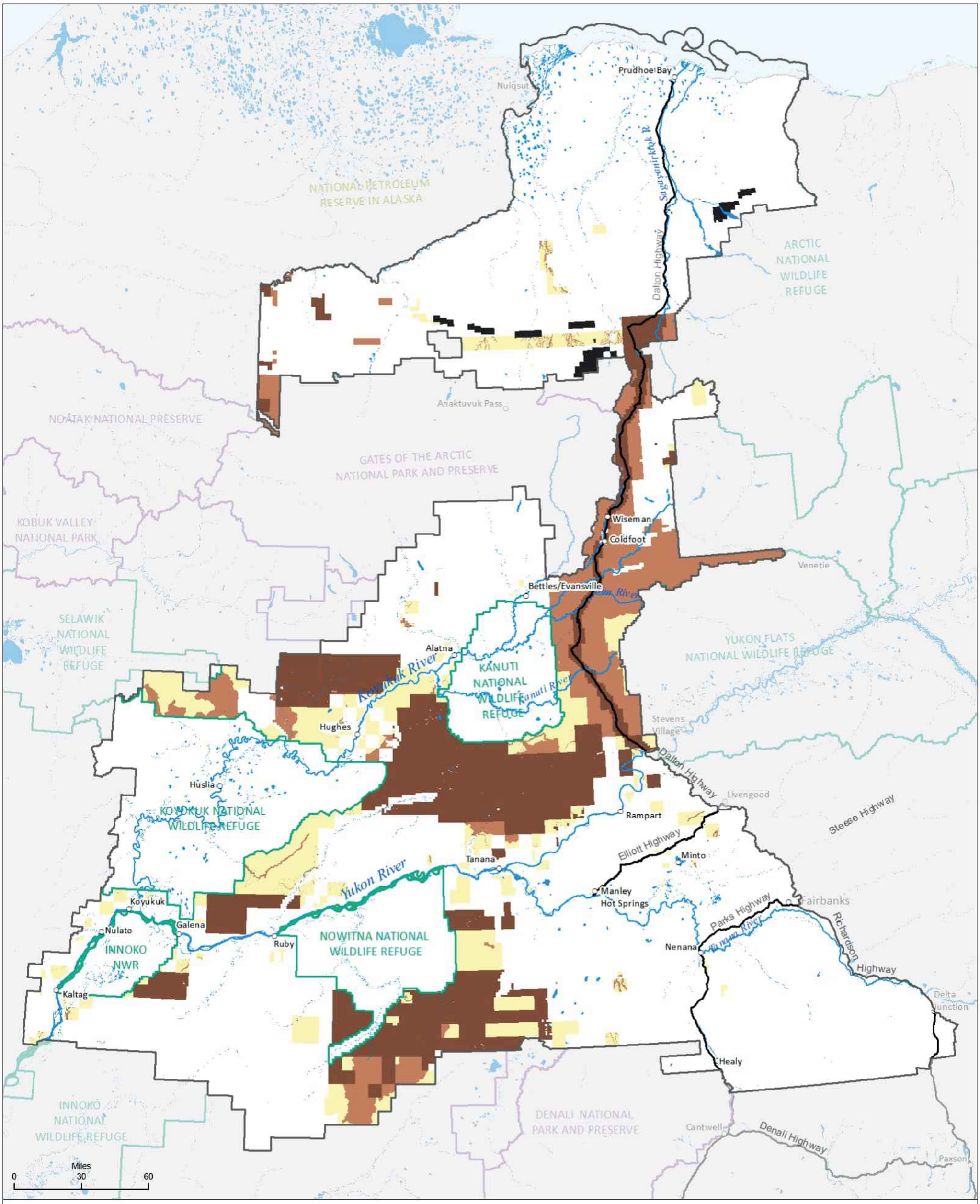


Map 2.76

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/15/2024



Withdrawn from nonenergy solid mineral leasing and development

Closed to nonenergy solid mineral leasing and development

Open to nonenergy solid mineral leasing and development

BLM surface, Native patent subsurface

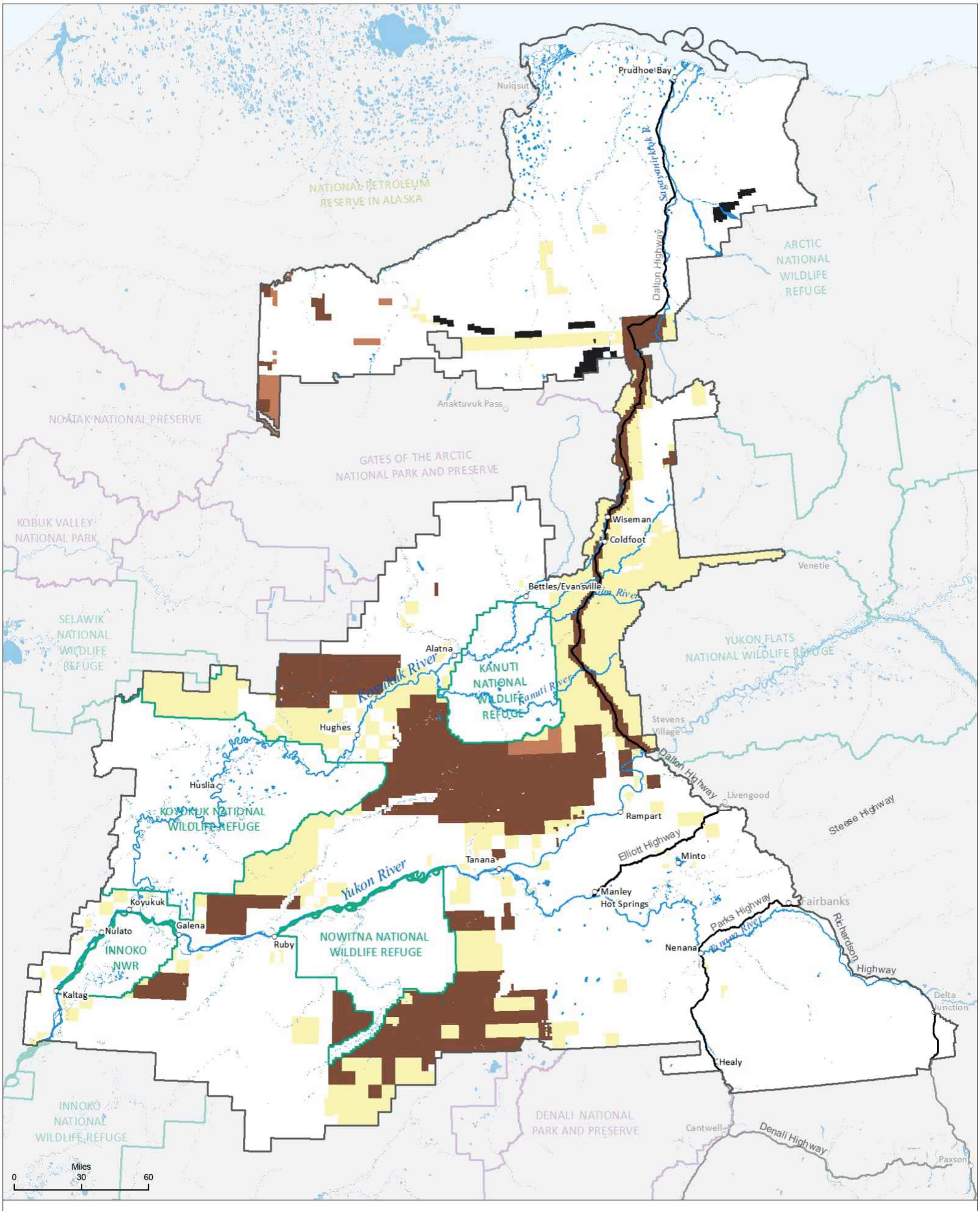


Map 2.77

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/15/2024



Withdrawn from nonenergy solid mineral leasing and development

BLM surface, Native patent subsurface

Closed to nonenergy solid mineral leasing and development

Open to nonenergy solid mineral leasing and development

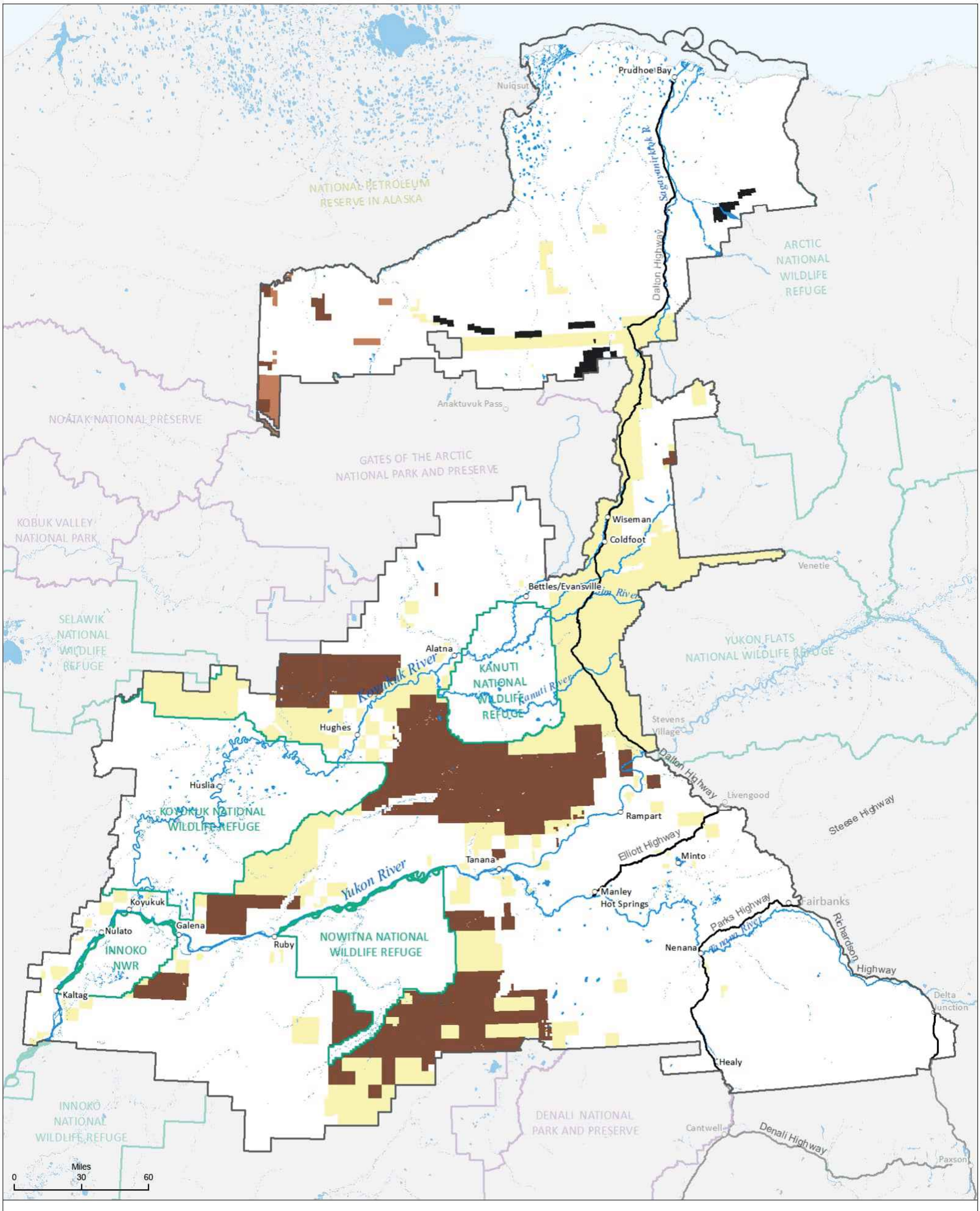


Map 2.78

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/15/2024

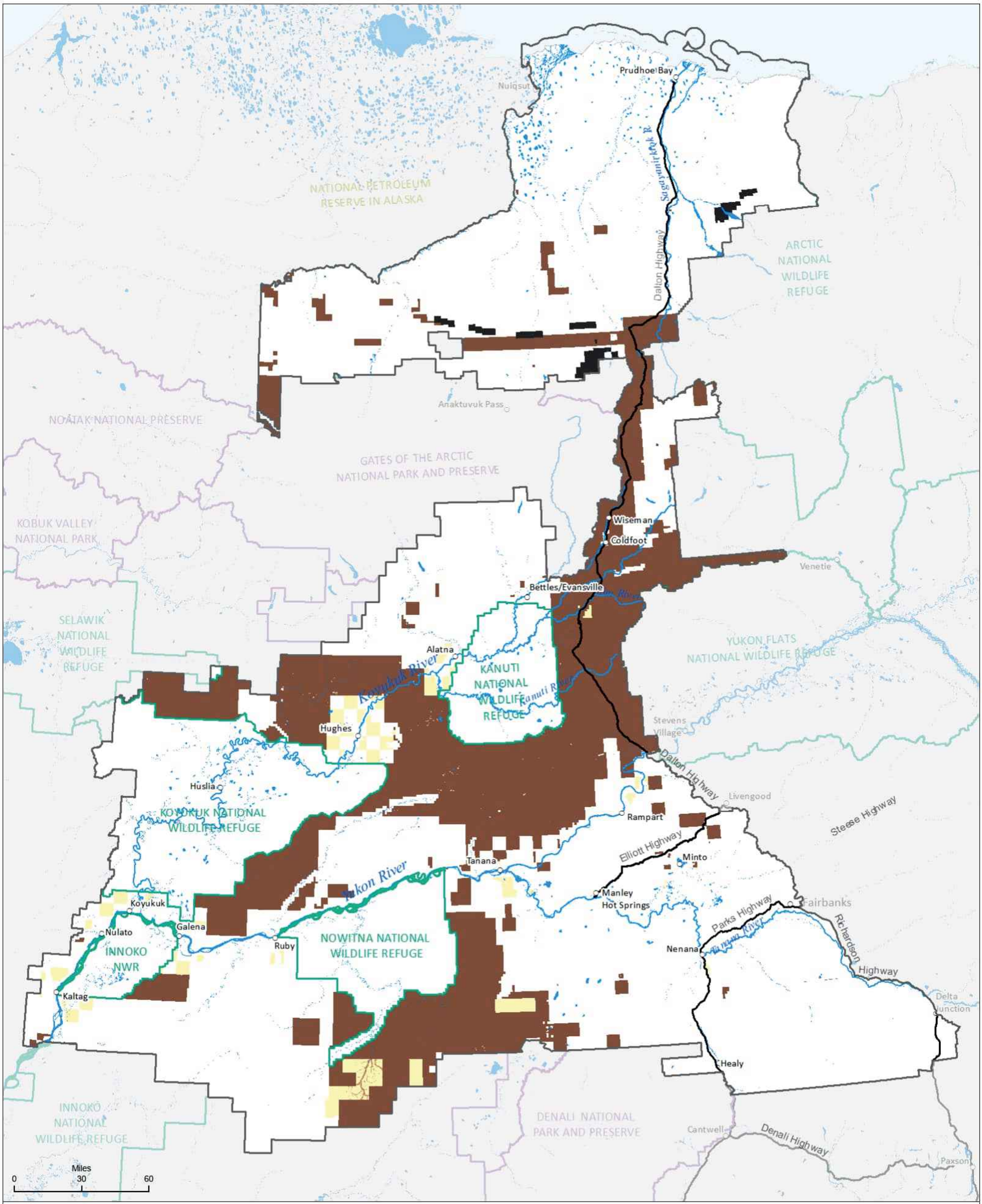


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.79

Print Date: 02/15/2024



Closed to nonenergy solid mineral leasing per Alaska Native Claims Settlement Act (ANCSA) public land orders (PLOs)

Closed to nonenergy solid mineral leasing and development

Open to nonenergy solid mineral leasing and development

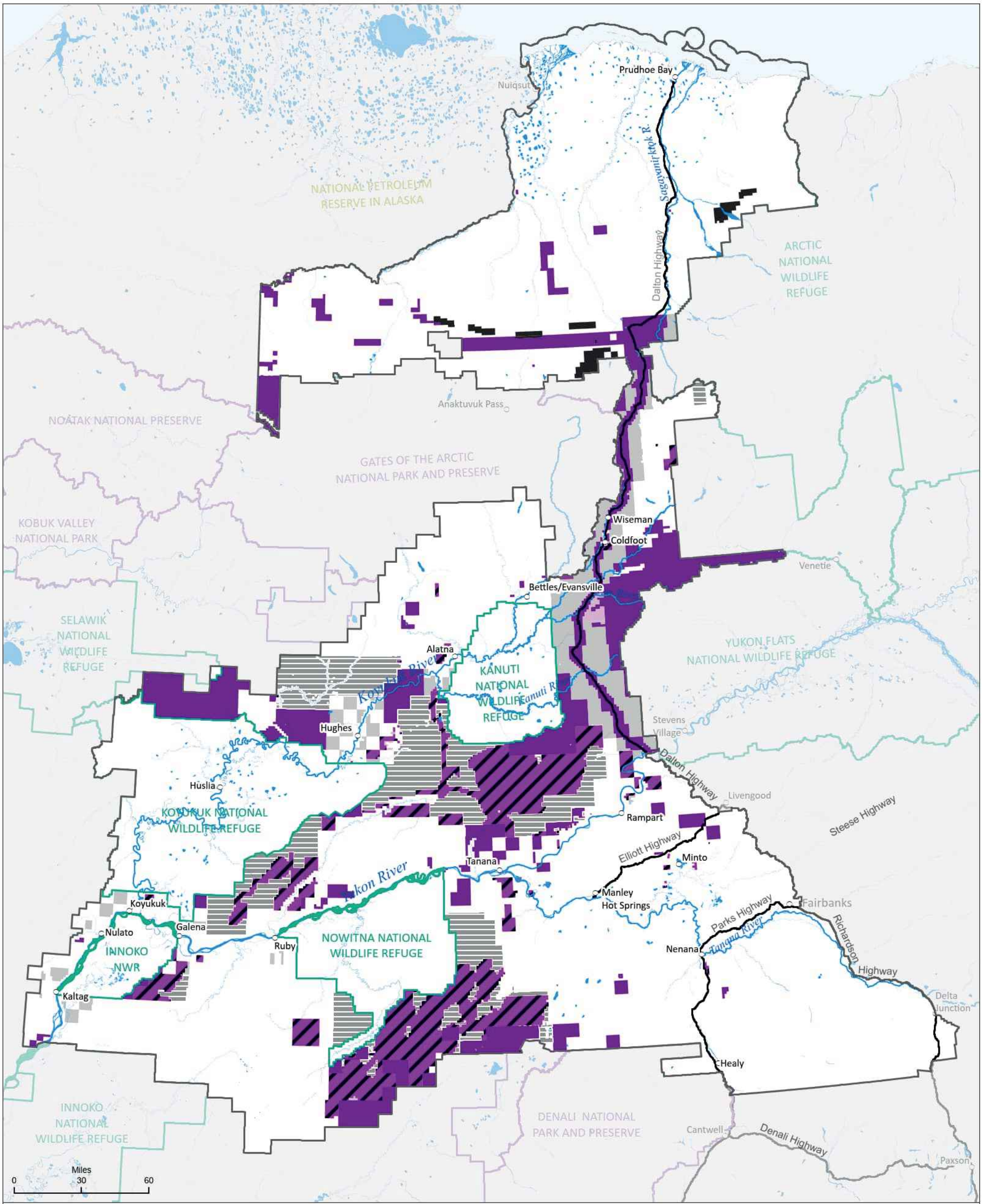


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Data Source: BLM GIS 2017

Map 2.80

Print Date: 02/15/2024



Currently withdrawn from locatable mineral entry and metalliferous mineral entry

Recommended for withdrawal from locatable mineral entry

Open to locatable mineral entry including metalliferous

Currently withdrawn from locatable mineral entry but open to metalliferous (and therefore effectively open, does not contain effective selections)

Open according to BLM's actions, but State- or Native selected and therefore segregated (or set aside and unavailable for other forms of appropriation)

BLM surface, Native patent subsurface

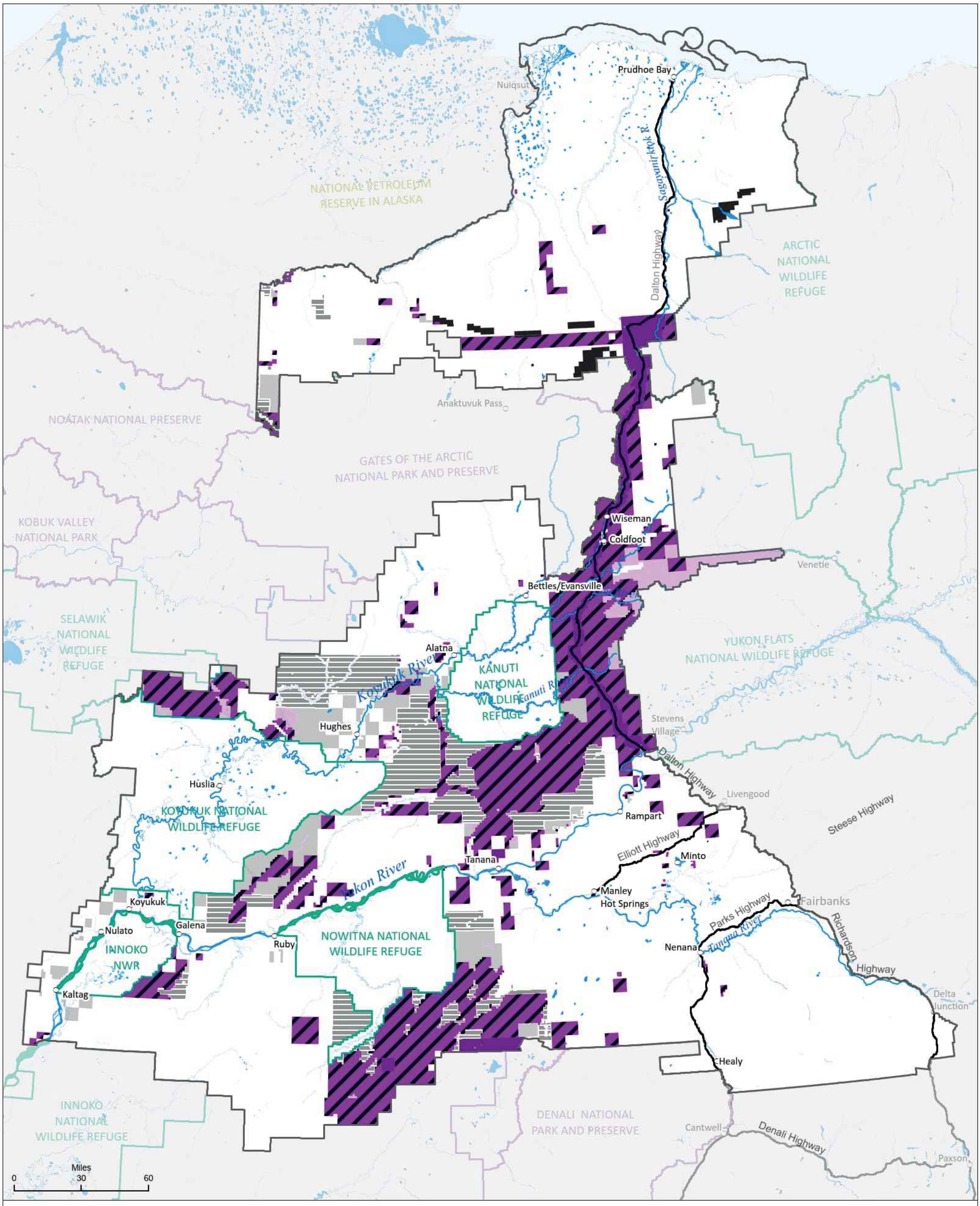


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.81

Print Date: 04/03/2024



Currently withdrawn from locatable mineral entry and metalliferous mineral entry

Recommended for withdrawal from locatable mineral entry

Open to locatable mineral entry including metalliferous

Currently withdrawn from locatable mineral entry but open to metalliferous (and therefore effectively open, does not contain effective selections)

Open according to BLM's actions, but State- or Native selected and therefore segregated (or set aside and unavailable for other forms of appropriation)

BLM surface, Native patent subsurface



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Data Source: BLM GIS 2017

Map 2.82

Print Date: 04/03/2024

Prudhoe Bay
Nuiqsut
Sagavanirktok R.
Dalton Highway
NATIONAL PETROLEUM RESERVE IN ALASKA
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Kobuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti R.
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Huslia
Dalton Highway
Livengood
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Tanana
Minto
Yukon River
Manley Hot Springs
Koyukuk
Nulato
Galena
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
Parks Highway
Fairbanks
Tanana River
Nenana
Richardson Highway
INNOKO NWR
Kaltag
Delta Junction
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Cantwell
Denali Highway
Paxson
Miles
0
30
60

Currently withdrawn from locatable mineral entry and metalliferous mineral entry

Recommended for withdrawal from locatable mineral entry

Open to locatable mineral entry including metalliferous

Currently withdrawn from locatable mineral entry but open to metalliferous (and therefore effectively open, does not contain effective selections)

Open according to BLM's actions, but State- or Native selected and therefore segregated (or set aside and unavailable for other forms of appropriation)

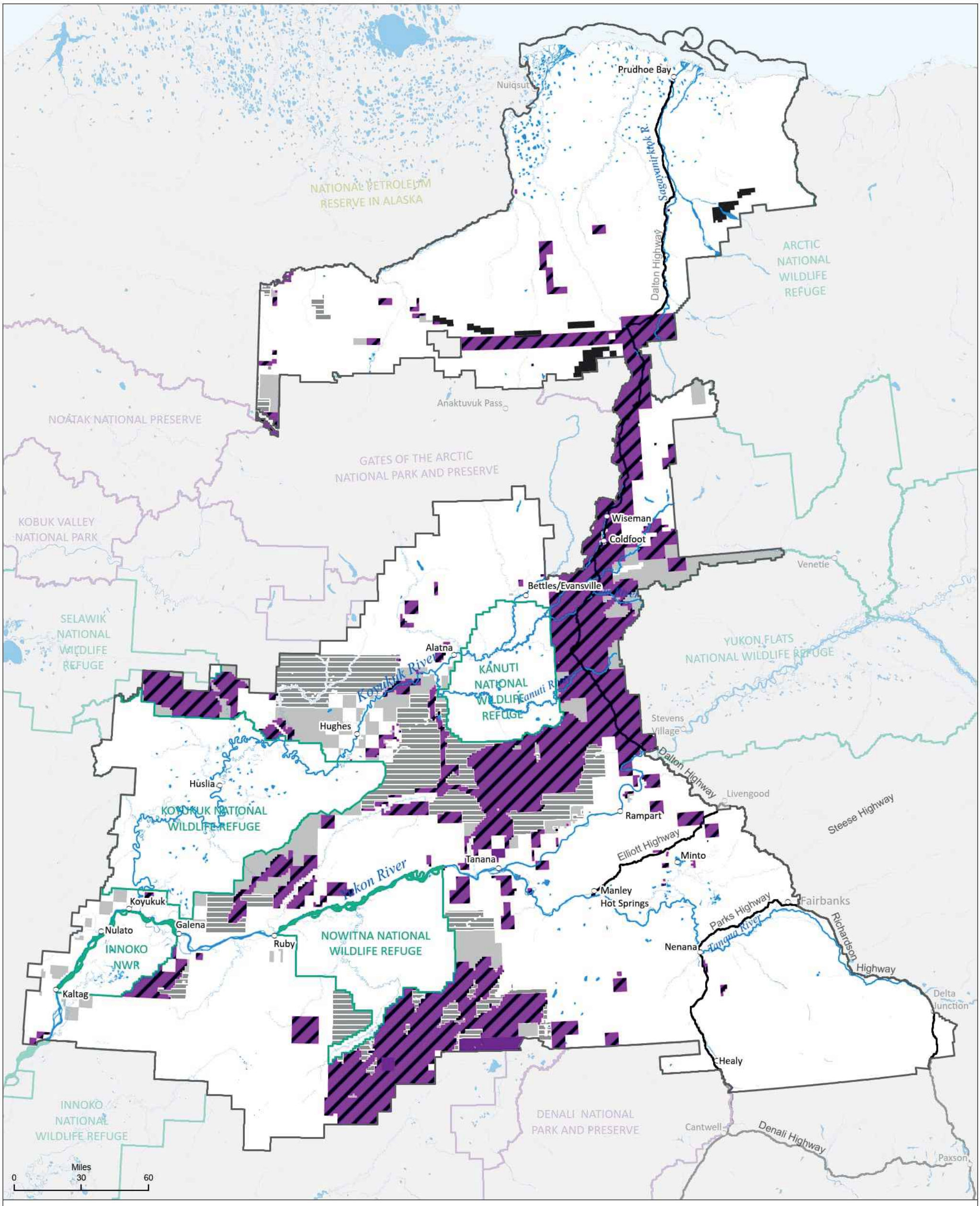
BLM surface, Native patent subsurface

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Data Source: BLM GIS 2017

Map 2.83

Print Date: 04/03/2024

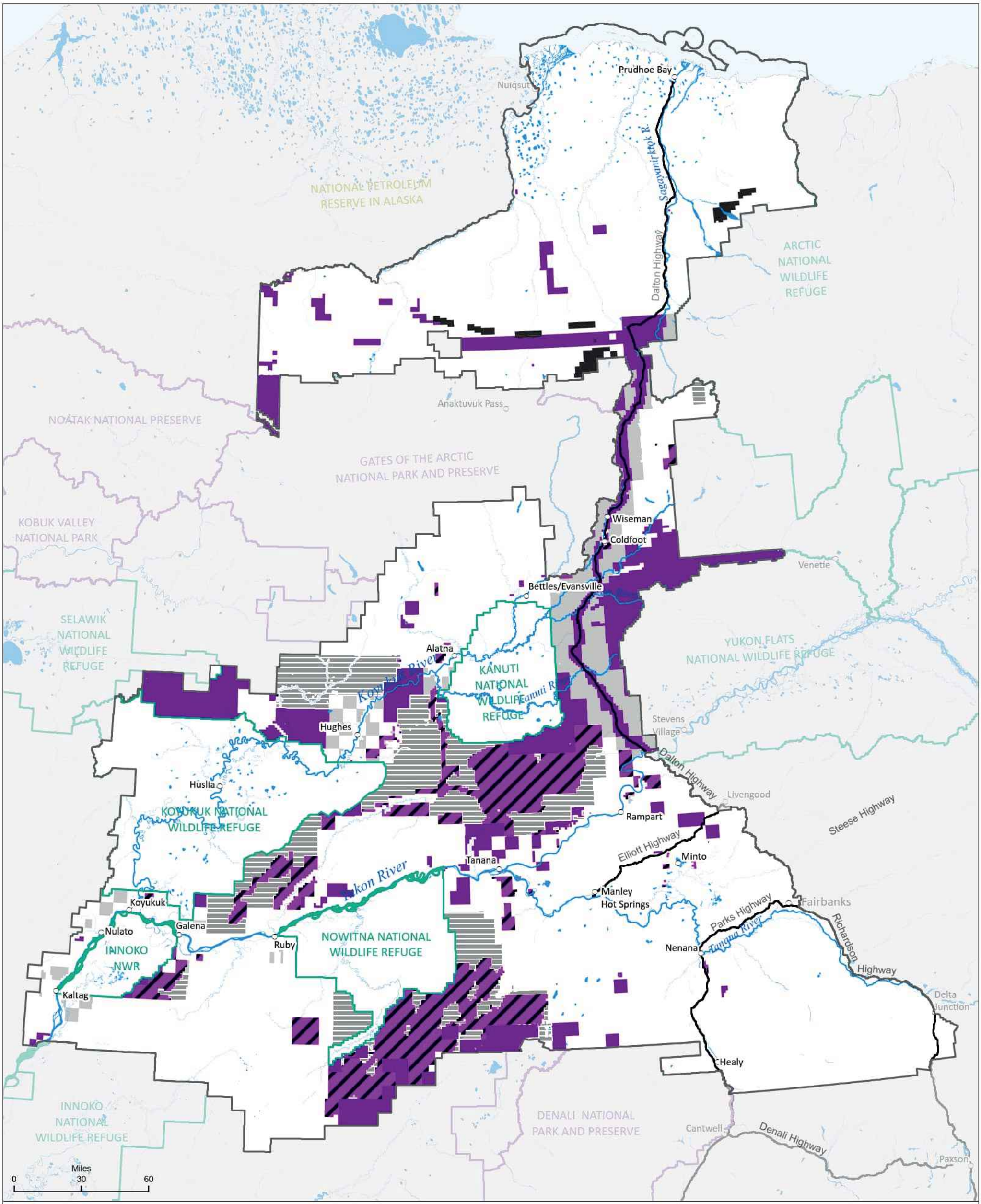


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.84

Print Date: 04/03/2024



Currently withdrawn from locatable mineral entry and metalliferous mineral entry

Open to locatable mineral entry including metalliferous

Currently withdrawn from locatable mineral entry but open to metalliferous (and therefore effectively open, does not contain effective selections)

Open according to BLM's actions, but State- or Native selected and therefore segregated (or set aside and unavailable for other forms of appropriation)

BLM surface, Native patent subsurface

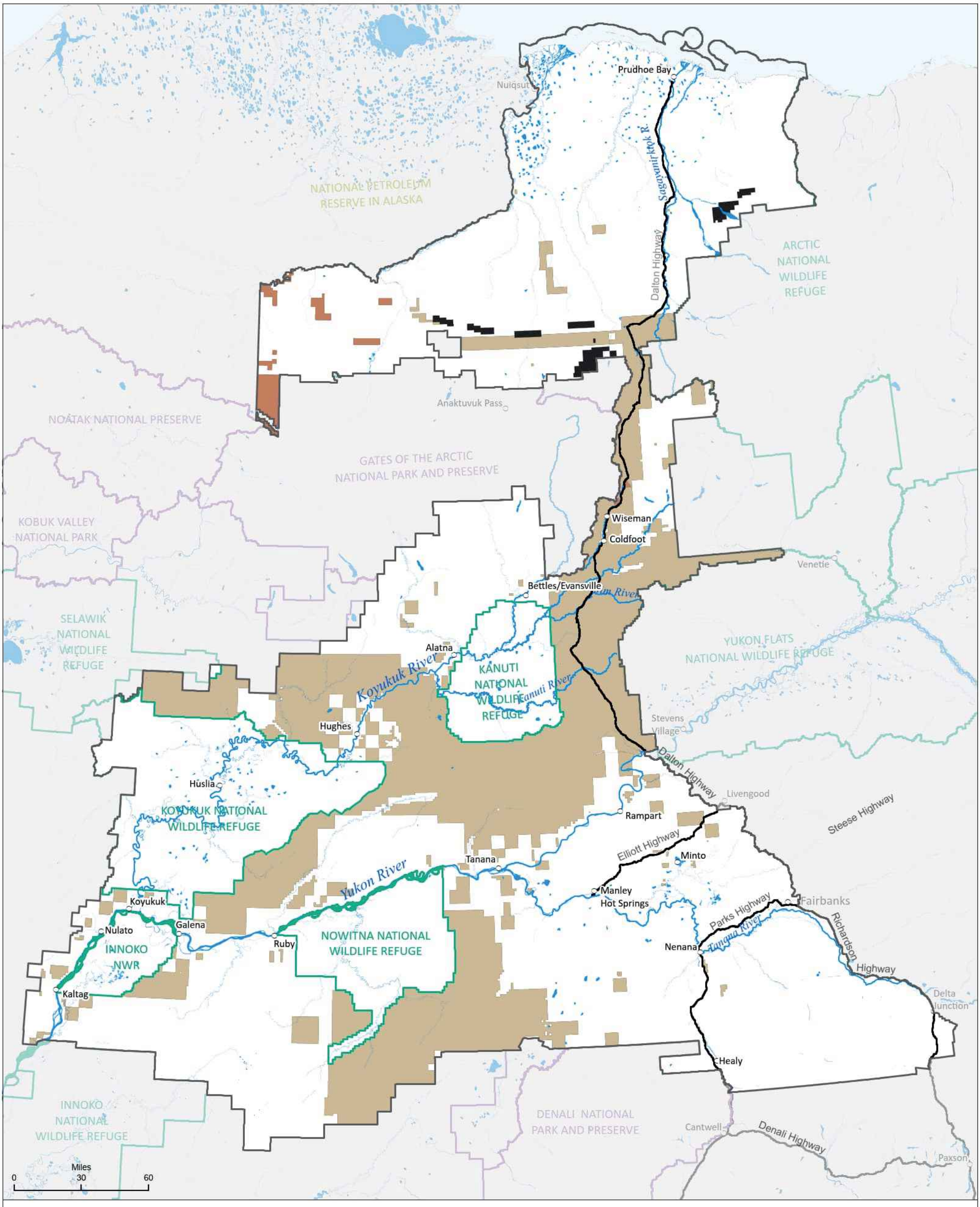


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Data Source: BLM GIS 2017

Map 2.85

Print Date: 04/03/2024

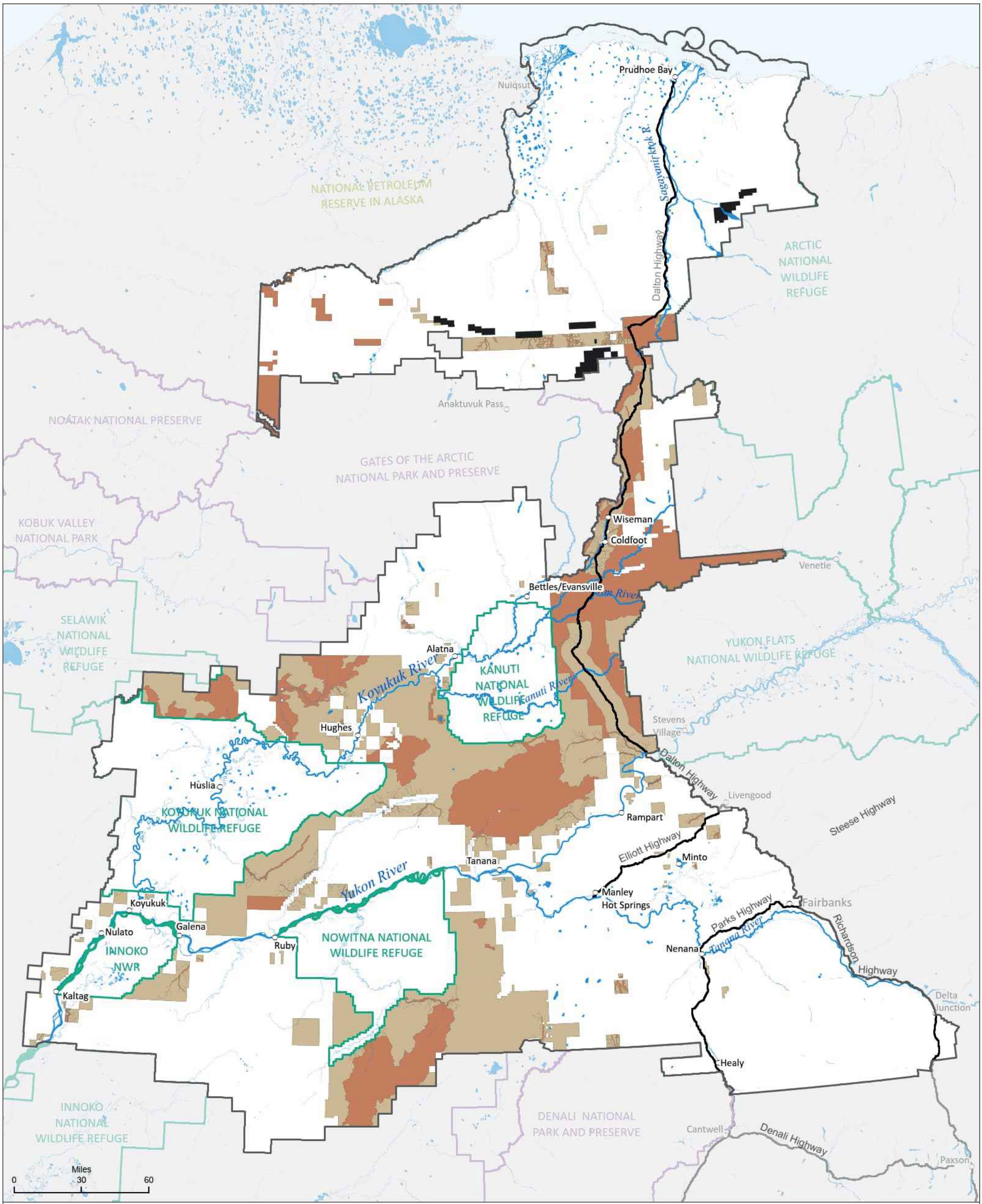


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.86

Print Date: 04/03/2024

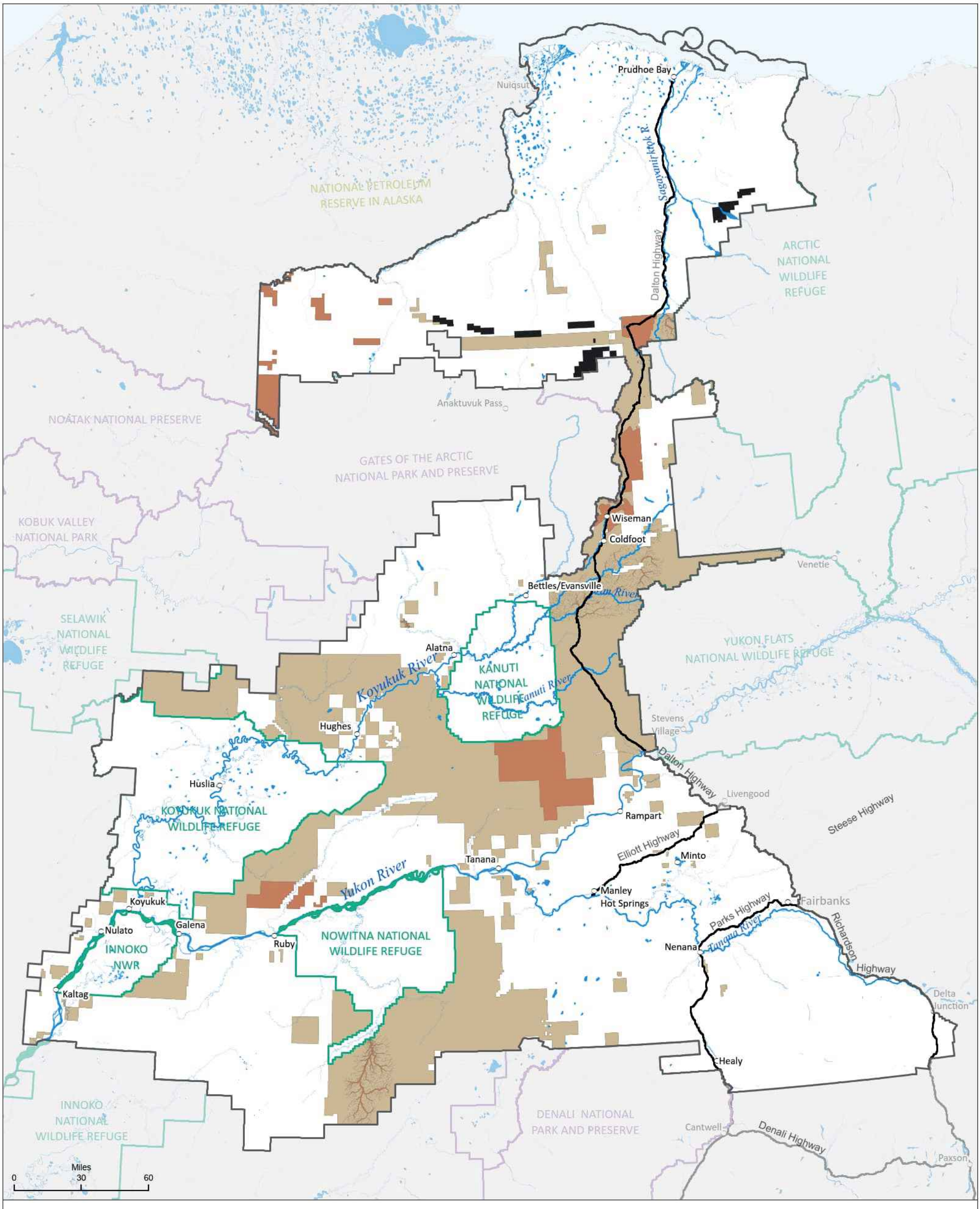


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Data Source: BLM GIS 2017

Map 2.87

Print Date: 04/03/2024

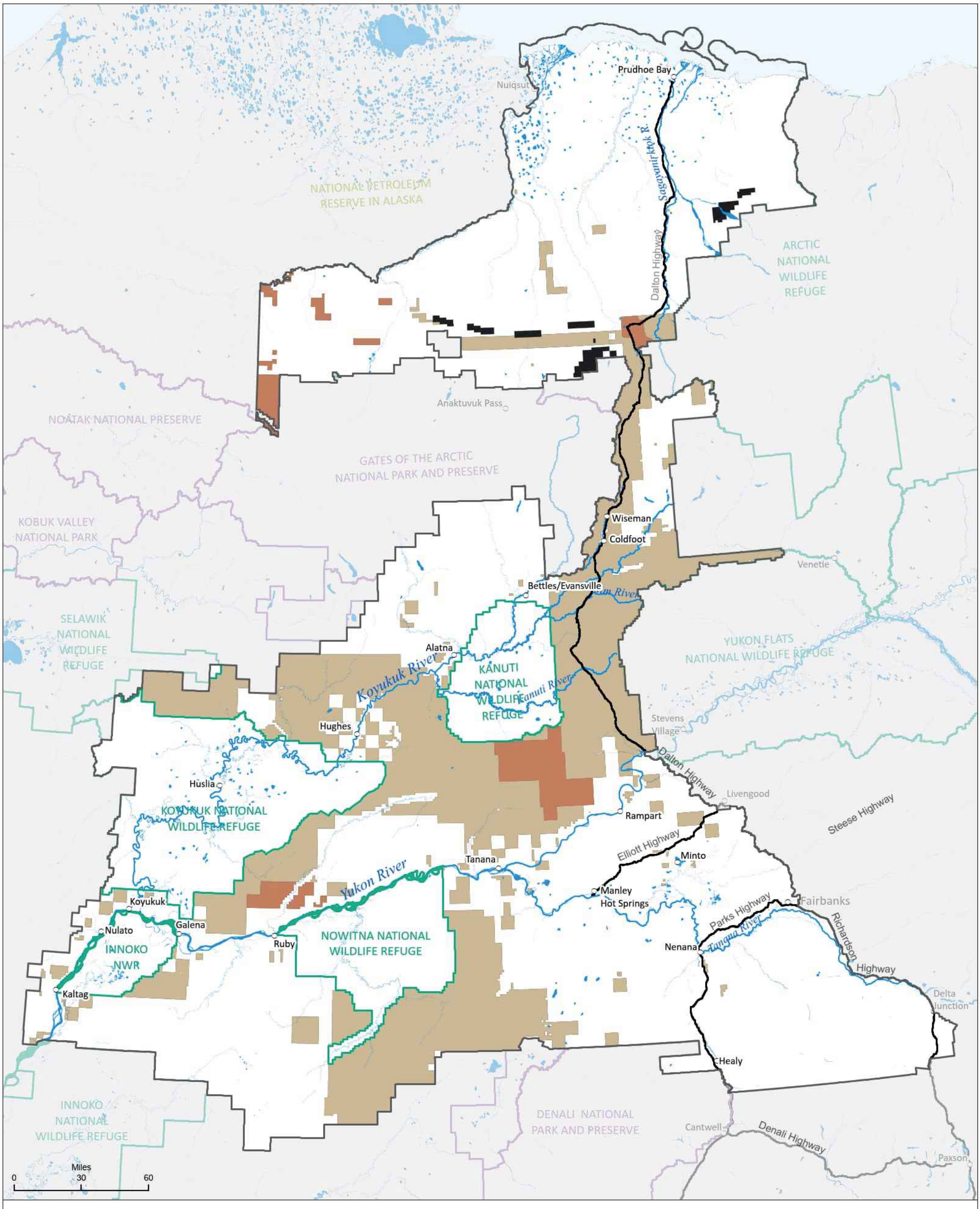


No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.88

Print Date: 04/03/2024

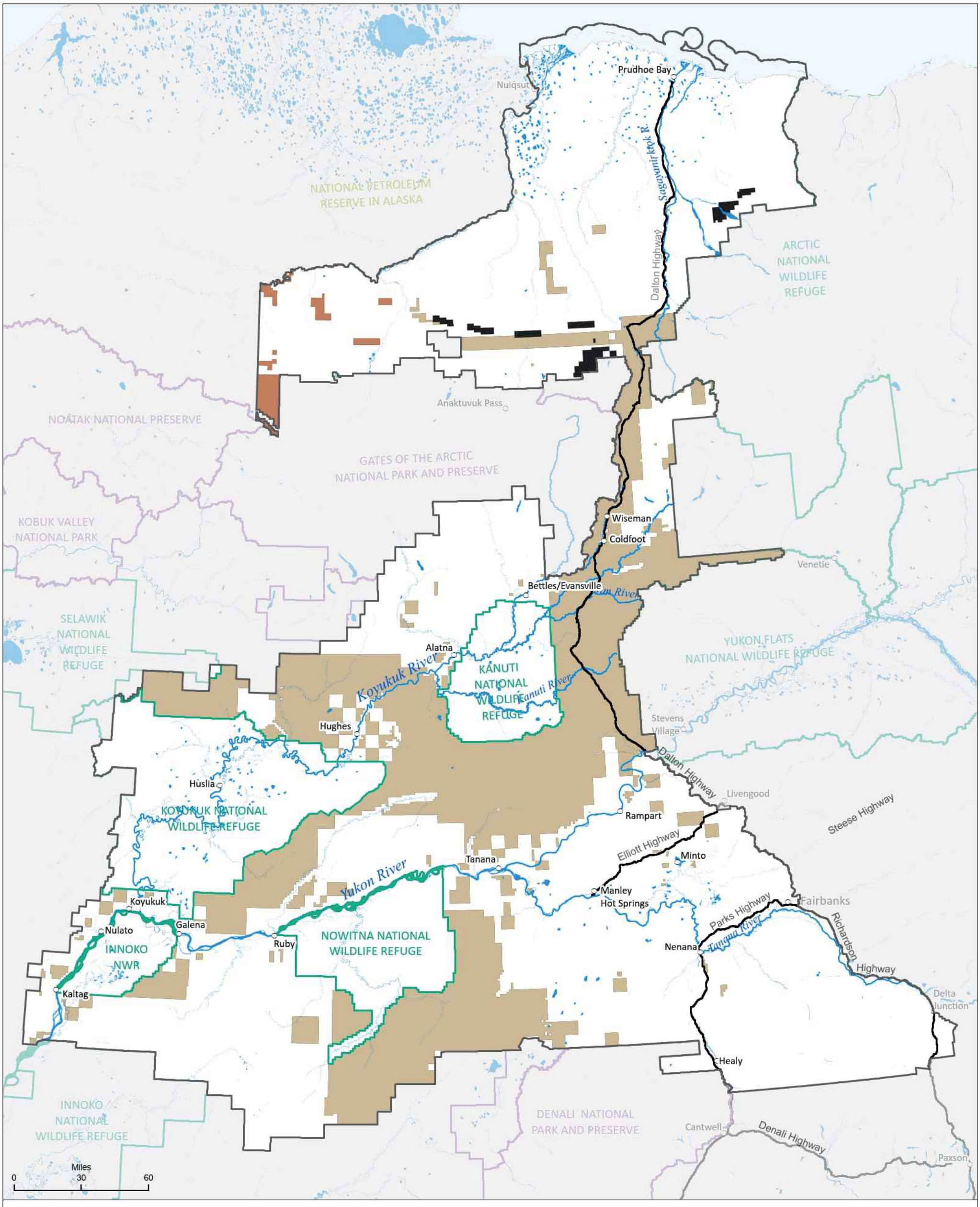


Map 2.89

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 04/03/2024

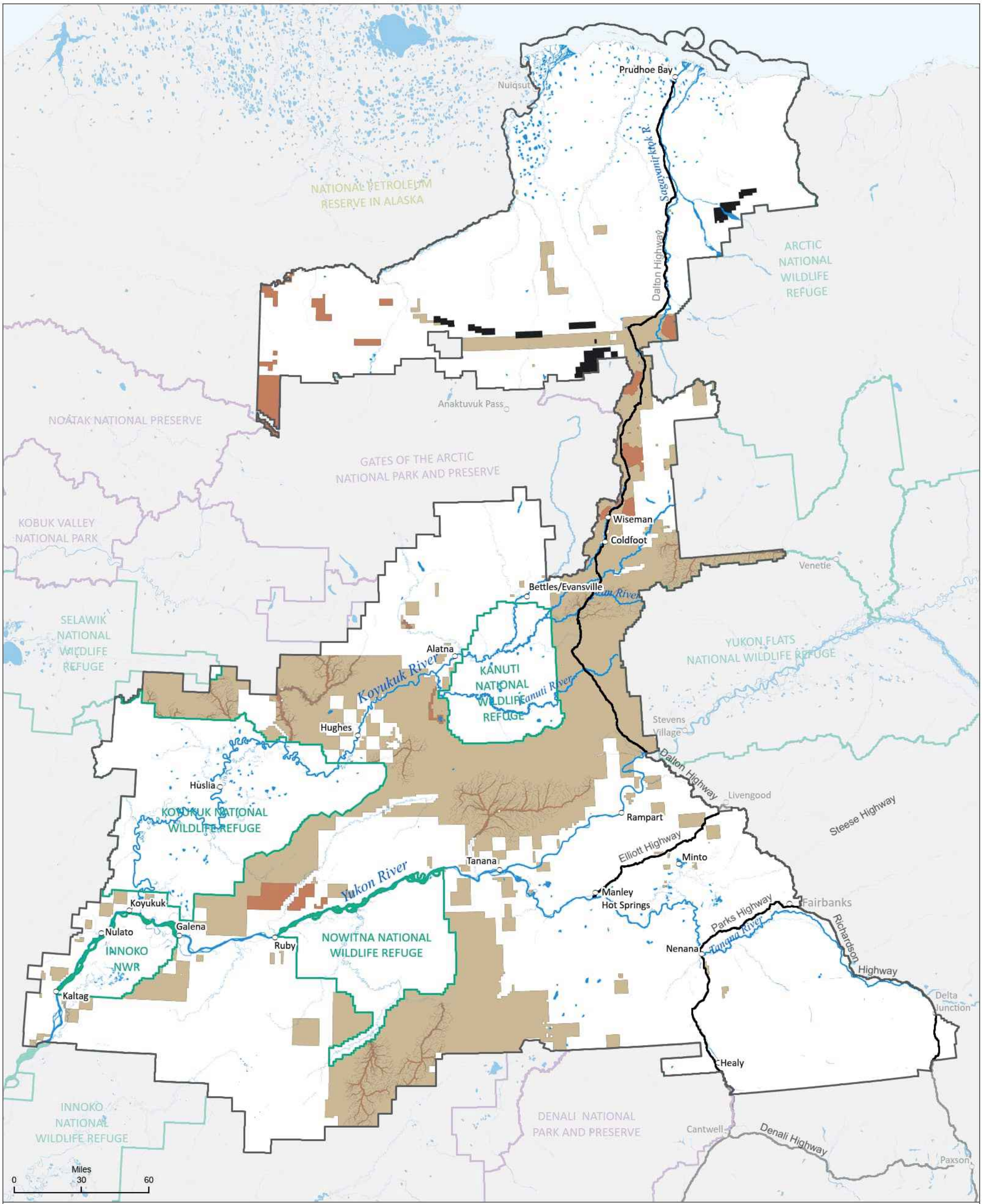


Map 2.90

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 04/03/2024

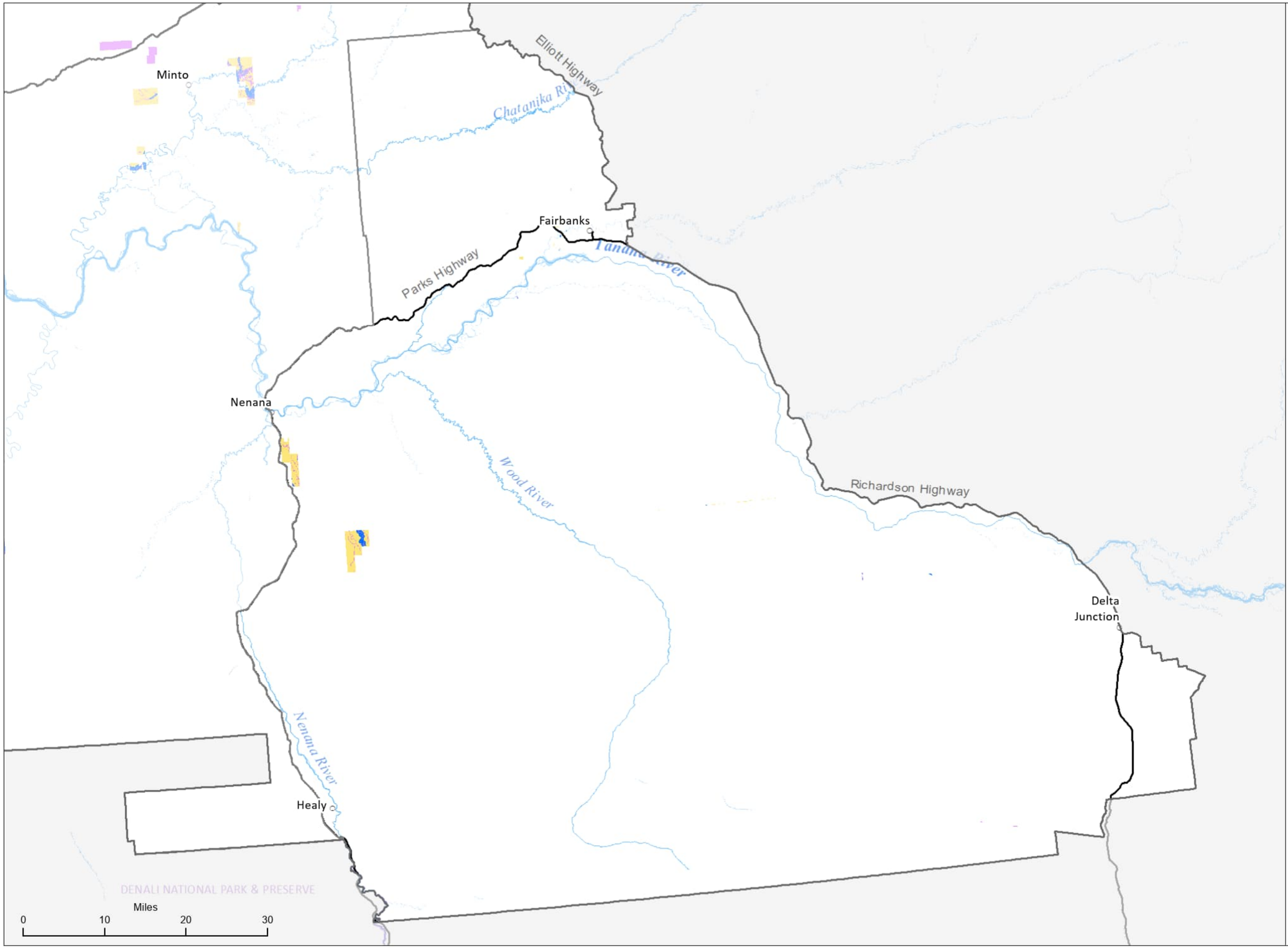


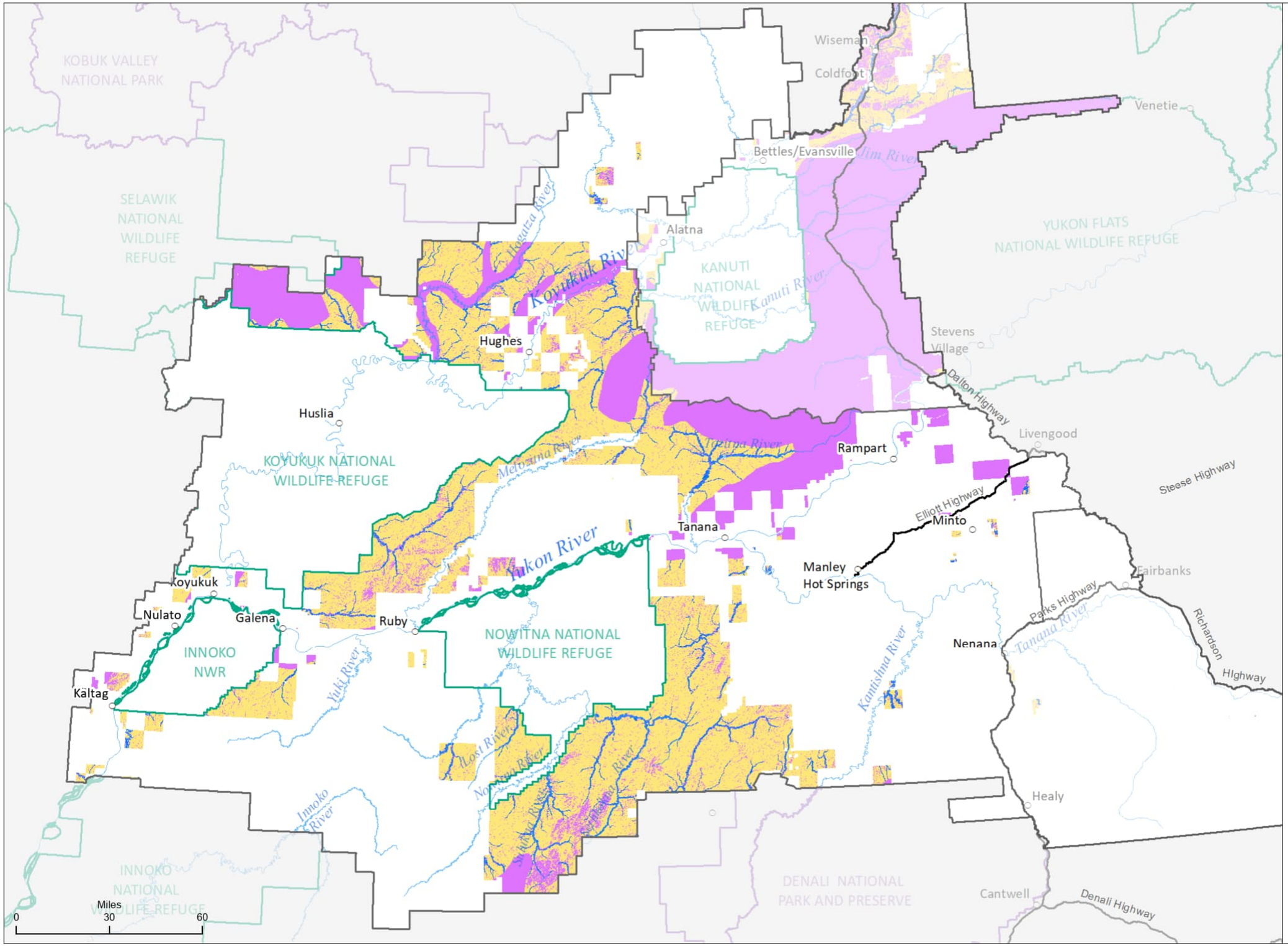
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map 2.91

Print Date: 04/03/2024


Minto
Elliott Highway
Chatanika Ri
Fairbanks
Parks Highway
Tanana River
Nenana
Wood River
Richardson Highway
Delta
Junction
Nenana River
Healy
DENALI NATIONAL PARK & PRESERVE
Miles
0
10
20
30
Thaw sensitive soils
100-year floodplain
BLM-managed lands
Data Source: BLM GIS 2017
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.
Map 3.1
Print Date: 02/13/2024



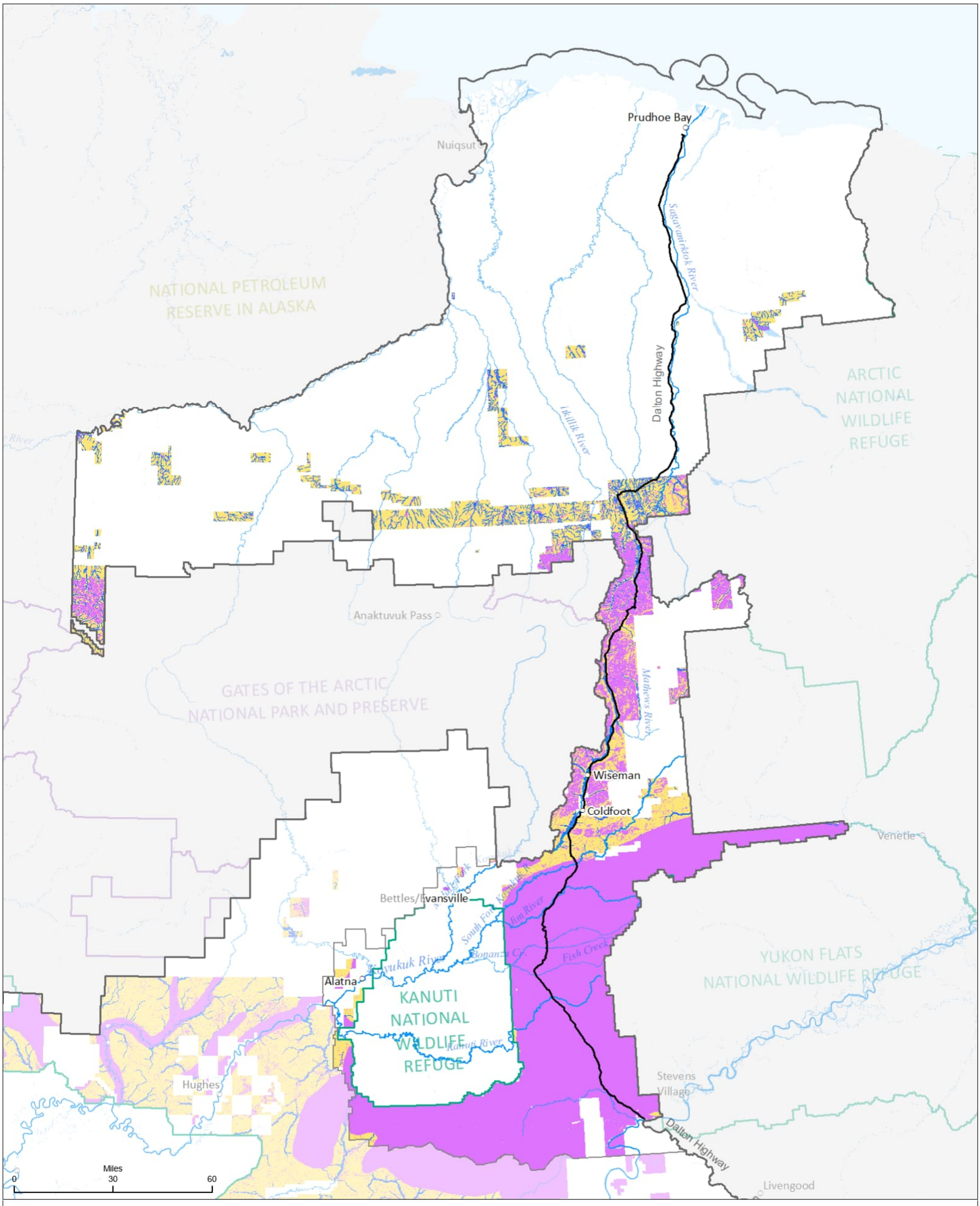
Data Source: BLM GIS 2017

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Map 3.2

Print Date: 02/13/2024



Map 3.3

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024

Community water system

Some community water systems are not visible due to close proximity to others.

BLM-managed lands

Map 3.4

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017, ADEC GIS 2022

Print Date: 02/13/2024

Hot spring
100-year floodplain
Lentic area
BLM-managed lands

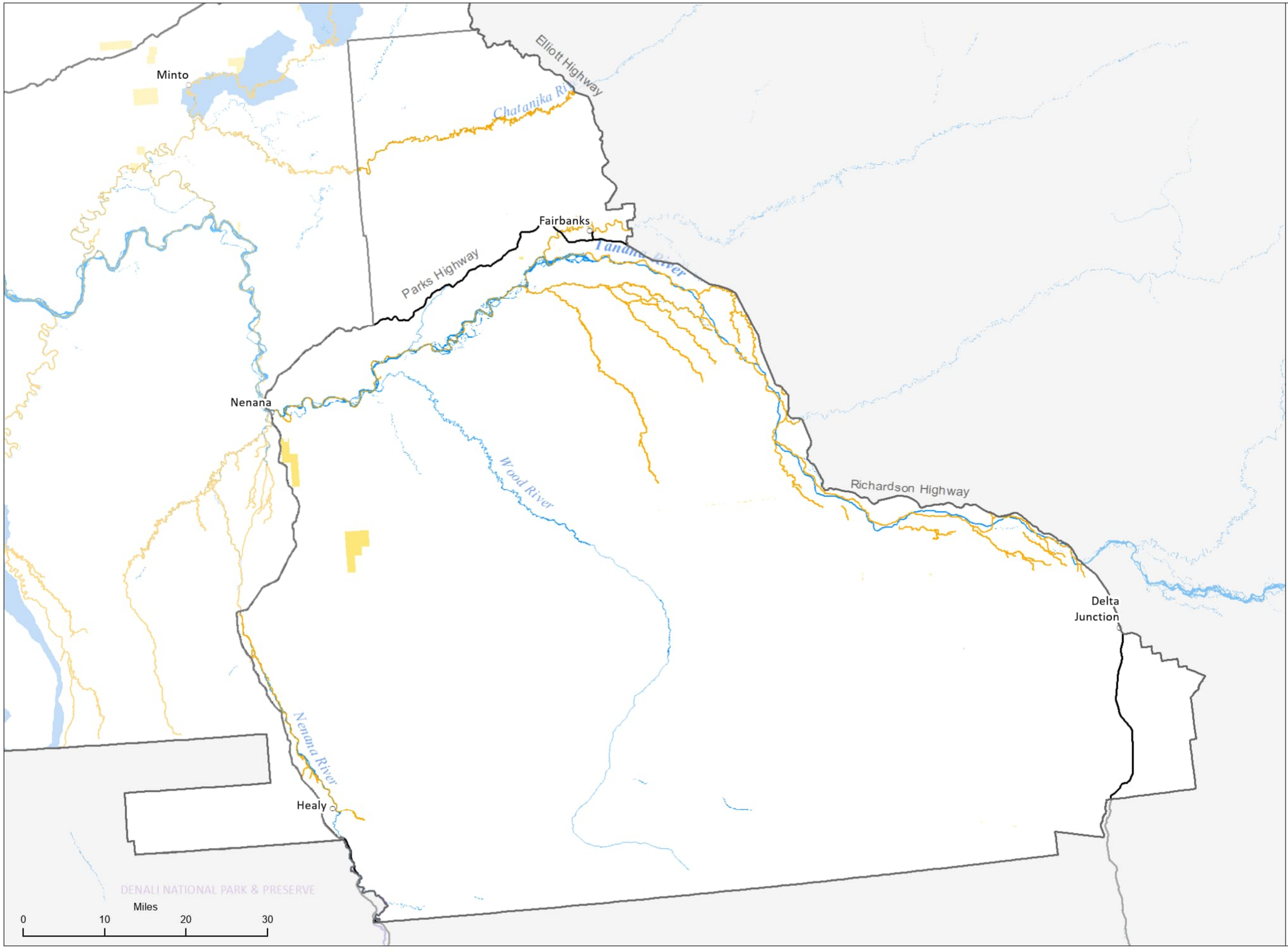
Miles
0 30 60

Map 3.5

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Print Date: 02/13/2024



High-value watershed
Medium-value watershed
Essential fish habitat
BLM-managed land

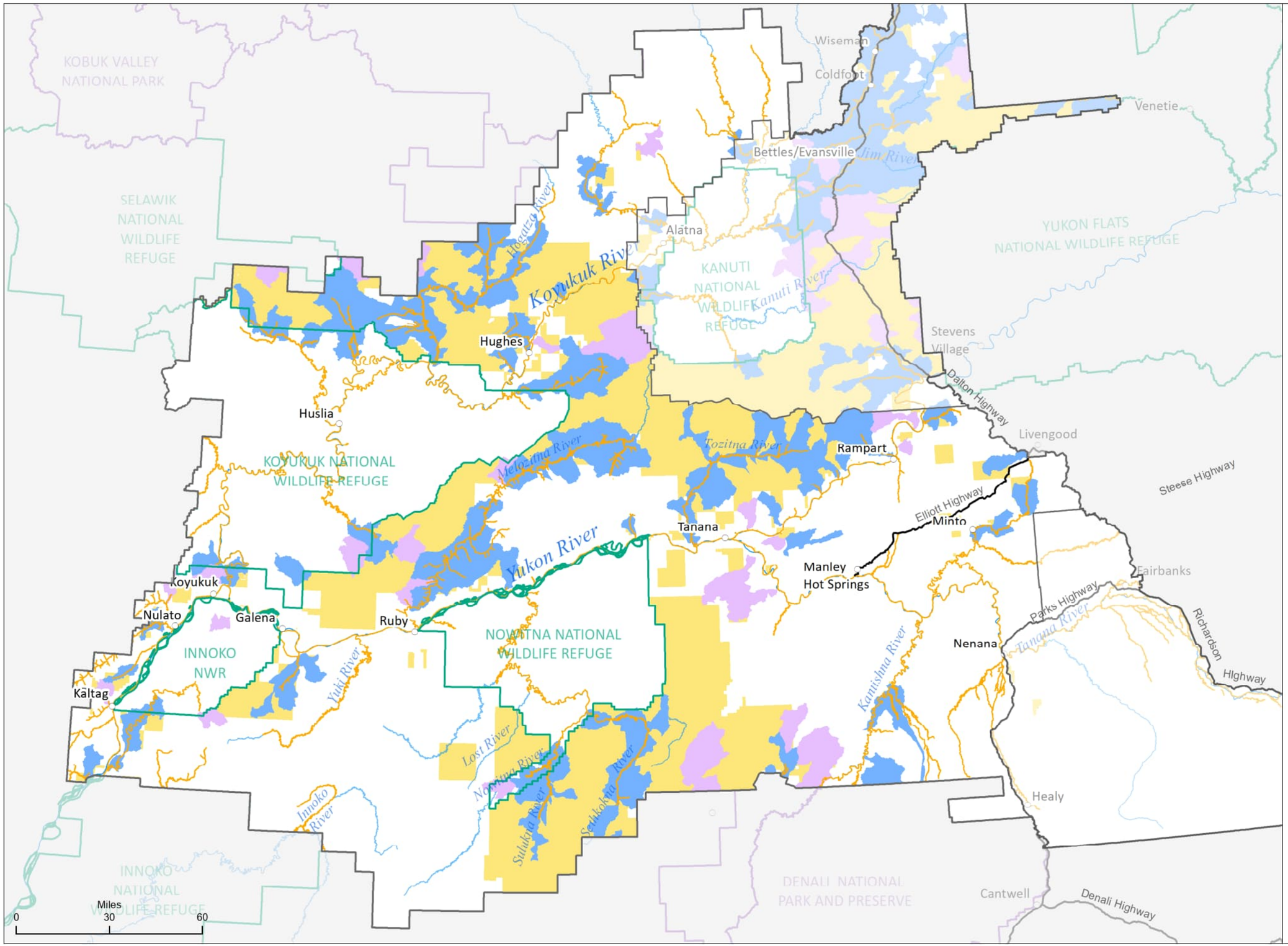
Data Source: BLM GIS 2017

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.



Map 3.6

Print Date: 02/13/2024



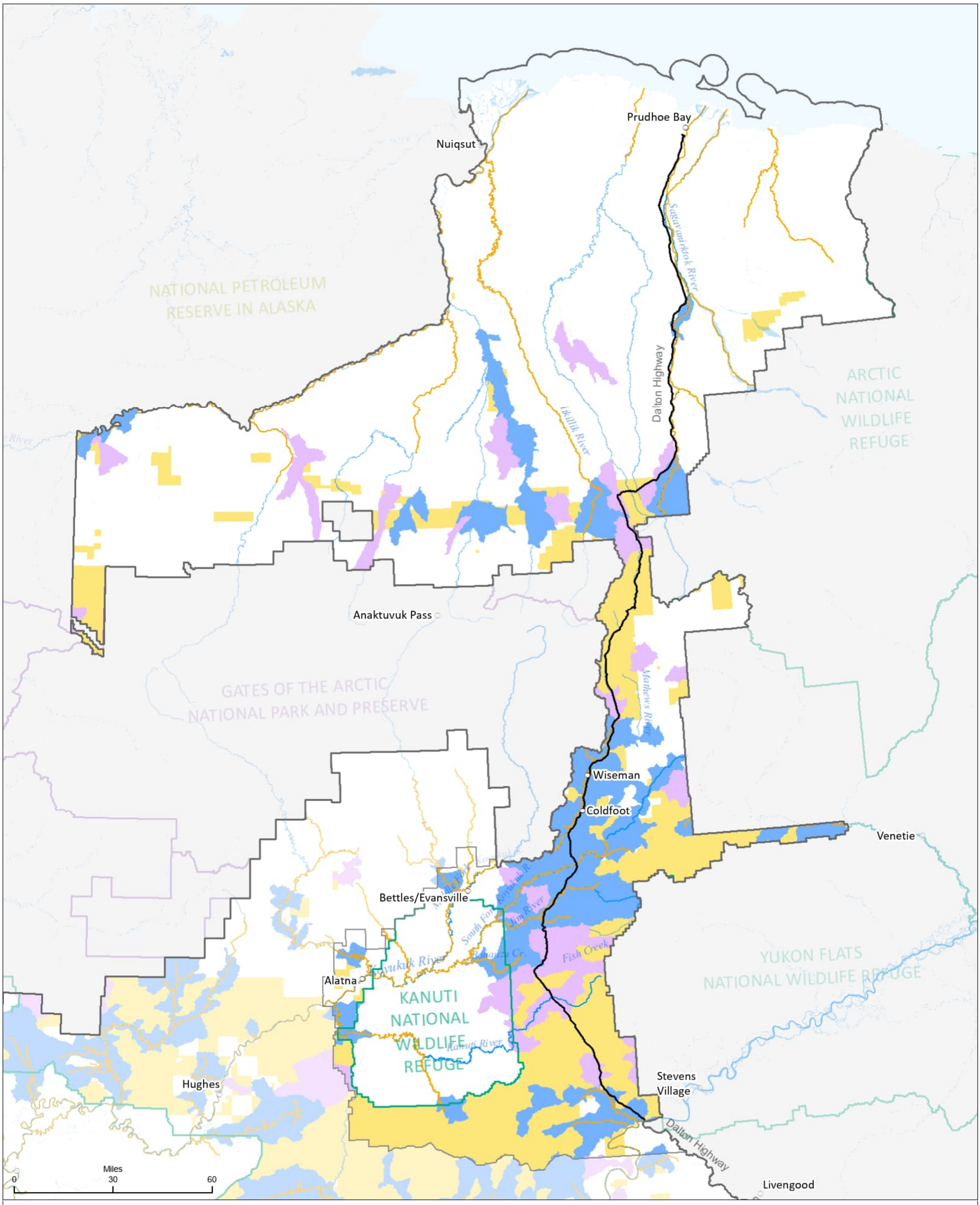
Data Source: BLM GIS 2017

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Map 3.7

Print Date: 02/13/2024



High-value watershed
Medium-value watershed
Essential fish habitat
BLM-managed lands

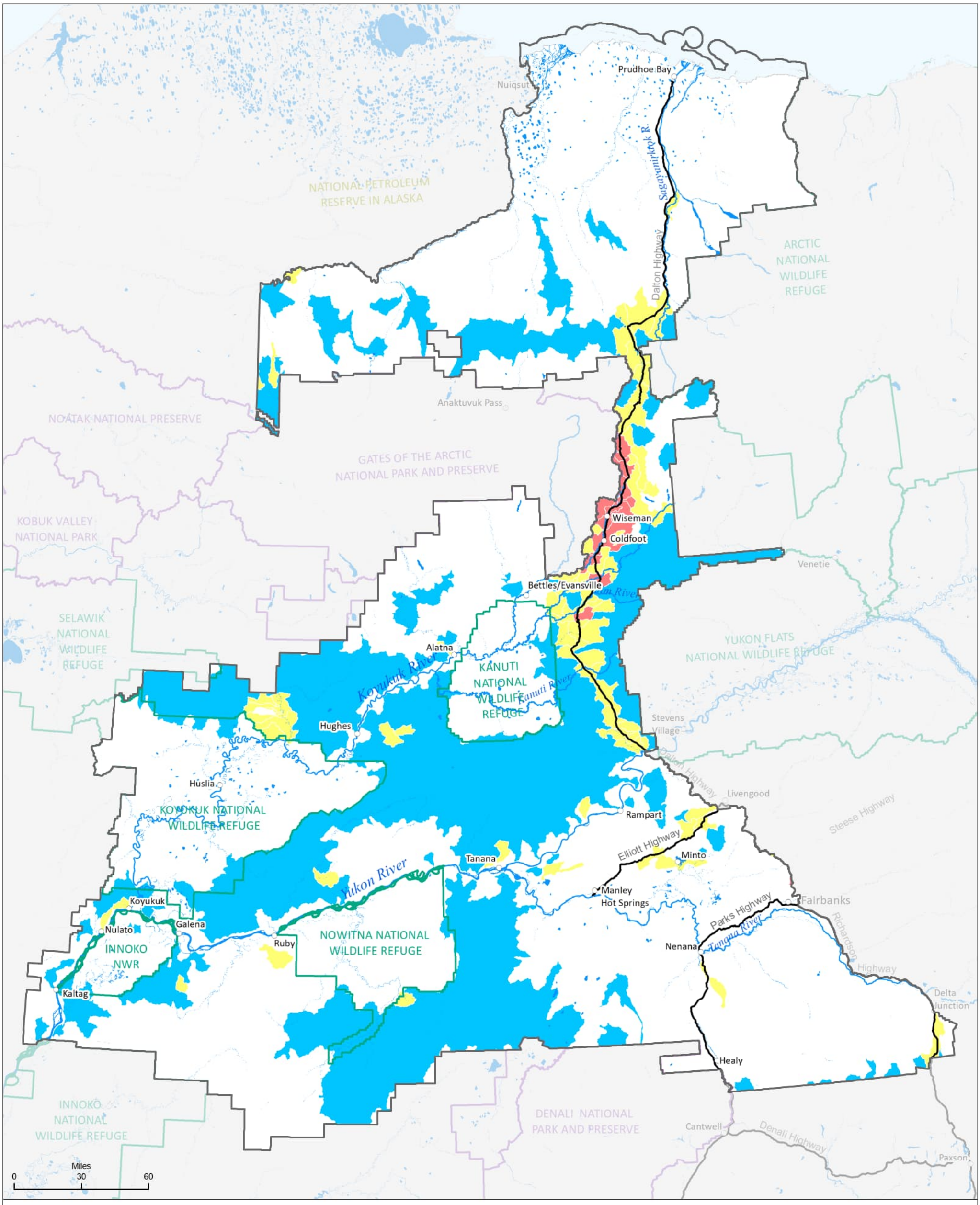


Map 3.8

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Data Source: BLM GIS 2017

Print Date: 02/13/2024

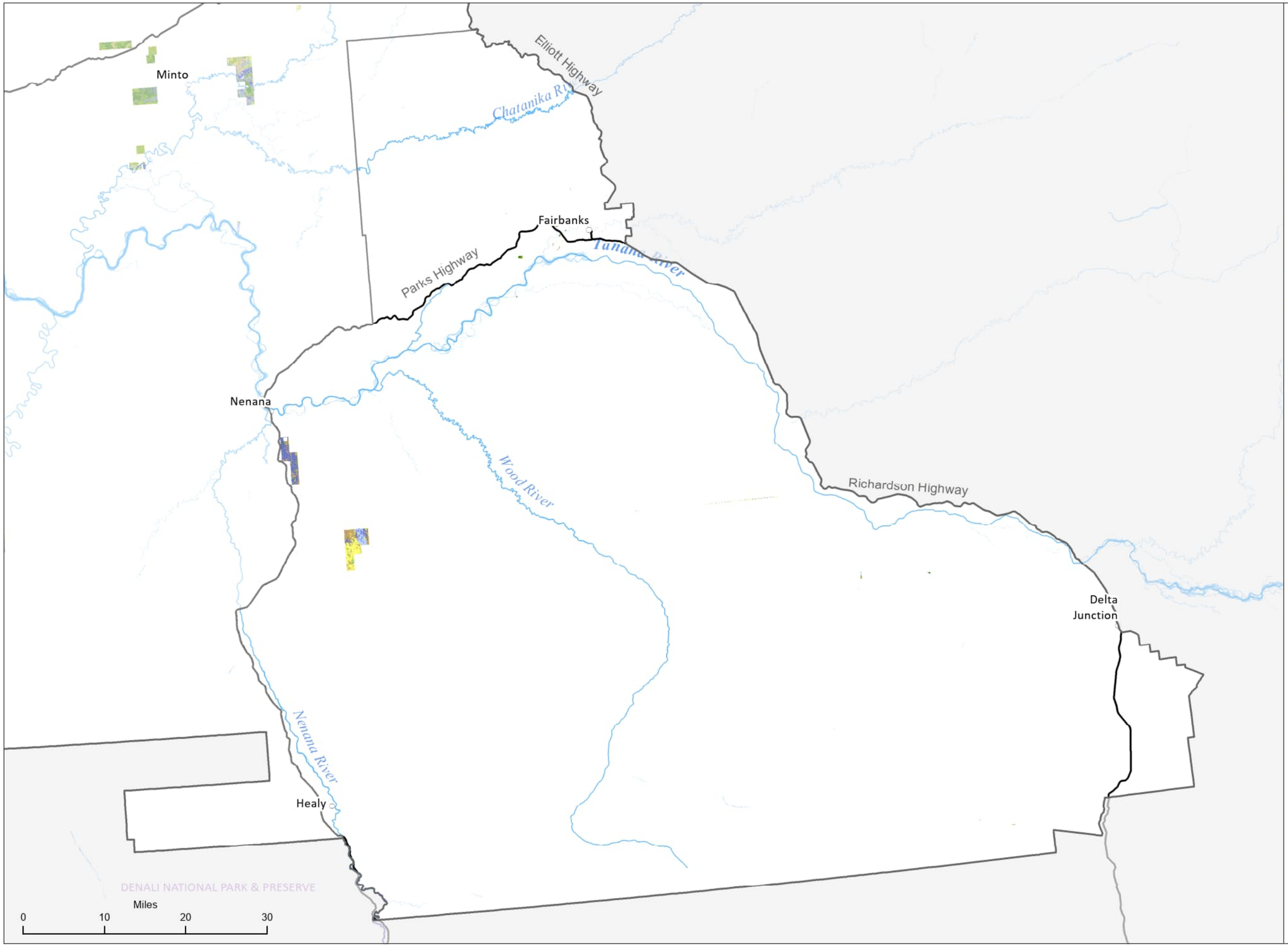


Map 3.9

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Data Source: BLM GIS 2017

Print Date: 02/13/2024



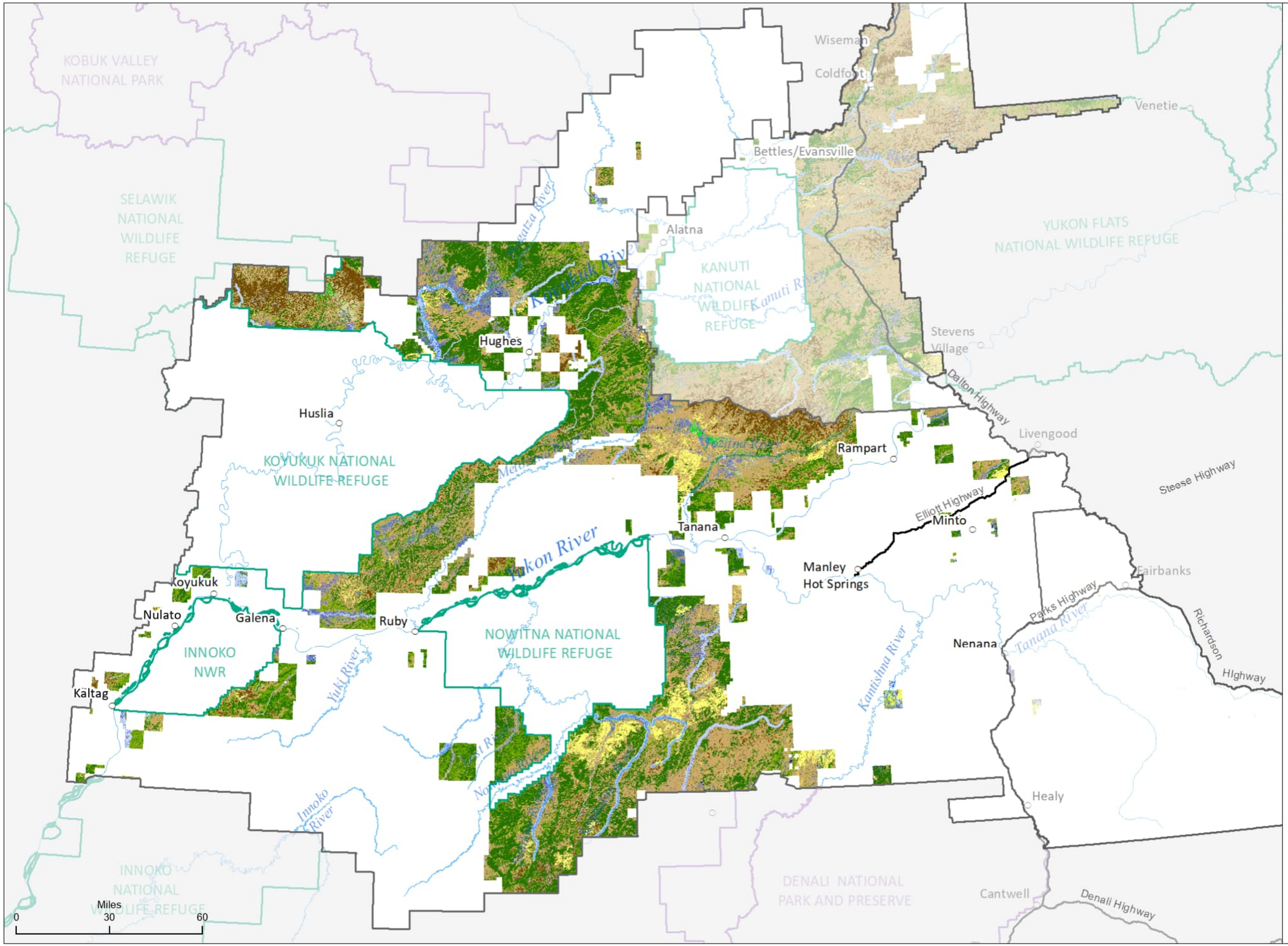
Data Source: BLM GIS 2017

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Map 3.10

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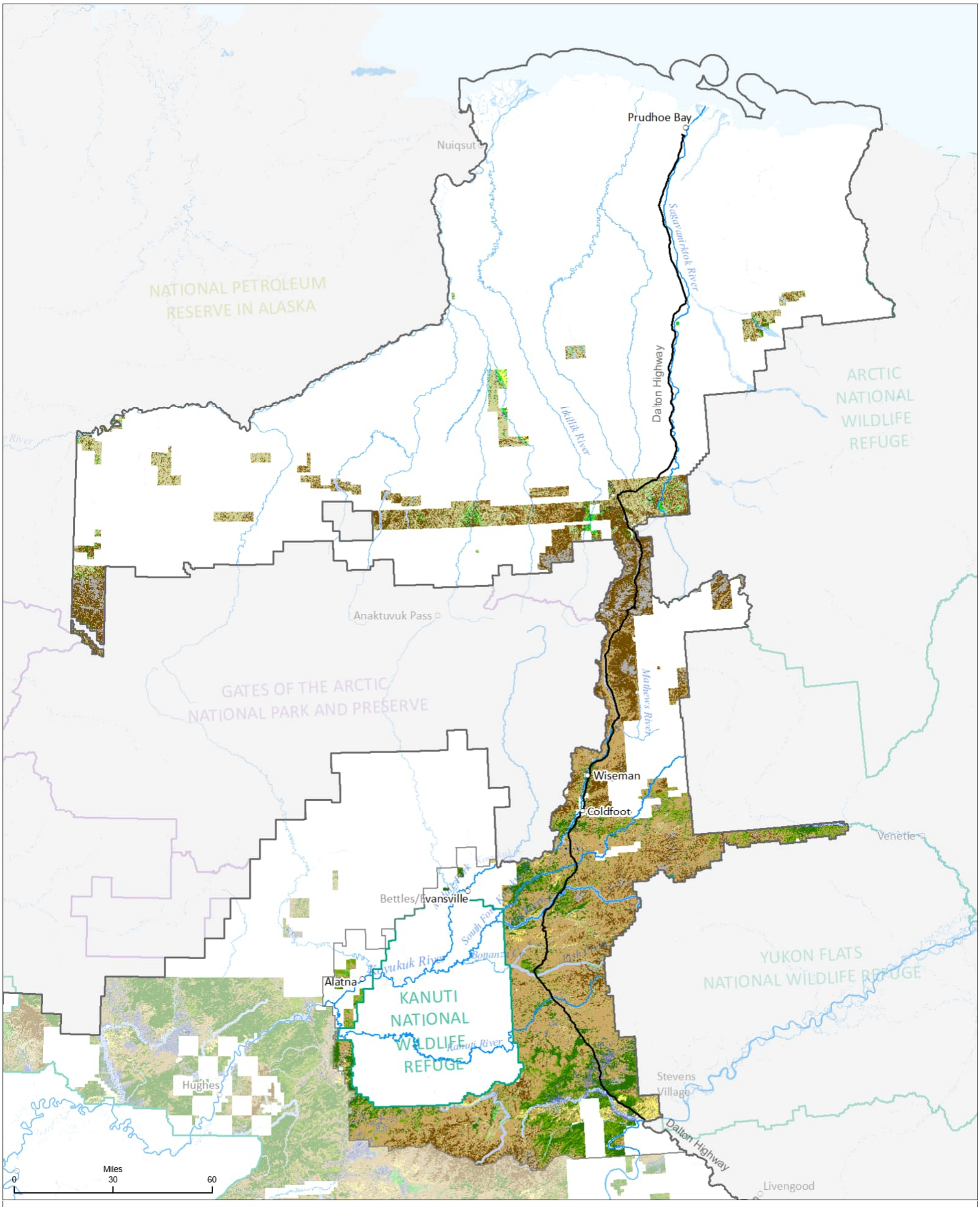
Data Source: BLM GIS 2017

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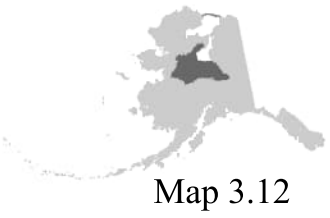


Map 3.11

Print Date: 02/13/2024



- Alpine and arctic tussock tundra
- Alpine dwarf shrub tundra
- Barren land
- Cultivated crops
- Developed
- Emergent herbaceous wetlands
- Grassland/herbaceous
- Lowland woody wetland
- Moss
- Open water
- Perennial ice/snow
- Riparian forest and shrub
- Sedge/herbaceous
- Upland low and tall shrub
- Upland mesic spruce forest
- Upland mesic spruce-hardwood forest



Map 3.12

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Data Source: BLM GIS 2017

Print Date: 02/13/2024

Breeding bird survey observation

Breeding bird survey route starting location

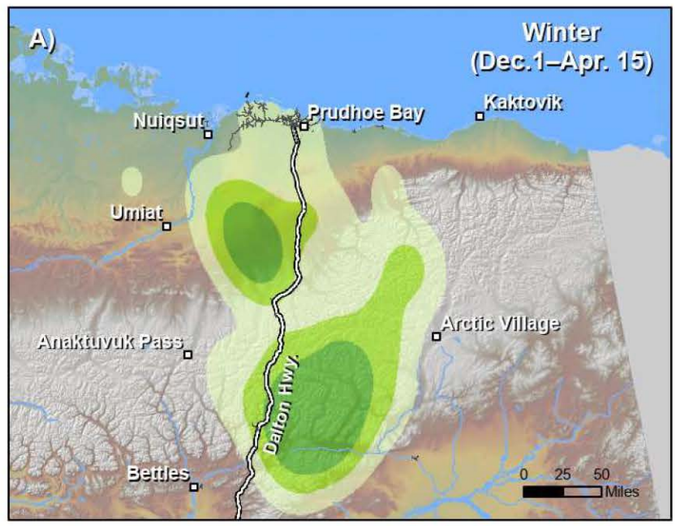
BLM-managed lands

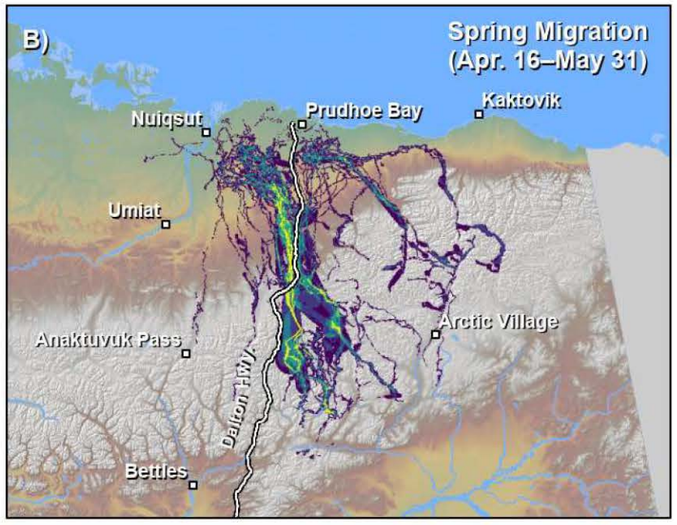
Map 3.13

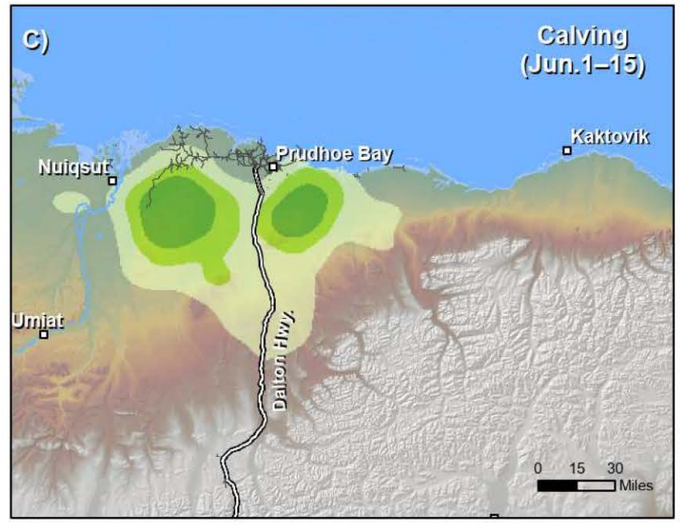
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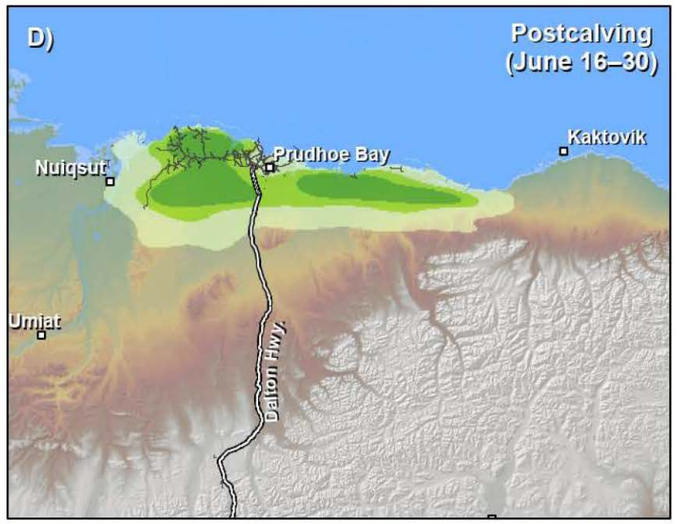
Data Source: BLM GIS 2017, USGS GIS 2018

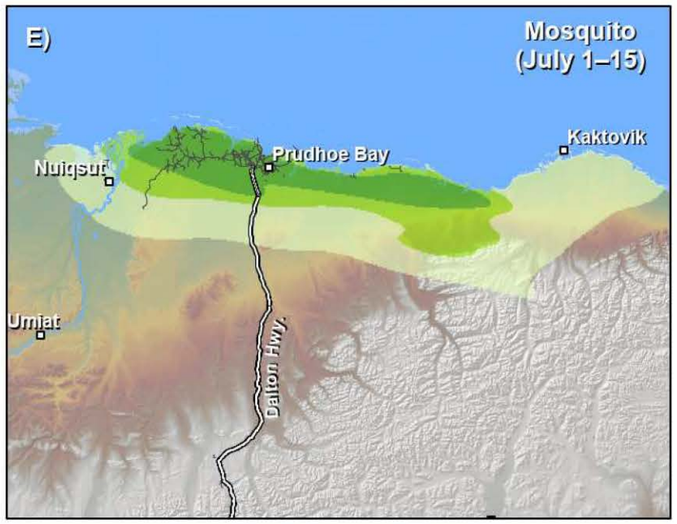
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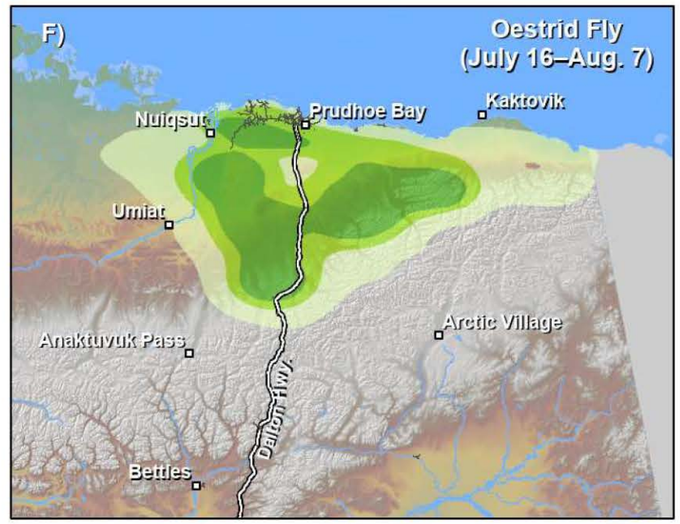


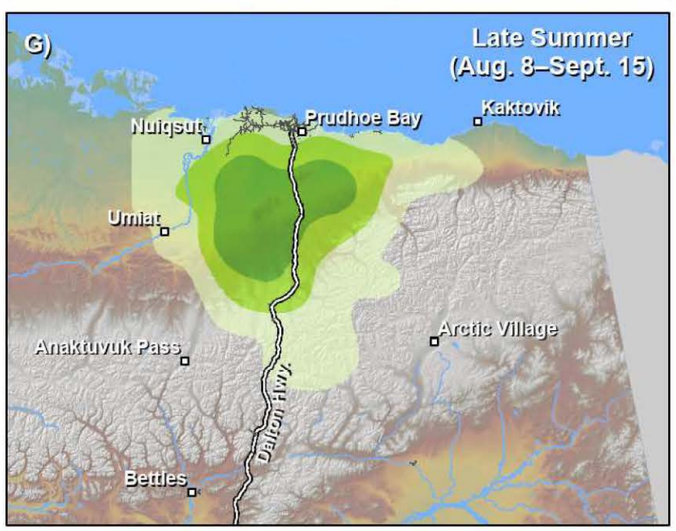


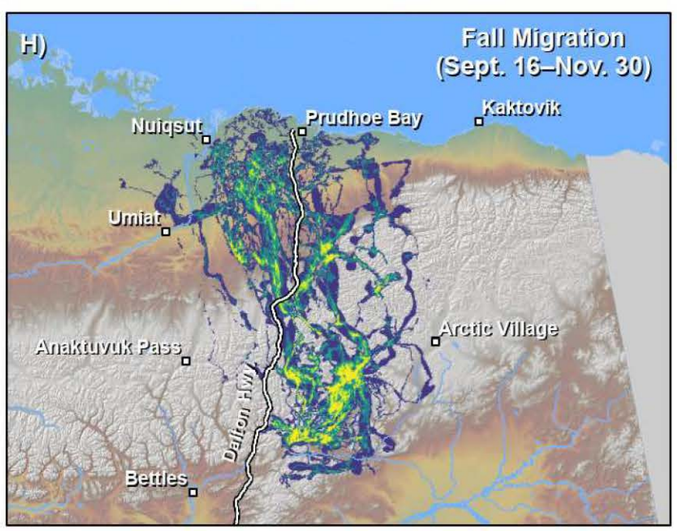












Central Arctic Caribou Herd, Seasonal Range Use, 2012–2017, Female Caribou

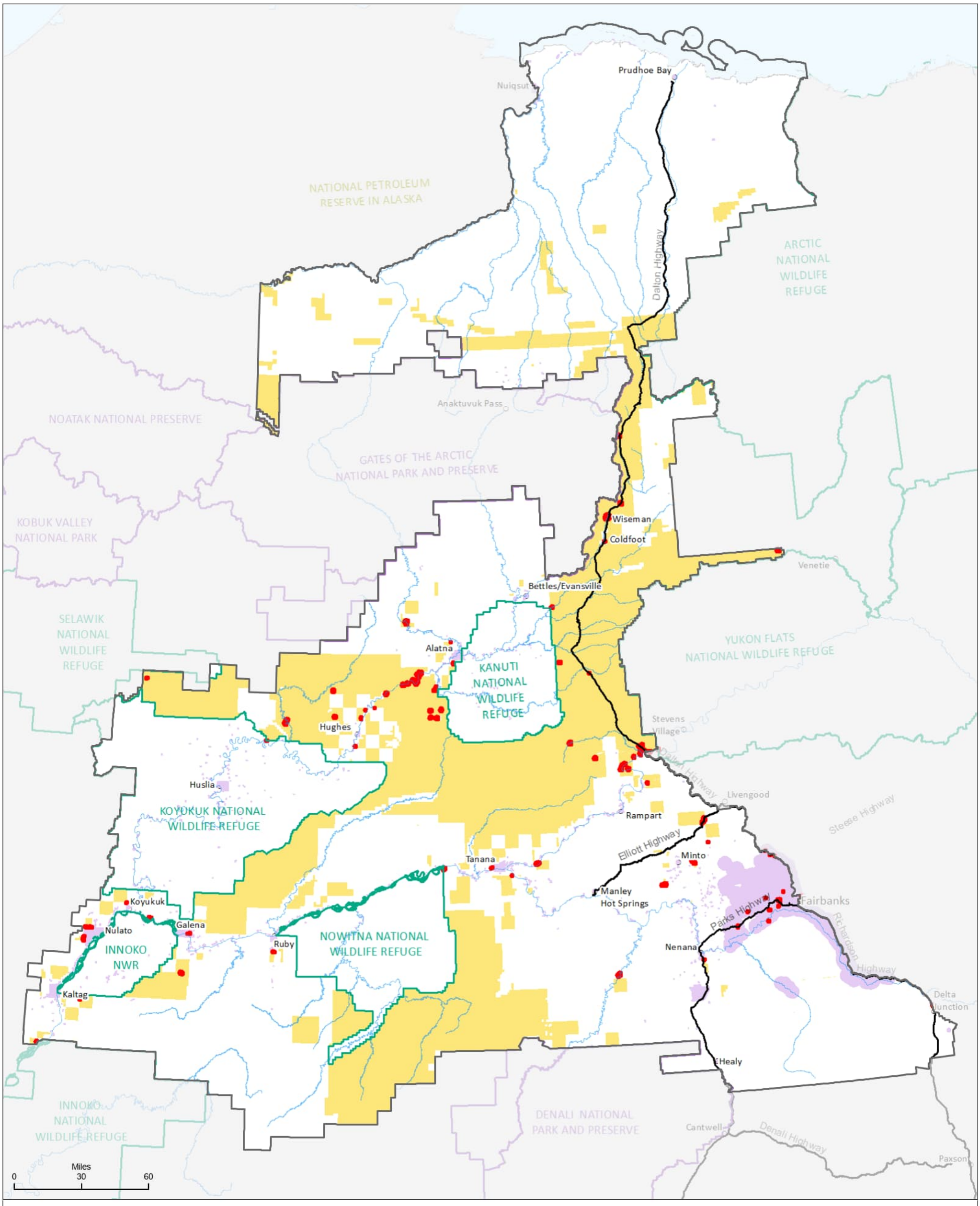
Areas of Concentrated Use	Percent Use During Migration
High Density	0–1, 3–4
Medium Density	1–2, 4–5
Low Density	2–3, >5

Data source: Utilization distribution contours from fixed-kernel analysis of locations of radio-collared female caribou (collar data from ADF&G, USGS, ConocoPhillips Alaska, and ExxonMobil Alaska).

Contours enclose stated percentages of all collar locations. High-, medium-, and low-density areas are the 50%, 75%, and 95% utilization distribution contours, respectively. Bandwidth calculated using the plugin method. Seasonal kernels are averages of daily utilization distributions calculated every other day during the season. Migration percentages were calculated from the 95% utilization distribution of dynamic Brownian Bridge movement models for each individual.

ABR file: 8-panel_CAH_Kernel_2012_2017_Females.mxd; 25 January 2019

Map 3.14

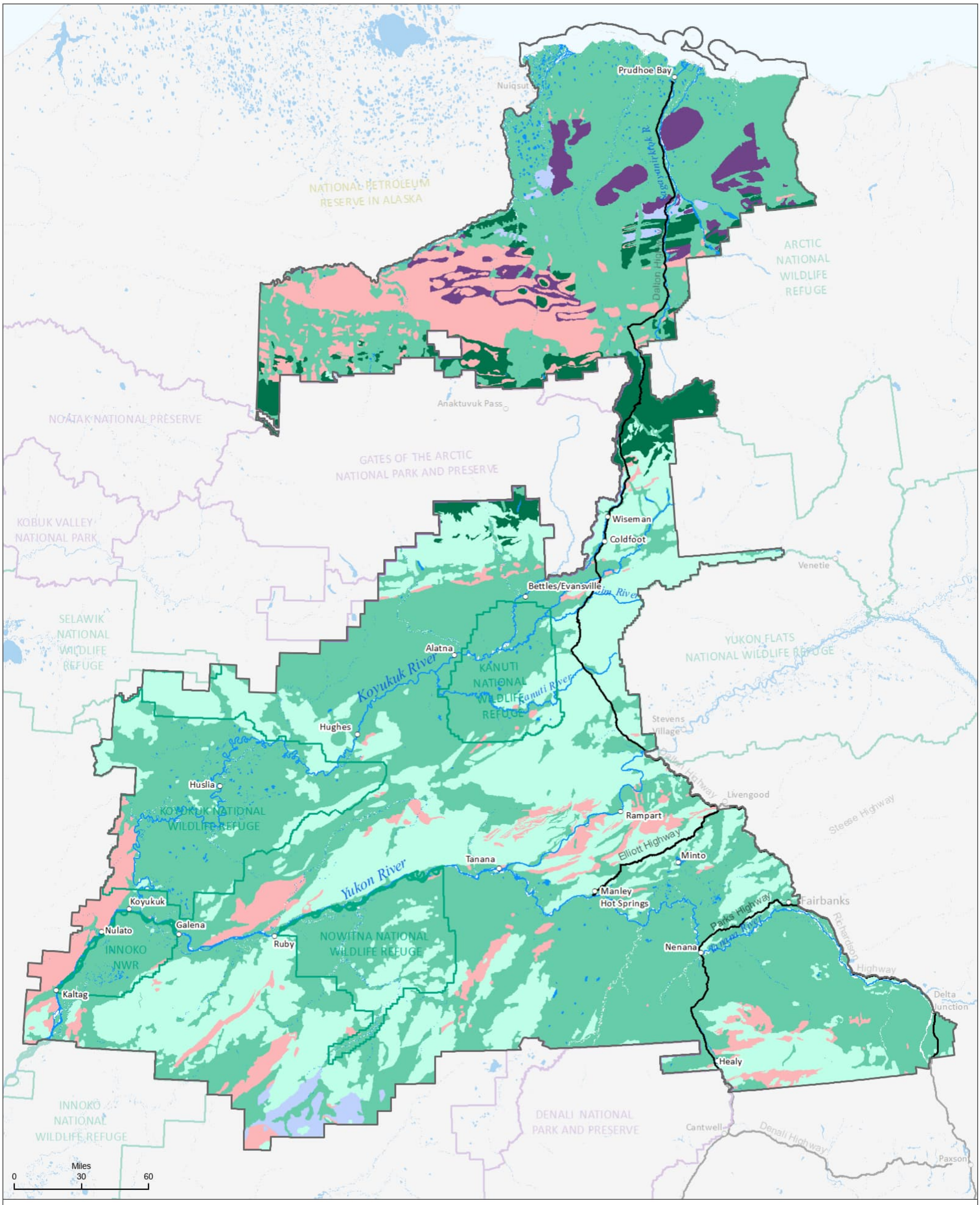


Map 3.15

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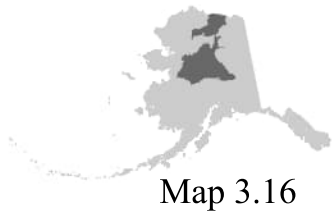
Data Source: BLM GIS 2017

Print Date: 02/13/2024



Potential fossil yield classification

1 2 3 4 5 Unclassified

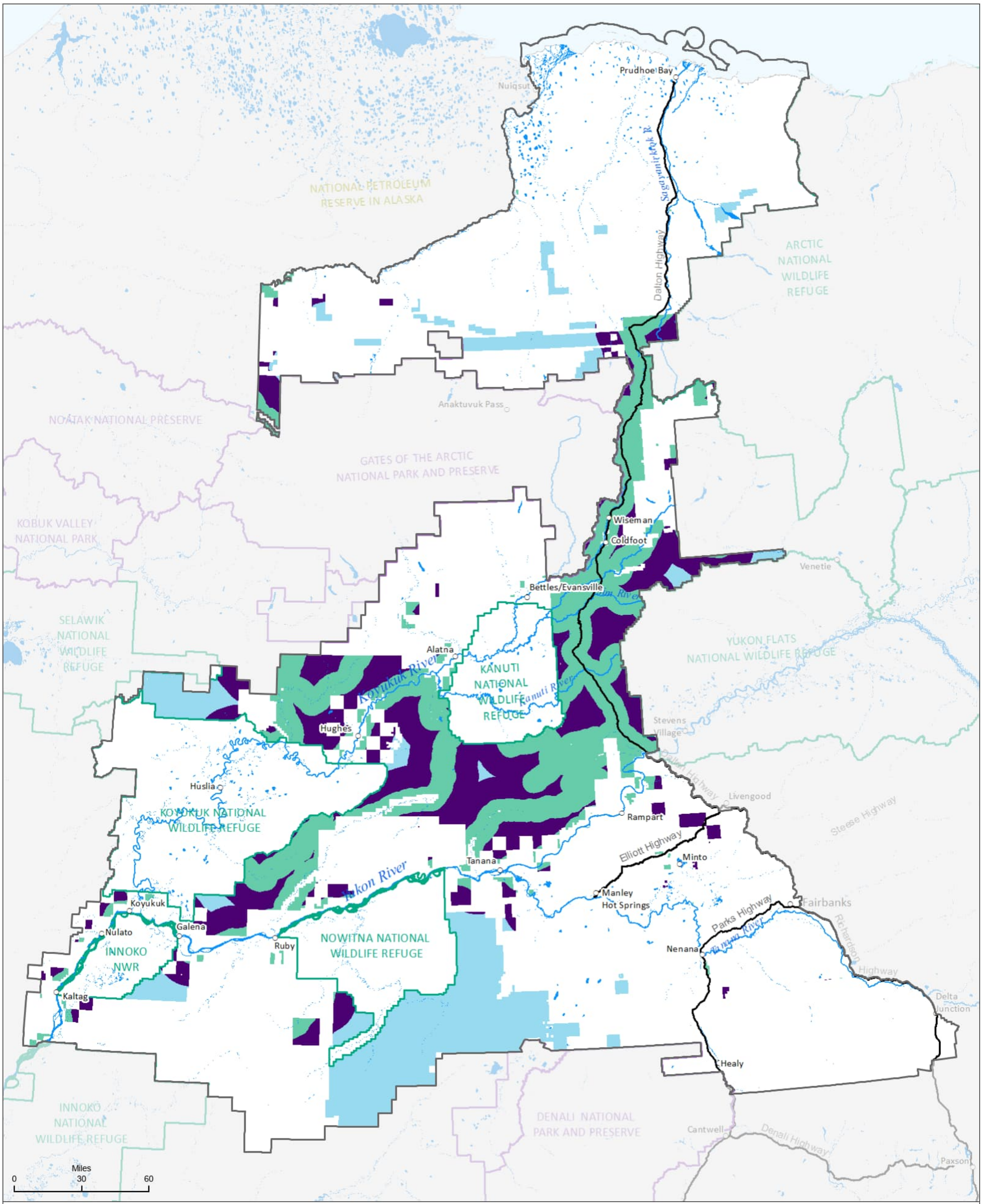


Map 3.16

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Print Date: 02/13/2024

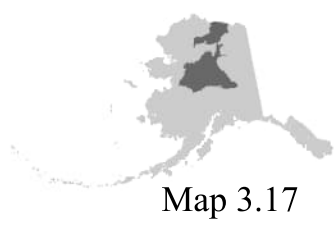


Background visibility, generally from 5 to 15 miles

Foreground-middleground, visibility generally up to 5 miles

Seldom seen, hidden from view, or not in foreground/middleground or background visibility zones

Distance zones are based on relative visibility from travel routes or observation points. Details are more visible to the viewer in the foreground-middleground and are less visible in the seldom seen zone. Lands within the foreground-middleground may therefore be more sensitive to landscape changes.

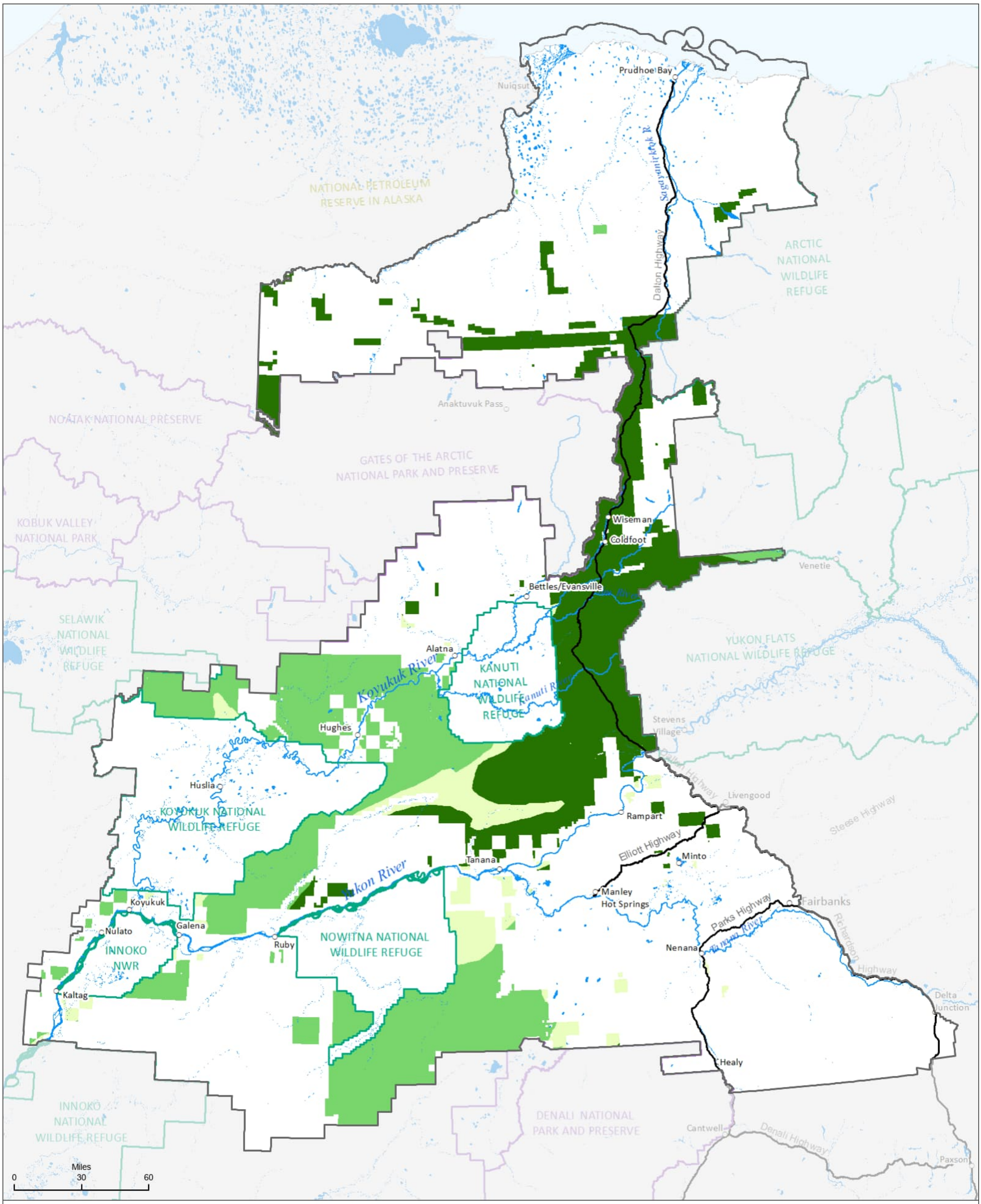


Map 3.17

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Print Date: 02/13/2024



A - 18.5 of more total score for scenic quality

B - 11.5 to 18 total score for scenic quality

C - 11 or less total score for scenic quality

Scenic quality evaluation measures the visual appeal of a landscape. Lands are rated based on the apparent scenic quality. Scenic quality is determined by reviewing and rating lands using seven key factors: landform, vegetation, water, color, influence of adjacent scenery, scarcity, and cultural modifications. The total score determines the scenic quality rating.

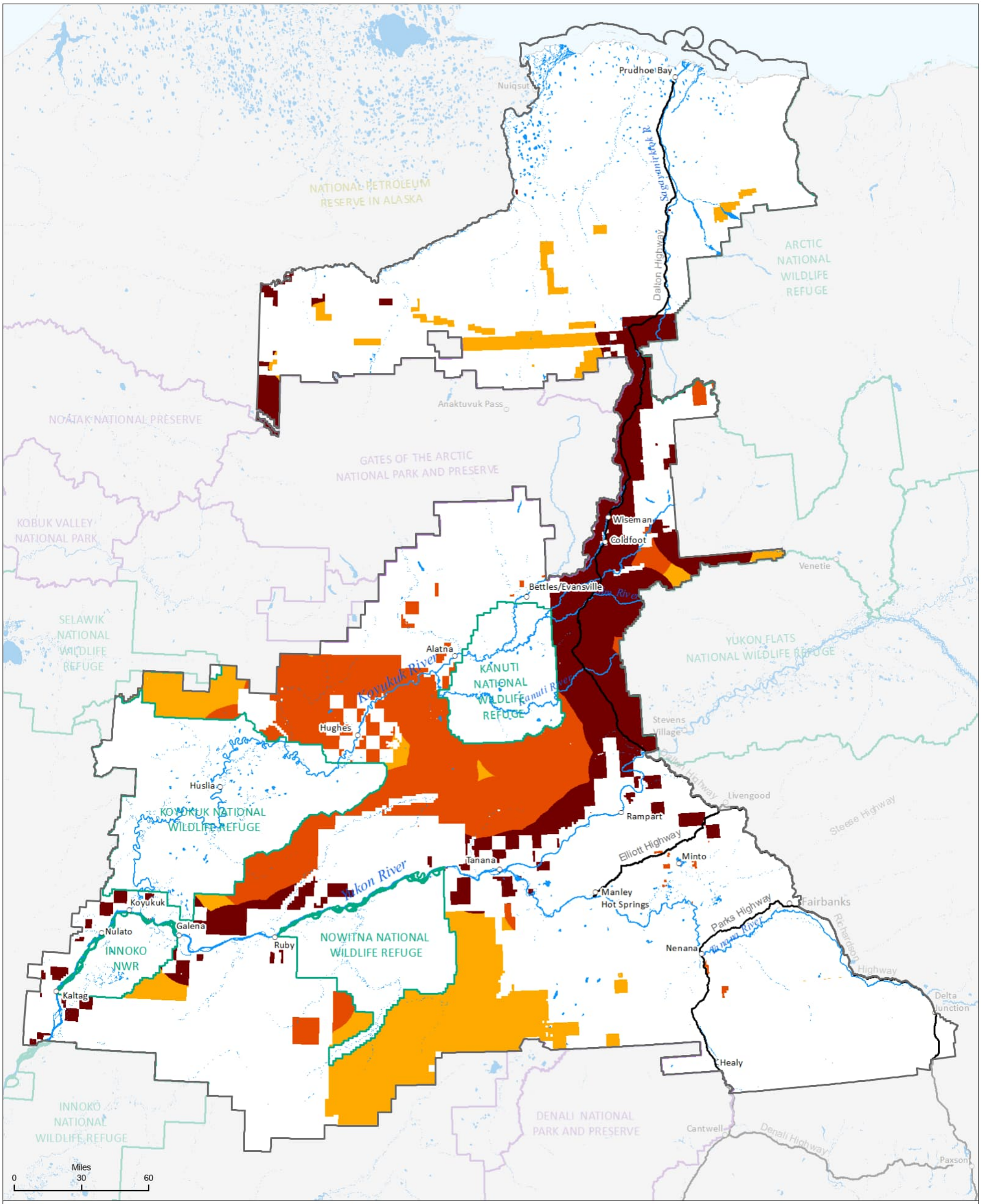


Map 3.18

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Data Source: BLM GIS 2017

Print Date: 02/13/2024



Maintenance of visual quality has high value

Maintenance of visual quality has moderate value

Maintenance of visual quality has low value

Sensitivity levels are a measure of public concern for scenic quality. Lands are assigned sensitivity levels based on consideration of the following: types of users, amount of use, public interest, adjacent land use, special areas, and other. The overall rating is not quantified: instead, the evaluators make a professional judgement about how the overall ratings are valued.

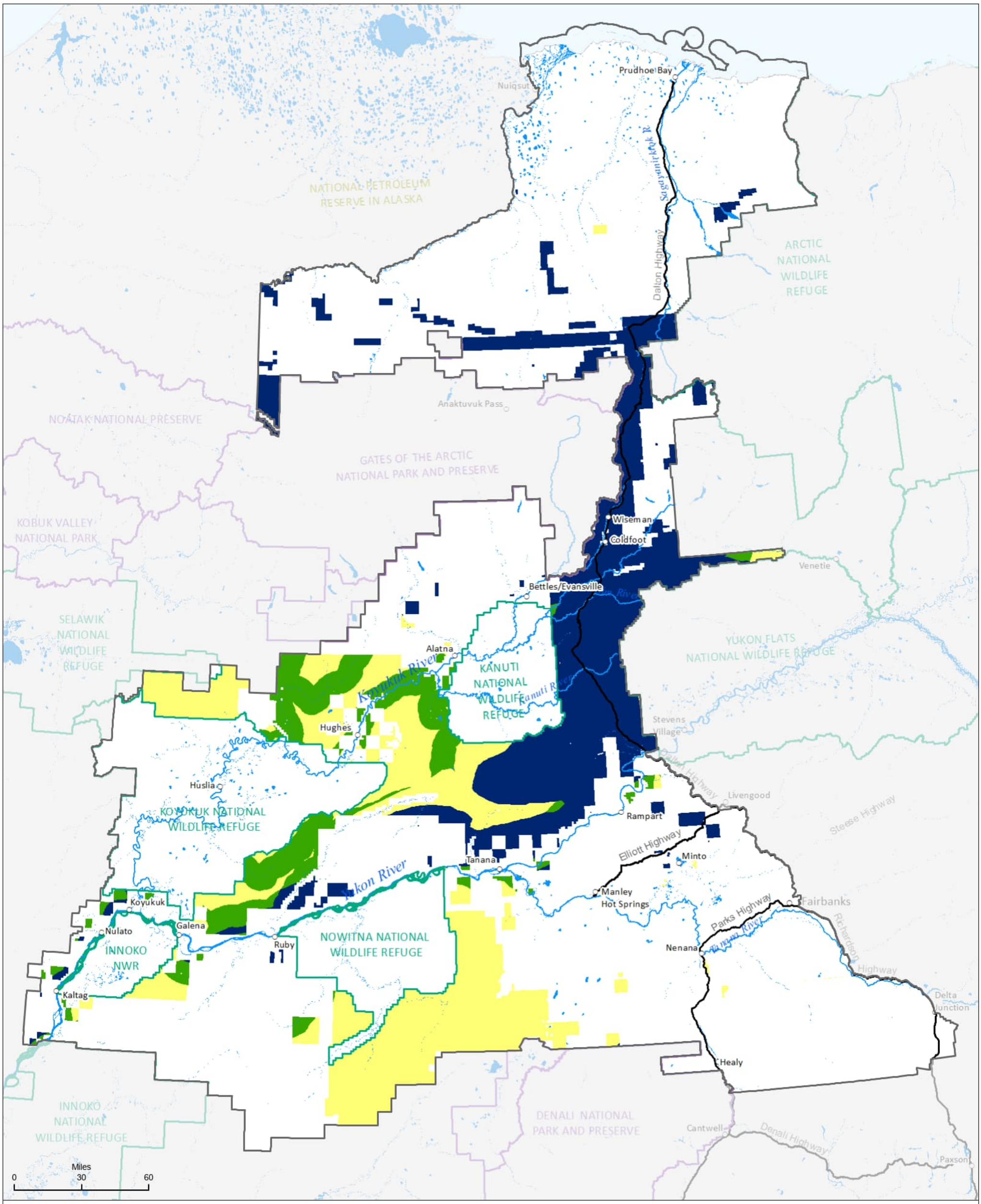


Map 3.19

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VRI Class II

VRI Class III

VRI Class IV

The Central Yukon field office conducted a visual resource inventory (VRI). Based on a scenic quality evaluation, sensitivity level analysis, and delineation of distance zones, BLM-administered lands were placed into one of four VRI classes, representing the relative visual quality of the landscape.

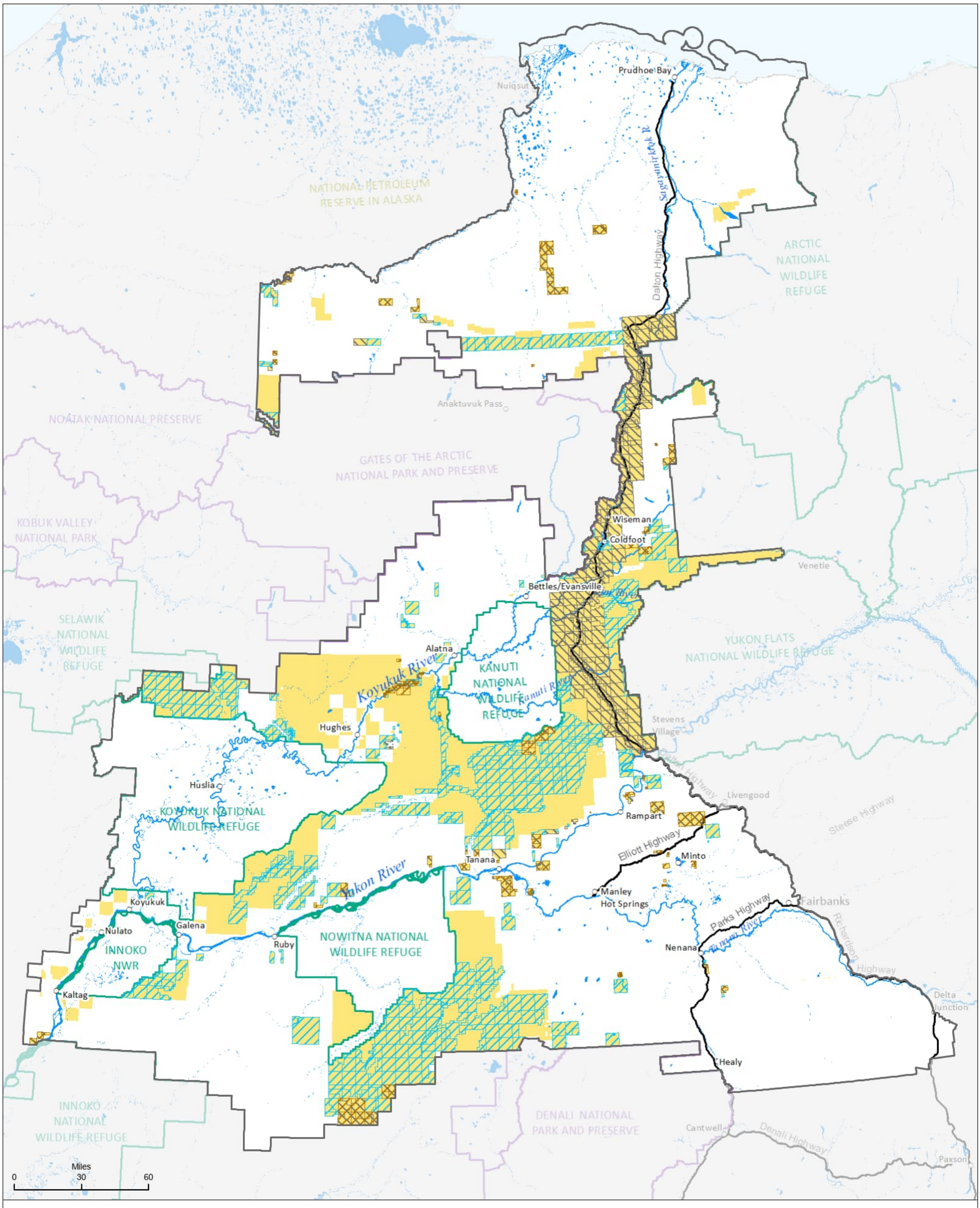


Map 3.20

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Print Date: 02/13/2024

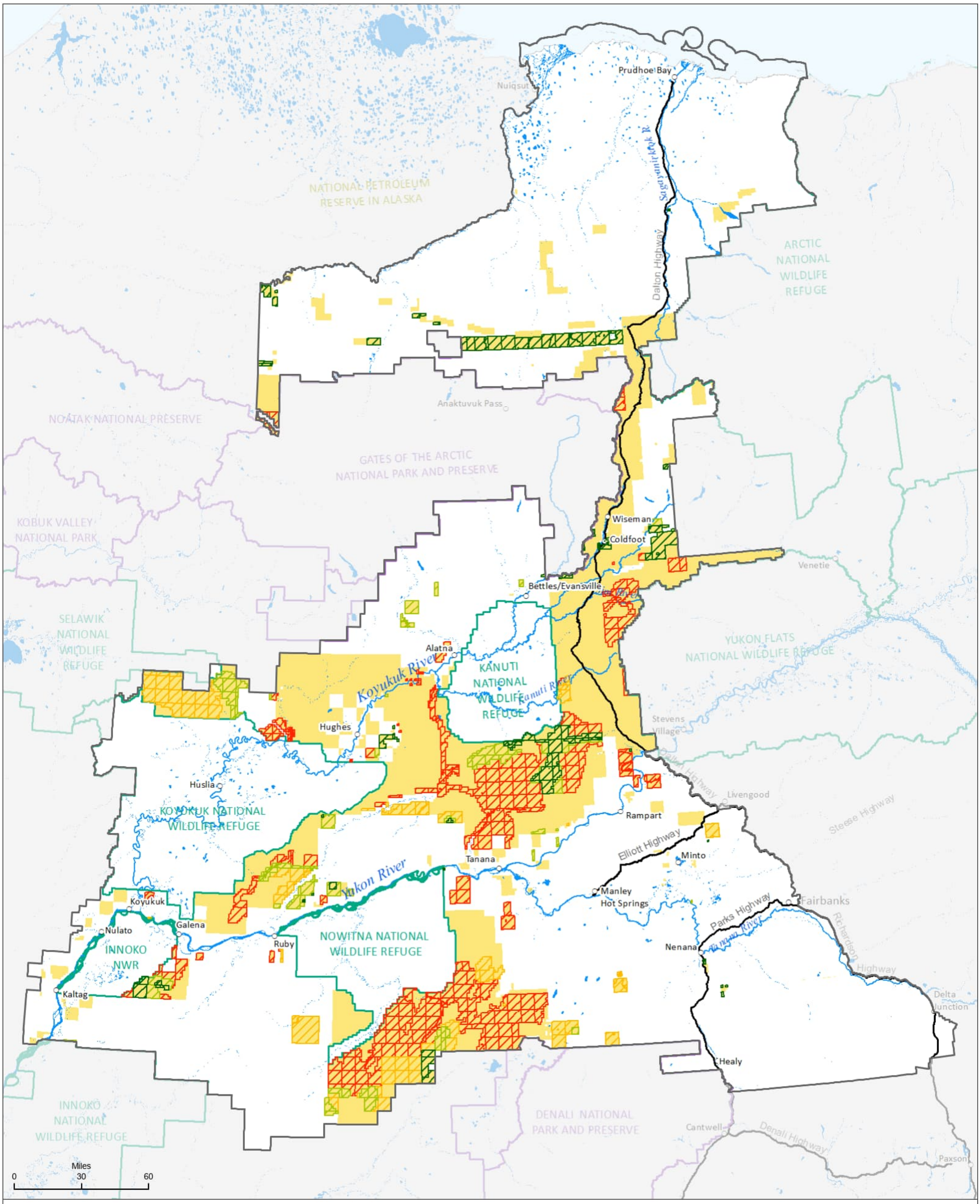


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Data Source: BLM GIS 2017

Map 3.21

Print Date: 02/13/2024



State-selection priority

BLM-managed lands

- Priority 1
- Priority 2
- Priority 3
- Priority 4



Map 3.22

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Data Source: BLM GIS 2017

Print Date: 02/13/2024

NATIONAL PETROLEUM RESERVE IN ALASKA
Sagavanirktok R.
Dalton Highway
ARCTIC NATIONAL WILDLIFE REFUGE
Anaktuvuk Pass
NOATAK NATIONAL PRESERVE
GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
KOBUK VALLEY NATIONAL PARK
Wiseman
Coldfoot
Venetie
Bettles/Evansville
SELAWIK NATIONAL WILDLIFE REFUGE
Alatna
Allakaket
Koyukuk River
KANUTI NATIONAL WILDLIFE REFUGE
Kanuti River
YUKON FLATS NATIONAL WILDLIFE REFUGE
Hughes
Stevens Village
Dalton Highway
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Ester
Fairbanks
Parks Highway
North Pole
Richardson Highway
Tanana River
Koyukuk
Nulato
Galena
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
INNOKO NWR
Nenana
Anderson
Big Delta
Delta Junction
Kaltag
Lake Minchumina
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Denali Highway
Miles
0
30
60

Percent of population identifying as a low-income population

- 0%
- 7.3% - 24.6%
- 24.7% - 50%
- 50.1% - 100%

BLM-managed lands

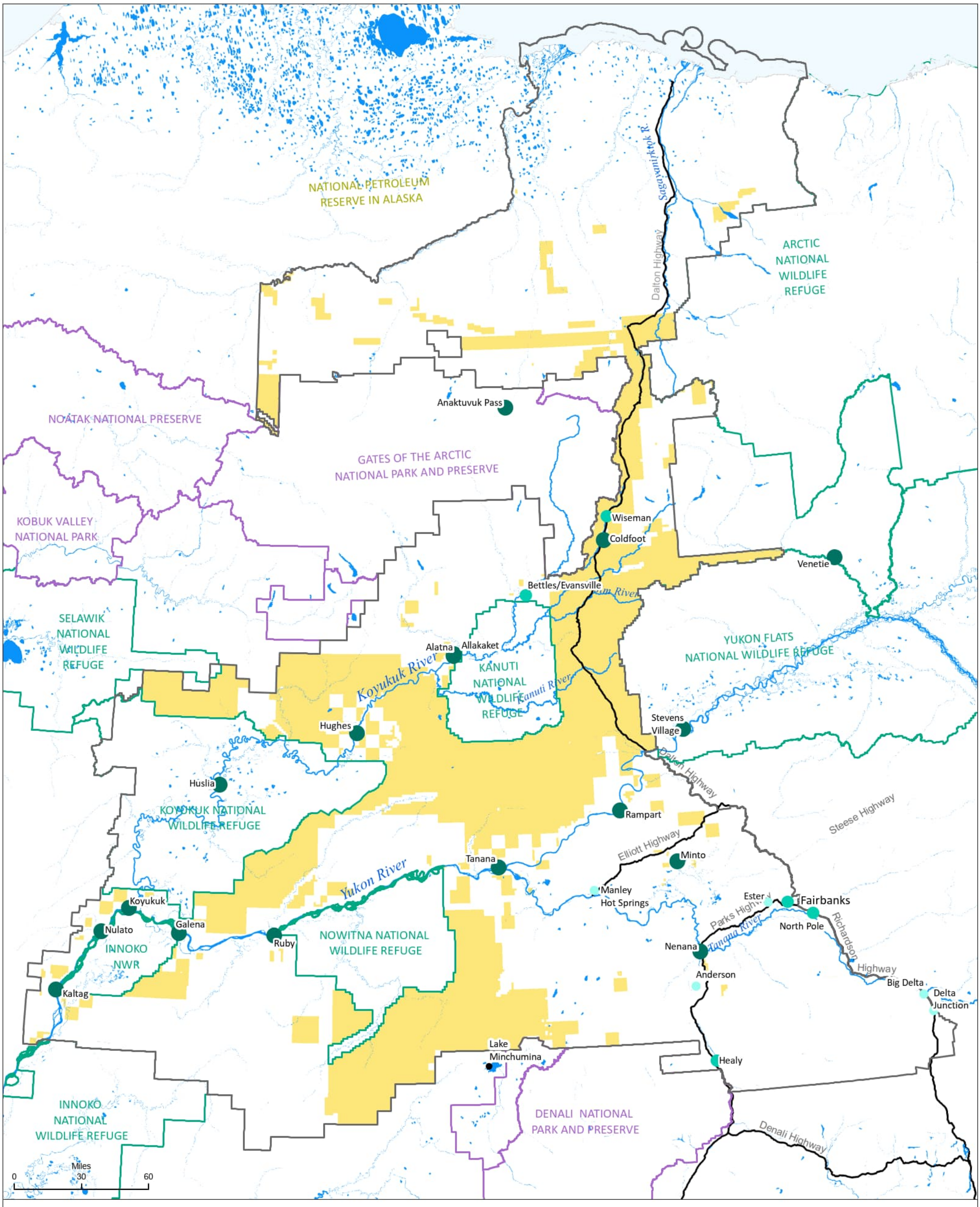
Alaska statewide percentage is 24.7%

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Data Source: BLM GIS 2017

Map 3.23

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Percent of population identifying as a minority population

- 0%
- 8.3% - 21.0%
- 21.0% - 38.2%
- 41.6% - 100%

BLM-managed lands

Alaska statewide percentage is 41.6%



Map 3.24

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Data Source: BLM GIS 2017

Print Date: 02/14/2024

NATIONAL PETROLEUM RESERVE IN ALASKA
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GATES OF THE ARCTIC NATIONAL PARK AND PRESERVE
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Kanuti River
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Hughes
Stevens Village
Huslia
KOYUKUK NATIONAL WILDLIFE REFUGE
Rampart
Steese Highway
Elliott Highway
Minto
Tanana
Yukon River
Manley Hot Springs
Ester
Fairbanks
Parks Highway
North Pole
Richardson Highway
Tanana River
Nenana
Anderson
Big Delta
Delta Junction
Koyukuk
Nulato
Galena
Ruby
NOWITNA NATIONAL WILDLIFE REFUGE
INNOKO NWR
Kaltag
Lake Minchumina
Healy
INNOKO NATIONAL WILDLIFE REFUGE
DENALI NATIONAL PARK AND PRESERVE
Denali Highway
Miles
0
30
60

Percent of population identifying as an indigenous population

- 0%
- 5.2% - 20.2%
- 20.3 % - 50%
- 50.1% - 100%

BLM-managed lands

Alaska statewide percentage is 20.3%

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Data Source: BLM GIS 2017

Map 3.25

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Appendix B
Collaboration and Coordination

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B-3 List of Preparers B-3

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Appendix B. Collaboration and Coordination

B.1 COLLABORATION

The Bureau of Land Management (BLM) is the lead agency for the Central Yukon Resource Management Plan (RMP). At the outset of the planning process, the BLM sent letters of invitation to local, state, federal, and tribal representatives, inviting them to participate as cooperating agencies for the Central Yukon RMP.

Table B-1
Cooperating Agency Participation

Agencies and Tribes Invited to be Cooperators	Agencies and Tribes that Signed a Memorandum of Understanding
U.S. Department of the Interior, Fish and Wildlife Service	Yes
U.S. Department of the Interior, National Park Service	No
Alaska Department of Natural Resources, Representing the State of Alaska	Yes
Denali Borough	No
Fairbanks North Star Borough	No
North Slope Borough	No
Northwest Arctic Borough	No
Eielson Air Force Base	No
Joint Base Elmendorf-Richardson	No
U.S. Army Garrison Fort Wainwright	No
The BLM invited all tribal entities listed in Section B.2 to be cooperators	See Section B.2

B.2 TRIBAL AND ALASKA NATIVE CORPORATIONS' CONSULTATION

Table B-2
Federally Recognized Tribes and Alaska Native Claims Settlement Act Native Corporations Contacted during Scoping

Count	Federally Recognized Tribes	Alaska Native Claims Settlement Act Native Corporations (Associated Tribes)
1	Alatna Village	K'oyitl'ots'ina, Limited (Alatna, Allakaket, Hughes, and Huslia)
2	Allakaket Village*	K'oyitl'ots'ina, Limited (Alatna, Allakaket, Hughes, and Huslia)
3	Hughes Village	K'oyitl'ots'ina, Limited (Alatna, Allakaket, Hughes, and Huslia)
4	Huslia Village	K'oyitl'ots'ina, Limited (Alatna, Allakaket, Hughes, and Huslia)

Count	Federally Recognized Tribes	Alaska Native Claims Settlement Act Native Corporations (Associated Tribes)
5	Village of Anaktuvuk Pass	Nunamiut Corporation, Incorporated (Anaktuvuk Pass)
6	Evansville Village	Evansville, Incorporated (Evansville Village)
7	Louden Village (Galena)	Gana-A'yoo, Limited (Galena, Kaltag, Koyukuk, and Nulato)
8	Village of Kaltag	Gana-A'yoo, Limited (Galena, Kaltag, Koyukuk, and Nulato)
9	Village of Koyukuk*	Gana-A'yoo, Limited (Galena, Kaltag, Koyukuk, and Nulato)
10	Nulato Village*	Gana-A'yoo, Limited (Galena, Kaltag, Koyukuk, and Nulato)
11	Nenana Native Association	Toghotthele Corporation (Nenana)
12	Native Village of Nuiqsut	Kuukpik Corporation (Nuiqsut)
13	Native Village of Minto	Seth-De-Va-Ah Corporation (Minto)
14	Native Village of Ruby*	Dineega Corporation (Ruby)
15	Native Village of Stevens	Dinyee Corporation (Stevens Village)
16	Native Village of Tanana*	Tozitna, Limited (Tanana)
17	Native Village of Unalakleet	Unalakleet Native Corporation (Unalakleet)
18	Manley Hot Springs Village	Bean Ridge Corporation (Manley Hot Springs)
19	Rampart Village	Baan O Yeel Kon Corporation (Rampart)
20	Native Village of Venetie Tribal Government*	None

*Cooperator

Regional Native Corporation
NANA Regional Corporation Inc.
Arctic Slope Regional Corporation
Doyon, Ltd.

In spring 2023, the BLM sent letters to solicit Native consultation to tribes and corporations on the Proposed RMP/Final Environmental Impact Statement. Over the course of seven meetings, the BLM consulted with the following tribes: Allakaket Village, Huslia Village, Evansville Village, Native Village of Ruby, Alatna Village, Native Village of Tanana, Fort Yukon, Village of Koyukuk, Nulato Village, Rampart Village, Village of Kaltag, and Anvik. The BLM also consulted with the following corporations: Doyon, Ltd.; Arctic Slope Regional Corporation; and Dinyee Corporation.

B.3 LIST OF PREPARERS

Table B-3
List of Preparers

Agency	Name	Role/Responsibility
BLM	Michelle Ethun*	Project Manager, Contracting Officer's Representative, Air Quality and Climate, Wilderness Characteristics, Lands and Realty and Utility Corridor, Travel Management, Areas of Critical Environmental Concern, Wilderness Study Area, Wild and Scenic Rivers, Back Country or Scenic Byways, Iditarod National Historic Trail, Environmental Justice, Social and Economic Conditions, Administrative Record/ePlanning
BLM	Tim LaMarr*	Field Office Manager
BLM	Tim Hammond	Assistant Field Manager, Forest and Woodland Products
BLM	Bill Hedman	Assistant Field Manager
BLM	Sylvia Ringer	Assistant Field Manager, Minerals and Resources
BLM	Melinda Bolton	Planning and Environmental Coordinator
BLM	Steve Taylor	Contracting Officer's Representative, Recreation and Visitor Services
BLM	Stewart Allen	Environmental Justice, Social and Economic Conditions
BLM	John Barefoot	Locatable Minerals and Mineral Materials
BLM	Willie Branson	Wildland Fire Ecology and Management
BLM	Melody Debenham	Hazardous Materials
BLM	Kelly Egger	Visual Resources, Recreation and Visitor Services, Travel Management
BLM	Dave Esse	Soil Resources, Water Resources, Wetland Resources, Fish and Aquatic Species
BLM	Mark Faughn	Geographic Information Systems (GIS)
BLM	Cindy Hamfler	GIS
BLM	Crystal Glassburn	Cultural Resources, Paleontological Resources
BLM	John Hoppe	Energy and Minerals
BLM	Tara Hutchison	Locatable Minerals and Mineral Materials
BLM	Erin Julianus	Wildlife, Subsistence
BLM	Bob Karlen	Fish and Aquatic Species
BLM	Ed Klimasauskas	Energy and Minerals
BLM	Erica Lamb	Soil Resources, Water Resources, Wetland Resources
BLM	Craig McCaa	Public Involvement
BLM	Chris McKee	Subsistence
BLM	Jennifer McMillan	Vegetation Communities
BLM	Anna O'Malley	Vegetation Communities, Special Status Species
BLM	Quinn Sawyer	Energy and Minerals, Renewable Energy
BLM	Tom St. Clair	Wildland Fire Ecology and Management, Forest and Woodland Products

Agency	Name	Role/Responsibility
BLM	Jessica Tighe	Hazardous Materials
BLM	Noel Turner	Soil Resources, Water Resources, Wetland Resources
BLM	Sheri Wilson	Lands and Realty and Utility Corridor
U.S. Department of Agriculture, Forest Service	Christy Prescott	Environmental Justice, Social and Economic Conditions
EMPS – Environmental Management and Planning Solutions, now AECOM	Marcia Rickey	Senior Project Manager, Comment Analysis, Quality Control
EMPS-AECOM	Megan Hillgartner	Assistant Project Manager, Areas of Critical Environmental Concern
EMPS-AECOM	Perry Lown	Deputy Project Manager
EMPS-AECOM	David Batts	Program Manager
EMPS-AECOM	Angie Adams	Task Manager, Natural Resources Specialist, Recreation Lead, Wilderness Characteristics, Areas of Critical Environmental Concern, Wilderness Study Area, Wild and Scenic Rivers, Back Country or Scenic Byways, Iditarod National Historic Trail
EMPS-AECOM	Lindsay Chipman*	Fish and Aquatic Species
EMPS-AECOM	Amy Cordle	Air Quality and Climate
EMPS-AECOM	Francis Craig	Energy and Minerals
EMPS-AECOM	Kevin Doyle	Cultural Resources, Paleontological Resources
EMPS-AECOM	Zoe Ghali	Wildland Fire Ecology and Management, Forest and Woodland Products, Environmental Justice
EMPS-AECOM	Derek Holmgren	Soil Resources, Water Resources, Visual Resources
EMPS-AECOM	Amy Lewis	Back Country or Scenic Byways, Iditarod National Historic Trail, Subsistence, Public Involvement
EMPS-AECOM	Katie Patterson, JD	Task Manager, Mineral Specialist, Non-Renewable Resources Lead, Energy and Minerals
EMPS-AECOM	Holly Prohaska	Senior Project Adviser, National Environmental Policy Act Specialist and Quality Assurance, Schedule
EMPS-AECOM	Julie Remp*	Vegetation Communities, Wildlife
EMPS-AECOM	Rob Lavie	GIS/eGIS Specialist Lead
EMPS-AECOM	Jenna Jonker	Public land order analysis, GIS
EMPS-AECOM	Chelsea Ontiveros	GIS
EMPS-AECOM	Devin Arnold	GIS
EMPS-AECOM	Aaron Plascencia	GIS
EMPS-AECOM	Cindy Schad	Formatting
EMPS-AECOM	Josh Schnabel	Visual Resources, Lands and Realty and Utility Corridor, Renewable Energy, Recreation and Visitor Services, Travel Management

Agency	Name	Role/Responsibility
EMPS-AECOM	Andy Spellmeyer	Wilderness Characteristics, Section 508 Compliance
EMPS-AECOM	Megan Stone	Administrative Record
EMPS-AECOM	Clayton McGee	Administrative Record
EMPS-AECOM	Sean Cottle	Comment analysis lead
EMPS-AECOM	Meredith Linhoff (Zaccherio)	Vegetation Communities, Wetland Resources
EMPS-AECOM	Claire Elias	Comment Analysis
AECOM	Tara Bellion	Public Involvement
AECOM	Jessica Evans	Public Involvement
AECOM	Arika Mercer	Meeting notes
EMPS-AECOM	Kate Krebs*	Senior Project Manager and Lead Facilitator
EMPS-AECOM	Chad Ricklefs, AICP*	Senior Project Manager
EMPS-AECOM	Victoria Arling*	Administrative Support and 508 Compliance
EMPS-AECOM	Amanda Biedermann*	Areas of Critical Environmental Concern, Wild and Scenic Rivers, Public Involvement
EMPS-AECOM	Peter Gower, AICP*	Lands and Realty and Utility Corridor, Renewable Energy, Recreation and Visitor Services, Travel Management
EMPS-AECOM	Matt Smith*	Soil Resources, Water Resources
EMPS-AECOM	Randy Varney*	Technical Editing
EMPS-AECOM	Kirsti Davis	Section 508 Compliance
EMPS-AECOM	Kim Murdock	Technical Editing
EMPS-AECOM	Brian Varney	Formatting
ABR, Inc.	Sue Bishop	Task Manager, Renewable Resources Lead, Vegetation Communities
ABR, Inc.	Wendy Davis	Wetland Resources
ABR, Inc.	Adrian Gall	Wildlife, Section 7 Consultation
ABR, Inc.	Alex Prichard	Wildlife
ABR, Inc.	John Seigle	Fish and Aquatic Species

*Former project staff

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Appendix C
Land Tenure

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
BLM	Bureau of Land Management

Appendix C. Land Tenure

In preparation for this land use planning initiative, the Bureau of Land Management (BLM) conducted an inventory of the public land in the planning area to determine whether there are any tracts that meet one or more of the Federal Land Policy Management Act (FLPMA) Section 203 disposal criteria, Section 206 exchange criteria, or Alaska-specific exchanges under the Alaska National Interest Lands Conservation Act (ANILCA) or Alaska Native Claims Settlement Act (ANCSA).

Secretarial Order 3373, Evaluating Public Access in BLM Public Land Disposals and Exchanges, also requires the BLM to weigh public-access considerations for outdoor recreation against considerations about a tract's location or other characteristics that otherwise qualify it for disposal under FLPMA's sale or exchange criteria. These types of public-access considerations are usually for roads, especially roads leading into isolated BLM parcels. Most BLM-managed lands in Alaska are accessed via motorized and nonmotorized travel through waterways in the summer or cross-country travel, especially using snowmachines, in the winter. Because users are not using roads or primitive routes to access BLM lands, a tract's location in relation to roads for recreation access is less important than for BLM-managed lands in the lower 48 states. The lands identified for disposal or exchange in the Proposed Plan/Final EIS will not have a negative impact on recreation or access.

However, for conveyances to the State that the EIS assumes would occur as a result of the recommendations in Alternatives B, C1, C2, or D within 10 years due to the Secretary revoking the withdrawals and opening the land to State selection, a negative impact on recreation or access is expected. If the State Priority 1 and 2 selections are conveyed, the Federal laws allowing access across Federal land; ANILCA sections 811, 1110(a), and 1323(b); would no longer supersede State law. For example, AS 19.40.210 prohibits access via OHV, including snowmobiles, within five miles of the Dalton Highway. Many users access BLM lands within the planning area via the Dalton Highway, which would be precluded if the lands are conveyed to the State.[1] Once out of Federal ownership, the BLM cannot guarantee the lands, access across them, or any associated infrastructure and facilities would be available for outdoor recreation. This could impact recreation on conveyed lands, nearby BLM-managed lands, as well as the connectivity of federal lands for recreation. If the conveyances are made in large blocks of BLM-managed lands, then access restrictions to former BLM-managed lands could be significant.

The lands that meet the criteria to be retained, acquired, exchanged, or disposed of are identified as Zone 1, 2, or 3. These decisions have no effect on the ongoing State of Alaska land conveyance process; conveyance of Native corporation selections; allotments selected under the John D. Dingell, Jr. Conservation, Management, and Recreation Act; or other non-discretionary conveyances.

- Lands in Zone 1 would be retained under BLM management; inholdings would be considered for acquisition on a willing seller basis (areas of critical environmental concern, research natural areas, designated important habitat, high-priority riparian habitat, lands managed for wilderness character, backcountry conservation areas, and recreation assets, including special recreation management areas and extensive recreation management areas).

[1] Under Alternative E, the Proposed Plan, the BLM would retain PLO 5150 containing the Dalton Highway, which would ensure continued access by recreational and subsistence users.

- Lands in Zone 2 would generally be retained but would be available for acquisition or exchange, whichever is appropriate, to enhance public resource values, improve management capabilities, or reduce the potential for land use conflict.
- Lands in Zone 3 meet the criteria for lands available for disposal or exchange (all Fairbanks Subunit parcels).
  - FLPMA Section 203 sales would not be permitted under Alternatives C1, C2, or D
  - Disposal is only considered in Alternatives B and E
  - Land exchange would be considered at the implementation level to benefit public interests. Exchanges would focus on efficient management of public lands and objectives including protection of fish and wildlife habitats, cultural resources, wilderness and aesthetic values, enhancing recreational opportunities, and community expansion. Exchanges generally would not be pursued until final State and Native entitlement is reached.

Lands in Zones 2 and 3 would be reassigned to Zone 1 if the U.S. Fish and Wildlife Service includes them in future designations of important habitat under the Endangered Species Act.

C.1 Exchange or Disposal Criteria

- Isolated parcels, such as those near Fairbanks, typically less than a township in size (acres)
- A tract that no longer serves the purpose for which it was acquired
- A tract whose disposal would serve the public objectives, such as expansion of communities and economic development or a recreation and public purposes or other lands action with reversionary clause or any other reversionary interests
- A tract that, because of its location or other characteristics, is difficult or uneconomic to manage and is not suitable for management by another federal agency
- A tract where there are minor boundary adjustments around Conservation System Unit boundaries allowed under ANILCA 103(b) (23,000-acre limit)
- A tract where disposal would promote management consolidation and ownership
- The BLM would consider mutually benefiting public interest land exchanges. Exchanges are authorized in Alaska by FLPMA Section 206, Section 22(f) of ANCSA, and Section 1302(h) of the ANILCA. When considering public interest, the BLM would give full consideration to efficient management of public lands and to securing resource management objectives. Reserved federal interests in split-estate lands anywhere in the planning area may be considered for conveyance out of federal ownership.
- Before any parcel is considered for exchange or disposal, the BLM would ensure that public access and recreation opportunities are important considerations of any land tenure adjustment pursuant to Secretarial Order 3373 and BLM Informational Bulletin No. 2020-010, Evaluating Public Access in Bureau of Land Management Public Land Disposals and Exchange.

C.2 LANDS THAT MEET THE CRITERIA THAT ARE IDENTIFIED FOR EXCHANGE IN ALL ACTION ALTERNATIVES (B, C1, C2, D, AND E)

ID	Description	Legal Description	Size (Acres)
AKF02000-5013	Ester Dome Observatory	T1N, R3W, S25, FM	6
AKF02000-5010	Ski Boot Hill Extension—Geophysical Observatory-1	T1N, R1W, S17, FM	5
AKF02000-5011	Ski Boot Hill Extension—Geophysical Observatory-2	T1N, R1W, S17, FM	5
AKF03000-4122	Nulato West #02	T9S, R2E, KM	3,840
AKF03000-4146	Tanana #03	T2N, R20W, FM	3,840
AKF03000-4021	Anderson #01	T6S, R8W, S31, FM	269
AKF03000-4067	Julius #05	T5S, R8W, S10, FM	161
AKF03000-4022	Anderson #02	T6S, R8W, S15, FM	51
AKF03000-4063	Julius #01	T5S, R8W, Sections 1,12, FM	1,132
AKF03000-4064	Julius #02	T5S, R7, 8W, FM	3,040
AKF03000-4065	Julius #03	T5S, R8W, Sections 26, 35, FM	1,280
AKF03000-4093	Minto #03	T3N, R10W, Sections 34, FM	640
AKF03000-4094	Minto #04	T2N, R10W, Sections 8–10, FM	1,920
AKF03000-4163	North Garnet Island	T8N, R15W, S21, FM	80
AKF02000-5023	Mineral Survey Meehan/Deep Creek Parcels	T3N, R2E	120
AKF02000-5048	Utility Corridor	T9S, R10E, S3, FM	160
AKF03000-4090	Minto-Old Townsite	T1N, R8W, FM	321
AKF03000-4132	Sagwon Airstrip	T1S, R14E, UM	2,564
AKF03000-3045	Irgnyiulk Lake	T12S, R4E, S8, UM	640
AKF03000-4068	Kakiagun Lake North	T2N, R3E, UM	2,747
AKF03000-4144	Tanana #01	T6N, R18W, FM	2,560
AKF03000-4145	Tanana #02	T5N, R19W, FM	3,174

ID	Description	Legal Description	Size (Acres)
AKF03000-4089	Minto-Elliott	T5N, R10W, Sec. 27–30, FM	2,557
AKF03000-4153	Toklat #02	T5S, R14W, FM	2,414
AKF03000-4028	Bettles #01	T24N, R19W, FM	1,280
AKF03000-4029	Bettles #02	T25N, R18W, FM	3840
AKF03000-4030	Bettles #03	T26N, R17W, FM	1,280
AKF03000-4091	Minto #01	T5N, R9W, T4N, R10W, FM	1,279
AKF03000-4092	Minto #02	T4N, R10W, FM	3,840
AKF02000-2002-	Ester Dome	T1N, R2W, S30, FM	310
AKF02000-2005	Mineral Survey Cache Creek	T1S, R2W, S3, FM	47
AKF02000-2004	Irish Gulch	T2N, R1E, S32, FM	120
AKF02000-5008	Taroka Road property	T1S, R2W, S30, FM	20
AKF02000-5009	Isberg Road property	T1S, R2W, S30, FM	20
AKF02000-5017	Mineral Survey Murphy Dome-Elliott Hwy.	T2N, R1E, S19, FM	36
AKF02000-5018	Mineral Survey Murphy Dome Road	T1N, R2W, S7, FM	60
AKF02000-5020	Mineral Survey Happy Creek	T1N, R2W, S35	40
AKF02000-5022	Mineral Survey Skoogy Creek	T2N, R1E, S1, FM	40
AKF02000-5024	Mineral Survey Cleary Hill Mine area	T3N, R1E, S25, FM	120
AKF02000-5024	Mineral Survey Cleary Hill Mine area	T3N, R2E, S30, FM	335
AKF02000-5025	Mineral Survey Fish Creek Mine area	T2N, 3E, S3, 4 FM	15
AKF02000-5025	Mineral Survey Fish Creek Mine area	T3N, 3E, S33, 34 FM	15
AKF02000-5026	Mineral Survey St. Patrick South	T1N, R2W, S35, FM	19
AKF02000-5026	Mineral Survey St. Patrick South	T1S, R2W, S4,5	600

ID	Description	Legal Description	Size (Acres)
AKF02000-5027	Mineral Survey Gold Hill	T1S, 2W, S3,4	40
AKF02000-5036	Green Road North Pole	T1S, R1E, S24, FM	154
AKF02000-5039	Hartman Lake	T6S, R4E, S2, FM	7
AKF02000-5040	Harding Lake	T6S, R4E, S2, FM	10
AKF02000-5041	Harding Lake Material Site	T6S, R4E, S2, FM	11
AKF02000-5050	Upper Stone Boy Creek	T2S, R16E, FM	640
AKF03000-4131	Ruby East	T10S, R17E, KM	4,480
AKF03000-4159	Yukon River-Yistletaw	T8S, R7E, S1,2, KM	370

*R&PP Act (43 USC 869 et seq.)—This plan considers R&PP disposals on Zone 2 and 3 lands throughout the planning area. Selected lands that meet the criteria for disposal under the R&PP Act would have to be fully adjudicated before the BLM would entertain an R&PP application.

C.3 Lands That Meet the Criteria That Are Identified for Disposal Only in Alternatives B and E

ID	Description	Legal Description	Size (Acres)
AKF02000-5013	Ester Dome Observatory	T1N, R3W, S25, FM	6
AKF02000-5010	Ski Boot Hill Extension—Geophysical Observatory-1	T1N, R1W, S17, FM	5
AKF02000-5011	Ski Boot Hill Extension—Geophysical Observatory-2	T1N, R1W, S17, FM	5
AKF03000-4122	Nulato West #02	T9S, R2E, KM	3,840
AKF03000-4146	Tanana #03	T2N, R20W, FM	3,840
AKF03000-4021	Anderson #01	T6S, R8W, S31, FM	269
AKF03000-4067	Julius #05	T5S, R8W, S10, FM	161
AKF03000-4022	Anderson #02	T6S, R8W, S15, FM	51
AKF03000-4063	Julius #01	T5S, R8W, Sections 1,12, FM	1,132
AKF03000-4064	Julius #02	T5S, R7, 8W, FM	3,040
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ID	Description	Legal Description	Size (Acres)
AKF03000-4093	Minto #03	T3N, R10W, Sections 34, FM	640
AKF03000-4094	Minto #04	T2N, R10W, Sections 8–10, FM	1,920
AKF03000-4163	North Garnet Island	T8N, R15W, S21, FM	80
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AKF03000-3045	Irgnyiulk Lake	T12S, R4E, S8, UM	640
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AKF03000-4144	Tanana #01	T6N, R18W, FM	2,560
AKF03000-4145	Tanana #02	T5N, R19W, FM	3,174
AKF03000-4089	Minto-Elliott	T5N, R10W, Sec. 27–30, FM	2,557
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AKF02000-2005	Mineral Survey Cache Creek	T1S, R2W, S3, FM	47
AKF02000-2004	Irish Gulch	T2N, R1E, S32, FM	120
AKF02000-5008	Taroka Road property	T1S, R2W, S30, FM	20
AKF02000-5009	Isberg Road property	T1S, R2W, S30, FM	20
AKF02000-5017	Mineral Survey Murphy Dome-Elliott Hwy.	T2N, R1E, S19, FM	36

ID	Description	Legal Description	Size (Acres)
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AKF02000-5022	Mineral Survey Skoogy Creek	T2N, R1E, S1, FM	40
AKF02000-5024	Mineral Survey Cleary Hill Mine area	T3N, R1E, S25, FM	120
AKF02000-5024	Mineral Survey Cleary Hill Mine area	T3N, R2E, S30, FM	335
AKF02000-5025	Mineral Survey Fish Creek Mine area	T2N, 3E, S3, 4 FM	15
AKF02000-5025	Mineral Survey Fish Creek Mine area	T3N, 3E, S33, 34 FM	15
AKF02000-5026	Mineral Survey St. Patrick South	T1N, R2W, S35, FM	19
AKF02000-5026	Mineral Survey St. Patrick South	T1S, R2W, S4,5	600
AKF02000-5027	Mineral Survey Gold Hill	T1S, 2W, S3,4	40
AKF02000-5036	Green Road North Pole	T1S, R1E, S24, FM	154
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AKF02000-5041	Harding Lake Material Site	T6S, R4E, S2, FM	11
AKF02000-5050	Upper Stone Boy Creek	T2S, R16E, FM	640
AKF03000-4131	Ruby East	T10S, R17E, KM	4,480
AKF03000-4159	Yukon River-Yistletaw	T8S, R7E, S1,2, KM	370

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Appendix D

Relationship to BLM Policies, Plans, and Programs

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
BLM	Bureau of Land Management
RMP	resource management plan

Appendix D. Relationship to BLM Policies, Plans, and Programs

The Bureau of Land Management (BLM) planning regulations provide that resource management plans (RMPs) be consistent with approved or adopted resource-related plans and other policies and programs of other federal agencies, state and local governments, and Indian tribes, so long as the guidance and RMPs are also consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands.

In Alaska, public land management is further directed by the Alaska National Interest Lands Conservation Act, the Alaska Native Claims Settlement Act, and the Alaska Statehood Act, particularly in regard to land tenure, access, and subsistence. Under the Alaska Statehood Act, the State of Alaska was allowed to select 104 million acres of federal land. Approximately 26 percent of BLM-managed land in the planning area is State-selected. The Alaska Native Claims Settlement Act requires the transfer of 44 million acres of public land to Alaska Native corporations. Approximately 7 percent of BLM-managed land in the planning area is Native-selected. Because conveyance of State- and Native-selected lands is ongoing, the implementation of planning decisions on selected lands may be delayed until final ownership is determined.

Below is a list of other policies, plans, and guides that the BLM considered during the planning process.

D.1 Policies

BLM policies are outlined in a variety of sources, including manuals, handbooks, executive orders, and instruction memoranda (available at https://www.blm.gov/policy/instruction-memorandum).

D.2 Handbooks and Manuals

BLM manuals include a specific policy for each subject. The BLM Alaska Statewide Land Health Standards (BLM 2011) outlines the BLM Alaska's policy on land health.

- BLM Manual 1601, Land Use Planning Manual (BLM 2000)
- BLM Handbook H-1601-1, Land Use Planning Handbook (BLM 2005)
- BLM Handbook H-1790-1, National Environmental Policy Act Handbook (BLM 2008)
- A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners (BLM 2012)

D.3 Plans

D.3.1 BLM Plans

- Eastern Interior RMP
- Kobuk-Seward Peninsula RMP
- Fort Greely RMP
- National Petroleum Reserve Alaska Integrated Activity Plan—2020
- Dalton Highway Management Area Integrated Invasive Plant Strategic Plan—2013
- Various habitat management plans for Areas of Critical Environmental Concern
- Iditarod National Historic Trail Comprehensive Management Plan, BLM, 1986

D.3.2 Other Federal Agency Land Use Plans

- Koyukuk/Northern Unit Innoko/Nowitna National Wildlife Refuges Comprehensive Conservation Plan—2009
- Kanuti National Wildlife Refuge Revised Comprehensive Conservation Plan – 2008
- Arctic National Wildlife Refuge Comprehensive Conservation Plan—2015
- Yukon Flats National Wildlife Refuge Comprehensive Conservation Plan—1987
- Gates of the Arctic National Park General Management Plan—1986 and the 2014 amendment
- Denali National Park and Preserve General Management Plan and amendments—1896, 1997, and 2006
- U.S. Army Garrison Alaska Integrated Natural Resource Management Plan—2020
- U.S. Army Transformation Environmental Impact Statement—2004

D.3.3 State of Alaska Plans

- Eastern Tanana Basin Area Plan—2015
- Yukon-Tanana Area Plan—2014
- Wildlife Action Plan—2015
- Aquatic Nuisance Species Management Plan—2002

D.3.4 Local Government Plans

- North Slope Borough Comprehensive Plan—2005 and 2019
- North Star Borough Regional Comprehensive Plan—2005
- Denali Borough Comprehensive Plan and amendments—adopted 2009, amended 2015
- Northwest Arctic Borough Comprehensive Plan—1993, updated 2021
- A Comprehensive Land Use Plan for the Traditional Lands of Stevens Village—1991

D.3.5 Tribal or Alaska Native Claims Settlement Act Corporation Plans

- Arctic Slope Regional Corporation 2018–2023 Strategic Plan

D.4 REFERENCES

BLM (U.S. Department of the Interior, Bureau of Land Management). 2000. 1601—Land Use Planning. BLM Manual. Rel. 1-1666. Washington, DC. November 22, 2000.

_____. 2005. H-1601-1—Land Use Planning Handbook. Rel. 1-1693. Washington, DC. March 11, 2005.

_____. 2008. H-1790-1—National Environmental Policy Act. Rel. 1-1710. BLM Washington Office. January 30, 2008.

_____. 2011. Alaska Statewide Land Health Standards. Alaska State Office. Anchorage. September 2, 2011.

_____. 2012. A Desk Guide to Cooperating Agency Relationships and Coordination with Intergovernmental Partners. BLM Washington Office.

Appendix E
ANILCA Access

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
ANILCA	Alaska National Interest Lands Conservation Act
BLM	Bureau of Land Management
TMP	travel management plan

Appendix E. ANILCA Access

This section provides guidance on implementing Sections 811, 1110(a), and 1323(b) of the Alaska National Interest Lands Conservation Act (ANILCA; 16 USC 3101 et seq.), as follows:

- Under Section 811 of ANILCA, the Secretary of the Interior shall permit on public lands the appropriate use, for subsistence purposes, of snowmachines, motorboats, and other means of surface transportation traditionally used for such purposes by residents (see ANILCA Section 102(3) for the definition of public lands).
- Under Section 1110(a) of ANILCA, the Secretary shall permit on conservation system units, national recreation areas, national conservation areas, and public lands designated as wilderness study the use of snowmachines, motorboats, airplanes, and nonmotorized surface transportation methods for traditional activities and for travel to and from villages and homesites.
- Under Section 1323(b) of ANILCA, access is granted to non-federally owned land surrounded by public land managed by BLM to secure to the owner "reasonable use and enjoyment," subject to terms and conditions and the rules and regulations applicable to access across the public lands.

Pursuant to ANILCA Sections 811,1110(a), and 1323(b) such uses are subject to reasonable regulation. The National Park Service and U.S. Fish and Wildlife Service have developed regulations to implement Section 811; while the Bureau of Land Management (BLM) has not developed similar regulations. Rather, this RMP permits reasonable access to public lands in the planning area for subsistence use similar to the regulations promulgated by the National Park Service (see 36 Code of Federal Regulations 13.460(b)) and the U.S. Fish and Wildlife Service (50 Code of Federal Regulations 36.12(b)) in 1.

The BLM would implement restrictions on and closures to the use of snowmachines, motorboats, and other means of surface transportation traditionally used for subsistence purposes by rural residents (ANILCA Section 811(b)); however, it would do this only if the BLM Authorized Officer determines that such use is causing or is likely to cause an adverse impact on public health and safety, resource protection, historic or scientific values protection, subsistence uses, endangered or threatened species conservation, or other purposes, values, and uses for which the lands are being managed under the Federal Land Policy and Management Act or designated by ANILCA.

The BLM will follow the regulations implementing Section 1110(a), as found in 43 Code of Federal Regulations 36. The BLM will implement restrictions on and closures to snowmachines, motorboats, aircraft, and nonmotorized surface transportation methods for traditional activities, such as domestic dogs, horses, and other pack or saddle animals. Restrictions or closures would be implemented only if the BLM Authorized Officer makes a finding, pursuant to 43 Code of Federal Regulations 36.11(h), that such uses would be detrimental to the resource values of the area.

To meet the requirements of Sections 811,1110(a), and 1323(b) of ANILCA, decisions in this final resource management plan/environmental impact statement are listed as *proposed* implementation decisions. In addition, because the transportation and travel management plan (TMP) is deferred, proposed interim decisions are identified to address more immediate issues until the TMP is completed.

After the resource management plan/environmental impact statement record of decision and travel management decision record are signed, the BLM will undertake the following process for both interim and final decisions:

- Publish the notice of proposed implementation decisions in the *Federal Register* and other formats and locations reasonably calculated to inform residents in the affected vicinity
- Allow a minimum of 60 days for the public comment period on the proposed implementation decisions
- Hold public hearings in the affected communities and other locations deemed appropriate by the BLM
- Consultation with relevant organizations within the federal subsistence management system and government-to-government consultation with affected tribes.
- Respond to comments and publish the final implementation decisions in the *Federal Register*
- Make the final implementation decisions known by the following methods (at a minimum):
  - Make implementation decisions and maps with relevant information available for public inspection at the BLM office and at other places convenient to the public and at locations and in formats reasonably calculated to inform residents in the affected vicinity
  - Post signs at appropriate sites
  - List implementation decisions and show relevant maps on BLM brochures and websites

If the decision in the record of decision is to develop a step-down transportation and TMP, the BLM will follow the implementation decision process described above to address any TMP decisions that are covered by Sections 811, 1110(a), and 1323(b). This rule process will be completed after the decision record on the transportation and TMP.

Maps E-1, **E-2**, **E-3**, **E-4**, **E-5**, and **E-6** show ANCSA 17(d)(1)s and BLM-managed resources by Alternative. If the Secretary fully revokes or revokes in part an ANCSA 17(d)(1) withdrawal, Priority 1 and 2 lands are assumed to be conveyed within 10 years of the ROD. As a result, these lands would leave federal management, meaning that the conveyed lands would no longer be considered public lands under ANILCA Section 102 and local residents would not retain federal subsistence priority access. The full or partial revocation of PLOs would have the practical effect of removing the federal subsistence priorities because provisions that currently allow federally qualified subsistence users to use firearms to harvest wildlife and to use snowmachines to access subsistence hunting and trapping areas only apply to federal land.

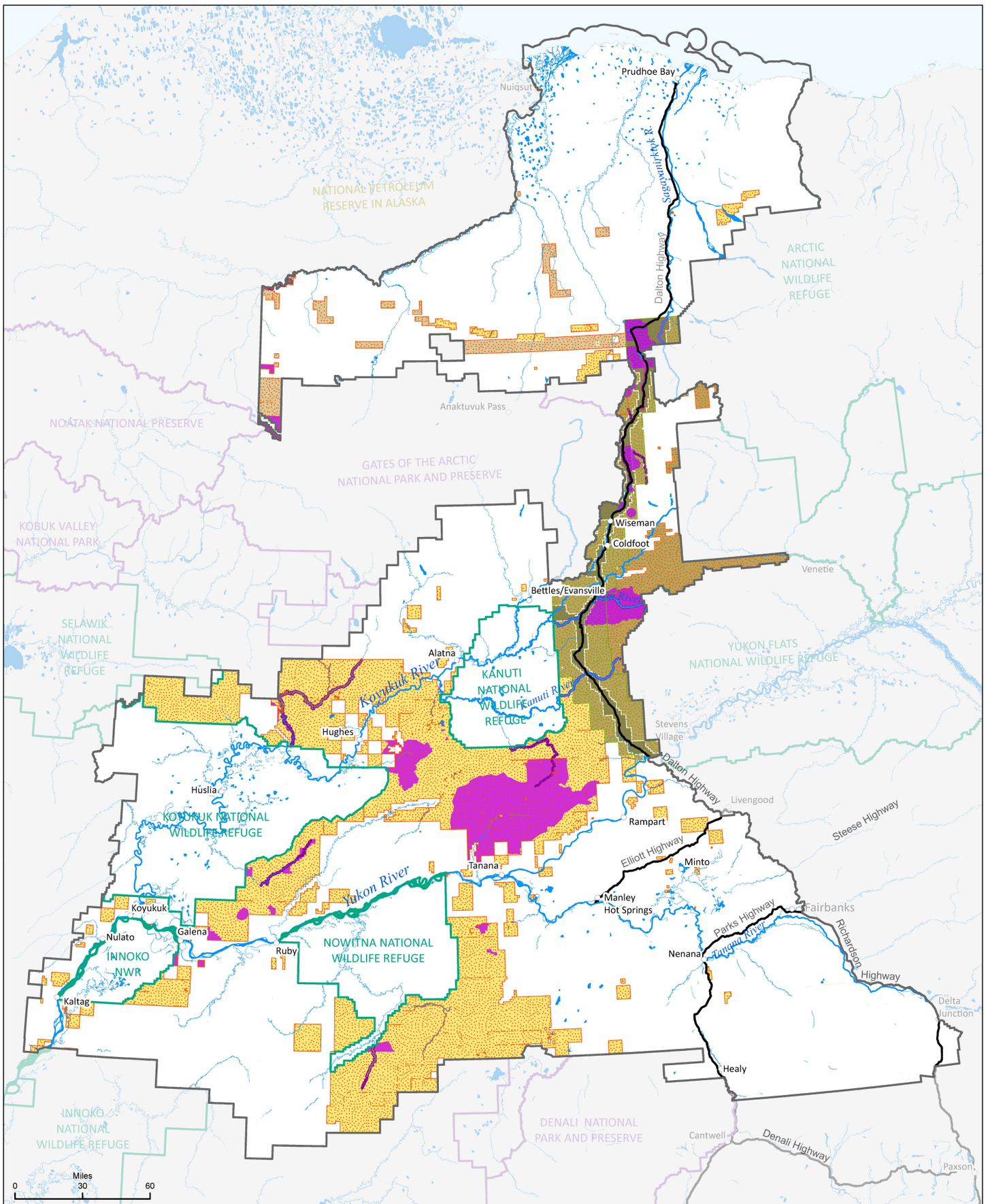
Conveyances of Priority 1 and 2 selections would make the remaining retained BLM-managed lands more fragmented and create more inholdings. The private landowners would no longer have access through 1323(b) and would be required to apply for a ROW to cross the inholdings.

Once out of Federal ownership, the BLM cannot guarantee the lands, access across them, or any associated infrastructure and facilities would be available for recreation. This could impact recreation on conveyed lands, nearby BLM-managed lands, as well as the connectivity of federal lands for recreation.

In any alternative where land is conveyed to the State of Alaska, the Federal laws allowing access across Federal land, ANILCA sections 811 and 1323(b), would no longer supersede the State law AS 19.40.210, which generally prohibits OHV access within five miles of the Dalton Highway, including use of snowmobiles for subsistence purposes.

E.1 REFERENCE

H.R. —Alaska National Interest Lands Conservation Act (ANILCA). XXIII. Appendix. Public Law 96-487. December 2, 1980, As amended through public law 115-97, December 22, 2017. Internet website https://www.govinfo.gov/content/pkg/COMPS-209/pdf/COMPS-209.pdf.

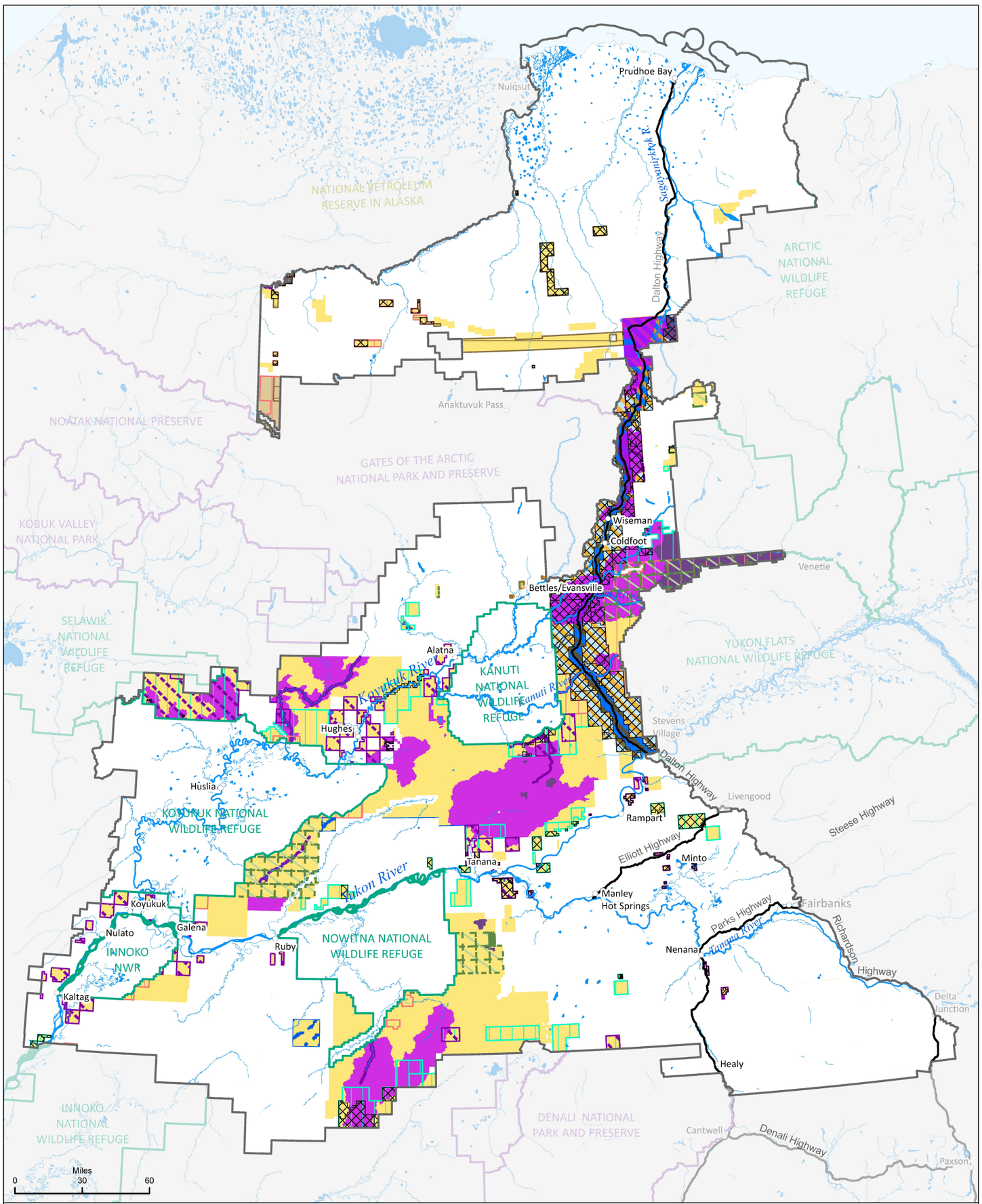


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Data Source: BLM GIS 2017

Map T.1

Print Date: 04/03/2024



PLO 5150 lands recommended for revocation (outer corridor lands)

PLO 5150 lands to be retained (inner corridor lands)

State of Alaska top-filed lands

Areas of Critical Environmental Concern (ACECs) or Research Natural Areas (RNAs)

WSR suitable segment classified as wild

WSR suitable segment classified as recreational

Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses

Special Recreation Management Area (SRMA) including recreation management zones (RMZs)

Backcountry Conservation Area (BCA)

Extensive Recreation Management Area (ERMA)

Recommend revoking Alaska Native Claims Settlement Act (ANCSA) PLOs:

PLO 5169

PLO 5173

PLO 5179

PLO 5180

PLO 5184

PLO 5186

PLO 5242

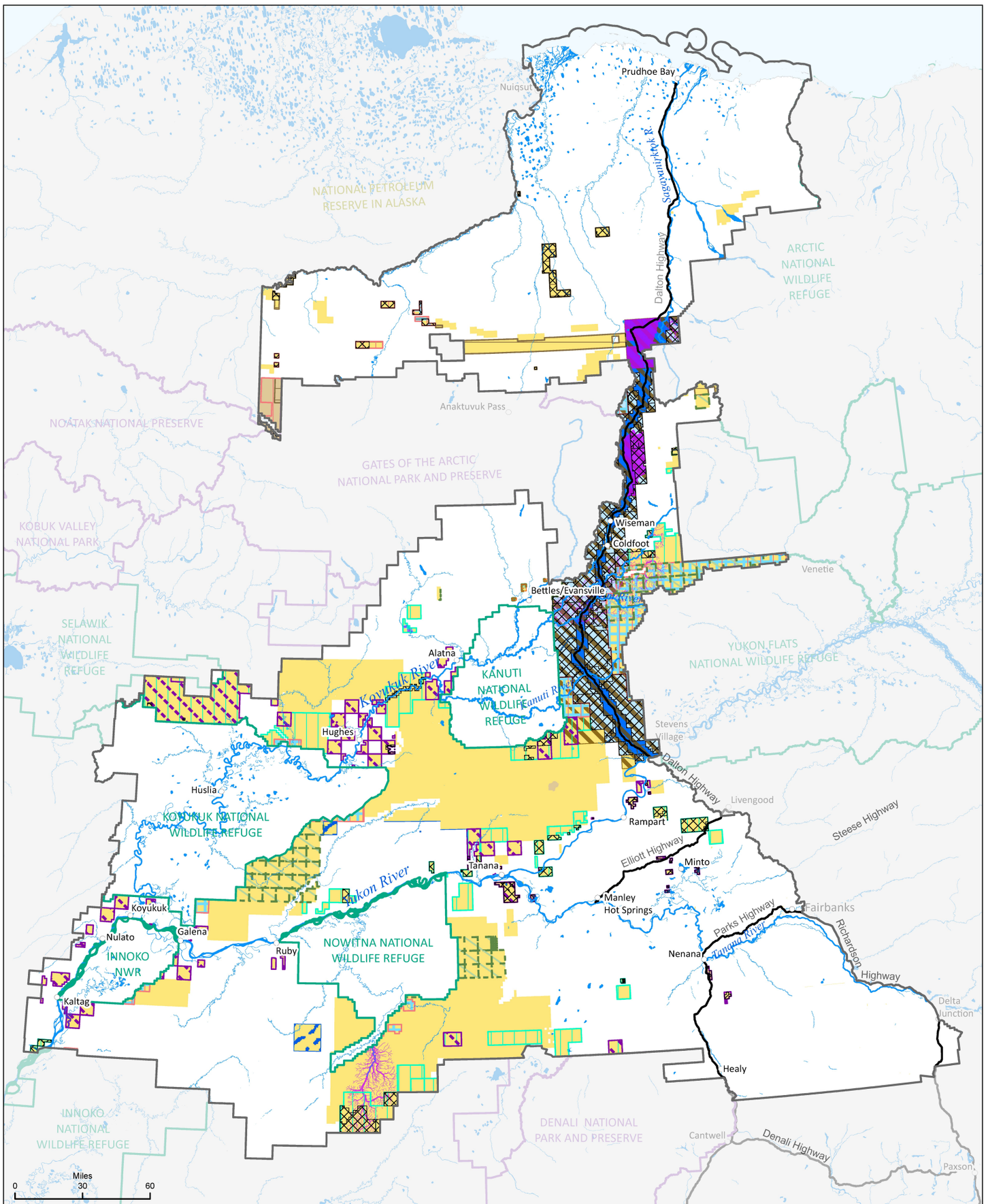
BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map T.2

Print Date: 04/03/2024



PLO 5150 lands recommended for revocation (outer corridor lands)

PLO 5150 lands to be retained (inner corridor lands)

State of Alaska top-filed lands

Areas of Critical Environmental Concern (ACECs) or Research Natural Areas (RNAs)

Lands managed to emphasize other multiple uses while applying management restrictions to reduce impacts on wilderness characteristics

Special Recreation Management Area (SRMA) including recreation management zones (RMZs)

Extensive Recreation Management Area (ERMA)

Recommend revoking Alaska Native Claims Settlement Act (ANCSA) PLOs:

PLO 5169

PLO 5173

PLO 5179

PLO 5180

PLO 5184

PLO 5186

PLO 5242

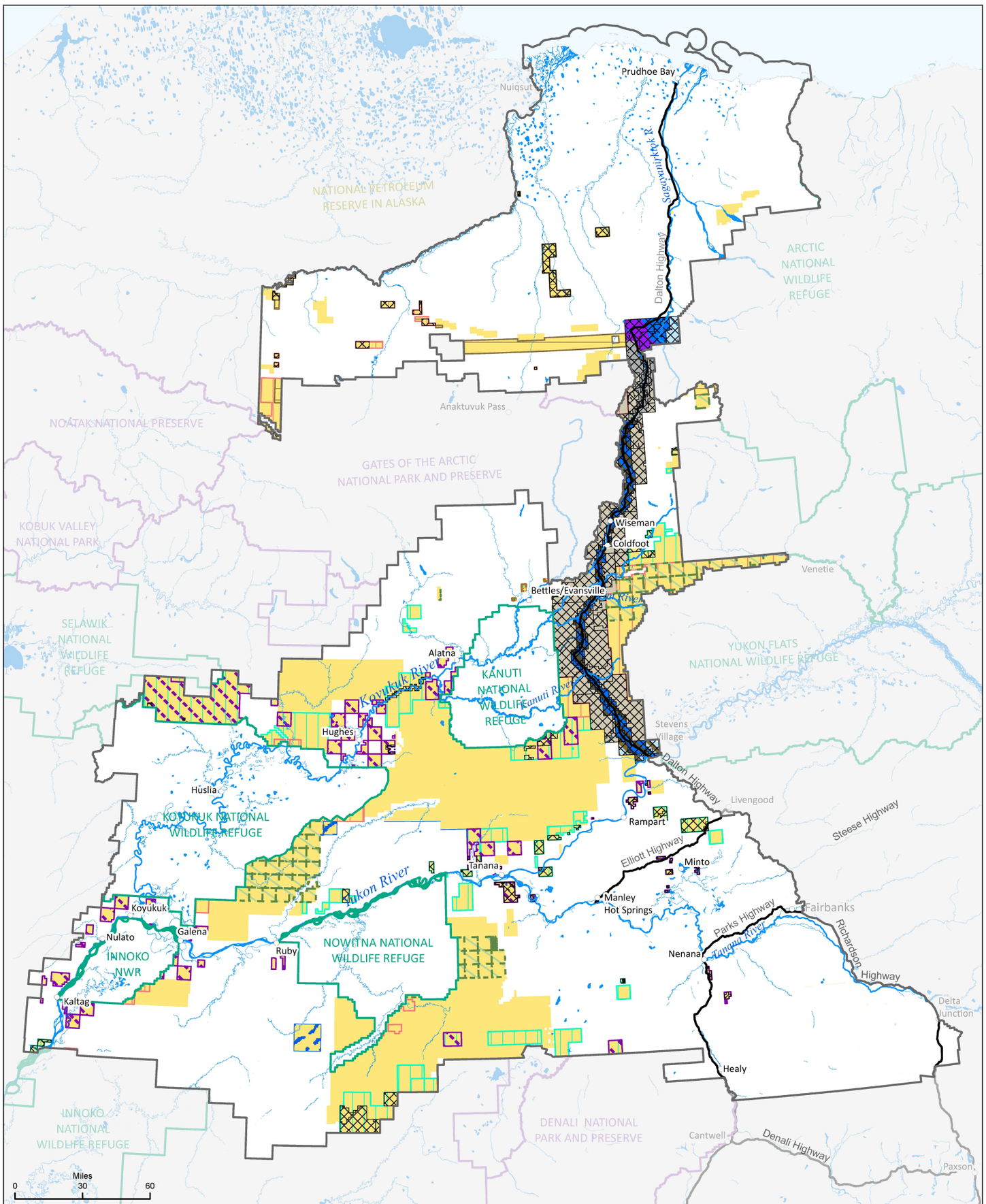
BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map T.3

Print Date: 04/03/2024



Recommend a full revocation of PLO 5150 (outer corridor)

Recommend a full revocation of PLO 5150 (inner corridor)

State of Alaska top-filed lands

Areas of Critical Environmental Concern (ACECs) or Research Natural Areas (RNAs)

Special Recreation Management Area (SRMA) including recreation management zones (RMZs)

Extensive Recreation Management Area (ERMA)

Recommend revoking Alaska Native Claims Settlement Act (ANCSA) PLOs:

PLO 5169

PLO 5173

PLO 5179

PLO 5180

PLO 5184

PLO 5186

PLO 5242

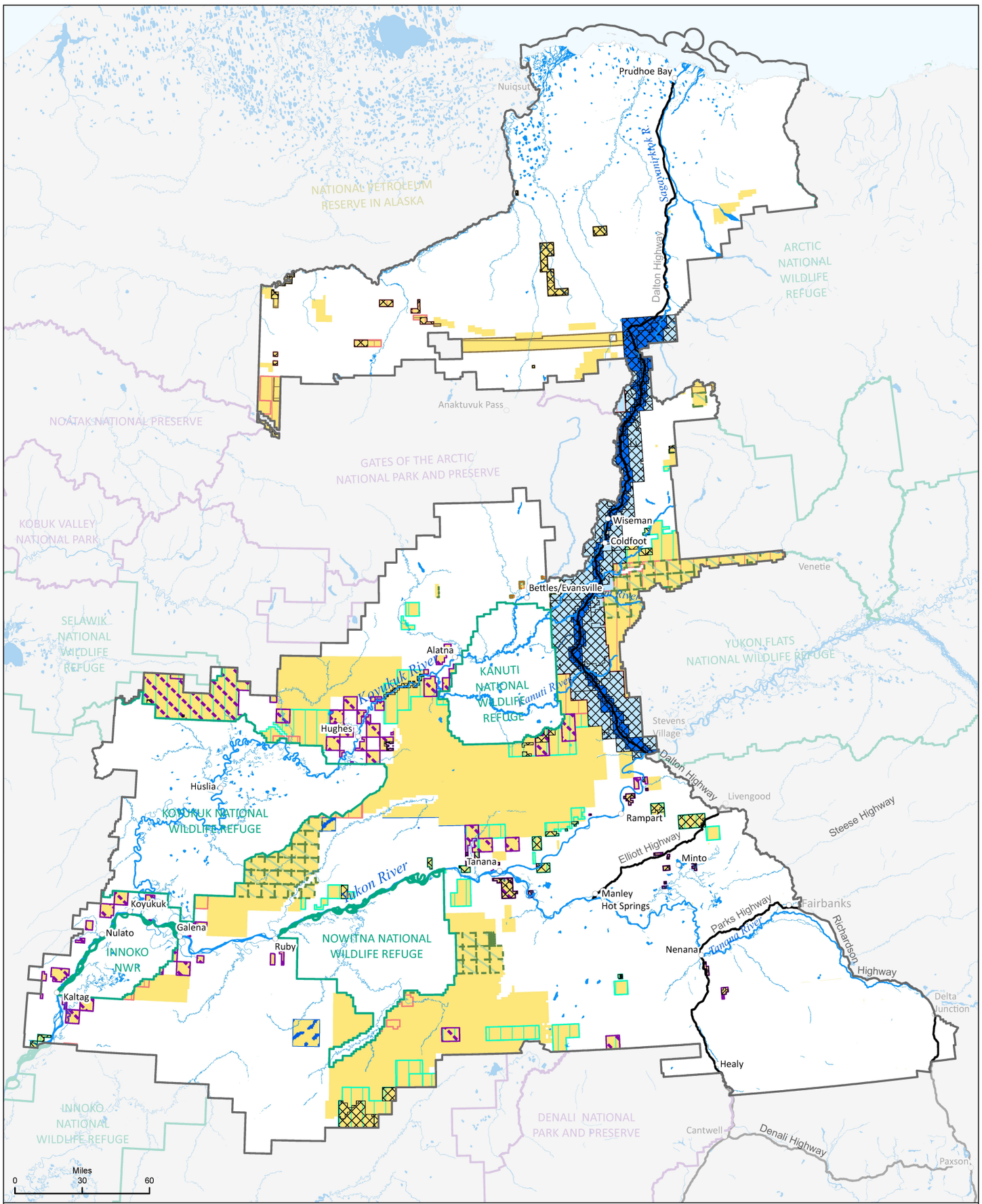
BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map T.4

Print Date: 04/03/2024



Recommend a full revocation of PLO 5150 (outer corridor)

Recommend a full revocation of PLO 5150 (inner corridor)

State of Alaska top-filed lands

Recommend revoking Alaska Native Claims Settlement Act (ANCSA) PLOs:

PLO 5169

PLO 5173

PLO 5179

PLO 5180

PLO 5184

PLO 5186

PLO 5242

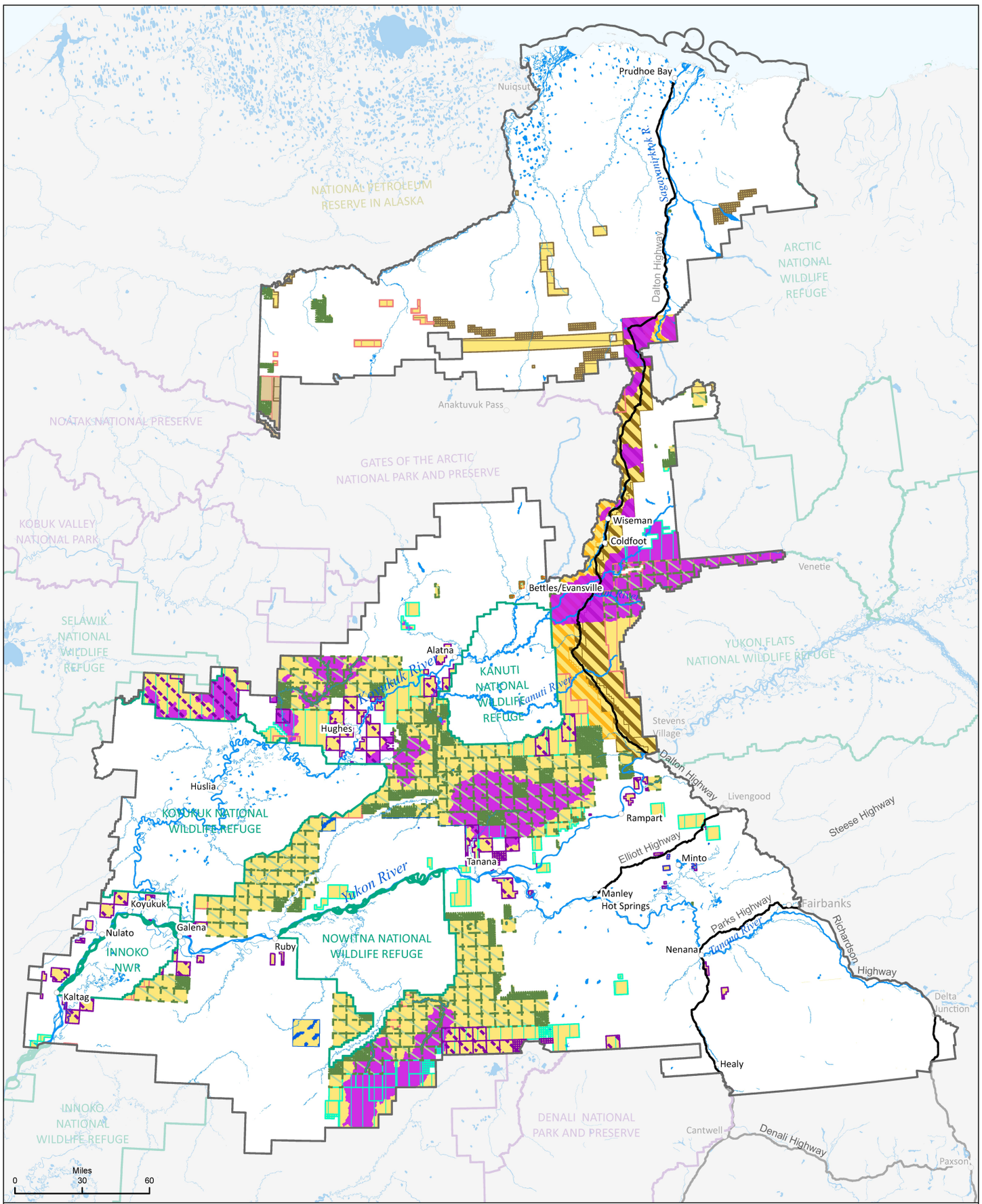
BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map T.5

Print Date: 04/03/2024



Areas of Critical Environmental Concern (ACECs) or Research Natural Areas (RNAs)

Special Recreation Management Area (SRMA) including recreation management zones (RMZs)

Backcountry Conservation Area (BCA)

Extensive Recreation Management Area (ERMA)

ANCSA 17(d)(1) withdrawals: recommend that the Secretary revoke in part 11.1 million acres of ANCSA 17(d)(1) PLOs to allow for selection by Alaska Native Vietnam-era veterans where the PLOs currently do not allow for it

PLO 5169

PLO 5173

PLO 5179

PLO 5180

PLO 5184

PLO 5186

PLO 5242

BLM-managed lands

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map T.6

Print Date: 04/03/2024

Appendix F

Standard Operating Procedures and Fluid Mineral Leasing Stipulations

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
BEACONS	Boreal Ecosystems Analysis for Conservation Networks
BLM	Bureau of Land Management
CSU	conservation system unit
EIS	environmental impact statement
FLPMA	Federal Land Policy and Management Act
RMP	resource management plan

Appendix F. Standard Operating Procedures and Fluid Mineral Leasing Stipulations

F.1 INTRODUCTION

The Bureau of Land Management (BLM) developed standard operating procedures (SOPs) and fluid mineral leasing stipulations to protect resources. These guidelines were based on the standards and guidelines in the Alaska Statewide Land Health Standards (Instruction Memorandum AK 2004-023) and by the goals outlined in this resource management plan (RMP)/environmental impact statement (EIS).

The SOPs are requirements, procedures, management practices, and design features that the BLM will use to protect resources. Leasing stipulations are requirements to reduce impacts on natural resources from fluid mineral exploration and development. The SOPs and leasing stipulations generally do not restate existing requirements in regulations or laws, including state laws. Regulations or laws may require conditions that are more stringent than those presented in this section. Chapter 6 of the Analysis of the Management Situation, Central Yukon RMP[1] includes a partial list of mandates and authorities pertaining to federal lands.

F.2 STANDARD OPERATING PROCEDURES

The SOPs apply to all actions on public land, whether the BLM implements them or if they authorize them and they are implemented by another individual, organization, or agency. The SOPs were based on the best information available during development of the Central Yukon RMP/EIS.

The BLM will apply the SOPs to all its actions and to activities that it authorizes such as: Federal Land Policy and Management Act leases and permits; special recreation permits; oil and gas activities; renewable energy activities; mining plans of operation; and authorizations for rights-of-way. While the SOPs generally will be applied to new activities moving forward from the signature date of the Record of Decision for this RMP, the BLM retains the leeway by regulation to change the terms and conditions of authorizations as a result of changes in legislation, regulation, or as otherwise necessary to protect public health or safety or the environment.

For fluid mineral leasing activities, SOPs would apply, in addition to the standard lease terms and leasing stipulations. Only those SOPs concerning resources that are potentially affected by the action would be applied to authorized permits and authorizations. For example, SOPs protecting caribou habitat would not apply to projects that are not in caribou habitat. They may be modified through site-specific analysis of subsequent authorizations, but they still must meet the goals and objectives of the RMP/EIS.

SOPs will continue to evolve as better resource information is gained and changes in technology become available. Modifications to SOPs may be appropriate if other measures are taken to protect resources that would result in the same or reduced impact.

[1] Bureau of Land Management. 2016. Analysis of the Management Situation, Central Yukon Resource Management Plan. Central Yukon Field Office. Fairbanks, Alaska. April 2016. Internet website: https://eplanning.blm.gov/eplanning-ui/project/35315/570.

SOPs are considered during the site-specific analysis during activity-level planning and, if adopted, are applied as conditions of approval to land use authorizations and permits.

If a particular SOP is demonstrated to be not feasible or not practicable for a specific activity or authorization, then exclusion or modification of that SOP, or deployment of an alternative SOP, may be considered at the discretion of the BLM Authorized Officer (AO).

SOPs are not selected as a condition of the permitted activities if the applicant has included them as part of the proposal or they have identified an alternative. An example of the latter is the adoption of an acceptable best management practice to meet stated resource management objectives. Applicants are encouraged to consider alternative methods, best management practices, and design features for the BLM's consideration during the permitting process. If an applicant does not include alternatives for agency consideration, the SOPs identified will be incorporated into an approval for a proposed activity.

The BLM AO or representative is responsible for ensuring that the intent of the SOPs presented in this RMP/EIS are followed and that permittees comply with the conditions of the authorization. Noncompliance will be documented, and a notice may be sent to the permittee, along with corrective actions and a timeframe in which the actions are to be completed.

The following is a complete list of the SOPs that the BLM would apply during implementation of the RMP/EIS.

F.2.1 Air (AIR)

SOP AIR-1 Consider smoke effects on human health, communities, recreation, and tourism in all wildland and prescribed fire management activities.

SOP AIR-2 To prevent degradation of the lands and protect health, the following elements will be adhered to:

a) Before National Environmental Policy Act (NEPA) analysis begins for an application to develop a: central processing facility, airstrip, road, gas compressor station, or other potential *substantial* air pollutant emission source, the permittee will submit for the BLM approval a complete list of reasonably foreseeable air pollutant emissions, including criteria air pollutants and hazardous air pollutants designated under authority of the Clean Air Act, as amended.

b) The BLM may require air quality modeling for purposes of analyzing project direct, indirect, or cumulative impacts on air quality, air quality related values, and hazardous air pollutants, if necessary, for the BLM NEPA analysis and no recent modeling analysis is available as a proxy. The BLM may require air quality modeling depending on the following:

   i. The magnitude of potential air emissions from the project
   ii. Proximity to a federally mandated Class I area
   iii. Proximity to a population center
   iv. Location in or proximity to a nonattainment or maintenance area
   v. Meteorological or geographic conditions
   vi. Existing air quality conditions
   vii. Magnitude of existing development in the area
   viii. Issues identified during the NEPA process

c) If air quality modeling indicates that project-related emissions cause or contribute to unnecessary or undue degradation of the public lands, or exceedances of the National Ambient Air Quality Standards/Alaska Ambient Air Quality Standards, air quality related values, and hazardous air pollutants levels, or if it fails to protect health (either directly or through use of subsistence resources), then the BLM may require the permittee to change their proposal or propose mitigation to reduce impacts. Project changes and mitigation measures will be analyzed through appropriate NEPA analysis to determine effectiveness.

d) Depending on the significance of the predicted impacts, a lessee proposing a central processing facility or other facility with potentially significant impacts on air quality may be required to monitor air pollutant emissions and/or air quality impacts for at least 1 year of operation. Depending upon the initial monitoring results, the BLM AO may require additional monitoring.

   If monitoring indicates impacts would fail to protect health (either directly or through the use of subsistence resources), the BLM AO may require changes in the lessee's activities at any time to reduce these emissions, such as using cleaner burning fuels or installing additional emission control systems.

F.2.2 Soils (SOI)

SOP SOI-1 At the beginning of any surface-disturbing activities, organic material will be segregated, stockpiled, and saved for later reclamation.

SOP SOI-2 Except when unavailable, stockpiled soil and overburden will be spread over mine tailings and stabilized to minimize erosion. The shape of contoured tailings and overburden should approximate the shape of the surrounding terrain.

SOP SOI-3 At sites where stockpiled soil quantities are insufficient to distribute over the entire disturbed area, specific areas best suited for reclamation should be selected to receive organic material. Use organic material from adjacent areas, if approved. At sites where organic material is not available, stockpiles of fine inorganic material may be used in place of the organics. The BLM will be available to advise operators on which areas would be best suited to receive organic material.

SOP SOI-4 Roadways will be ditched on the uphill side. Culverts or low water crossings will be installed at suitable intervals. Spacing of drainage devices and water bars will be appropriate for the road gradient and soil erodibility of the site. Water bars will be placed across reclaimed roads.

SOP SOI-5 Prudent use of erosion control measures, including diversion terraces, riprap, matting, temporary sediment traps, and water bars, will be employed to control soil erosion, as necessary. The type and location of a sediment control structure, including construction methods, will vary by site-specific characteristics. Erosion control materials containing plastic will be avoided. Erosion control materials, when no longer required, will be promptly removed.

SOP SOI-6 Snow and ice bridges will be removed, breached, or slotted before spring ice breakup. Ramps and bridges will be substantially free of soil and debris.

SOP SOI-7 Overland moves and heavy equipment use are as follows:

- Locate new OHV trails on stable locations (e.g., ridge tops, benches, and gentle-to-moderate side slopes). Minimize trail construction on steep slopes where runoff could channel to a waterbody.

- Design, construct, and maintain trail width, grades, curves, and switchbacks suitable to the terrain and designated use. Use and maintain surfacing materials suitable to the site and use, to withstand traffic and to minimize runoff and erosion.
- Designate class of vehicle suitable for the trail location, width, trail surfaces, and waterbody crossings, to prevent erosion and potential sediment delivery.
- Use existing road crossings of streams and floodplains on low-volume roads and partially decommissioned roads that tie with the trail system, where safety permits.
- Minimize low-water stream crossings for constructed or existing trails. Cross streams on stable substrate (e.g., bedrock, cobble) in areas of low streambanks.

SOP SOI-8 Areas disturbed during project operation or construction will be restored to be as near to pre-project conditions as practical. Wetland topsoil will be selectively handled. Mulching, erosion control, and fertilization may be required to achieve acceptable stabilization of surface materials. Interseeding, secondary seeding, or staggered seeding may be required to accomplish revegetation objectives. Follow-up seeding or corrective erosion control measures may be required on areas of surface disturbance where reclamation fails. Corrective erosion control measures could include broadcasting woody debris, planting viable portions of live shrubs (sprigging), and transplanting live vegetation from adjacent areas.

SOP SOI-9 Disturbed areas will be reclaimed as soon as possible after the disturbance, with efforts continuing until the site is fully stabilized.

SOP SOI-10 Reduce disturbance of soils by minimizing footprint of surface-disturbing activities; consolidate access to minimize the number of routes; and require prompt implementation of methods to mitigate soil erosion.

SOP SOI-11 To the greatest extent practicable, avoid disturbance of the vegetation mat and permafrost soil areas.

SOP SOI-12 For long-term storage of soil stockpiles, provide protective cover, such as organic mulch, herbaceous vegetation, jute matting, or other erosion-preventative fabric.

SOP SOI-13 Surface-disturbing proposals involving construction on slopes greater than 3:1 will include an approved erosion control strategy and a topsoil segregation/restoration plan. Sites will be properly surveyed and designed by an engineer registered in the State of Alaska; the BLM will approve the sites prior to construction and maintenance.

SOP SOI-14 Permafrost Protection Measures are as follows:

- For all surface-disturbing the BLM-permitted activities and activities that require a reclamation plan in areas with permafrost, the BLM would require the project proponent's reclamation plan to include BMPs to avoid or minimize impacts on permafrost. These BMPs could include, but are not limited to, the following: avoiding critical areas; applying permafrost impact prevention measures (e.g., meet conditions of appropriate snow cover and frozen ground, leave vegetation intact, implement reclamation timeline, adjust seasons for operation and overland equipment moves, use minimum impact equipment); and complying with State of Alaska Arctic Civil Engineering requirements, if applicable.
- To the extent possible, surface disturbance would be avoided in areas with moss and peat to provide insulation to permafrost and to prevent accelerated thawing.
- To the extent possible, the BLM would avoid authorizing temporary routes on areas with permafrost.

- To the extent possible, the BLM-permitted temporary routes constructed on permafrost should be built only in winter when snow cover and frost depth are adequate to leave the vegetative layer intact.
- To the extent possible, the BLM would conduct or require re-insulation of disturbed permafrost areas to prevent additional permafrost thaw, and associated possible subsidence, by restoring the natural ground surface thermal regime, particularly on steep erosion-prone soils.
- The BLM-permitted roads/airstrips may be required to incorporate necessary engineering considerations on permafrost to provide adequate base material for insulation.

SOP SOI-15 Off-road overland travel in winter (November – March) may be considered open for off-road travel when soil temperatures reach a minimum of 23 degrees F (-5 degrees C) at 12 inches deep (30 cm) and snow depths average a minimum of 6 inches (15 cm).

F.2.3 Watersheds and Fisheries (WAT/FISH)

SOP WAT/FISH-1 Road crossings or low water crossings (fords) will not be permitted in fish spawning habitat during spawning or the immobile life stages of fish (eggs and alevins), unless the applicant can demonstrate to the BLM AO that on a site-specific basis, impacts would be minimal.

SOP WAT/FISH-2 New, replacement, and reconstructed stream crossing structures, such as bridges and culverts, will be designed to accomplish the following:

- Accommodate a 100-year flood event, including bedload and debris;
- Maintain or improve fish and aquatic organism passage;
- Maintain channel integrity;
- Accommodate mean bankfull channel widths; and
- Incorporate adjacent reclamation (such as willow cuttings, wattles, and brush layering) on the disturbed areas up and downstream of the abutments.

SOP WAT/FISH-3 Drilling is prohibited in the 100-year floodplain of fish-bearing rivers and streams, and fish-bearing lakes, except where the applicant can demonstrate to the BLM AO on a site-specific basis that impacts would be minimal, or the BLM AO otherwise determines the drilling is necessary (e.g., for bridge design).

SOP WAT/FISH-4 Pesticides and other toxicants will be applied in a manner that does not measurably inhibit the attainment of desired conditions or adversely impact priority aquatic species.

SOP WAT/FISH-5 All water intakes will be screened and designed to prevent fish intake and mortality, in accordance with Alaska Department of Fish and Game requirements.

SOP WAT/FISH-6 For surface-disturbing activities affecting, or with the potential to affect, stream channel integrity, reduce riparian functioning condition, or reduce the Watershed Condition Rating, baseline geomorphic and hydrologic data will be required before the surface is disturbed. The BLM will be available to advise operators on the exact type of information and detail to meet this requirement, as needed.

SOP WAT/FISH-7 In mining operations and fluid mineral leasing operations, all process water and groundwater seeping into an operating area must be treated appropriately. This will be done before such water re-enters the natural water system.

SOP WAT/FISH-8 Settling ponds will be cleaned out and maintained at appropriate intervals to comply with state and federal water quality standards. Fine sediment captured in the settling ponds will be protected from washout and left in a stable condition at the end of each field season.

SOP WAT/FISH-9 Altered stream channels will be restored to a condition that will allow for proper functioning of the riparian zone and stream channels. Active streams will be returned to the natural water course. Alternatively, a new channel will be created at the stream's lowest energy state (valley bottom). Stream channels will be restored to approximate the pre-disturbance channel utilizing natural channel design methods and practices.

SOP WAT/FISH-10 All permitted operations will be conducted so as not to block any stream or drainage system, unless temporarily authorized by the BLM AO.

SOP WAT/FISH-11 Structural and vegetation treatments in riparian and wetland areas will be compatible with the capability of the site, including the system's hydrologic regime. The treatments will contribute to maintenance or restoration of proper functioning condition. Revegetation treatments should mimic a site's pre-disturbance vegetation types.

SOP WAT/FISH-12 When a stream must be crossed, the crossing will be as close as possible to a 90-degree angle to the riparian area and stream, and at as low a bank angle as possible. Stream crossings will be made at stable sections in the stream channel, based on Rosgen channel-type evaluations.

SOP WAT/FISH-13 Vehicular travel up and down streambeds, except by watercraft, is prohibited. The exception is if ice is frozen to a sufficient depth to sustain the activity and the streambanks are a sufficient distance apart to allow for passage without adverse impacts on them. Rivers and streams will be crossed at shallow riffles, from point bar to point bar, whenever possible.

SOP WAT/FISH-15 Stream and marsh crossings shall be designed and constructed to ensure free passage of fish, reduce erosion, maintain natural drainage, and minimize adverse effects on natural streamflow.

- To allow for sheet flow and floodplain dynamics and to ensure passage of fish and other organisms, bridges are preferred over culverts. However, culverts may be permitted on smaller streams, if they are large enough to avoid restricting fish passage or adversely affecting natural streamflow and floodplain function.
- The BLM will require fish sampling at any stream crossing where flow is channelized. The permittee may be required to gather these data, or this requirement may be waived if an acceptable dataset already exists, and it is approved by the BLM AO. Alternatively, the permittee may assume fish presence and design accordingly.
- Stream and marsh crossings are to be designed based on relevant reference reach or regional hydrologic data. To ensure that crossings provide for fish passage, all proposed crossing designs would adhere (as applicable) to the standards outlined in fish passage design guidelines developed by the U.S. Fish and Wildlife Service (USFWS) Alaska Fish Passage Program (USFWS 2019), USFWS Culvert Design Guidelines for Ecological Function (USFWS 2020), and Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organisms at Road-Stream Crossings (Forest Service 2008). The most current version of these documents will be applied where appropriate.
- The crossing structure design shall account for: permafrost, sheet flow, additional freeboard during breakup, and other unique conditions of the planning area.

SOP WAT/FISH-16 Stream channel design for any stream diversions, bypasses, stream relocations, or stream reconstruction projects would be designed to achieve stable channel form, floodplain connectivity, bedform diversity, and ensuring riparian vegetation is in proper functioning condition as stated in the

condition thresholds included in Appendix H, Aquatic and Riparian Resource Desired Conditions and Objectives.

SOP WAT/FISH-17 To prevent adverse impacts on aquatic species and water quality, water alone will be used for dust suppression within 300 feet of any fish bearing stream or higher value wetland (e.g., emergent wetlands, fens, and shallow ponds) whenever practicable.

F.2.4 Vegetation and Nonnative Invasive Species (VEG/NNIS)

SOP VEG/NNIS-1 The Nonnative Invasive Species (NNIS) of Concern are all terrestrial and aquatic NNIS species identified by the BLM at the time of the permitted action, regardless of whether the species is present at that time. Planning, inventory, treatment, and monitoring are required for all permitted activities to ensure that the permitted (and associated) activities do not contribute to or result in the introduction, establishment, or spread of invasive species.

SOP VEG/NNIS-2 Invasive plants and aquatic organisms will be addressed in writing for every proposed action (and renewal or modifications to previously permitted activities) on BLM-managed lands, including the BLM projects and activities.

SOP VEG/NNIS-3 If NNIS of Concern are detected at any time during any permitted activity, the permittee will report them to the BLM AO within 30 days of detection. The notification will include plant samples or photographs, or both, for identification, as well as global positioning system points or detailed location descriptions.

SOP VEG/NNIS-4 For all projects where NNIS of Concern are detected (before, during, or after the permitted activity) and eradication is deemed necessary by the BLM, the permittee will describe in writing the proposed eradication methods. The BLM will approve only those eradication plans that meet the requirements described in both the current BLM National Vegetation Management EIS and regionally specific Integrated Pest Management Plan. The application of herbicide or pesticide by the permittee will require the BLM's prior authorization and it will be restricted to approved application methods and active ingredients. Additional site-specific environmental analysis may be required.

SOP VEG/NNIS-5 All revegetation methods that require importation of materials that may include vegetative matter will only contain native plant species. This includes, but is not limited to, materials salvaged from the site and respread; weed-free seed or seedlings; weed-free topsoil or mulch; or material gathered under a special permit for site revegetation.

SOP VEG/NNIS-6 For some newly permitted activities, the BLM will require an Invasive Species Monitoring Plan that describes post-activity monitoring and includes a Hazard Analysis Critical Control Point Evaluation for all permitted activities that involve any of the following:

- Ground disturbance greater than 2 acres
- Ground disturbance of more than 0.5 mile in total length
- Operations within waterways or involving water handling operations
- Importation (from another part of the state or beyond) of equipment or substances, including weed-free seed, straw, gravel, topsoil, or mulch that could harbor invasive species

SOP VEG/NNIS-7 Initial post-activity monitoring for NNIS of Concern will be completed during the active growing season, within 1 year of project completion. If NNIS of Concern are identified, an eradication plan would be established as an addendum to the invasive species monitoring plan.

SOP VEG/NNIS-8 At the discretion of the BLM AO, permittees may be encouraged to work with surrounding land management agencies/owners to establish and/or maintain Cooperative Weed Management Areas or similar collaborative networks.

SOP VEG/NNIS-9 Off-highway vehicle use will comply with designations in the area and they may be subject to further restrictions to protect vegetation, soils, or wildlife habitat.

SOP VEG/NNIS-10 Disturbed stream banks will be recontoured and revegetated, or other protective measures will be taken, to prevent soil erosion into adjacent waters and provide stream bank stability. Active stream bank revegetation or other stabilization techniques (e.g., ADFG 2005) will be required for all erosion-prone areas, such as stream banks and near stream areas. Seeding or fertilization, or both, will be required for sites with little to no organic content, that is, sites that are essentially bare mineral soil.

SOP VEG/NNIS-11 At the conclusion of operations, roads and other disturbed areas will be recontoured and revegetated in accordance with an approved reclamation plan or plan of operations. Revegetation will occur through seeding of native seed or by providing for soil conditions that allow the site to revegetate naturally; whichever provides the most effective means of reestablishing ground cover and minimizing erosion. The final land surface will be scarified to provide seed traps and erosion control.

SOP VEG/NNIS-12 Riparian vegetation, if removed during operations, will be reestablished.

SOP VEG/NNIS-13 When authorizing mineral material sale sites, avoid priority plant species and communities, if feasible. If sales are authorized in vegetated areas, all overburden vegetation mats and associated natural debris, will be saved, and appropriately stored for use during site reclamation to facilitate vegetation recovery.

SOP VEG/NNIS-14 Existing roads and trails will be used for access, where feasible, rather than creating new roads and trails.

SOP VEG/NNIS-15 The BLM may require modifications to or may disapprove a proposed activity that is likely to result in an impairment to the continued existence of a special status species or result in the destruction or adverse modification of a designated or proposed critical habitat.

SOP VEG/NNIS-16 All ground-disturbing authorizations, permits, and material sales will include stipulations to prevent the introduction and/or spread of NNIS.

F.2.5 Wildlife (WILD)

SOP WILD-1 For facilities that occupy more than 3 acres in known or suspected wildlife migration routes or movement corridors, and which have the potential to significantly impact such migration or movement, the BLM AO may require the development of an ecological land classification map (or similar instrument) of the development area as part of the permitting process. The map will integrate geomorphology, surface form, and vegetation at a scale, resolution and level of positional accuracy that allows for detailed analyses of alternative development. The map would be provided to the BLM AO in advance of issuance of an authorization; such that ground-based wildlife and/or vegetation habitat surveys may be conducted prior to the BLM AO approval of exact facility location.

SOP WILD-2 Employ industry-accepted best management practices to prevent raptors and other birds from colliding with or being electrocuted by utility lines, alternative energy structures, towers, and poles.[2] In important bird areas, if possible, bury utility lines. Where raptors are likely to nest in human-made structures (such as cell phone towers) and such use could impede operation or maintenance of the structures or jeopardize the safety of the raptors, equip the structures with devices engineered to discourage raptors from building nests. An alternative is to equip the structures with nesting platforms that would safely accommodate raptor nests without interfering with structure performance.

Follow best management practices, in accordance with the Avian Power Line Interaction Committee, for power lines. Guidelines for towers should follow those of the USFWS.[3]

SOP WILD-3 The use of guy wires on towers should be avoided, if possible; however, if tall towers require the use of guy-wired apparatus, regardless of purpose, they will be marked in accordance with the USFWS guidance,[4] or a more current version of that guidance.

SOP WILD-4 Permittees must take the following precautions to avoid attracting wildlife to food, garbage, and other attractants:

- Storage of food in bear-proof containers
- Use bear-resistant containers for all garbage, petroleum products, and other bear attractants.
- Prohibition from feeding wild animals

SOP WILD-5 To prevent the entrapment of small mammals and birds, all hollow pipes or tubes that are 2 to 10 inches in diameter will be filled or capped prior to installation (unless fixed horizontally). Mining claim posts will be capped.

SOP WILD-6 Employ industry-accepted best management practices to prevent the nesting, denning, or shelter of wildlife (especially ravens, raptors, and foxes where ground-nesting birds are sensitive to associated artificial increases in predators).

SOP WILD-7 Permitted activities in the vicinity of eagle nests must be conducted in accordance with the Bald and Golden Eagle Protection Act and the USFWS Alaska Region recommendations. That may include restrictions on activities such as buffers around nests or seasonal restrictions on activities.

SOP WILD-8 The permittee will ensure that all associated operations are conducted to avoid or minimize impacts on migratory birds. The primary mechanism to avoid and minimize impacts is to plan to conduct work that may disturb wildlife outside of the nesting season. The USFWS provides region-specific guidance for Alaska on dates to avoid land disturbance and vegetation clearing. The BLM may require surveys for species deemed sensitive prior to permitted activity.

SOP WILD-9 The BLM may require applicants to conduct inventories for special status species and to avoid or minimize impacts on these species, pursuant to the BLM policy and the Endangered Species Act. The BLM may recommend modifications to any proposals. The BLM may not approve or may require

[2] APLIC 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, D.C. and Sacramento, CA. Internet website: http://www.aplic.org/.
[3] Siting, Construction, Operation, and Decommissioning of Communications Towers. September 14, 2000.
[4] Ibid.

modifications to a proposed activity that is likely to jeopardize the continued existence of a proposed or listed threatened and endangered or sensitive species or result in the destruction or adverse modification of a designated or proposed critical habitat.

SOP WILD-10 Where practicable, authorized use may be redirected to protect special status species habitat or to otherwise maintain public land health through avoidance of sensitive habitat. If impacts on special status species populations and habitats cannot be avoided, the applicant (or the BLM for internal actions) will develop mitigation measures to reduce impacts.

SOP WILD-11 Design and construct rights-of-way to avoid and minimize impediments to the free movement of wildlife and to allow for the safe, unimpeded passage of the public, with deference to those participating in traditional subsistence activities. Applicants must demonstrate that they have considered such features in their project design and construction planning. Examples of such practices include:

- Aboveground pipelines will be elevated a minimum of 7 feet, measured from the ground to the bottom of the pipeline at vertical support members to facilitate wildlife movement under the pipe.
- Ramps over pipelines (or burial of pipelines) may be required in areas where facilities or terrain may funnel wildlife movement.
- A minimum distance of 500 feet will be maintained between aboveground pipelines and roads.
- Road design and construction no higher than necessary to accommodate their intended purpose.

SOP WILD-12 Locate and/or minimize linear rights-of-way or special use authorizations to reduce disturbance to identified important wildlife habitat. Coordinate road construction and use among authorization holders and applicants. Close and reclaim existing duplicate roads.

SOP WILD-13 To prevent wildlife entanglement, **t**he use of erosion control materials that contain plastic will be avoided. Temporary erosion and sediment control products that either do not contain netting, or that contain netting manufactured from 100 percent biodegradable nonplastic materials, such as jute, sisal, or coir fiber, shall be used whenever possible. If netting is used, it will have a loose-weave, wildlife-safe design with movable joints between the horizontal and vertical twines, allowing the twines to move independently and thus reducing the potential for wildlife entanglement. Silt fences reinforced with metal or plastic mesh, which can also cause an entanglement hazard to wildlife, shall be avoided when practicable. Temporary erosion and sediment control products, when no longer required, should be promptly removed.

SOP WILD-14 Consult with ADFG area biologists as appropriate to ensure consistency with species management required by the state.

F.2.6 Wildland Fire Management (FM)

SOP FM-1 Permittees and casual users will be held financially responsible for any actions or activity that results in a wildland fire. Costs associated with wildland fires include damage to natural or cultural resources and costs associated with any suppression action taken on the fire.

SOP FM-2 The BLM will not be held responsible for protecting permittees' structures or their personal property from wildland fire. It is the responsibility of permittees and lessees to mitigate and minimize risk to their personal property and structures from wildland fire, following the conditions in their permits.

SOP FM-3 Gas-powered equipment must be equipped with manufacturer-approved and functional spark arrestors.

SOP FM-4 To avoid potential impacts on aquatic life, the application of fire chemicals, including retardant, will be avoided within 300 feet of waterbodies. Deviations are acceptable when life or property is threatened, and fire chemicals are reasonably expected to alleviate the threat. The BLM AO may approve a deviation if potential damage to natural resources outweighs the impact to aquatic resources.

SOP FM-5 Off-road use of heavy equipment and other motorized vehicles in wildland fire suppression activities will be conducted in a manner that: minimizes erosion, riparian area damage, water quality degradation, fish habitat degradation, and stream channel sedimentation.

SOP FM-6 Off-road use of heavy equipment and other motorized vehicles requires approval of the BLM AO.

SOP FM-7 Repair suppression damage in accordance with a repair plan provided by the BLM Field Office to the protection agency.

SOP FM-8 Utilize active management best management practices such as: mowing; pre-commercial and commercial thinning; manual and mechanical cutting; linear fuel breaks; biological and chemical treatment; access road maintenance; prescribed fire and controlled burns; timber salvage; timber and biomass sales; piling; yarding; removing vegetative material; selling of vegetative products (including, but not limited to, firewood, biomass, timber, and fence posts); application of pesticides, bio-pesticides and herbicides; seeding native species; invasive species management; jackpot and pile burning; fuels conversion to a less flammable type such as spruce to hardwoods; shear blading; and shaded fuel breaks.

SOP FM-9 Utilize fire management options to capitalize on resource benefits from wildfires where possible.

SOP FM-10 Maximize the use of natural barriers and physical features (such as roads and rights-of-way) within landscapes when designing fuel breaks and other vegetative treatments.

F.2.7 Visual Resource Management (VRM)

SOP VRM-1 Facilities allowed in the viewsheds of developed recreation sites shall be screened with vegetation or blend in with the color or line form of the surrounding landscape. Consideration to the primary uses of established utility and transportation corridors will be considered, where appropriate, as the line and form of the surrounding landscape.

F.2.8 Forestry (FOR)

SOP FOR-1 Timber disposals will include buffers to prevent disturbance of priority fish species habitat and sedimentation into streams. Buffer widths will be dependent on harvest method, season of harvest, equipment used, slope, vegetation, land use allocation (ACECs or High Value Watersheds) and soil type. Winter operations will be considered to avoid the need for road building and to reduce impacts on soils, vegetation, and riparian areas.

F.2.9 Mineral Materials and Locatable Minerals (MIN-LMM)

SOP MIN-LMM-1 Whenever possible, use existing upland material sources that meet suitability and economic needs. Using material from wetlands, lakes, and 100-year floodplains will be avoided, unless no feasible upland alternative exists. Sales or permits for in-stream gravel extraction within an active channel will not be allowed in priority fish species spawning habitat. Mineral material extraction from: lakes, active floodplains, riparian zones, wetlands, deltas, lakes, and active or inactive stream or river channels should be avoided and is subject to constraints developed through project-specific NEPA analysis.

SOP MIN-LMM-2 When authorizing mineral material sale sites, avoid habitats important to local fish populations (such as fish spawning and overwintering sites). Avoid key geomorphic features, such as the river cut banks and associated riparian zones and springs, wetlands, and active channels of small, single channel rivers. Avoid mineral material extraction from habitats important to wildlife populations, such as (but not limited to) calving areas and raptor nesting sites. Sites directly affecting these habitats should not be considered unless alternative sites are not available.

When authorizing mineral material sale sites, avoid priority plant species and communities.

SOP MIN-LMM-3 When mining gravel in 100-year floodplains, maintain buffers that will protect active channels and keep them in their original locations and configurations.

SOP MIN-LMM-4 Use existing access routes during the season for which the route was designed and developed.

SOP MIN-LMM-5 Upon closure of mining operations, dispose of all: mining improvements, deleterious materials and substances, contaminants, and hazardous and solid waste. The latter includes scrap steel, derelict mining machinery, and parts. These materials will be disposed of in accordance with applicable federal and state laws and regulations. Burial is not an acceptable form of disposal.

F.2.10 Lands and Realty (LR)

SOP LR-1 Consider previously disturbed sites prior to allowing uses on undisturbed sites.

F.2.11 Travel and Transportation Management (TTM)

SOP TTM-1 For the BLM permitted activities that require ice thickness be tested before equipment over 1,500 pounds curb weight is transported, this would be done to confirm adequate ice, as determined by the U.S. Army Corps of Engineers' ice engineering table.

Some travel up and down streambeds would be allowed by the individual vehicles collecting snow from river drifts or ice aggregate from the channel (where ice is grounded). Rivers and streams shall be crossed at areas of grounded ice, whenever possible.

SOP- TTM-2 For the BLM permitted activities, petroleum, oil, and lubricants could be transported in amounts greater than 1,000 gallons over ice only under the direction of a licensed professional engineer.

F.2.12 National Trails (NAT)

SOP NAT-1 To eliminate, minimize, or limit the spread of NNIS on BLM-managed lands, the BLM will authorize feed and mulch (hay cubes, hay pellets, or straw, for example) that are certified as weed-free through the Alaska Weed-Free Forage Certification Program (or other programs with approval of the BLM AO). Where Alaska-certified sources are not available, locally produced forage and mulch may be used, with the approval of the BLM AO. If no certified weed-free or local sources are available, then other products may be used, with the approval of the BLM AO.

F.2.13 Hazardous Materials and Health and Human Safety (HAZMAT)

SOP HAZMAT-1 The burial of garbage is prohibited. All putrescible waste will be incinerated, backhauled, or composted in a manner approved by the BLM AO. All unburnable solid waste will be backhauled and disposed of in an approved waste disposal facility, in accordance with the regulations and procedures of the U.S. Environmental Protection Agency and Alaska Department of Environmental Conservation.

SOP HAZMAT-2 If wastes are incinerated on site, the permittee will ensure that only solid waste combustibles that originate from on-site are incinerated, and that they are incinerated in accordance with Environmental Protection Agency and Alaska Department of Environmental Conservation requirements.

The permittee will ensure that incineration of garbage using burn barrels is conducted in compliance with the Alaska Division of Forestry Burn Barrell Specification. These specifications can be found at http://dnr.alaska.gov/burn/specifications.

No solid waste is to remain on site for more than 90 days unless authorized in writing by the BLM AO.

SOP HAZMAT-3 (Note: This SOP restates current State requirements and they will be adjusted according to any future updates to State requirements). Pit privies must be located at least 100 feet from any waterbody and 100 feet from the high-watermark of streams, rivers, or lakes. The BLM AO may require a larger separation distance, to protect high-value resources. No septic system will be installed without the BLM AO's approval and it must comply with 18 Alaska Administrative Code, Subsection 72.030. Gray water must be filtered before being released to the surface, and it must be discharged in a way that does not cause erosion. Gray water may not be released to any water body. If regulations and procedures cannot be met, all wastewater must be collected and transported to a State-approved disposal facility.

Upon closure of a campsite, a pit privy must be sprinkled with lime and then completely backfilled with a minimum of 2 feet of over-material when the pit has reached capacity, or the operation is terminated. The surface area must be covered and regraded to its approximate original appearance.

SOP HAZMAT-4 All hazardous materials and petroleum, oil, and lubricants will be stored in containers that are compatible with the material being stored. Containers will be labeled with the: responsible party's name, contents of the container, date the container was purchased, and date the container was filled.

SOP HAZMAT-5 Storage of petroleum, oil, and lubricants greater than or equal to 55 gallons at any site will require secondary containment. The containment area must have the following characteristics:

- Be constructed to hold at least 110 percent of the largest container
- Be lined with an impermeable liner that is free of cracks or gaps
- Be compatible with the contents stored
- Be sufficiently impervious to contain leaks or spills

SOP HAZMAT-6 When 40 CFR 112 requires a Spill Prevention, Control, and Countermeasure plan to be prepared for activities occurring on BLM-managed lands, a copy shall be provided to the BLM AO for awareness purposes.

SOP HAZMAT-7 Leaking equipment must have a drip basin placed under the leak area. Also, the basin must be protected from rainwater collection to ensure no release to the surrounding environment. When equipment maintenance has the potential to release fluids, an impermeable liner must be used to ensure that spills are contained.

SOP HAZMAT-8 Notice of any reportable spill (as required by 40 CFR, Subpart 300.125 and 18 Alaska Administrative Code, Section 75.300) will be given to the BLM AO as soon as possible, but no later than 24 hours after occurrence. This requirement is in addition to, and does not replace, reporting requirements under other federal and state law. All spills will be contained and cleaned up in accordance with Alaska

Department of Environmental Conservation guidance as soon as the release has been identified, unless health and safety of personnel is at risk.

A copy of any report required or requested by any federal agency or state government as a result of a reportable release or spill of any toxic substance will be furnished to the BLM AO, concurrently with filing the reports to the involved federal agency or state government.

SOP HAZMAT-9 If refueling cannot be avoided within the riparian zone or within 100 feet of a water body, a catch basin and petroleum, oil, and lubricant-type absorbent pads will be used to collect any overflow.

SOP HAZMAT-10 With the exception of watercraft, water pumps, or aircraft, fueling operations for motorized apparatus will not occur in riparian zones (from the ordinary high-watermark to the outer edge of riparian vegetation) nor within 100 feet of a water body, whichever is greater. These activities also will not be allowed within 500 feet of the active floodplain of any fish-bearing water body whenever practicable.

SOP HAZMAT-11 For oil and gas operations and mining plans of operation, a hazardous materials emergency contingency plan will be prepared and implemented before transportation, storage, or use of fuel or hazardous substances. The plan will include a set of procedures to ensure prompt response, notification, and cleanup of a hazardous substance spill or threat of a release. The plan will include a list of resources available for response, such as heavy-equipment operators, spill-cleanup materials, and companies. It also will include names and phone numbers of federal and state contacts.

SOP HAZMAT-12 For oil and gas operations, all pumpable solid, liquid, and sludge waste will be disposed of by injection, in accordance with U.S Environmental Protection Agency, Alaska Department of Environmental Conservation, and Alaska Oil and Gas Conservation Commission regulations and procedures. The BLM AO may permit alternate disposal if the lessee demonstrates that subsurface disposal is not feasible or prudent and the alternative method would not result in adverse environmental effects.

SOP HAZMAT-13 For oil and gas operations, mining operations, and other leases and permits, sufficient oil spill cleanup materials, such as absorbents and containment devices, will be stored at all fueling points and vehicle maintenance areas. Field crews will carry such materials on all overland moves, seismic work trains, and similar overland moves by heavy equipment. All personnel will be trained to properly respond to spills.

F.2.14 Subsistence (SUB)

SOP SUB-1 The BLM AO may require permittees to provide information to potentially affected subsistence communities regarding the timing, siting, and scope of a proposed activity.

SOP SUB-2 The BLM AO may require permittees to consult with potentially affected subsistence communities to receive input regarding ways to minimize impacts on subsistence. Permittees will be required to provide the BLM with documentation of their consultation.

SOP SUB-3 Permittees are prohibited from intentionally disturbing individuals engaged in subsistence activities.

SOP SUB-4 Roads must be designed, constructed, maintained, and operated to allow for continued subsistence use and access to traditional subsistence hunting, fishing, and gathering areas.

SOP SUB-5 Use of aircraft, especially rotary wing aircraft, near known subsistence camps and cabins or during sensitive subsistence hunting periods would be kept to a minimum.

F.2.15 Standard Operating Procedures (MIN-LEA)

SOP MIN-LEA-1 In mining and fluid mineral leasing operations, all process water and groundwater seeping into an operating area must be treated appropriately prior to reentering the natural water system. One method is to use settling ponds.

SOP MIN-LEA-2 For oil and gas operations and mining plans of operation, a hazardous materials emergency contingency plan will be prepared and implemented before transportation, storage, or use of fuel or hazardous substances. The plan will include a set of procedures to ensure prompt response, notification, and cleanup in the event of a hazardous substance spill or threat of a release. The plan will include the names and phone numbers of federal and state contacts. It also will include a list of resources available for response, such as heavy-equipment operators, spill-cleanup materials, or companies.

Leasing stipulations are specific to fluid mineral activity, including exploration, development, and production. These leasing stipulations are included in a lease in addition to the standard lease terms. Fluid minerals include oil and gas, geothermal, and coal bed natural gas.

Additional site-specific leasing stipulations may be added if they are determined to be necessary through further analysis. Leasing stipulations may be excepted, modified, or waived by the BLM AO, pursuant to 43 CFR, Subparts 3101.1-4 and Washington, D.C., Office Instruction Memorandum 2008-032.

The environmental analysis prepared for fluid mineral development (such as applications for permit to drill or sundry notices) will address proposals to except, modify, or waive a leasing stipulation. To except, modify, or waive a stipulation, the environmental analysis would need to show the following:

- The circumstances or relative resource values in the area had changed following issuance of the lease
- Less restrictive requirements could be developed to protect the resource of concern
- Operations could be conducted without causing unacceptable impacts
- The resource value of concern does not occur within the lease area

An exception exempts the holder of a lease from the leasing stipulation on a one-time basis. A modification changes the language or provisions of a leasing stipulation, either temporarily or for the term of the lease. A waiver permanently exempts the leasing stipulation.

Compliance with leasing stipulations is monitored by the BLM AO or representative. Noncompliance may result in monetary fines or operation shutdown.

F.3 FLUID MINERAL LEASING

F.3.1 Fluid Mineral Leasing Stipulations

SOILS OBJECTIVE: To maintain the chemical, physical, and biotic properties of soils; this includes maintaining soil productivity, stability, and biotic properties. This would prevent excessive erosion and potential mass wasting and it would improve the likelihood of successful reclamation.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Surface occupancy and use is prohibited for fluid mineral leases on sensitive soils in high-value watersheds.	Sensitive soils in high-value watersheds	**Exception:** The BLM AO may grant an exception if the operator can demonstrate that the proposed action would not contribute to degradation of the soil resource (such as excessive soil erosion, mass wasting, or lost productivity) or downslope resource conditions (such as reduced water quality due to sedimentation). **Modification:** The BLM AO may modify the area affected by this stipulation if portions of the leasehold do not contain sensitive soils. **Waiver:** The BLM AO may waive this stipulation if the entire leasehold does not contain sensitive soils.	X	.	.	.	.
Apply controlled surface use stipulations to fluid mineral leases on slopes greater than 35 percent and in areas with sensitive soils. Before sensitive soils are disturbed, the AO must approve a reclamation plan, which must demonstrate the following: (1) no other practicable alternatives exist for relocating the activity, (2) the activity would be located to reduce effects on soil and water resources, (3) site productivity would be maintained or restored, (4) surface runoff and sedimentation would be adequately controlled, (5) on- and off- site areas would be protected from accelerated erosion, (6) no areas susceptible to mass wasting would be disturbed, and (7) surface- disturbing activities would be prohibited during extended wet periods.	Slopes greater than 35 percent in areas with sensitive soils	**Exception:** The BLM AO may grant an exception to this stipulation if the operator can demonstrate that the proposed action would not contribute to soil resource degradation, such as by excessive soil erosion, mass wasting, or lost productivity, or contribute to downslope resource conditions, such as reduced water quality due to sedimentation. **Modification:** None **Waiver:** None	X	.	.	.	..

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Apply controlled surface use stipulations to fluid mineral leases on slopes greater than 35 percent and in areas with sensitive soils. Before sensitive soils are disturbed, a plan must be approved by the BLM AO. The plan must demonstrate the following: (1) no other reasonable alternatives exist for relocating the activity, (2) the activity would be located to reduce impacts on soil and water resources, (3) surface runoff and sedimentation would be adequately controlled, (4) on- and off-site areas would be protected from accelerated erosion, (5) no areas susceptible to mass wasting would be disturbed, and (6) surface-disturbing activities would be prohibited or appropriate mitigations would be applied during extended wet periods.	Slopes greater than 35 percent in areas with sensitive soils	**Exception:** The BLM AO may grant an exception to this stipulation if the operator can demonstrate that the proposed action will not contribute to degradation of the soil resource (e.g., excessive soil erosion, mass wasting, and/or lost productivity) or downslope resource conditions (e.g., reduced water quality due to sedimentation). **Modification:** None **Waiver:** None	.	**X**	**X**	**X**	**X**

FISH OBJECTIVE: Maintain and protect aquatic habitat to support populations of sheefish, salmon, and Dolly Varden, identified as relevant and regionally important and require special management to maintain critical habitat.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Surface occupancy and use is prohibited in the 100-year floodplain of the identified streams, including the design and location of permanent or temporary oil and gas facilities within 300 feet of the rivers for the following areas of critical environmental concern (ACECs): • Accomplishment Creek ACEC • Alatna River ACEC • Jim River ACEC • South Fork Koyukuk River ACEC • Sulukna ACEC	The ACECs listed	**Exception:** The BLM AO may grant an exception if the lessee demonstrates that impacts would be minimal or that there is no feasible or prudent alternative. **Modification:** None **Waiver:** None	.	**X**	.	.	.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Surface occupancy and use is prohibited in the watershed of the identified streams, including the design and location of permanent or temporary oil and gas facilities within 300 feet of the rivers for the following ACECs: • Accomplishment Creek ACEC • Altana River ACEC • Jim River ACEC • South Fork Koyukuk River ACEC • Sulukna River ACEC • Wheeler Creek ACEC • Chandalar River ACEC • Sethkokna River ACEC • Ishtalitna Creek ACEC • Indian River ACEC	The ACECs listed	**Exception:** The BLM AO may grant an exception if the lessee demonstrates that impacts would be minimal or that there is no feasible or prudent alternative. **Modification:** None **Waiver:** None	**X**	.	.	.	.

RIPARIAN OBJECTIVE: To protect the unique biological and hydrological features and functions associated with perennial and intermittent streams, lakes, ponds, reservoirs, floodplains, wetlands, and riparian areas.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Surface occupancy and use is prohibited in perennial or intermittent streams, lakes, ponds, reservoirs, 100-year floodplains, wetlands, and riparian areas.	100-year flood plain	**Exception:** No exceptions would be allowed in streams, natural lakes, or wetlands. The BLM AO may grant an exception for riparian areas, floodplains, and artificial ponds or reservoirs if the operator can demonstrate that (1) there are no practicable alternatives to locating facilities in these areas, (2) the proposed actions would maintain or enhance resource functions, and (3) all reclamation goals and objectives would be met. **Modification:** The BLM AO may modify the boundaries of the stipulated area if it is determined that portions of the leasehold do not include these types of areas. **Waiver:** The BLM AO may waive this stipulation if the entire leasehold does not include these types of areas.	X	.	.	.	X

WATER OBJECTIVE: Maintain sufficient surface water and groundwater flows to keep hot springs beneficial uses and the unique ecosystems.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Surface occupancy and use is prohibited within a 160-acre area centered around hot springs.	Hot springs	**Exception:** This stipulation does not apply to geothermal leases or wells. **Modification:** none **Waiver:** none	.	.	.	X	X
Surface occupancy and use is prohibited within 0.25-mile of lentic areas.	Lentic areas	**Exception:** none **Modification:** none **Waiver:** none	.	.	.	.	X

WILDLIFE OBJECTIVE: Minimize impacts on wildlife species from the BLM-authorized activities.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Disturbance caps would be applied to discretionary activities in the following: • Dall sheep habitat area (5 percent disturbance cap on discretionary permitted activities) • Dall sheep movement corridor (15 percent disturbance cap on discretionary permitted activities) • Dall sheep study area (no disturbance cap on discretionary permitted activities)	Identified Dall sheep habitats	**Exception:** The BLM AO may grant an exception if Dall sheep are not currently using the area. **Modification:** None **Waiver:** This stipulation may be waived if Dall sheep data show changes in current habitat use areas.	.	**X**	.	.	.
Disturbance caps would be applied to discretionary activities in the following: • Dall sheep habitat area (5 percent disturbance cap on discretionary permitted activities)	Identified Dall sheep habitat areas	**Exception:** The BLM AO may grant an exception if Dall sheep are not currently using the area. **Modification:** None **Waiver:** This stipulation may be waived if Dall sheep data show changes in current habitat use areas.	.	.	.	.	**X**
No surface occupancy or use is allowed in the Dall sheep habitat area, which contains crucial licks.	Dall sheep habitat area, Sukakpak Mountain ACEC/Snowden Mountain ACEC	**Exception:** The BLM AO may grant an exception to a fluid mineral lease only where the proposed action would have the following impact: • Would not have direct, indirect, or cumulative effects on Dall sheep or its habitat • Is proposed to be undertaken as an alternative to a similar action on a nearby parcel, and it would provide a clear conservation gain to Dall sheep **Modification:** No modifications **Waiver:** None	.	**X**	.	.	**X**

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
From April 15 to June 15, motorized intrusions may occur for up to 10 percent of any hour, and as many as five motorized noise events over ambient sound may occur per day. Motorized noise would not exceed 50 a-weighted decibels at identified Dall sheep habitat area between 7 a.m. and 7 p.m.	Dall sheep habitat area	**Exception:** The BLM AO may grant an exception to a fluid mineral lease only where the proposed action would do the following: • Would not have direct, indirect, or cumulative effects on Dall sheep or its habitat • Is proposed to be undertaken as an alternative to a similar action on a nearby parcel, and it would provide a clear conservation gain to Dall sheep **Modification:** No modifications **Waiver:** None	.	X	.	.	.
Manage the following areas as open to fluid mineral leasing, subject to timing limitations for exploration, development, or facility construction within 0.5 mile of any known raptor nests, from April 15 through August 15 (from March 15 through July 20 for gyrfalcon nests).	Raptor nests	**Exception:** The BLM AO may grant an exception if the lessee demonstrates that impacts would be minimal or that there is no feasible or prudent alternative. **Modification:** Season may be adjusted, based on actual nest occupancy. **Waiver:** If no known occupied nests are present, a waiver can be granted.	X	X	X	.	X
No surface occupancy or use is allowed within 0.5 mile of active golden eagle nests.	Golden eagles	Exception: The BLM AO may grant an exception if the lessee demonstrates that impacts would be minimal or that there is no feasible or prudent alternative. **Modification:** Season may be adjusted, based on actual nest occupancy. **Waiver:** If no known occupied nests are present, a waiver can be granted.	X	X	X	.	X

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
To protect threatened, endangered, or other special status species and their habitats, the lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened or endangered species. The BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid an approved activity that would contribute to a need to list such a species or its habitat. The BLM may require a modification to or disapprove a proposed activity that is likely to jeopardize the continued existence of a proposed or listed threatened and endangered species or result in the destruction or adverse modification of a designated critical habitat.	All the BLM-managed lands	**Exception:** None **Modification:** None **Waiver:** None	X	X	X	X	X

WILD AND SCENIC RIVER OBJECTIVE: To protect wild and scenic rivers' outstandingly remarkable values, free-flowing nature, and water quality of suitable segments.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Surface use and occupancy is prohibited within the study corridor of suitable wild and scenic river segments classified as wild.	Suitable segments classified as wild	Standard exceptions, modifications, and waivers apply.	X	.	.	.	.

WILDERNESS CHARACTERISTICS OBJECTIVE: To protect identified areas, to apply management, and to protect wilderness character as a priority over other multiple uses by maintaining at least a 5,000-acre parcel, opportunities for solitude, and appearance of naturalness.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Surface occupancy and use are prohibited in areas that are managed to emphasize other multiple uses, while applying management restrictions to reduce impacts on wilderness characteristics.	Lands with wilderness characteristics	**Exception:** None **Modification:** None **Waiver:** None	X	X	.	.	.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN OBJECTIVE: Protect the identified relevant and important values for each ACEC.

Stipulation	Area Where It Applies	Exception, Modification, Waiver	B	C1	C2	D	E
Surface occupancy and use are prohibited in the following ACECs: 1. Accomplishment Creek 2. Galbraith Lake 3. Hogatza River Tributaries 4. Huslia 5. Indian River 6. Jim River 7. Klikhtentotzna Creek 8. Mentanontli River/Lake Todatonten 9. Midnight Dome/Kalhabuk 10. Nugget Creek 11. Poss Mountain 12. Sethkokna River 13. Snowden Mountain 14. South Fork Koyukuk River 15. Tozitna River 16. Upper Teedriinjik (Chandalar) River 17. West Fork Atigun River 18. Wheeler Creek	ACECs	**Exception:** Unless specific lands are designated as right-of-way exclusion areas, ACEC designations would not prevent or preclude authorized access to adjacent lands not managed by BLM. Additionally, ACEC designations would not prevent any rights-of-way guaranteed under section 1323(b) of the Alaska National Interest Lands Conservation Act. Right-of-way avoidance areas within ACECs are areas that would be available for authorized activities that may entail special stipulations or consideration of other site-specific alternatives to protect identified relevant and important values for the subject ACEC(s) involved. The BLM would work with any project proponent to design a project plan in right-of-way avoidance areas that meets the proponent's needs and protects relevant and important ACEC values. **Modification:** none **Waiver:** none	.	.	.	.	X

F.3.2 Standard Lease Terms

All fluid mineral leases would include the standard lease terms contained in the BLM Form 3100-11 (Offer to Lease and Lease for Oil and Gas, U.S. Department of the Interior, BLM, October 1992, or later addition). The standard lease terms provide the lessee with the right to use the leased land to explore for, drill for, extract, remove, and dispose of fluid mineral deposits that are under the leased lands. The standard lease terms also require that operations be conducted in a manner that minimizes impacts on the: land, air, water, cultural, biological, and visual elements of the environment, as well as other land uses or users.

F.4 REFERENCES

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F.5 GLOSSARY

100-year floodplain. The area inundated by the 100-year flood or the 1 percent annual exceedance probability flood. It is the flood that has a 1 percent chance of being equaled or exceeded in any single year. It is often mistakenly thought of as the flood that occurs once every 100 years. If a project is within the 100-year floodplain and the project life is expected to be 30 years, it would have a 25 percent chance of experiencing flood damage due to a 100-year flood. For a project with an anticipated life of 15 years, the chance of incurring flood damage due to a 100-year flood would be 14 percent.

The 100-year floodplain is difficult to accurately map without extensive ground surveys. On-the-ground surveys conducted in the Central Yukon planning area typically employ the valley width that corresponds to an elevation of three times maximum bankfull depth as an estimate of the 100-year floodplain (FEMA 2015).

aircraft. Fixed-wing and rotary-wing aircraft.

ambient air quality standard. Air pollutant concentrations of the surrounding outside environment that cannot legally be exceeded during fixed time intervals and in a specific geographic area.

area of critical environmental concern (ACEC). Special area designation established through the BLM's land use planning process (43 CFR 1610.7-2), where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important: historic, cultural, or scenic values; fish and wildlife resources; or other natural systems or processes, or to protect life and safety from natural hazards. The level of allowable use in an ACEC is established through the collaborative planning process. Designation of an ACEC allows for resource use limitations to protect identified resources or values.

controlled surface use. A fluid mineral leasing stipulation with moderate use constraints.

criteria air pollutant. The Clean Air Act of 1970 identified six air pollutants of concern, called criteria pollutants: carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. They are the only air pollutants that national air quality standards define as having allowable concentrations in ambient air. States may adopt ambient air quality standards for additional pollutants of concern.

critical habitat. Habitat that is necessary to maintain viable populations of wildlife during specific seasons or reproductive periods (BLM Manual 6780).

Dall sheep habitat area (DSHA). BLM-managed lands identified as having the highest habitat conservation value in relation to Dall sheep.

disturbance. Alteration of the vegetative cover or ground surface. Human disturbance is caused by human activities, such as clearing, excavating, or introducing sources of invasive species. Natural disturbance is caused by natural events, such as lightning-caused wildfires or windstorms.

ecological integrity. The state of an ecosystem where structure, composition, and function are characteristic for the region; ecological processes are intact and self-sustaining; and the ecosystem evolves naturally.

Endangered species. An animal or plant species designated by the U.S. Fish and Wildlife Service to receive federal protection status because it is in danger of extinction throughout all or a significant portion of its natural range.

Environmental impact statement (EIS). A detailed statement of a given project's environmental consequences, including unavoidable adverse environmental effects; alternatives to the proposed action, the relationship between local short-term uses and long-term productivity; and any irreversible or irretrievable commitment of resources.

hazardous air pollutant. Also known as a toxic air pollutant, it is a pollutant that causes or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects. The U.S. Environmental Protection Agency is required to control 187 hazardous air pollutants, including volatile organic compounds, heavy metals, and persistent bio-accumulative toxins. The most widespread volatile organic compounds commonly analyzed are benzene, ethylbenzene, toluene, xylene, n-hexane, and formaldehyde.

ice road. A winter road that runs on a naturally frozen water surface. Ice roads are not passable in unfrozen conditions.

landscape. An entity with structural elements of patch, mosaic, and corridor, reflecting a mix of ecosystems, habitats, and land uses.

minimize. To reduce harmful effects to a level that does not have significant adverse effect on wildlife populations or their habitat in the planning area or significantly reduce the public's opportunity for successful harvest or nonconsumptive use of wildlife.

mitigation. It includes: avoiding an impact by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments (40 CFR 1508.20).

National Ambient Air Quality Standards (NAAQS). The Clean Air Act requires the U.S. Environmental Protection Agency to set national ambient air quality standards (codified in 40 CFR 50) for pollutants considered harmful to public health and the environment. The Clean Air Act identifies two types of national ambient air quality standards: Primary standards provide public health protection, including protecting the health of sensitive populations, such as asthmatics, children, and the elderly; and secondary standards protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. The U.S. Environmental Protection Agency set standards for six principal pollutants (see criteria air pollutants above). Periodically, it reviews the standards and may revise them.

No surface occupancy (NSO). A fluid mineral leasing constraint that prohibits occupancy or disturbance on all or part of the lease surface to protect special values or uses. Lessees may exploit the fluid mineral resources under the leases restricted by this constraint through use of directional drilling from sites outside the NSO area.

outstandingly remarkable value. A value among those listed in Section 1(b) of the Wild and Scenic Rivers Act of 1968: "scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values." Other similar values that may be considered are ecological, biological, or botanical.

permafrost. Soil, sand, gravel, or bedrock that has remained below 32 degrees Fahrenheit for two or more years.

pollutant. Any substance introduced into the environment that adversely affects the usefulness of a resource or the health of humans, animals, or ecosystems.

resource (and their values, services, or functions). Natural, social, or cultural objects or qualities; resource values are the importance, worth, or usefulness of resources; resource services are the benefits people derive from resources; and resource functions are the physical, chemical, or biological processes that involve resources.

riparian. Relating to or situated on the bank of a river.

Rosgen stream classification. A classification system for natural rivers in which a morphological arrangement of stream characteristics is organized into relatively similar stream types. Morphologically similar stream reaches are divided into seven major stream type categories (A-G) that differ in: entrenchment, gradient, width/depth ratio, and sinuosity in various landforms.

sensitive soils. The soils mapped by the BLM to be in one of the following categories: steep slopes, thaw-sensitive permafrost, or wetland soils, or those that are highly susceptible to erosion or that have high moisture content.

sensitive species. All species that are under status review, that have small or declining populations, or that live in unique habitats. They also may be any species requiring special management. Sensitive species include threatened, endangered, or proposed species, as classified by the U.S. Fish and Wildlife Service, or species designated by a state wildlife agency as needing special management (IM AK 2004-23).

special status species. Special status species include endangered species, threatened species, proposed species, candidate species, state-listed species, and the BLM Alaska sensitive species.

subsistence use. The customary and traditional use by rural Alaska residents of wild renewable resources for direct personal or family consumption as: food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of inedible byproducts of fish and wildlife resources taken for personal or family consumption; for barter or sharing for personal or family consumption; and for customary trade. This includes any use of surface use transportation as a means of access to subsistence resources, as provided for under ANILCA Sections 811 and 1110.

suitable river. An eligible river segment found through administrative study to meet the criteria for designation as a component of the National Wild and Scenic Rivers System, as specified in Section 4(a) of the Wild and Scenic Rivers Act (BLM Manual 6400, Wild and Scenic Rivers-Policy and Program Direction for Identification, Evaluation, Planning, and Management).

timber. All woody vegetation that is 5 inches in diameter at breast height or larger is classified as timber. By industry convention, diameter at breast height is the diameter of the outside bark measured 4.5 feet above ground level. This convention is the standard used to describe timber size in this RMP/EIS.

wilderness characteristic. This includes an area's size, its apparent naturalness, and outstanding opportunities for solitude or a primitive and unconfined type of recreation; it also may include supplemental values. Lands with wilderness characteristics are those that the BLM has inventoried and determined to possess wilderness characteristics, as defined in Section 2(c) of the Wilderness Act.

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Appendix G

Adaptive Management Framework

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
BEACONS	Boreal Ecosystems Analysis for Conservation Networks
BLM	Bureau of Land Management
CSU	conservation system unit
EIS	environmental impact statement
FLPMA	Federal Land Policy and Management Act
RMP	resource management plan

Appendix G. Adaptive Management Framework

G.1 Landscape Resource Values

It is the U.S. Department of the Interior (Department) policy (522 Department Manual 1) to encourage the use of adaptive management, as appropriate, as a tool in managing lands and resources. To this end, bureaus are directed (whenever using adaptive management) to "conduct appropriate and applicable environmental monitoring to determine resource status, promote learning, and evaluate progress toward achieving objectives" and to "incorporate adaptive management principles, as appropriate, into policies, plans, guidance, agreements, and other instruments for the management of resources under the Department's jurisdiction."

Department policy (604 Department Manual 1) also directs bureaus to achieve landscape goals through development of integrated landscape-level strategies that inform management decisions and work processes, and that promote:

- incorporation of best available science;
- consideration of multiple scales;
- interdisciplinary, science-based understanding of landscape dynamics;
- integration of science, management, and monitoring and evaluation efforts; and
- resilience to environmental change.

That policy also links adaptive management and landscape objectives, requiring bureaus to evaluate the effectiveness of management actions using monitoring indicators to determine if management actions are achieving desired landscape outcomes and, if not, to determine the causative factors to inform changes in management actions to achieve the desired outcomes.

The Bureau of Land Management (BLM) policy (Instruction Memorandum 2014-125) directs the BLM to consider relevant data and information from rapid ecoregional assessments and other landscape assessments during land use planning and project-level decision-making.

The Bureau of Land Management (BLM) policy (Instruction Memorandum 2023-043) directs the BLM to follow AIM principles and established AIM implementation procedures in land use plan effectiveness evaluations of renewable ecological resources on BLM-managed lands.

The Federal Land Policy and Management Act (FLPMA) requires the BLM to maintain an inventory of all public lands and their resource and other values. The BLM also must keep the inventory current to reflect changes in conditions and to identify new and emerging resources and other values. The FLPMA also mandates that the BLM relies on the inventory of the public lands, their resources, and other values in developing land use plans.

Advances in landscape science since the previous resource management plan (RMP) allow identification and inventory of landscape resource values that previously could not be inventoried in a manageable format. These include identifying and inventorying potential ecological benchmarks—areas, or networks of areas, that are representative of the range of ecological characteristics of an ecoregion—and areas suitable to

function as structural linkages between jurisdictions with missions more narrowly focused on conservation, thus providing for resilience to environmental change.

Magness et al. (2018) published an inventory of structural landscape connectivity in the region. The Boreal Ecosystems Analysis for Conservation Networks (BEACONS) project inventoried potential ecological benchmarks in the planning area, incorporating data and information from rapid ecoregional assessments and other landscape assessments. These two inventory efforts provide a framework to comply with direction in the FLPMA and to formulate a landscape-scale adaptive management strategy in compliance with Department and BLM policy. The goal is to draw on best available science to understand conditions and trends across multiple scales, adapt to changes in conditions and trends, promote resilience to environmental change, and facilitate informed decisions. These will be used to manage healthy, productive lands that support the BLM's multiple use mission over the life of the plan.

The connectivity corridors and ecological benchmarks were determined using the best available data, in this case, the scientific modelling described above. These data have not been ground-truthed, and ground-truthed data are not available at the time of the Proposed RMP.

G.1.1 Rationale

Alaska's ecosystems are changing. Documented changes include the following:

- Temperature: Consistently warmer average annual temperatures, longer growing seasons, an increased number of growing degree days, fewer extreme cold days per year, and earlier average river breakup (Thoman and Walsh 2019; IPCC 2014)
- Precipitation: Increased annual precipitation, more frequent winters with freezing rain, shorter snow seasons, and shrinking perennial snowfields in key parts of the planning area (Thoman and Walsh 2019)
- Permafrost: Changing permafrost stability and distribution (Hinzman et al. 2006) and warmer deep permafrost temperatures across northern and interior Alaska (Thoman and Walsh 2019)
- Fire regime: Changing fire regimes (Kaisischke et al. 2006) characterized by more frequent large fire seasons and more smoky days (Thoman and Walsh 2019)
- Plants: An advancing tree line, expanding shrub species range, conditions favoring broadleaf species over conifers and moss (IPCC 2014), and greening of North Slope tundra (Thoman and Walsh 2019)
- Animals and Fish: Changing animal populations (IPCC 2014), range expansion for beavers, and large fish die-offs attributed to high water temperatures (Thoman and Walsh 2019)

Maintaining connectivity corridors, resilience, and adaptability are key to managing for such changes (Cooke 2017; Beever et al. 2015; Heller and Zavaleta 2009). Furthermore, managing for such changes is essential to carrying out the BLM's multiple use mission. Resource development activities, both large and small, influence ecosystem processes through the footprint of facilities and infrastructure, their supply chain, and their production stream. Conversely, ecosystem processes influence the economic margins and feasibility of both current and future resource development.

Communities whose economies depend on public lands are often the most seriously affected by ecological degradation (BLM 1994). Similar relationships apply for social considerations, such as the quality of recreational experiences, clean water availability, and other ecosystem services; thus, healthy resource industries and communities depend on the sustained yield of healthy, productive ecosystems. Monitoring the

condition and trends and corresponding adaptive management are essential for achieving that sustained yield.

G.1.2 Objectives

The planning area is unique in that it overlaps eight ecoregions, it is characterized by ecosystems adapted to large fires, and it contains large tracts of intact land where landscape-scale ecological processes function with minimal disruption. In addition, BLM-managed lands in the planning area are next to, and thus serve as important connections between, nine conservation system units (CSUs) under the Alaska National Interest Lands Conservation Act. Most BLM planning must be a reactive approach to maintaining or restoring ecological integrity and connectivity corridors; nevertheless, these characteristics create the opportunity in this planning process to proactively manage for the sustained yield of landscape resilience, connectivity, and adaptability. This is to support multiple use activities, while maintaining functional landscapes.

G.1.3 Strategy

The BLM proposes to manage land uses to sustain existing landscape connectivity in a small percentage of BLM-managed lands identified through the inventory described above. The BLM also proposes to manage land uses to sustain ecological representation within a selected set of potential ecological benchmarks. It would do this by monitoring changes throughout the benchmarks using the BLM Assessment, Inventory, and Monitoring framework and other appropriate monitoring methodologies as well as adapting land use management in the benchmarks, if indicated. In addition to sustaining ecological representation within limited areas, this would allow the BLM to distinguish changes associated with permitted land uses from changes associated with other change agents. This would help inform management of permitted activities throughout the planning area.

Local indigenous knowledge is valuable to implementing the management actions in this RMP as well as aiding monitoring and adaptive management strategies. The BLM would seek to engage local communities and tribal governments in co-stewardship opportunities for monitoring resource conditions that can aid in adaptive management for implementation level actions and inform the adaptive management framework.

Ecological Benchmarks

BEACONS is a conservation matrix model (BEACONS 2017) that is designed to be used for proactive planning in large, intact landscapes. BEACONS identifies areas in a landscape that have the attributes needed to function as ecological benchmarks. Benchmark areas are intact, hydrologically connected areas large enough to accommodate natural disturbance regimes.

Benchmark networks are groups of benchmark areas that, collectively, are representative of key ecological indicators for an ecoregion (Cooke 2017). They can serve as references for understanding the natural dynamics of ecosystems and their response to human activities. They also are buffers to environmental stressors.

In addition to the fundamental benchmark properties (intactness, hydrologic connectivity, size, and ecoregion representation), potential benchmarks can be compared or ranked based on how well they represent other attributes such as land status, amount of priority species habitat, or resilience.

Connectivity Corridors

One aspect of managing for adaptability is allowing for range-wide adaptations of species, which may include redistribution on the landscape as ecosystems change. Lands managed for multiple uses also can serve as connectivity corridors or linkages between lands managed for conservation, which could

accommodate these changes. Magness et al. (2018) used methods outlined in Brost (2010) and Jenness et al. (2011) to identify land facet-based connectivity corridors between CSUs in the planning area.

G.1.4 Management

Both ecological benchmarks and connectivity corridors would be treated as resources on the landscape with defining attributes, and they would be managed for sustained yield for those defining attributes. While different benchmarks are identified under different alternatives, benchmarks under Alternatives B and E would be identical (see **Map G-1** below). Management of lands recognized as benchmarks would be the same under Alternatives B, C1, and E. Management would be accomplished by applying the standard operating procedures (see RMP/environmental impact statement [EIS], **Appendix F**). Connectivity corridors would be the same under Alternatives B, C1, and E. Landscape connectivity corridors would be the same under Alternatives B, C1, C2, D, and E.

G.1.5 Connectivity Corridors (LANDSCAPE)

Landscape connectivity corridors would be analyzed for all discretionary activities that disrupt habitat connectivity, cause habitat fragmentation, or present barriers to facilitating adaptive migration and ecological reorganization in response to climate change and other drivers of systematic ecological change. In all cases, analysis of impacts for proposed activities in the corridors would include careful consideration of cumulative impacts on habitat connectivity.

Mitigation would be required for direct, indirect, or cumulative impacts that increase habitat fragmentation, reduce structural or functional connectivity. Where relevant, required mitigation may include:

- Seasonal or time restrictions on activities
- Burial of infrastructure or facilities
- Wildlife escapement design features, where needed
- Siting and orientation of infrastructure and facilities to allow maximum opportunities for unfettered wildlife movement
- Use of vegetation to provide screened and unfragmented movement corridors around infrastructure and facilities
- Other measures determined necessary by the AO

Within the Central Yukon Field Office, there are approximately 371,000 acres of BLM-administered lands considered connectivity corridors. See **Table G-1** for a breakdown of right-of-way and locatable minerals related management actions by acreage under each alternative.

Table G-1
Acreage[1] of Connectivity Corridor by Management Action under the Alternatives

Management Action	A	B	C1	C2	D	E
Currently withdrawn from locatable mineral entry	85,000	55,000	55,000	0	0	100,000
Currently withdrawn but open to metalliferous	46,000	0	0	0	0	137,000
Recommended for withdrawal from locatable mineral entry	0	42,000	0	0	0	0
Open to locatable mineral entry (including lands segregated by selection)	201,000	274,000	315,000	370,000	370,000	133,000

Management Action	A	B	C1	C2	D	E
Open, State or Native selection, segregated	96,000	166,000	166,000	221,000	221,000	81,000
Right-of-way (ROW) avoidance area	0	116,000	92,000	29,000	0	42,000
ROW exclusion area	0	53,000	0	0	0	0
Open to ROW	371,000	201,000	20,000	342,000	371,000	329,000
Designated utility corridor[2]	0	1,000	1,000	56,000	56,000	1,000

Source: BLM GIS 2017
[1]Acreages are rounded to the nearest thousand for ease of interpretation
[2]Open to development of Umiat, Ambler, or Inner Dalton Corridors

G.1.6 Ecological Benchmarks (BENCHMARK)

SUITABILITY RETENTION: Hydrologic connectivity, size, and intactness (Alternatives B, C1 and E) Cumulative discretionarily land use authorizations would be inventoried in relation to the benchmark area. Discretionary land uses may not be authorized in BLM-managed watersheds within benchmarks if they would result in any of the following:

- Temporarily or permanently disrupt hydrologic connectivity in any watershed such that the next higher and lower order watersheds would be disconnected from each other because of the proposed action.
- Reduce the size of the total suitable benchmark area below the minimum dynamic reserve size.
- Temporarily or permanently reduce intactness below 80 percent in any watershed that contributes to the makeup of a benchmark area. All disturbed areas that are not fully reclaimed and deemed complete in accordance with the standards in **Appendix L**, Reclamation Standards for All Surface-Disturbing Activities, of the RMP/EIS would be counted against watershed intactness.

SUITABILITY RETENTION: Ecological representation (Alternatives B, C1, and E) Key ecological traits that contribute to benchmark suitability—land cover, lake edge density, climate moisture index, and gross primary productivity would be monitored by measuring them once every 3 years. If a downward trend in any one or more of the four traits is detected between two measurements, then monitoring would change to an annual schedule. If a downward trend in any one or more of the four traits is detected in three sequential measurements, then an analysis would be conducted to determine the causal factors. If the cause is determined to be partially or wholly attributable to BLM-permitted activities, then permitting of new discretionary activities may cease or require further analysis; moreover, all practicable relevant mitigation would be applied to nondiscretionary activities until the trend reverses for three sequential measurements.

G.2 Ecological Benchmarks Identification

The BLM used the BEACONs conservation matrix model to identify areas that currently have characteristics making them suitable as ecological benchmarks for the eight ecoregions in the planning area. These are areas that currently meet criteria that make them suitable as ecological benchmarks for the eight ecoregions in the planning area.

These characteristics are as follows:

- Hydrologic connectivity
- Size, relative to the minimum dynamic reserve
- Intactness (80 percent or greater)

- Representation of key ecological traits (land cover, lake edge density, climate moisture index, and gross primary productivity)

These characteristics are important for maintaining ecological resilience and landscape connectivity (BEACONS 2017). Within an adaptive management framework, benchmark areas serve as reference areas or controls for detecting and understanding the influence of human activity on ecological systems. They can support identification of management practices that sustain the many environmental, cultural, and economic values associated with the northwest boreal region and help to manage risk (Kachergis et al. 2020).

In this manner, the BLM can use adaptive management to evaluate the effects of permitting decisions by using monitoring tools. One example is using the BLM Assessment, Inventory, and Monitoring indicators (MacKinnon et al. 2011; Taylor et al. 2014; BLM 2015) to compare effects of varying use levels and mitigation measures applied to permitted activities inside and outside the benchmarks. The BEACONS geographic information system products and techniques also can be used as a tool to identify areas with minimal conflict between maintaining ecological integrity and connectivity and potential development permitting scenarios.

The Central Yukon RMP interdisciplinary team refined the BEACONS outputs into manageable options to be carried forward in the RMP alternatives using the following process:

- **Excluding ecoregions.** The BLM originally included eight ecoregions in the BEACONS analysis. Four of these were excluded from further consideration because they either overlapped little with the planning area, or they did not have many acres of federal land within their boundaries. The remaining four ecoregions were retained to plan for resilience as part of the Central Yukon RMP/EIS planning process.

Retained Ecoregions	Eliminated Ecoregions
Kobuk Ridges and Valleys	Alaska Range
Ray Mountains	Lime Hills
Yukon River Lowlands	Nulato Hills
Kuskokwim Mountains	Tanana Kuskokwim Lowlands

- **Refining list of potential benchmarks.** The model output created over 100 candidate benchmarks for each ecoregion. Analyzing the feasibility of managing each of these benchmarks would be prohibitively time intensive. The interdisciplinary team refined the list of benchmarks to be considered by restricting consideration to the top-ranked 12 or 13 benchmarks. The team ranked benchmarks using three criteria fundamental benchmark properties; resilience to climate change; and the amount of priority species habitat. An overall rank was obtained for each of the 100-plus benchmarks. The interdisciplinary team did not consider benchmarks ranked lower than 13.
- **Selecting benchmark polygons.** Using the list of top-ranked benchmarks for each ecoregion, the interdisciplinary team proposed two sets of benchmarks: those with the most BLM-managed land and those with the most CSU land.
- The following alternatives were proposed:
  - **Alternative B and E—Select BEACONS benchmark from 13 top-ranked benchmarks with the greatest amount of BLM-managed land** (see **Map G-1**). The goal under this alternative would be to maintain the characteristics that make these areas suitable as ecological benchmarks. This allows the BLM to establish quantitative planning objectives; monitor the effectiveness of management decisions in meeting those objectives; and use that information to inform adaptive

management strategies. The experimental control areas would lie mostly on BLM-managed lands, including approximately 4,622,000 acres of Central Yukon Field Office lands.

– **Alternative C1—Select BEACONS benchmark from the top-ranked 13 benchmarks with the greatest amount of CSU lands** (national wildlife refuge, national park and preserve, or national conservation area; see **Map G-2**). Cooperation with other federal land managers would be emphasized under this alternative. The goal would be to supplement or contribute to the effectiveness of CSU benchmarks by managing adjacent BLM-managed lands appropriately and in close cooperation with the CSU land manager.

  Similar to Alternative B, this alternative provides a framework that would allow the BLM, in cooperation with CSU land managers, to establish quantitative planning objectives and to monitor the effectiveness of management decisions to meet them, in order to inform adaptive management strategies. Benchmarks under Alternative C1 would incorporate 2,431,000 acres of BLM-managed lands in the Central Yukon Field Office.

G.3 CONNECTIVITY CORRIDORS

The use of corridors to connect core conservation areas is generally found in developed areas with highly fragmented ecosystems; however, there are also application examples in areas where opportunities exist for proactively conserving largely intact systems (Bennett and Mulongoy 2006), such as the landscapes of interior Alaska. The biodiversity benefits of such connectivity corridors can spill over into surrounding nontarget areas (Brudvig et al. 2009), extending the value of connectivity corridors beyond simply connecting core areas.

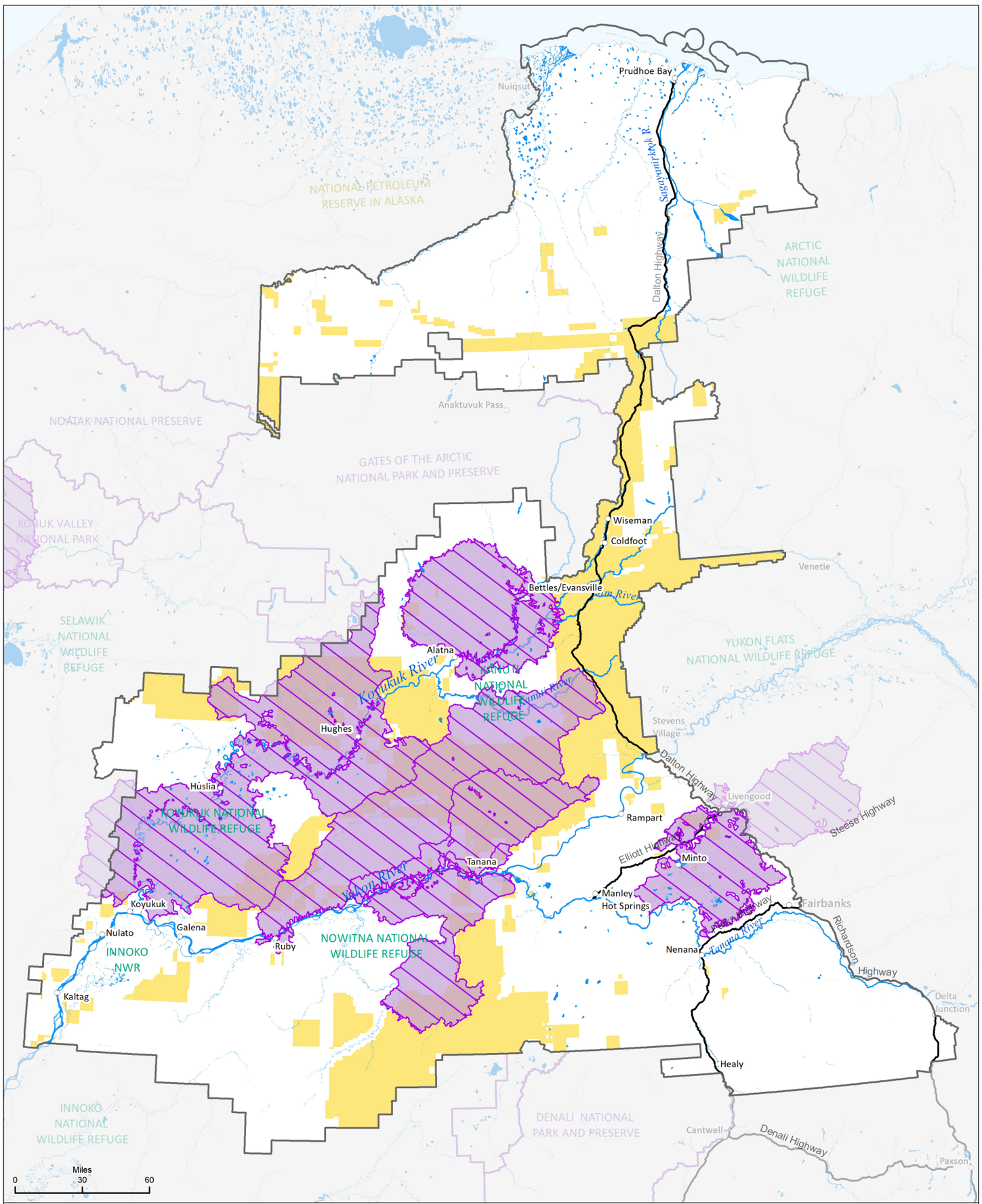
Classification of the habitat value is not just a question of habitat presence or absence. Areas fragmented by human use can still have considerable habitat value (McIntyre and Hobbes 1999). Because of this, management objectives in the matrix surrounding core conservation areas appropriately include recognition of ecological values and contributions to conservation across the landscape. This includes lands managed for multiple uses.

The combined benefits of connecting core conservation areas and extending conservation benefits into the matrix make connectivity corridors important for achieving landscape conservation goals on lands managed for multiple uses.

It is important to recognize that landscape connectivity corridors are landscape management features, not wildlife management features. The intent is not to capture currently used migration corridors, but to sustain resilience and capacity for adaptability in response to change.

The structural connectivity corridors proposed for all action alternatives (B, C1, C2, D, and E) in the Central Yukon RMP/EIS are based on enduring landscape features, which are not directly influenced by most management actions. However, given the recognition of least-cost pathways through the landscape, it follows that corresponding wildlife habitat connectivity is a functional requirement; thus, management actions focus on retaining general habitat connectivity, minimizing habitat fragmentation or loss, and avoiding barriers to wildlife movement within those corridors. See **Map G-3**, Alternatives B, C1, C2, D, and E: Connectivity Corridors. Connectivity corridors encompass 371,000 acres of BLM-managed lands.

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BEACONS Benchmarks Alternative B and E

BLM

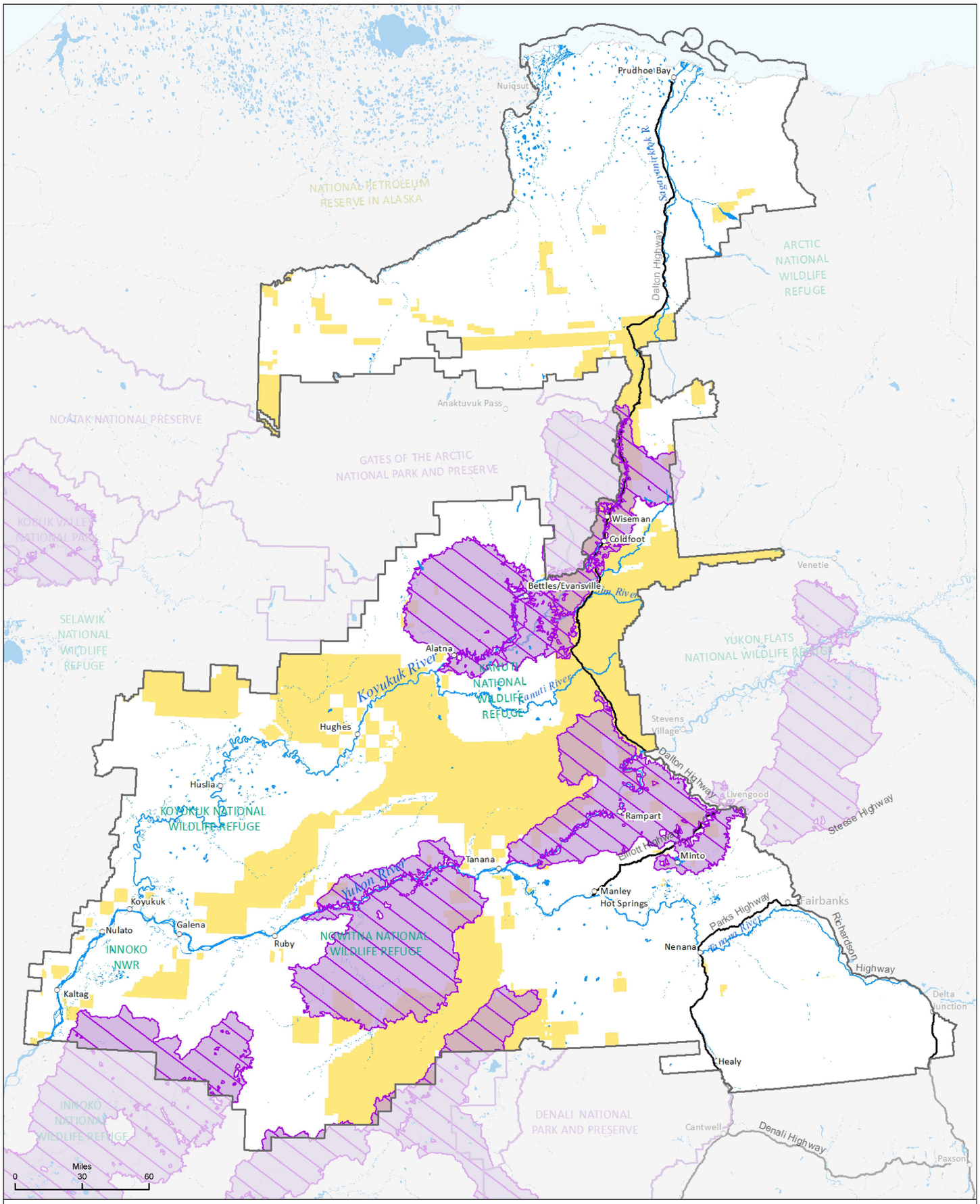


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Data Source: BLM GIS 2017

Map G.1

Print Date: 01/24/2024



BEACONS Benchmarks Alternative C1

BLM

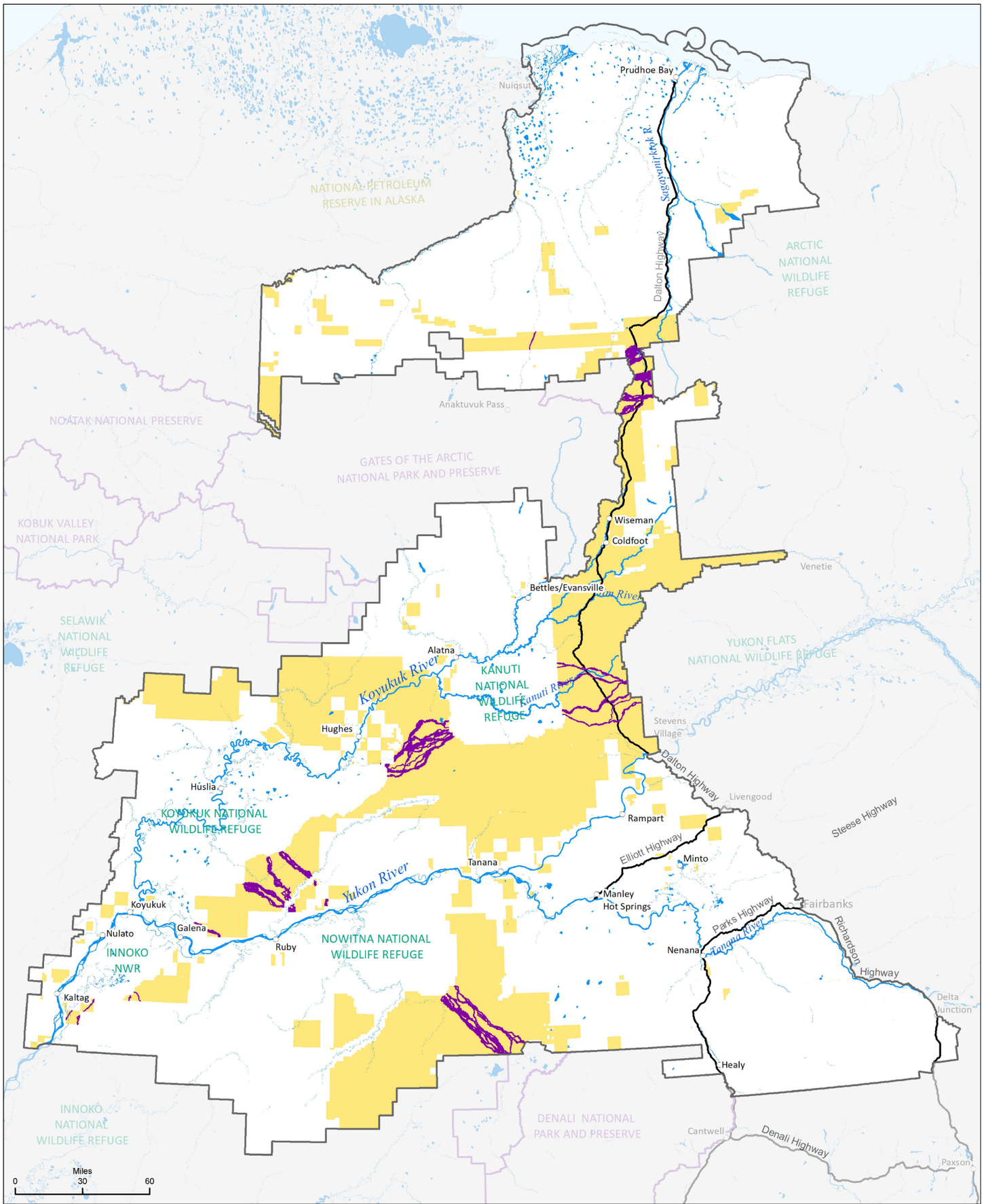


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Data Source: BLM GIS 2017

Map G.2

Print Date: 01/17/2024



Connectivity corridor

BLM



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Data Source: BLM GIS 2017

Map G.3

Print Date: 01/24/2024

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G.5 GLOSSARY

adaptive management. Adaptive management represents a process that tests, evaluates, and adjusts the assumptions, objectives, actions, and subsequent on-the-ground results from the implementation of RMP decisions. Used effectively, adaptive management provides resource managers with the flexibility to respond quickly and effectively to changing resource and user conditions. Changes in management actions are based on site-specific resource monitoring and evaluation. Adaptive management includes four phases: planning, implementation, monitoring, and evaluation.

BEACONS benchmark. A benchmark derived using the Boreal Ecosystem Analysis for Conservation Networks model.

benchmarks. Benchmark areas are intact, hydrologically connected areas large enough to accommodate natural disturbance regimes.

benchmark polygons. A line indicating the outer boundary of a benchmark on a map.

benchmark networks. Benchmark networks are groups of benchmark areas that, collectively, are representative of key ecological indicators for an ecoregion.

biodiversity. The genetic diversity, species diversity, and ecosystem diversity within an area of interest.

BLM sensitive species. Species designated as BLM sensitive must be native species that occur on BLM-managed lands and for which the BLM has significant management capability to affect their conservation status. In addition, one of the following two criteria also must apply:

- There is information that a species is known or predicted to undergo a downward trend such that viability of the species or a distinct population segment of the species is at risk across all or a significant portion of its range; or
- The species depends on ecological refugia, specialized habitats, or unique habitats, and there is evidence that such areas are threatened with alteration such that the continued viability of the species in that area would be at risk.

connectivity corridors. Components of a landscape that facilitate the movement of matter, energy, and/or organisms between elements of the landscape.

conservation matrix model. A conceptual framework for the design of ecological networks to facilitate biodiversity, conservation, and sustainable use across a spectrum of opportunities.

core conservation areas. Areas, such as parks and wildlife refuges, which are managed primarily for conservation purposes.

conservation system unit (CSU) benchmark. A benchmark consisting mostly of lands inside conservation system units designated in the Alaska National Interest Lands Conservation Act.

ecoregions. Geographical regions characterized by specific ecological patterns, including soil types, flora and fauna, climatic conditions, and ecological functions.

ecosystem services: The benefits that humans freely gain from the environment. These include provisioning services (such as food, water, and energy), regulating services (such as flood control, carbon sequestration, and air or water purification), cultural services (such as spiritual, therapeutic, and recreational benefits), and supporting services (such as nutrient cycling, primary production, and habitat provision).

Federal Land Policy and Management Act (FLPMA). A law passed in 1976 to establish public land policy; establish guidelines for its administration; and provide for the management, protection, development, and enhancement of the public lands.

fire regime. A description of the patterns of wildland fire occurrences, frequency, size, severity, and, sometimes, vegetation and fire effects in a given area or ecosystem. A fire regime is a generalization based on wildland fire histories at individual sites. There are five standard fire regimes:

- Fire Regime I—with a fire frequency of 0–35 years, surface fire to mixed fire type
- Fire Regime II—with a fire frequency of 0–35 years frequency, stand replacement fire type
- Fire Regime III—with a fire frequency of 35–100+ years, with a mixed fire type
- Fire Regime IV—with a fire frequency of 35–100+ years, with a stand replacement fire type
- Fire Regime V—with a fire frequency of 100+ years, with a stand replacement fire type

fundamental benchmark properties. Fundamental benchmark properties are intactness, hydrologic connectivity, size, and ecoregion representation. Areas that meet particular criteria for these properties are suitable to serve as ecological benchmarks.

habitat. The physical space in which a plant or animal lives, and the abiotic and biotic entities (e.g., resources) it uses and selects in that space.

landscape. An entity with structural elements of patch, mosaic, and corridor, reflecting a mix of ecosystems, habitats, and land uses.

landscape connectivity. The degree to which landscape components facilitate or impede movement of matter, energy, and/or organisms within and between elements of the environment.

landscape resilience. The ability of landscape components to absorb change and persist after perturbation.

linkages. See *connectivity corridors*.

minimum dynamic reserve. An estimate of the minimum reserve size required to incorporate natural disturbance and maintain ecological processes, relating the size of the dominant disturbance on a landscape to communities of species that may be differentially affected by this disturbance.

mitigation. Includes avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments (40 Code of Federal Regulations 1508.20).

objective. A description of a desired outcome for a resource.

planning area. The geographic area within which the BLM will make decisions during a planning effort. A planning area boundary includes all lands regardless of jurisdiction; however, the BLM will only make decisions on lands that fall under the BLM's jurisdiction (including subsurface minerals). Unless the State Director determines otherwise, the planning area for a RMP is the geographic area associated with a particular field office (43 Code of Federal Regulations 1610.1(b)). State Directors also may establish regional planning areas that encompass several field offices or states, or both, as necessary.

priority species. Species in the planning area that are recognized as significant for at least one factor, such as: density, diversity, size, public interest, remnant character, or age (BLM Handbook 1601).

resilience: The capacity to recover from shocks and stressors, and rebound, adapt to, and thrive amidst changing conditions.

resources (and their values, services, and/or functions). Natural, social, or cultural objects or qualities; resource values are the importance, worth, or usefulness of resources; resource services are the benefits people derive from resources; and resource functions are the physical, chemical, and/or biological processes that involve resources.

Appendix H

Aquatic and Riparian Resource Desired Conditions and Objectives

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
AIM	Assessment, Inventory, and Monitoring
BLM	Bureau of Land Management
GIS	geographic information system
HUC	hydrologic unit code

Appendix H. Aquatic and Riparian Resource Desired Conditions and Objectives

H.1 Aquatic and Hydrology Definitions

100-year floodplain. The area inundated by the 100-year flood or the 1 percent annual exceedance probability flood. It is the flood that has a 1 percent chance of being equaled or exceeded in any single year. It is often mistakenly thought of as the flood that occurs once every 100 years; in actuality, if a project within the 100-year floodplain is expected to last 30 years, it would have a 25 percent chance of experiencing flood damage due to a 100-year flood; for a project with an anticipated life of 15 years, the chance of incurring flood damage would be 14 percent. Annual precipitation is increasing in the planning area, so the probability of 100-year floods may increase (Thoman and Walsh 2019).

The 100-year floodplain is difficult to accurately map without extensive ground surveys. On-the-ground surveys conducted in the Central Yukon planning area typically employ the valley width that corresponds to an elevation of three times maximum bankfull depth as an estimate of the 100-year floodplain (FEMA 2015).

Given the difficulty of remotely mapping the 100-year floodplain and the desire to convey the intent of the various management alternatives to the reader, riparian buffer distances are used in this resource management plan as proxies for the 100-year floodplain. Buffer distances are given as a distance from bankfull elevation and are dependent on stream order as follows:

Stream Order	Buffer Distance (Feet)
First and second	100
Third	500
Fourth and fifth	1,000
Sixth through eighth	1,500

alevins. Newly spawned salmon or trout still carrying the yolk.

aggradation. A raising of the local base level of a stream due to sediment deposition.

anadromous. Fish that live most of their lives in the sea but return to freshwater to spawn. Anadromous streams are those that support fish species that migrate between freshwater and marine waters, such as salmon.

Bank Erosion Hazard Index. Evaluates the susceptibility to erosion for multiple erosional processes, such as surface erosion, fluvial entrainment, or mass erosion. The Bank Erosion Hazard Index uses a variety of variables (Rosgen 2008) and can be used to establish corresponding streambank erosion rates (Rosgen 2006).

bank-to-height ratio. A quantitative measure of the degree of vertical containment or degree of channel incision, as determined by the ratio of the lowest bank height, divided by the maximum bankfull depth.

bankfull depth (maximum). Maximum depth of the bankfull channel cross-section or the distance between the thalweg[1] and bankfull stage.

bankfull depth (mean). The mean depth of flow at the bankfull stage, determined as the cross-sectional area, divided by the bankfull surface width.

bankfull discharge. A frequently occurring peak flow whose stage represents the incipient point of flooding. It is often associated with a return period of 1–2 years, with an average of 1.5 years. It is expressed as the momentary maximum of instantaneous peak flows, rather than the mean daily discharge.

bankfull stage. The elevation of the water surface associated with the bankfull discharge.

bankfull width. The surface width of the stream, measured at the bankfull stage.

bankfull width-to-depth ratio. An index value that indicates the shape of the stream channel cross-section (ratio of bankfull width to the mean bankfull depth).

degradation. A lowering of the local base level of a stream, due to channel incision processes.

dynamic equilibrium. A river or stream's ability in the present climate to transport the streamflows and sediment of its watershed, overtime, in such a manner that the channel maintains its dimension, pattern, and profile without either aggrading or degrading.

entrenchment ratio. The vertical containment of a river that is quantitatively defined as the width of the flood-prone area, divided by the bankfull width (the flood-prone area width is that of the channel at an elevation that is twice the maximum bankfull riffle depth).

essential fish habitat. Those waters and substrate necessary for fish for spawning, breeding, feeding, or growing to maturity; it is defined by the Magnuson-Stevens Fishery Conservation and Management Act (Public Law 94-265).

flood-prone area width. The width of the channel associated with the elevation that is twice the maximum bankfull depth. It includes the floodplain of the river and often the low terrace of alluvial streams.

high-value watershed. Watersheds with the highest fisheries resource values in the Central Yukon planning area, this metric was used during the development of Alternatives B, C1, C2, D and E. The development is explained in section H.2 of this appendix.

hydrologic connectivity. The degree to which landscape components facilitate or impede the water-mediated transfer of matter, energy, or organisms within or between elements of the hydrologic cycle.

hydrologic cycle. Includes the fundamental components of precipitation, infiltration, runoff, and evaporation that indicate the origin of water and determines the downstream transfer of water, sediment, nutrients, and organic debris; it ultimately defines the physical and biological character of the stream.

hydrologic regime. Variations in the state and characteristics of a water body that are regularly repeated in time and space and that pass through phases, such as a season.

[1]Line connecting the lowest points of successive cross-sections along the course of a valley or river.

lentic. Wetlands or riparian areas with standing water habitat, such as lakes, ponds, seeps, bogs, and meadows.

macroinvertebrate. Bottom-dwelling species, such as crayfish and mayflies.

potential natural conditions (PNC). PNCs represent the range of chemical, physical, and biological conditions expected at a site under minimal anthropogenic impacts, but they include natural disturbances. In the case of RMP objectives and reclamation plans, the BLM uses indicators of ecosystem health and percentiles to assess the attainment of management objectives. For indicators that are expected to decrease with disturbance (e.g., vegetation composition), values above the 25th percentile would be considered within PNCs. Values between the 25th and 5th percentile would be considered a moderate departure from PNCs, and values below the 5th percentile would be considered a major departure from PNCs. For indicators that are expected to increase with disturbance (e.g., the amount of bare ground, nonnative invasive plant species, and the proportion of soil surface in large intercanopy gaps), values below the 75th percentile would be considered within PNCs. Values between the 75th and 95th percentile would be considered a moderate departure from PNCs, and values above the 95th percentile would be considered a major departure from PNCs.

riparian. Relating to or situated on the banks of a river.

riparian-wetlands. A form of wetland transition between permanently saturated wetlands and upland area. These areas exhibit vegetation or physical characteristics reflective of permanent surface or subsurface water influence. Typical riparian areas are lands along, next to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are such sites as ephemeral streams or washes without vegetation that depends on free water in the soil.

river stability (dynamic equilibrium). A river or stream's ability in the present climate to transport the streamflows and sediment of its watershed over time, in such a manner that the channel maintains its dimension, pattern, and profile without aggrading or degrading.

Rosgen stream classification. A classification system for natural rivers in which a morphological arrangement of stream characteristics is organized into relatively similar stream types. Morphologically similar stream reaches are divided into seven major stream type categories (A–G) that differ in entrenchment, gradient, width/depth ratio, and sinuosity in various landforms (Rosgen 1994).

stream hydrograph. A chart that displays the change of a hydrologic variable over time. One of the most frequently created hydrographs shows the change in discharge of a stream over time.

site potential. The highest ecological status a riparian-wetland area can attain, given no political, social, or economic constraints; often referred to as the potential natural community.

H.2 WATERSHED AQUATIC RESOURCE VALUE MODEL

An aquatic resources value model was developed for the Central Yukon Field Office, in conjunction with this plan. It is an indicator of the value of fish resources and habitat in the planning area.

On the lands that it manages, the Bureau of Land Management (BLM) ranked 767 watersheds, using the aquatic resources value model, after segregating the planning area into 6th level (12-digit) hydrologic units. The agency used the hydrologic unit code (HUC) system because it provides a framework that delineates

watersheds using an accepted national standard hierarchical system based on surface hydrologic features. The ranking system was developed to score the fisheries values by watershed, using a combination of automated geographic information system (GIS) modeling and professional judgment.

Primary metrics that the BLM considered in ranking were fish species presence (diversity), salmon and non-salmon diadromous species[2] habitat, and the presence of unique or rare fishery resources or habitat.

Based on the model, the highest ranked watersheds—those with the highest fisheries resource values in the planning area—were used during the development of Alternatives B, C1, C2, D and E. These are referred to as high-value watersheds in the Central Yukon Resource Management Plan and EIS.

Aquatic resource value rankings by watershed are depicted on **Maps 3.5**, **3.6**, and **3.7** in **Appendix A**. **Table H-1** outlines the ranking criteria and associated point system.

Table H-1
Rank Criteria and Scoring Used to Identify Aquatic Resource Values

Value	Definition	Score
Endangered Species Act aquatic resources	Federally listed aquatic species are present.	3 Points
Essential fish habitat is present	Alaska Department of Fish & Game Anadromous Waters Catalog GIS data served as the basis for determining if salmon species occur in the watershed.	2 Points
Fish species diversity	Based on reports and professional knowledge, determine the number of fish species occurring in the watershed.	1–2 Species = 1 Point 3–4 Species = 2 Points 5–6 Species = 3 Points 7–8 Species = 4 Points > 9 Species = 5 Points
Non-salmon diadromous species present	Using the Anadromous Waters Catalog GIS data, select watersheds that contain non-salmon species, such as whitefish and lamprey.	2 Points
Unique/rare fishery resource or habitat or both	Spawning areas for salmon and non-salmon diadromous species based on the Anadromous Waters Catalog GIS data (5 points) and the presence of unique/rare fisheries resources (5 points).	Potential for 10 Points

H.3 WATERSHED CONDITION MODEL

The BLM developed a watershed condition model for this plan as an indicator of habitat health in the planning area. The agency evaluated the resource condition using the model, after segregating by area and using sixth level hydrologic units, as was done for the aquatic resource value model. The process categories and attributes used in the evaluation were adapted from a Forest Service Watershed Condition Classification Technical Guide (Potyondy and Geier 2011). The four process categories are the aquatic physical, aquatic biological, terrestrial physical, and the terrestrial biological. Each process category was evaluated using a defined set of attributes (**Table H-2**). Modifications and additional attributes were formulated by the BLM-Alaska fisheries staff, working closely with GIS staff. Watershed condition rankings are depicted on **Map 3.8** in **Appendix A**.

[2]Species that migrate alternately between freshwater and salt water.

The model is used to inform the alternative development process, as well as to establish the current watershed condition and the predicted trend for the impacts analysis (**Chapter 3** of the Central Yukon Resource Management Plan/Environmental Impact Statement). The results also quantify the number of watersheds needing additional management attention to achieve the desired conditions.

Table H-2
Attributes and Scoring Used to Identify Watershed Condition

Weighting	Attribute	Definition	Scoring
Aquatic Physical (Weighting = 30 Percent)	Impaired waters (303[d])	Alaska Department of Environmental Concern Impaired Waters GIS data was used to determine if Clean Water Act Section 303(d)-listed streams were present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Not formally listed water quality problems	Reports and professional knowledge were used to determine if other water quality problems were present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Flow characteristics	National Hydrography Dataset Point and Flow line GIS data was used to determine if reservoirs, dams, or diversion facilities were present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Habitat fragmentation	Reports and professional knowledge were used to determine if habitat fragmentation was occurring.	If aquatic habitat fragmentation areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Large woody debris	Reports and professional knowledge were used to determine if large woody debris is present and continues to be recruited into the system at near natural rates.	If areas are in the 6th level HUC, where large woody debris is present but is recruited into the system at less than natural rates because of riparian management, the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Physical (Weighting = 30 Percent)	Channel shape and function	Reports and professional knowledge were used to determine if stream channel shape and function exhibit the range of conditions expected in the absence of human influence.	If areas are in the 6th level HUC, where streams exhibit a channel shape and function outside the range of conditions expected, the watershed receives 3 points; otherwise, 1 point is awarded.

Weighting	Attribute	Definition	Scoring
Aquatic Physical (Weighting = 30 Percent)	Lentic system functionality	Reports and professional knowledge were used to determine if physical alteration from the natural condition of lentic bank/shore integrity, vegetation community, soil structure, or hydrology were present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Biological (Weighting = 30 Percent)	Life form presence	Reports and professional knowledge were used to determine if expected aquatic life forms and communities are present, based on the potential natural communities present, or some life histories have been lost, or range has been reduced in the watershed due to human disturbance of habitat.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Biological (Weighting = 30 Percent)	Native species	Alaska Exotic Plants Information Clearinghouse GIS data was used to determine if nonnative species are present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Biological (Weighting = 30 Percent)	Aquatic invasive plant species	Alaska Department of Environmental Concern GIS data was used to determine if aquatic nonnative species are present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Aquatic Biological (Weighting = 30 Percent)	Vegetation condition	Reports and professional knowledge were used to determine if native vegetation is functioning properly throughout the stream corridor or along wetlands and water bodies.	If areas are in the 6th level HUC, where native vegetation is found to be nonfunctioning, then the watershed receives 3 points; otherwise 1 point is awarded.
Terrestrial Physical (Weighting = 30 Percent)	Road and trail maintenance	Road, Revised Statute 2477, and trail GIS data were used to determine there are if roads or trails.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Terrestrial Physical (Weighting = 30 Percent)	Road's proximity to water	Road, Revised Statute 2477, and trail GIS data were used to determine if roads or trails were within 300 feet of a waterbody.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.

Weighting	Attribute	Definition	Scoring
Terrestrial Physical (Weighting = 30 Percent)	Soil productivity/erosion	GIS data on roads, Revised Statute 2477, and trails buffered by 35 feet were used to determine the effect of roads and trails on soil productivity and erosion.	The buffered area in each watershed is divided by the total acres of the watershed. A value of 1 is assigned when buffered routes do not fall within a watershed; a value of 2 is assigned when the acreage of buffered routes is greater than 0 and less than 1; a value of 3 is assigned when the acreage of buffered routes is greater than or equal to 1.
Terrestrial Physical (Weighting = 30 Percent)	Soil contamination	Alaska Department of Environmental Concern contaminated sites GIS data were used to determine if contaminated sites are present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.
Terrestrial Biological (Weighting = 10%)	Terrestrial invasive species	Alaska Exotic Plants Information Clearinghouse GIS data were used to determine if terrestrial nonnative plants are present.	If these areas are in the 6th level HUC, then the watershed receives 3 points; otherwise, 1 point is awarded.

Watershed Condition Model Summary Calculation:

((([Impaired_Waters] + [Water_Quality_Problems] + [Flow_Characteristics] + [Habitat_Fragmentation] + [Large_Woody_Debris] + [Channel_Shape_Function] + [Lentic_System_Functionality])/7)*.3) + ((([Life_Form_Presence] + [Native_Species] + [Aquatic_Invasive] + [Vegetation_Condition])/4)*.3) + ((([Road_Trail_Maint] + [Proximity_Water] + [Soil_Productivity_Erosion] + [Soil_Contamination])/4)*.3) + ((([Terrestrial_Invasive_Species])/1)*.1)

Watershed Ranking:

Watershed Condition Model Summary is equal to 1.0: functioning properly
Watershed Condition Model Summary is greater than 1.0–2.0: functioning at risk
Watershed Condition Model Summary is greater than 2.0: impaired function

H.4 Desired Conditions and Objectives

There is a goal of no net loss of aquatic habitat function. Reclamation standards should be applied, and resource conditions should be monitored for floodplains and riparian and aquatic resources with the application of standard operating procedures for all development activities.

See **Table H-3** for desired conditions and thresholds.

H.5 RATIONALE

Table H-3
Aquatic and Riparian Resource Desired Conditions and Objectives—Common to All Action Alternatives

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Watersheds are managed so as to maintain the integrated ecological functions of rivers, streams, wetlands, and lakes and their associated riparian areas. They are also managed to provide, into perpetuity, the ecosystem services associated with properly functioning aquatic and riparian habitat: biological diversity, recreation, aesthetics, soil productivity, water quality, food, and raw materials.	N/A	N/A	N/A
Riparian zones are fully functional over the width of the 100-year floodplain.	Riparian PFC or AIM-based PNC	Determine the need for floodplain disturbance; outline required eight-step evaluation (see FEMA 2015).	Before the project is authorized, the proponent must demonstrate why the 100-year floodplain cannot be avoided; if so, the proponent should describe the methods used to minimize disturbance, such as excavating and storing riparian vegetation, to maintain vigorous conditions for replanting following the project. The proponent should use methods to protect floodplain function; examples are project sequencing, to minimize disturbance and make efficient use of riparian vegetation for immediate replanting; planning riparian leave strips for source vegetation; and striving to restore floodplain function within 3 years following project completion.

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Riparian zones are fully functional over the width of the 100-year floodplain.	Riparian-wetland AIM, lotic AIM, or other appropriate methods.	The following would be attained within 3 years of project completion: riparian-wetland spatial extent, vegetation density, dominant woody vegetation composition, age-class distribution, and canopy cover equivalent to the site potential.[3] This would be an interim objective until regional reference conditions are quantified; at that time, the objective would be greater than the 25th percentile of the regional reference condition of the regional reference condition based on lotic and/or riparian-wetland AIM data or other regional reference data The riparian-wetland area would have a functional rating as determined through riparian-wetland AIM, lotic AIM, or other appropriate methods.	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Floodplain connectivity (lateral)	Maintain a bank-to-height ratio less than the 75th percentile of reference conditions (PNC) (1.0:1.0, if new construction).	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Floodplain width	No loss of the 100-year floodplain width.	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Stream channel maintenance flows	Prioritize applying for several instream flow reservations over the life of the plan; this is to protect channel maintenance flows and provide for habitat needs of fish in high value HUCs.	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Floodplain connectivity (longitudinal)	Longitudinal connectivity: Streams and stream segments must remain connected and accessible to all species and life stages, as dictated by natural stream potential.	N/A

[3]The highest ecological status a riparian-wetland area can attain, given no political, social, or economic constraints; often referred to as the potential natural community.

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Bed form diversity	As soon as the disturbance activity is done and for 5 years following reclamation, thresholds considered to be functioning will be based on regional reference reach conditions (25th to 75th percentile). They will address percent pool, pool-to-pool spacing ratio (see Harman et al. 2023 for interim threshold values; final values to be provided on completion of the AIM regional reference condition and other regional reference data).	N/A
Watersheds managed to closely approximate natural successional processes and hydrologic regimes (the frequency and magnitude of watershed disturbance match to the extent possible those that exist naturally).	Stream channel design	Stream diversions, bypasses, stream relocation, or stream reconstruction projects will be designed to achieve stable channel form, floodplain connectivity, bedform diversity, and riparian vegetation within PNC, using regional reference datasets or stream design datasets.	N/A
Manage the physical, chemical, and biological properties of soil so that they support the full productive capacity of the land and its ecological processes, such as hydrological function of watersheds; provide the ecosystem services associated with properly functioning aquatic and riparian habitat.	Erosion	Erosion is managed so as to have no apparent rills, gullies, trail braiding, or other indicators of degradation.	N/A
Manage the physical, chemical, and biological properties of soil so that they support the full productive capacity of the land and its ecological processes, such as hydrological function of watersheds; provide the ecosystem services associated with properly functioning aquatic and riparian habitat.	Soil characteristics	Soil depth following disturbance will replicate pre-disturbance depth, so as to not restrict root growth or result in moisture extremes.	For reclaimed sites, soil amendments to adjust pH, to provide nutrients, and to increase soil microbial activity will be dictated by the results of a soil analysis.
Manage the physical, chemical, and biological properties of soil so that they support the full productive capacity of the land and its ecological processes, such as hydrological function of watersheds; provide the ecosystem services associated with properly functioning aquatic and riparian habitat.	Soil characteristics	Abnormal hydrologic heaving, slumping, or thawing of permafrost is not occurring.	N/A

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Manage the physical, chemical, and biological properties of soil so that they support the full productive capacity of the land and its ecological processes, such as hydrological function of watersheds; provide the ecosystem services associated with properly functioning aquatic and riparian habitat.	Soil characteristics	The threshold for impairment to soil fertility, nutrient cycling, and hydrologic cycling processes will be less than 0.5 percent of any 6th level HUC.	N/A
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	N/A	Rosgen geomorphic channel design or other appropriate restoration planning methods will be used to develop an appropriate channel geometry and slope for the anticipated discharge and sediment regime. Designs will be required prior to disturbance and will be implemented as soon as the disturbance is over; it will be monitored and maintained for 5 years following reclamation.	N/A
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition	Lateral channel stability (streambank stability)	As soon as the disturbance is over and for 5 years following reclamation, stream design results in laterally stable stream banks as indicated by PNC values for Stream Bank Cover and Stability derived from regional reference condition. Interim values would use Bank Erosion Hazard Index/Near Bank Stress ratings within the functional range as presented in Table 8.7 of Harman et al. 2012.	N/A
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition *(continued)*	Stream competency and stream power	Bed material is sized or stream channel is designed to prevent aggradation or degradation of stream channel (channel at dynamic equilibrium).	N/A
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition *(continued)*	Stream dynamics	Multi-metric bioassessment index (MMI) values for benthic macroinvertebrate will be managed for functional conditions as outlined in the AK Stream Quantification Tool (2021) or regionally adapted MMIs. N/A	To the extent possible, avoid modifying high sediment supply stream channels and streambanks of Rosgen channel type (1996; pp. 8, 9): A-3 through A-6, C-4 through C6; D-type, F-3 through F6; G3 through G6. N/A
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition *(continued)*	Road density	Manage roads and access trails so as to avoid the 100-year floodplain; road density will be 0.1 mile per square mile or less in the watershed area (6th level HUC).	N/A

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition *(continued)*	Water quality	Meet federal and state water quality laws.	On Clean Water Act, Section 303(d)-listed streams, once a total maximum daily load is established, the BLM would authorize no additional disturbance until the proponent can demonstrate that further disturbance would be in compliance with water quality standards established in the total maximum daily load.
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition *(continued)*	Water quality	Meet federal and state water quality laws.	Must meet Alaska water quality antidegradation law. For all surface-disturbing activities requiring an erosion control plan, address the parameters commonly required in Alaska stormwater pollution prevention plans.
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition *(continued)*	Water quality	Meet federal and state water quality laws.	As a means to address nonpoint source erosion, the BLM would encourage vegetation non-disturbance zones next to lotic and lentic[4] surface waters and may be applied toward compensatory mitigation to offset functional loss, where disturbance cannot be avoided.
Natural input rates of sediment, organic matter, and nutrients; no excessive erosion or deposition *(continued)*	Water quality	Meet federal and state water quality laws.	Suction dredging would be limited to the active channel, so streambanks would not be disturbed; instream use of heavy equipment to move substrate would not be allowed.

[4]Fast-moving and slow-moving

Desired Conditions	Measurable Objective to Achieve Desired Conditions	Condition Thresholds	Stipulations
Watersheds are managed to create and sustain functional terrestrial, riparian, aquatic, and wetland habitats capable of supporting diverse populations of native aquatic- and riparian-dependent species and to be resilient and able to recover rapidly to a minimum of level 4 stream functional condition.	Vertical channel stability	Channels are vertically stable; maintain appropriate entrenchment ratios, based on the channel type and landscape setting.	N/A
	Large woody debris	In aquatic and riparian systems that evolved with wood near the streams, large woody debris is present and continues to be recruited into the system at site potential rates as evidenced by conditions occurring within the range of PNC based on regional reference conditions.	N/A
Natural disturbance regimes remain the primary drivers of shifting patterns of species composition and structure in and between watersheds. Stream channel morphology, structure, complexity, and diversity are in ranges that are characteristic of the magnitude, timing, and duration exhibited by stream hydrographs under natural conditions.	Large woody debris *(continued)*	A goal of no net loss of aquatic habitat function with high value watersheds. Apply reclamation standards and monitoring for resource conditions in floodplain, riparian, and aquatic resources and apply standard operating procedures for all development activities.	N/A
	Stream discharge	Watershed has free-flowing rivers and streams, or dams and diversions are operated to mimic natural hydrographs.	N/A
Retain native community composition of riparian plant and fish species at site potential.	Community composition	Over the life of the plan, conduct systematic surveys of priority restoration watersheds to establish reference condition datasets necessary to support future restoration efforts.	N/A
Watersheds managed to prevent the introduction of invasive species.	Invasive species	Aquatic invasive species are controlled using methods demonstrated to be safe for soil, water, and native aquatic resources.	Following documented occurrence of invasive plant species on the currently deployed nonnative invasive species list for management, or aquatic invasive species, develop a plan for eradication or control as soon as practicable.

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Appendix I

Dall Sheep and Caribou Habitat Management

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
ACEC	area of critical environmental concern
BLM	Bureau of Land Management
DSHA	Dall sheep habitat areas
DSMC	Dall sheep movement corridors
DSSA	Dall sheep study area
GMH	Galena Mountain herd
HHH	Hodzana Hills herd
OHV	off-highway vehicle
RMH	Ray Mountains herd
ROW	right-of-way

Appendix I. Dall Sheep and Caribou Habitat Management

I.1 DALL SHEEP HABITAT MANAGEMENT

I.1.1 Dall Sheep Habitat Management

The Bureau of Land Management (BLM)-managed Dalton Utility Corridor traverses prime Dall sheep habitat in the Brooks Range of Alaska. The area is famous to backcountry hunters who value the rare road-accessible sheep-hunting opportunities. In support of Secretarial Order No. 3362, which highlights the duty of federal agencies to "expand opportunities for big-game hunting by improving priority habitats" and "to increase and maintain sustainable big game populations," the BLM Central Yukon Field Office proposes to safeguard the highest priority habitat for Dall's sheep, in particular, the known naturally occurring mineral sources (licks) for Dall's sheep. These areas are referred to as Dall Sheep Priority Habitat Management Areas in **Map I-1**, below.

Mineral lick identification and monitoring in the region began before highway construction and has continued with a recent effort by the BLM to quantify mineral lick chemical properties and use patterns. It is known that each mineral lick provides a unique suite of trace minerals (region-specific data available; BLM unpublished data). A single subpopulation of sheep regularly rotates to several mineral licks in each area, further indicating that no single mineral lick will meet all the nutritional needs of a given sheep or subpopulation of sheep.

There is the potential for human development in and around the mineral licks, such as placer mining in low-lying areas and communication towers on mountaintops. Without clear delineation of priority habitat destruction of mineral licks, reduced accessibility is highly possible, with unknown but likely detrimental impacts on a population level.

Dall sheep habitat management under Alternative A is open to rights-of-way (ROWs) and mineral materials but is closed to fluid mineral and nonenergy solids leasing. The habitat is captured in five areas of critical environmental concern (ACECs) with varied management.

Alternatives B and E identify Dall sheep habitat in six ACECs where management varies with restrictions within 0.5 miles of mineral licks and proposed Federal Land Policy and Management Act withdrawals, closure to mineral materials sales, ROW avoidance and exclusion areas, timing limitations for development activities, and travel management limitations for permitted flights.

Alternatives C2 and D do not propose special management for Dall sheep habitat.

Dall sheep habitat management under Alternatives C1 and E propose a tiered level of management to accommodate development in core habitat areas, with management actions scaled to the habitat area type. The Alternative C1 management has been defined under three headings with corresponding geographic areas and management parameters, as follows: Dall sheep habitat areas (DSHA), Dall sheep movement corridors (DSMC), and a Dall sheep study area (DSSA) (see **Map I-1**, below); Alternative E management is defined as DSHA only. DSHA are BLM-managed lands identified as having the highest habitat conservation value in relation to Dall sheep. DSMC are BLM-managed lands identified by the BLM and other agencies as having significant value to Dall sheep for accessing seasonal ranges, mineral sources, forage habitat, and escape terrain. The spatial dimensions of the DMSCs was informed by Brownian Bridge models derived from

location information collected between 2009 and 2012 from 20 radio-collared ewes. Because the knowledge of Dall sheep habitat utilization in the planning area is not currently inclusive of all known Dall sheep habitat, a DSSA is identified. It includes the remainder of the planning area that is known to be inhabited by Dall sheep but is not identified as DSHA or DSMC.

Alternative C1

Action (Effects Minimization and Mitigation Requirements)

In DSHA and DSMC, apply the management techniques below to discretionary disturbances or activities.

A—Disturbance limit

Manage permitted human disturbances, whether temporary or permanent, so they cover less than 5 percent of DSHA and 15 percent of DSMC. If either limit is exceeded on BLM-managed lands, then no new permitted human disturbances would be permitted until the disturbance has been reduced to less than the cap. Disturbance calculations would include disturbances from all permitted activities, including discretionary actions. There would be no disturbance limit in DSSA.

B—Noise restrictions

In DSHA, from April 15 to June 15, motorized intrusions may occur for up to 10 percent of any hour, and as many as 5 motorized noise events over ambient sound may occur per day. Motorized noise would not exceed 50 dBA (a-weighted decibels) at identified DSHA between 7 a.m. and 7 p.m.

C—Best management practices

In DSHA, DSMC, and the DSSA, while incorporating applicable best management practices, allow activity to occur. Economic considerations, such as increased costs associated with a given activity, would not necessarily mean that a best management practice be altered or rendered inapplicable.

Action (Vegetation)

Prioritize DSHA for vegetation management and conservation, including land health assessments.

Prohibit vegetation removal in DSHA.

Action (Trails and Travel Management—Aircraft Restrictions)

Flights associated with BLM-permitted activities would be conducted more than 2,000 feet above ground level over DSHA (Cote 1996; Frid 2003; Hurley 2004) from April 15 to August 30.

In DSMC and the DSSA, implementation-level travel management planning would emphasize minimizing impacts on Dall sheep and reducing the potential for unauthorized routes, while meeting human access needs. This emphasis may require improving or closing routes or creating new routes. Comprehensive travel and transportation planning would emphasize a net neutral effect on Dall sheep habitat.

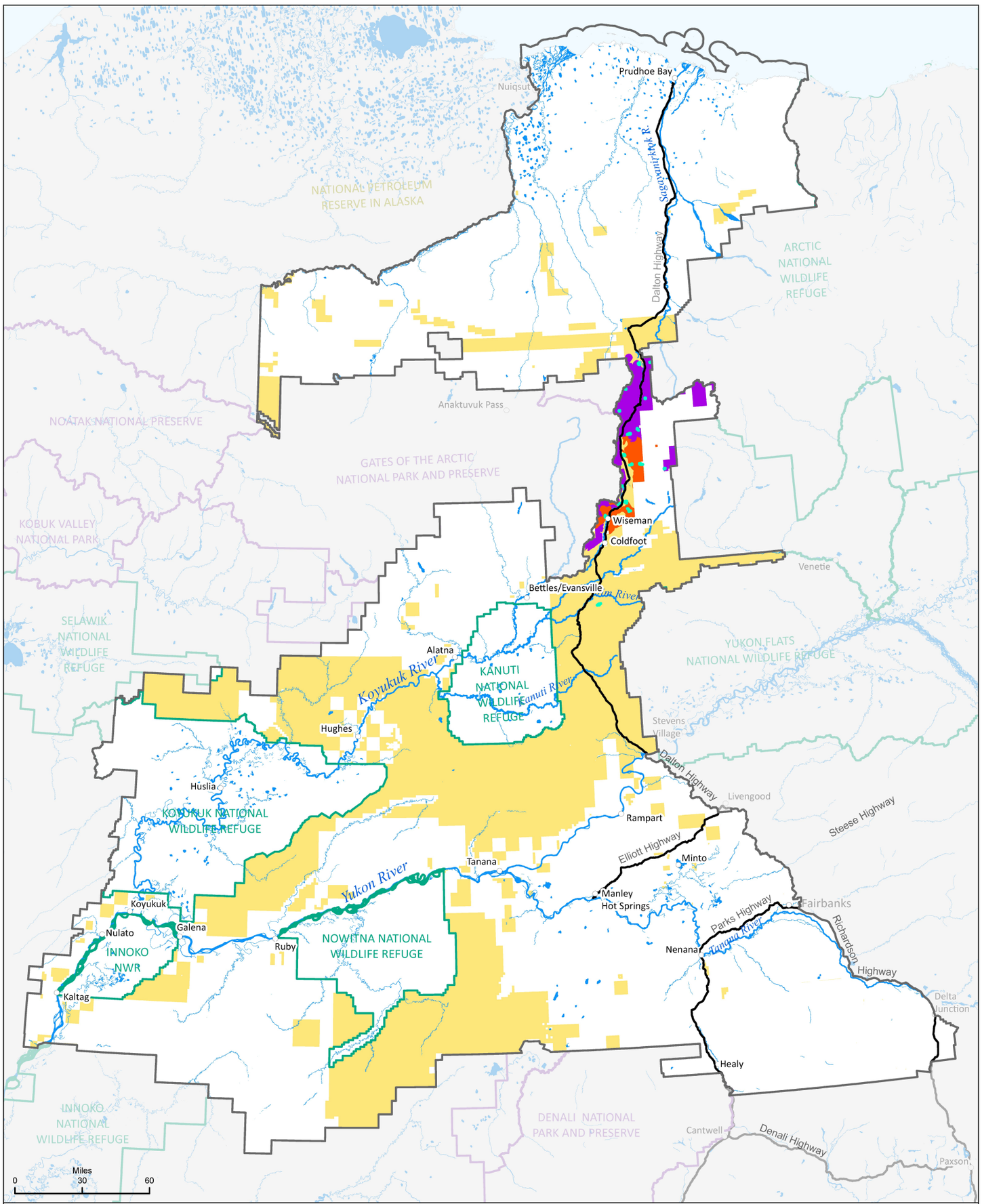
No new routes would be created in DSHA.

Action (Minerals)

Allow exploration for all minerals, such as geophysical, trenching, and drilling, in DSMC and the DSSA if they are not otherwise closed or withdrawn to obtain exploratory information.

Action (Fluid Minerals)

No surface occupancy stipulations would apply to fluid mineral leases in DSHA and DSMC.



Dall sheep habitat area (DSHA)

Dall sheep movement corridor (DSMC)

Dall sheep study area (DSSA)

BLM-managed lands



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Data Source: BLM GIS 2017

Map I.1

Print Date: 03/27/2024

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Action (Locatable Minerals)

Recommend DSHA for withdrawal from locatable mineral entry and development. In DSMC and the DSSA, locatable minerals authorizations would include all practicable mitigations to minimize surface disturbance and reduce impacts on sheep habitat and sheep movement. Any additional DSHA identified after the record of decision is signed would be managed as DSMC, with respect to locatable minerals.

Action (Mineral Materials)

DSMC and the DSSA would be closed to new mineral material disposal but would remain open to the expansion of existing active pits.

Action (Nonenergy Solid Leasable Minerals)

Close DSHA to nonenergy solid mineral leasing and development. In DSMC, exploration and prospecting noise levels would need to be monitored. They would not be allowed during sensitive pre-lambing and lambing periods, from April 15 to June 15, between 7:00 a.m. and 7:00 p.m.

Action (Linear and Site-Type ROWs, Permits, and Leases, Excluding Wind and Solar)

DSHA will be exclusion areas for new linear and site type ROWs, permits, and leases, except for within ROW corridors designated for aboveground use. DSMC will be avoidance areas for new ROWs, permits, and leases. Where avoidance is not possible in DSMC, placement of a new ROW/permit/lease would be allowed in areas that minimize the effects on the Dall sheep population, and the disturbance footprint would be calculated in the 15 percent disturbance limit for DSMC.

Renewal, amendment, or reauthorization of existing ROW permits in DSMC would include a review of ROW impacts on Dall sheep habitat. The permittee may be required to alter existing infrastructure to meet current guidance for ROWs in DSMC.

Action (Transmission Lines)

DSHA would be exclusion areas for transmission lines and would be avoidance areas for high voltage transmission line ROWs. Transmission lines would be allowed in areas where the effect on the Dall sheep population would be minimized. In DSMC, new transmission lines must be buried, to the extent feasible.

Action (Pipelines)

DSHA will be exclusion areas for major pipelines (greater than 24 inches) in areas outside of designated utility corridors and avoidance areas inside designated utility corridors. DSMC would be avoidance areas for major pipelines outside of designated utility corridors. When avoidance is not possible in avoidance areas, routes would be selected, subject to safety considerations, to minimize disturbance in DSHA and DSMC. In DSMC, pipelines must be buried, where feasible.

Action (Communication Sites)

DSHA would be exclusion areas and DSMC would be avoidance areas for communication towers. Where avoidance is not possible in DSMC or is necessary for human safety, communication towers would be allowed but would be in areas that minimize the effect on the Dall sheep population.

Action (Road ROWs)

DSHA would be exclusion areas and DSMC would be avoidance areas for road ROWs. If a road ROW is necessary for public safety or administrative access, or if it is subject to valid existing rights and creates new surface disturbance, it would be constructed to minimize the effects on the Dall sheep population.

Action (ROW Corridors)

In DSMC, ROWs in corridors should be avoided, if possible. Where avoidance is not possible, the following should be implemented:

- Allow new linear ROWs in DSMC
- Construct new ROWs in designated corridors as close as technically feasible to existing linear ROW infrastructure, to limit disturbance to the smallest footprint, unless using a different alignment better minimizes impacts on Dall sheep
- Apply the pertinent management for discretionary activities in DSMC identified in *Effects Minimization and Mitigation Requirements*

Alternative E (Proposed Plan)

Action (Effects Minimization and Mitigation Requirements)

In DSHA, apply the management techniques below to discretionary disturbances or activities.

C—Best management practices

In DSHA, while incorporating applicable best management practices, allow activity to occur. Economic considerations, such as increased costs associated with a given activity, would not necessarily mean that a best management practice be altered or rendered inapplicable.

Action (Trails and Travel Management—Aircraft Restrictions)

Flights associated with BLM-permitted activities would be conducted more than 2,000 feet above ground level over DSHA (Cote 1996; Frid 2003; Hurley 2004) from April 15 to August 30.

No new routes would be created in DSHA.

Action (Fluid Minerals)

No surface occupancy stipulations would apply to fluid mineral leases in DSHA.

Action (Locatable Minerals)

In DSHA, locatable minerals authorizations would include all practicable mitigations to minimize surface disturbance and reduce impacts on sheep habitat and sheep movement.

Action (Mineral Materials)

DSHA would be closed to new mineral material disposal but would remain open to the expansion of existing active pits.

Action (Nonenergy Solid Leasable Minerals)

Close DSHA to nonenergy solid mineral leasing and development.

Action (Linear and Site-Type ROWs, Permits, and Leases, Excluding Wind and Solar)

DSHA will be avoidance areas for new linear and site type ROWs, permits, and leases.

Transmission lines would be allowed in areas where the effect on the Dall sheep population would be minimized. New transmission lines and pipelines must be buried, to the extent feasible.

If a road ROW is necessary for public safety or administrative access, or if it is subject to valid existing rights and creates new surface disturbance, it would be constructed to minimize the effects on the Dall sheep population.

Where avoidance is not possible, the following should be implemented:

- Construct new ROWs in designated corridors as close as technically feasible to existing linear ROW infrastructure, to limit disturbance to the smallest footprint, unless using a different alignment better minimizes impacts on Dall sheep
- Apply the pertinent management for discretionary activities in DSHA identified in *Effects Minimization and Mitigation Requirements*

I.2 DSHA AND DSMC CONSIDERATIONS FOR IMPLEMENTATION-LEVEL TRAVEL MANAGEMENT PLANNING

Implementation-level travel planning will be guided by the goals, objectives, and guidelines outlined in the Dall sheep section, relevant national and Alaska-specific guidance, and the following:

- A timeline to complete travel planning will be identified, prioritized, and updated annually in all relevant planning areas to accelerate data collection, route evaluation and selection, and on-the-ground implementation, including signing, monitoring, and rehabilitating.
- Among other designation criteria from 43 Code of Federal Regulations 8342.1(b), "areas and trails will be located to minimize harassment of wildlife or significant disruption of wildlife habitats."
- During subsequent travel management planning, the following requirements would apply:
  - The BLM would consult "with interested user groups, federal, state, tribe, borough, and local agencies, local landowners, and other parties in a manner that provides an opportunity for the public to express itself and have its views given consideration"; consequently, a public outreach plan to fully engage all interested stakeholders will be incorporated into future travel management plans. All routes would be evaluated to determine their purpose and need and the potential resource or user conflicts from motorized travel; where resource or user conflicts outweigh the purpose and need, the route would be considered for closure or for relocation outside of Dall sheep habitat.
  - Dall sheep and their habitat would be considered when evaluating route designations or closures.
  - Routes that do not have a purpose or need would be considered for closure.
  - Routes that are duplicative, parallel, or redundant would be considered for closure.
  - Seasonal/diurnal restrictions on off-highway vehicle (OHV) use would be considered in important seasonal habitats where OHV use is disrupting Dall sheep habitat.
  - Routes not required for public access or recreation with a current administrative/agency purpose or need would be evaluated for administrative access only.
  - Scheduling road maintenance to avoid disturbance during sensitive periods and times would be considered, to the extent practicable. Time of day limits, such as no use between 7:00 p.m. and 7:00 a.m., would be considered to reduce impacts on Dall sheep during breeding periods.
- In DSHA and DSMC, the following requirements would apply:
  - Travel systems would be managed with an emphasis on improving the sustainability of the travel network in a comprehensive manner to minimize impacts on Dall sheep, to maintain human safety, and to prevent unauthorized cross-country travel, while meeting access needs. To do so, it may be necessary to improve portions of routes, to close routes, or to create new routes that meet user group needs, thereby reducing the potential for pioneering unauthorized routes. The emphasis of the comprehensive travel and transportation planning would be placed on having a neutral effect on Dall sheep habitat.

  - When considering an upgrade of existing routes that would change route category (BLM route categories: road, primitive road, or trail) or capacity, the larger transportation network would be considered, while protecting Dall sheep habitat.
  - Existing roads or realignments, as described above, would be used to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then any new roads would be constructed to the absolute minimum standard necessary. Apply additional effective mitigation necessary to offset the resulting loss or fragmentation of Dall sheep habitat. Plan for new routes in consideration of the larger transportation network objectives and needs, while protecting Dall sheep habitat.
- Develop an educational process to advise OHV users of the potential for conflict with Dall sheep.

I.3 CORE CARIBOU HABITAT MANAGEMENT

Three herds of fewer than 1,000 animals—the Galena Mountain herd (GMH), Ray Mountains herd (RMH), and Hodzana Hills herd (HHH)—are in the planning area. Much of their ranges consist of BLM-managed land and are associated with a series of uplands north of the Yukon River, known as the Kokrine Mountains, Ray Mountains, and Hodzana Highlands.

The ecology of these herds differs from larger migratory herds in the following way:

- They are considered nonmigratory because their winter and summer ranges overlap substantially.
- Their ranges are generally restricted to discrete mountain ranges.
- They do not have traditional calving grounds; whereby large numbers of animals congregate and calve in clearly delineated areas and do so consistently from year to year.

As such, land management in the ranges of these herds considers alternatives to traditional prescriptions associated with other herds, such as to protect important caribou habitat in the GMH and RMH.

I.3.1 Galena Mountain Herd

While historically the GMH has always been small, it currently numbers approximately 150 animals and is considered to be of conservation concern. For the last 10 years, the herd has been closed to all forms of hunting, including subsistence. The cause of the decline and subsequent small population size is high calf mortality due to predation. Unlike other nonmigratory herds, this herd is confined to a relatively small area in the vicinity of Galena Mountain. It is above the treeline during the spring and summer. Alpine habitat is necessary during this period, not only because it has high-quality forage but also because cows with young calves can more easily avoid predators when their vision is unobstructed by trees or flat topography.

Access to and continued use of this small alpine habitat is critical to the herd's perpetuation. The Alaska Department of Fish & Game has worked with the Alaska Department of Natural Resources and the BLM to minimize disturbance to maternal caribou during and after calving.

Mineral potential (specifically placer and rare earth elements) within the range of the GMH is moderate to low, and interest in these resources appears to be minimal. There are neither past nor current mining claims in the proposed special management area.

I.3.2 Ray Mountains Herd

The importance of the RMH was highlighted during scoping. Subsistence hunters who rely on this herd routinely travel over 70 miles across the Kanuti Flats to it in the spring, particularly when the moose harvest is low, and the Western Arctic Herd of caribou is not accessible from the villages.

Mineral potential and the occurrence of rare earth elements is high in the Ray Mountains. Many of the lands within the range of the RMH have valid State of Alaska selections. There is a large block of State mining claims in Spooky Valley and along the Kilolitna and Big Salt Rivers that will likely be developed once conveyance is completed.

Rare earth element mines are generally large, open pits. Impacts on caribou would be difficult to mitigate, and it is likely that they would simply be displaced where extensive development occurs. After conveyance, should development occur, lands that remain federally managed after conveyance would be critical to maintain for continued use by the RMH.

I.3.3 Hodzana Hills Herd

During scoping, commenters raised concerns regarding the impacts of linear ROWs on caribou movement, impacts of resource development, and increased access to the HHH by hunters. They asked if regulations associated with the State's Dalton Highway Corridor Management Area should be revised or removed.

The Dalton utility and transportation corridor bisect the range of the HHH. The herd annually crosses the road, the TAPS, and other linear features and do not appear to be restricted in their movements. It appears standard stipulations regarding linear infrastructure sufficiently mitigate impacts on caribou movement.

While a few placer mines are active within the range of the HHH, these small-scale operations do not appear to affect individual caribou nor their population size, demographic features, or survival rates. While a portion of the range is State-selected, BLM-managed land unencumbered by State or Native selections next to the Dalton Highway does not have established mining claims, beyond those associated with the one or two small-scale operators mentioned above. It is unlikely that extensive mineral development would occur over the life of the Central Yukon Resource Management Plan.

I.3.4 Core Caribou Habitat Management Allocations

Alternative A (No Action)

The Galena Mountain, Tozitna North Subunit, and the Tozitna South Subunit ACECs were designated in the 1986 Central Yukon Resource Management Plan to protect the roughly delineated caribou calving grounds identified for the GMH and RMH. Both the Galena Mountain and Tozitna Subunits have ACEC management plans that guide management in these areas. Development and permitted activities in these areas has been minimal due to their inaccessibility. Development associated with mining in the Tozitna North and South Subunits ACECs (Ray Mountains) has been largely restricted due to the State selections that are in effect on much of these lands and on lands within the RMH range in general.

Alternative B

The boundaries of the Galena Mountain ACEC would be adjusted to more accurately reflect the use of BLM-managed land by the GMH during spring and early summer.

The Tozitna North and South Subunits ACECs would be combined into one larger ACEC that was delineated using watershed boundaries and locations of collared caribou observed during calving.

A portion of the proposed Upper Kanuti ACEC met the relevance and importance criteria for caribou and is therefore carried forward under Alternative B. The boundary was delineated using collar data acquired during calving, like the Tozitna North and South Subunits ACECs. The Spooky Valley ACEC also meets the relevance and importance criteria for caribou and is therefore carried forward under Alternative B.

Aside from the allocation decisions described and proposed above, these areas do not require extensive special management. Additionally, the existing and proposed ACECs were developed using the traditional model of "protecting the calving grounds," which, as described, may not be appropriate for small nonmigratory herds.

Alternative C1

Core habitat for the GMH and RMH would be designated under Alternative C1 to address the issues raised during scoping, described above. Alternative C1 would propose a ROW avoidance area in the GMH and RMH core habitat, as well as timing limitations for OHVs during calving season (May 1 through June 30). The RMH core caribou habitat would be closed to fluid mineral leasing. This alternative also recommends a withdrawal from mineral entry in the RMH core habitat.

Alternative C2

Core habitat for the GMH and RMH would be designated under Alternative C2 to address the issues raised during scoping, described above. Alternative C2 would propose a ROW avoidance area in the GMH and RMH core habitat, as well as timing limitations for OHVs during calving season. This alternative does not recommend a withdrawal from mineral entry in the RMH core habitat.

Alternative D

Designating special management areas for caribou is not proposed under Alternative D.

Alternative E (Proposed Plan)

Core habitat for the GMH and RMH that would be designated under Alternative E is identical to that under Alternative C1/C2. Alternative E would propose a ROW avoidance area in the GMH and RMH core habitat. There would be timing limitations for OHVs during calving season (May 1 through June 30). The RMH core caribou habitat would be closed to fluid mineral leasing. This alternative does not recommend a withdrawal from mineral entry in the RMH core habitat.

Core Caribou Ranges by Township

Ray Mountains

- T8, R18, FM
- T9, R15, FM
- T9, R16, FM
- T9, R17, FM
- T9, R18, FM
- T10, R15, FM
- T10, R16, FM
- T10, R17, FM
- T10, R18, FM
- T11, R17, FM
- T11, R18, FM
- T11, R19, FM
- T11, R20, FM
- T11, R21, FM
- T12, R17, FM
- T12, R18, FM
- T12, R19, FM
- T12, R20, FM
- T12, R21, FM
- T13, R17, FM
- T13, R18, FM
- T13, R19, FM
- T13, R20, FM
- T13, R21, FM
- T14, R17, FM

Galena Mountain

- T5, R15, KM
- T5, R16, KM
- T5, R17, KM
- T6, R15, KM
- T6, R16, KM
- T6, R17, KM
- T6, R18, KM
- T6, R19, KM
- T6, R20, KM

I.4 REFERENCES

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Hurley, K. 2004. NWSGC position statement on helicopter-supported recreation and mountain goats. Biennial Symposium of the Northern Wild Sheep and Goat Council 14: 131–136.

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Appendix J

Land Management Allocations

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
ACEC	areas of critical environmental concern
AGL	above ground level
ANCSA	Alaska Native Claims Settlement Act of 1971
BLM	Bureau of Land Management
CAMA	Central Arctic Management Area
DSHA	Dall Sheep Habitat Area
ERMA	extensive recreation management area
FLPMA	Federal Land Policy and Management Act of 1976
NSO	no surface occupancy
OHV	off-highway vehicle
PLO	Public Land Order
RMZ	recreation management zone
RNA	research natural area
ROW	right-of-way
SRMA	special recreation management area
VRM	visual resource management
WSA	Wilderness Study Area
WSR	Wild and Scenic River

Appendix J. Land Management Allocations

J.1 VISUAL RESOURCE MANAGEMENT

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative from Draft RMP/EIS)*	Alternative D	Alternative E
Action: Manage the following areas as Visual Resource Management (VRM) Class I: • Central Arctic Management Area (CAMA) Wilderness Study Area (WSA)	**Action:** Manage the following areas as VRM Class I: • CAMA WSA • Spooky Valley Extensive Recreation Management Area (ERMA) • Nigu-Iteriak River ERMA • Suitable Wild and Scenic River (WSR) segments classified as wild • Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses • Spooky Valley Area of Critical Environmental Concern (ACEC)	**Action:** Manage the following areas as VRM Class I: • CAMA WSA • Spooky Valley ERMA • Nigu-Iteriak River ERMA	**Action:** Manage the following areas as VRM Class I: • CAMA WSA	**Action:** Manage the following areas as VRM Class I: • CAMA WSA	**Action:** Manage the following areas as VRM Class I: • CAMA WSA • Nigu-Iteriak River ERMA

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative from Draft RMP/EIS)*	Alternative D	Alternative E
Action: No similar action (no lands are managed as VRM Class II).	**Action:** Manage the following areas as VRM Class II: • Dalton Corridor Backcountry Conservation Area • Sukakpak Region Special Recreation Management Area (SRMA) • Suitable WSR segments classified as recreational with a scenic outstanding remarkable value • Lands managed to emphasize other multiple uses while applying management restrictions to reduce impacts on wilderness characteristics • ACECs o Galbraith Lake o Jim River o Spooky Valley o Sukakpak/Snowden Mountain	**Action:** Manage the following areas as VRM Class II: • Dalton Highway Corridor SRMA, Outer Corridor Recreation Management Zone (RMZ) • Dalton Highway Corridor SRMA, Brooks Range South RMZ • Dalton Highway Corridor SRMA, Brooks Range North/Galbraith Lake RMZ, Chapman Lake RMZ • Lands managed to emphasize other multiple uses while applying management restrictions to reduce impacts on wilderness characteristics • ACECs o Galbraith Lake o Sukakpak/Snowden Mountain ACEC	**Action:** Manage the following areas as VRM Class II: • Dalton SRMA, Sukakpak Region RMZ	**Action:** No similar action (no lands are managed as VRM Class II).	**Action:** Manage the following areas as VRM Class II: • Sukakpak Region SRMA • Dalton Corridor SRMA • Dalton Corridor BCA

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative from Draft RMP/EIS)*	Alternative D	Alternative E
Action: Manage the following areas as VRM Class III: • Dalton Corridor SRMA • Oolamnagavik-Colville River ERMA • Nigu-Iteriak ACEC	**Action:** Manage the following areas as VRM Class III: • Central Dalton SRMA, Dalton Uplands RMZ • Other suitable WSR segments classified as recreational	**Action:** Manage the following areas as VRM Class III: • Dalton Highway Corridor SRMA, Finger Mountain RMZ • Dalton Highway Corridor SRMA, Arctic Circle RMZ • Dalton Highway Corridor SRMA, Grayling Lake RMZ	**Action:** Manage the following areas as VRM Class III: • Dalton SRMA, Dalton Uplands RMZ • Dalton ERMA	**Action:** Manage the following areas as VRM Class III: • Dalton Utility and Transportation Corridor and the lands previously encumbered by Public Land Order (PLO) 5150	**Action:** Manage the following areas as VRM Class III: • Jim River ACEC • Central Dalton SRMA
Action: Manage the following areas as VRM Class IV: • Galbraith Lake ACEC • Inner Utility Corridor • CAMA lands outside the WSA	**Action:** Manage the following areas as VRM Class IV: • Central Dalton SRMA, Yukon River Crossing RMZ • Central Dalton SRMA, Coldfoot RMZ • All other BLM-managed lands	**Action:** Manage the following areas as VRM Class IV: • Dalton Highway Corridor SRMA, Yukon River RMZ • Dalton Highway Corridor SRMA, Coldfoot RMZ • Utility and transportation corridors (Ambler and Umiat) • All other BLM-managed lands	**Action:** Manage the following areas as VRM Class IV: • Dalton SRMA, Yukon River Crossing RMZ • Dalton SRMA, Coldfoot RMZ • Utility and transportation corridors (Ambler and Umiat) • All other BLM-managed lands	**Action:** Manage the following areas as VRM Class IV: • All other Bureau of Land Management (BLM)-managed lands	**Action:** Manage the following areas as VRM Class IV: • All other Bureau of Land Management (BLM)-managed lands

J.2 AREAS OF CRITICAL ENVIRONMENTAL CONCERN (INCLUDING RESEARCH NATURAL AREAS)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Action: Manage the following areas as ACECs or research natural areas (RNAs, 1,751,000 acres): 1. Arms Lake RNA (11,000 acres) 2. Dulbi River ACEC (54,000 acres) 3. Galbraith Lake ACEC (53,000 acres) 4. Galena Mountain ACEC (19,000 acres) 5. Hogatza River Tributaries ACEC (5,000 acres) 6. Indian River ACEC (155,000 acres) 7. Ishtalitna Creek Hot Springs RNA (1,000 acres) 8. Jim River ACEC (203,000 acres) 9. Kanuti Hot Springs ACEC (40 acres 10. Lake Todatonten Pingos RNA (1,000 acres) 11. McQuesten Creek RNA (4,000 acres) 12. Nigu-Iteriak ACEC (40,000 acres) 13. Nugget Creek ACEC (3,000 acres) 14. Poss Mountain ACEC (9,000 acres)	**Action:** Manage the following areas as ACECs or RNAs (4,035,000 acres): 1. Accomplishment Creek ACEC (41,000 acres) 2. Alatna River ACEC (5,000 acres) 3. Arms Lake RNA 4. Galbraith Lake ACEC (52,000 acres) 5. Galena Mountain ACEC (62,000 acres) 6. Hogatza River Tributaries ACEC (221,000 acres) 7. Huslia ACEC (73,000 acres) 8. Indian River ACEC (173,000 acres) 9. Ishtalitna Creek Hot Springs ACEC/RNA 10. Jim River ACEC (303,000 acres) 11. Kanuti Hot Springs ACEC (160 acres) 12. Klikhtentotzna Creek ACEC (108,000 acres) 13. Lake Todatonten Pingos ACEC (1,000 acres) 14. McQuesten Creek ACEC/RNA 15. Mentanontli River/Lake Todatonten ACEC (20,000 acres) 16. Midnight Dome/Kalhabuk ACEC (10,000 acres)	**Action:** Manage the following areas as ACECs or RNAs (418,000 acres): 1. Accomplishment Creek ACEC (7,000 acres) 2. Alatna River ACEC 3. Galbraith Lake ACEC (4,000 acres) 4. Jim River ACEC (30,000 acres) 5. South Fork Koyukuk River ACEC (44,000 acres) 6. Sukakpak/Snowden Mountain ACEC (124,000 acres) 7. Sulukna River ACEC (51,000 acres) 8. Toolik Lake RNA (106,000 acres)	**Action:** Manage the following areas as ACECs or RNAs (77,000 acres): 1. Toolik Lake RNA (77,000 acres)	**Action:** Manage no areas as ACECs.	**Action:** Manage the following areas as ACECs or RNAs (3,611,000 acres): 1. Accomplishment Creek ACEC (41,000 acres) 2. Alatna River ACEC (5,000 acres) 3. Galbraith Lake ACEC (53,000 acres) 4. Hogatza River Tributaries ACEC (221,000 acres) 5. Huslia ACEC (73,000 acres) 6. Indian River ACEC (173,000 acres) 7. Jim River ACEC (303,000 acres) 8. Klikhtentotzna Creek ACEC (108,000 acres) 9. Mentanontli River/Lake Todatonten ACEC (20,000 acres) 10. Midnight Dome/Kalhabuk ACEC (10,000 acres) 11. Nugget Creek ACEC (3,000 acres)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
15. Redlands Lake RNA (4,000) 16. Snowden Mountain ACEC (30,000 acres) 17. South Todatonten Summit RNA (1,000 acres) 18. Spooky Valley RNA (10,000 acres) 19. Sukakpak Mountain ACEC (3,000 acres) 20. Sulukna River ACEC (25,000) 21. Toolik Lake ACEC/RNA (77,000) 22. Tozitna River ACEC (842,000 acres) 23. Tozitna Subunits North and South ACEC (192,000 acres) 24. West Fork Atigun ACEC (9,000 acres)	17. Nugget Creek ACEC (3,000 acres) 18. Poss Mountain ACEC (25,000 acres) 19. Redlands Lake RNA 20. Sethkokna River ACEC (299,000 acres) 21. South Fork Koyukuk River ACEC (425,000 acres) 22. South Todatonten Summit ACEC (1,000 acres) 23. Spooky Valley ACEC/RNA (9,000) 24. Sukakpak/Snowden Mountain ACEC (124,000 acres) 25. Sulukna River ACEC (398,000 acres) 26. Toolik Lake ACEC/RNA (106,000 acres) 27. Tozitna ACEC (1,043,000 acres) 28. Upper Kanuti River ACEC (160) 29. Upper Teedriinjik (Chandalar) River ACEC 295,000 acres) 30. West Fork Atigun ACEC (33,000 acres) 31. Wheeler Creek ACEC 145,000 acres)	*(see above)*	*(see above)*	*(see above)*	12. Poss Mountain ACEC (25,000 acres) 13. Sethkokna River ACEC (299,000 acres) 14. Snowden Mountain ACEC (50,000 acres) 15. South Fork Koyukuk River ACEC (415,000 acres) 16. Sulukna River ACEC (398,000 acres) 17. Toolik Lake RNA (106,000 acres) 18. Tozitna River ACEC (835,000 acres) 19. Upper Teedrinjik River ACEC (295,000 acres) 20. West Fork Atigun ACEC (33,000 acres) 21. Wheeler Creek ACEC (145,000 acres)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
No similar action	No similar action	No similar action	No similar action	No similar action	Within the following ACECs special management actions described in **Appendix J** would apply to stream order-based 100-year floodplain buffers watershed-wide (390,000 acres): 1. Hogatza River Tributaries (55,000 acres) 2. Huslia River (9,000 acres) 3. Indian River (17,000 acres) 4. Jim River (30,000 acres) 5. Klikhtentotzna Creek (18,000 acres) 6. Sethkokna River (34,000 acres) 7. South Fork Koyukuk River (44,000 acres) 8. Sulukna River (51,000 acres) 9. Tozitna River (85,000 acres) 10. Upper Teedriinjik (Chandalar) River (31,000 acres) 11. Wheeler Creek (16,000 acres)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Arms Lake and Redlands Lake					
Arms Lake Designate as an RNA to protect the sand dune complex and associated vegetation and limnological[1] characteristics. **Redlands Lake** Designate as an RNA to protect the remnant lake and sand dunes complex.	**Arms Lake** Designate as an ACEC/RNA to protect the sand dune complex and associated vegetation and limnological characteristics. **Redlands Lake** Designate as an ACEC/RNA to protect the remnant lake and sand dunes complex.	**Arms Lake** No similar action (the ACEC/RNA would not be designated under this alternative). **Redlands Lake** No similar action (the ACEC/RNA would not be designated under this alternative).	**Arms Lake** No similar action (the ACEC/RNA would not be designated under this alternative). **Redlands Lake** No similar action (the ACEC/RNA would not be designated under this alternative).	**Arms Lake** No similar action (the ACEC/RNA would not be designated under this alternative). **Redlands Lake** No similar action (the ACEC/RNA would not be designated under this alternative).	**Arms Lake** No similar action (the ACEC/RNA would not be designated under this alternative). **Redlands Lake** No similar action (the ACEC/RNA would not be designated under this alternative).
Propose for inclusion in the Ecological Reserve System (BLM 1986).	No similar action: this area would be maintained for scientific purposes or description of unique features.	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).

[1]Limnology is the scientific study of physical, chemical, meteorological, and biological conditions in fresh waters, especially ponds and lakes.

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E

• Closed to Federal Land Policy and Management Act (FLPMA) leases and sales
  ○ Closed to fluid mineral leasing
  ○ Closed to nonenergy solid mineral leasing
  ○ Closed to land disposal through sale
• Recommend withdrawal from locatable mineral entry
• Allow access through RNAs for vehicles over 1,500 pounds gross vehicle weight by permit (BLM 1986)
	• Pursue FLPMA withdrawal
	  ○ Closed to fluid mineral leasing and development
	  ○ Closed to nonenergy solid mineral leasing
	  ○ Recommend withdrawal from locatable mineral entry
	• Closed to mineral materials disposal
	• Prohibit commercial timber development; prohibit non-subsistence collecting of live vegetation (subsistence use still requires a permit)
	• Right-of-way (ROW) exclusion area
		No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).

Ishtalitna Creek Hot Springs and McQuesten Creek					
Ishtalitna Creek Hot Springs Designate as an RNA to protect the low-gradient hot springs system and unique assemblages of plants associated with the system. **McQuesten Creek** Designate as an RNA to protect the low-gradient hot springs system and geologic features.	Designate the **Ishtalitna Creek Hot Springs ACEC/RNA** and **McQuesten Creek ACEC/RNA** to protect low-gradient hot springs systems and associated vegetation and soils.	**Ishtalitna Creek Hot Springs** No similar action (the ACEC/RNA would not be designated under this alternative). **McQuesten Creek** No similar action (the ACEC/RNA would not be designated under this alternative).	**Ishtalitna Creek Hot Springs** No similar action (the ACEC/RNA would not be designated under this alternative). **McQuesten Creek** No similar action (the ACEC/RNA would not be designated under this alternative).	**Ishtalitna Creek Hot Springs** No similar action (the ACEC/RNA would not be designated under this alternative). **McQuesten Creek** No similar action (the ACEC/RNA would not be designated under this alternative).	**Ishtalitna Creek Hot Springs** No similar action (the ACEC/RNA would not be designated under this alternative). **McQuesten Creek** No similar action (the ACEC/RNA would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Propose for inclusion in the Ecological Reserve System (BLM 1986).	No similar action: this area would be maintained for scientific purposes or description of unique features.	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).

• Closed to FLPMA leases and sales
  ○ Closed to fluid mineral leasing
  ○ Closed to nonenergy solid mineral leasing
  ○ Closed to land disposal through sale
• Recommend for withdrawal from locatable mineral entry
• Allow access through RNAs for vehicles over 1,500 pounds gross vehicle weight by permit
• Require an approved plan of operation for any surface-disturbing activity on existing mining claims (BLM 1986)
	• Pursue FLPMA withdrawal
	  ○ Closed to fluid mineral leasing
	  ○ Closed to nonenergy solid mineral leasing
	  ○ Closed to land disposal through sale
	  ○ Recommend for withdrawal from locatable mineral entry
	  ○ Closed to mineral materials disposal
	• In summer, off-highway vehicle (OHV) use is limited to designated routes or trails; all vehicles over 1,500 pounds curb weight require a permit
	• Prohibit commercial timber development; prohibit non-subsistence collecting of live vegetation (subsistence use still requires a permit)
	• ROW exclusion area
	• Prohibit Special Recreation Permits
	• No commercial development of the hot springs
		No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Closed to mineral leasing and non-metalliferous location; open to location and entry for metalliferous minerals (PLO 5180).	Carry forward closure; recommend withdrawal of these areas.	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).
160 acres (0.25 square miles) surrounding the hot springs are withdrawn under Executive Order #5389.	Maintain withdrawal for the hot springs.	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).
Spooky Valley					
Spooky Valley Designate as an RNA to protect geological, physiographic, vegetation, and scenic values.	**Spooky Valley** Designate as an ACEC/RNA to protect vegetation, special status vegetation, scenery, and caribou habitat.	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).
Propose for inclusion in the Ecological Reserve System (BLM 1986).	No similar action: this area would be maintained for scientific purposes or description of unique features.	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E

• Closed to FLPMA leases and sales
  ○ Closed to fluid mineral leasing
  ○ Closed to nonenergy solid mineral leasing
  ○ Closed to land disposal through sale
• Recommend for withdrawal from locatable mineral entry
• Allow access through RNAs for vehicles over 1,500 pounds gross vehicle weight by permit
• Require an approved plan of operations for any surface-disturbing activity on existing mining claims (BLM 1986)
	• Pursue FLPMA withdrawal
	  ○ Closed to fluid mineral leasing
	  ○ Closed to nonenergy solid mineral leasing
	  ○ Closed to land disposal through sale
	  ○ Recommend for withdrawal from locatable mineral entry
	  ○ Closed to mineral materials disposal
	• ROW avoidance area
	• OHV timing limitation (no OHVs from May 1 to June 30)
	• Manage as VRM Class I
		No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).

Closed to mineral leasing and nonmetalliferous location; open to location and entry for metalliferous minerals (PLO 5180).	Carry forward closure; recommend withdrawal of the ACEC/RNA.	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).	No similar action (the ACEC/RNA would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Lake Todatonten Pingos and South Todatonten Summit					
Lake Todatonten Pingos Designate as an RNA to protect open system pingos. **South Todatonten Summit** Designate as an RNA to protect open system pingos.	**Lake Todatonten Pingos** Designate as an ACEC to protect the soil, hydrologic processes, and vegetation associated with the pingos system. **South Todatonten Summit** Designate as an ACEC to protect the soil, hydrologic processes, and vegetation associated with the pingos system.	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).
Propose for inclusion into the Ecological Reserve System (BLM 1986).	No similar action: this area would be maintained for scientific purposes or description of unique features.	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).

• Closed to FLPMA leases and sales
  ○ Closed to fluid mineral leasing
  ○ Closed to nonenergy solid mineral leasing Closed to land disposal through sale
• Recommend for withdrawal from locatable mineral entry
• Allow access through RNAs for vehicles over 1,500 pounds gross vehicle weight by permit (BLM 1986)
	• Pursue FLPMA withdrawal
	  ○ Closed to fluid mineral leasing
	  ○ Closed to nonenergy solid mineral leasing
	  ○ Closed to land disposal through sale
	  ○ Recommend withdrawal from locatable mineral entry
	• ROW exclusion area
	• Prohibit commercial timber development; prohibit non-subsistence collecting of live vegetation (subsistence use still requires a permit)
	• Prohibit removal of vegetative substrate and litter from the pingos
	• No camping within the ACECs
		No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).	No similar action (the ACECs/RNAs would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Galbraith Lake					
Galbraith Lake Designate as an ACEC to protect cultural resources, rare or sensitive plants, high scenic values, and crucial Dall sheep lambing areas.	**Galbraith Lake** Designate as an ACEC to protect cultural resources, high scenic values, and crucial Dall sheep habitat, including mineral licks.	**Galbraith Lake** Designate as an ACEC to protect Dall sheep habitat.	No similar action (the ACECs would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Galbraith Lake** Designate as an ACEC to protect Dall sheep habitat.
• Apply no surface occupancy (NSO) stipulations to fluid mineral leases • Require plans of operation, with protective stipulations and mitigation measures, to all surface-disturbing activities to avoid restricting sheep movement, unduly disturbing sheep habitat, or affecting any other protected resource • Limited motorized vehicle use by State statute and Alaska Department of Fish and Game hunting regulations (State law, not BLM limitation; the BLM has to be at least as restrictive as state law; Alaska Statute 19.40-210 closes BLM-managed lands within 5 miles of the Dalton Highway to	• Closed to mineral materials disposal • Proposed ROWs must mitigate wildlife impacts and impacts on connectivity corridors	• Closed to mineral materials disposal • Proposed ROWs must mitigate wildlife and connectivity corridors impacts	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	• Proposed ROWs must mitigate wildlife and connectivity corridors impacts • Apply NSO stipulations to fluid mineral leases

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
OHV; Alaska Department of Fish and Game Hunter Information Series #111-13, "Dalton Highway Corridor")	*(see above)*	*(see above)*	*(see above)*	*(see above)*	*(see above)*
• All BLM-authorized camps and support facilities in the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished • All recreation facilities would be consistent with the Dalton Highway Recreation Area Management Plan and would minimize disturbance to protected resources in the ACEC • Allow the development of public campground facilities • Allow use by guides and outfitters, but no surface-disturbing activities in association with guides and outfitters	• All BLM-authorized camps and support facilities in the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished; restrict camp footprint to southwest corner of the Galbraith south pit in the existing footprint • All recreation facilities, such as campgrounds, would be developed to minimize disturbance to protected resources in the ACEC	• All BLM-authorized camps and support facilities in the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished; if cultural resources are discovered, then camps and support facilities must be avoided in these areas • All recreation facilities, such as campgrounds, would be developed to minimize disturbance to protected resources in the ACEC	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	• All BLM-authorized camps and support facilities in the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished; if cultural resources are discovered, then camps and support facilities must be avoided in these areas • All recreation facilities, such as campgrounds, would be developed to minimize disturbance to protected resources in the ACEC

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Aircraft associated with all BLM-authorized land use activities would be required to fly a minimum of 2,000 feet above ground level (AGL) from May 1 to August 31, unless doing so would endanger human life or be an unsafe flying practice.	No similar action (see **Chapter 2**, *Wildlife* and *Travel Management and Transportation* for aircraft restrictions).	No similar action (see **Chapter 2,** *Wildlife* and *Travel Management and Transportation* for aircraft restrictions).	No similar action (the ACECs would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (see **Chapter 2,** *Wildlife* and *Travel Management and Transportation* for aircraft restrictions).
Manage as VRM Class IV.	Manage as VRM Class III.	No similar action (scenic values are not one of the relevant and important values being managed for; see **Chapter 2**, *Recreation*).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (scenic values are not one of the relevant and important values being managed for; see **Chapter 2,** *Recreation*).
Dulbi River					
Dulbi River Designate as an ACEC to protect crucial peregrine falcon habitat.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).
Closed to fluid mineral leasing.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).
Galena Mountain					
Galena Mountain Designate as an ACEC to protect the calving grounds of the Galena Mountain caribou herd.	**Galena Mountain** Designate as an ACEC to protect the calving grounds of the Galena Mountain caribou herd.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
• No surface-disturbing activities during caribou calving, except for casual use and scientific study • All facilities should be temporary • Aircraft pilots must fly 2,000 feet AGL during calving • Prohibit normal landings, except emergencies or for scientific purposes from May 5 to June 30	• Recommend withdrawal from locatable mineral entry and location • Closed to fluid mineral leasing • Closed to mineral materials development • Closed to nonenergy solid mineral leasing • OHV timing limitation (no OHVs from May 1 to June 30) • ROW exclusion area • No surface-disturbing activities during from May 1 to June 30, except for casual use and scientific study • All facilities should be temporary • Aircraft associated with BLM-permitted activities would maintain an altitude of at least 2,000 feet AGL from May 1 to June 30 • Aircraft landings associated with BLM-permitted activities are prohibited from May 1 to June 30 • Unmanned aerial vehicle use is prohibited from May 1 to June 30	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Tozitna River, Tozitna Subunit North, and Tozitna Subunit South					
Tozitna River Designate the Tozitna River ACEC to protect crucial salmon spawning habitat. **Tozitna Subunits North and South** Designate the Tozitna Subunits North and South ACEC to protect Ray Mountain caribou habitat (crucial caribou calving habitat) • Modify habitat by allowing limited action fires to burn in accordance with the Alaska Interagency Fire Management Plan • Surface occupancy associated with all BLM-authorized activities (see definitions below) would be prohibited from May 10 to June 30; authorized scientific and management studies and casual use activities would be exempt • All BLM-authorized activities would be conducted to avoid or minimize disturbance to caribou from July 1 to May 9	T**ozitna** Designate as an ACEC (includes the Tozitna River, Tozitna Subunit North, and Tozitna Subunit South existing ACECs) to protect caribou habitat, soils, water, and crucial Chinook, chum, and coho salmon spawning habitat.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Tozitna River** Designate the Tozitna River ACEC to protect crucial salmon spawning habitat.

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
• All BLM-authorized field camps and support facilities, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished; the existing structures at and around Kilo Hot Spring are exempt • All BLM-authorized activities and facilities would be designed to allow free movement of caribou • Aircraft associated with all BLM-authorized activities would be required to fly a minimum of 2,000 feet AGL from May 10 to June 30, unless doing so would endanger human life or be an unsafe flying practice • Aircraft associated with all BLM-authorized activities would be required to fly a minimum of 1,000 feet AGL from July 1 to May 9, unless doing so would endanger human life or be an unsafe flying practice;	(*see above*)	(*see above*)	(*see above*)	(*see above*)	(*see above*)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
normal landings and takeoffs would be allowed • Use of live-fire ammunition and pyrotechnics by the Alaska Army National Guard would be prohibited • The BLM would monitor the Ray Mountains caribou herd during the next 3 years	(*see above*)	(*see above*)	(*see above*)	(*see above*)	(*see above*)
Tozitna River ACEC Recommend withdrawal of crucial spawning habitat from mineral location and FLPMA sales and leases; this withdrawal would extend 300 feet from each side of the stream mean high-water line and would include the stream bed of unnavigable reaches.	• Pursue FLPMA withdrawal • Recommend withdrawal from locatable mineral entry • Closed to mineral extraction or collection (casual use and prospecting) • Closed to fluid mineral leasing and development • Closed to mineral materials development • Closed to nonenergy solid mineral leasing and development • ROW exclusion area within the 100-year floodplain • ROW avoidance area outside the 100-year floodplain • Prohibit surface-disturbing activities from May 1 to June 30	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	• NSO for fluid minerals • Closed to mineral materials development • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be in the 100-year floodplain

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Tozitna River ACEC *(cont.)*	• OHV timing limitation (no OHVs from May 1 to June 30) • All facilities would be temporary • Aircraft associated with BLM-permitted activities would maintain an altitude of at least 2,000 feet AGL from May 1 to June 30 • Aircraft landings associated with BLM-permitted activities are prohibited from May 1 to June 30 • Unmanned aerial vehicle use is prohibited from May 1 to June 30 • Prohibit commercial timber development within the 100-year floodplain; prohibit non-subsistence collecting of live vegetation (subsistence use still requires a permit) • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be in the 100-year floodplain	(*see above*)	(*see above*)	(*see above*)	(*see above*)
Tozitna Subunits North and South Structures must be temporary.	No similar action; the Tozitna Subunit North and South would not be designated as an ACEC but would be in the Tozitna ACEC.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Upper Kanuti River					
No similar action; the Upper Kanuti River is not a designated ACEC.	**Upper Kanuti River** Designate as an ACEC to protect cultural resources and Hodzana caribou habitat.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).
No similar action; the Upper Kanuti River is not a designated ACEC.	• Pursue FLPMA withdrawal • Recommend withdrawal from locatable mineral entry • Closed to fluid mineral leasing • Closed to mineral materials development • Closed to nonenergy solid mineral leasing and development • OHV timing limitation (no OHV use from May 1 to June 30) • ROW avoidance area • Prohibit surface-disturbing activities from May 1 to June 30 • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished; if cultural resources are discovered, then camps and support facilities	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	must avoid impacts in these areas • All recreation facilities, such as campgrounds, and permitted activities would be developed in a manner to avoid disturbance, to protect resources in the ACEC (restricted to previously disturbed areas, where possible) • Aircraft associated with BLM-permitted activities would maintain an altitude of at least 2,000 feet AGL from May 1 to June 30 • Aircraft landings associated with BLM-permitted activities are prohibited from May 1 to June 30 • Unmanned aerial vehicle use is prohibited from May 1 to June 30	(*see above*)	(*see above*)	(*see above*)	(*see above*)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Hogatza River Tributaries, Indian River, Klikhtentotzna Creek, Sethkokna River, South Fork Koyukuk River, Upper Teedriinjik (Chandalar) River, Wheeler Creek					
Hogatza River Tributaries Designate as an ACEC to protect crucial salmon spawning habitat. **Indian River** Designate as an ACEC to protect crucial salmon spawning habitat.	**Hogatza River Tributaries** Designate as an ACEC to protect crucial summer chum spawning habitat. **Indian River** Designate **as an ACEC** to protect crucial chinook and summer chum salmon spawning habitat. **Klikhtentotzna Creek** Designate as an ACEC to protect crucial summer chum salmon spawning habitat. **Sethkokna River** Designate as an ACEC to protect crucial chinook salmon spawning habitat, soil, and water. **South Fork Koyukuk River** Designate as an ACEC to protect crucial chinook salmon and chum salmon spawning habitat. **Upper Teedriinjik (Chandalar) River** Designate as an ACEC to protect crucial habitat for chinook, summer and fall chum, coho, whitefish, and cisco.	**Hogatza River Tributaries** No similar action (the ACEC would not be designated under this alternative). **Indian River** No similar action (the ACEC would not be designated under this alternative). **Klikhtentotzna Creek** No similar action (the ACEC would not be designated under this alternative). **Sethkokna River** No similar action (the ACEC would not be designated under this alternative). **South Fork Koyukuk River** Designate as an ACEC to protect crucial chinook salmon and chum salmon spawning habitat. **Upper Teedriinjik (Chandalar) River** No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACECs would not be designated under this alternative).	No similar action (the ACECs would not be designated under this alternative).	**Hogatza River Tributaries** Designate as an ACEC to protect crucial summer chum spawning habitat. **Indian River** Designate as an ACEC to protect crucial chinook and summer chum salmon spawning habitat. **Klikhtentotzna Creek** Designate as an ACEC to protect crucial summer chum salmon spawning habitat. **Sethkokna River** Designate as an ACEC to protect crucial chinook salmon spawning habitat, soil, and water. **South Fork Koyukuk River** Designate as an ACEC to protect crucial chinook salmon and chum salmon spawning habitat.

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	**Wheeler Creek** Designate as an ACEC to protect crucial summer chum salmon spawning habitat.	**Wheeler Creek** No similar action (the ACEC would not be designated under this alternative).	(*see above*)	(*see above*)	**Upper Teedriinjik (Chandalar) River** Designate as an ACEC to protect crucial habitat for chinook, summer and fall chum, coho, whitefish, and cisco. **Wheeler Creek** Designate as an ACEC to protect crucial summer chum salmon spawning habitat.
• Recommend withdrawal of crucial spawning habitat from mineral location and FLPMA sales and leases; this withdrawal would extend 300 feet from each side of the stream mean high-water line and would include the stream bed of unnavigable reaches	• Pursue FLPMA withdrawal • Recommend withdrawal from locatable mineral entry • Closed to mineral materials disposal • Closed to fluid leasable mineral leasing and development • Closed to nonenergy solid mineral leasing and development • Closed to mineral extraction or collection (i.e., casual use and prospecting) • For BLM-authorized activities, over-ice travel is limited to designated corridors and required engineer thickness/strength testing approval	• NSO for fluid mineral leasing and development • ROW avoidance • All BLM-authorized camps and support facilities would not be located within the confines of the ACEC, including cabins and tent frames, except for scientific purposes	No similar action (the ACECs would not be designated under this alternative).	No similar action (the ACECs would not be designated under this alternative).	Within the stream order-based 100-year floodplain buffer areas, the following special management applies: • Closed to mineral materials disposal • ROW avoidance • NSO for fluid mineral leasing and development • All BLM-authorized camps and support facilities would not be located within the confines of the ACEC, including cabins and tent frames, except for scientific purposes

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	• Prohibit commercial timber development; prohibit non-subsistence collecting of live vegetation (subsistence use still requires a permit) • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be in the 100-year floodplain, except for scientific purposes	(*see above*)	(*see above*)	(*see above*)	(*see above*)
No similar action.	For the Hogatza River Tributaries: • ROW avoidance area	See above for travel restrictions and ROW prescriptions common to all of these ACECs.	No similar action (the ACECs would not be designated under this alternative).	No similar action (the ACECs would not be designated under this alternative).	(*see above*)
No similar action.	For the Indian River, Klikhtentotzna Creek, Sethkokna River, South Fork Koyukuk River, Upper Teedriinjik (Chandalar) River, and Wheeler Creek: • In summer, closed to OHV use • ROW exclusion area	See above for travel restrictions and ROW prescriptions common to all of these ACECs.	No similar action (the ACECs would not be designated under this alternative).	No similar action (the ACECs would not be designated under this alternative).	For the Indian River, Klikhtentotzna Creek, Sethkokna River, South Fork Koyukuk River, Upper Teedriinjik (Chandalar) River, and Wheeler Creek: • In summer, closed to OHV use
Accomplishment Creek					
No similar action: Accomplishment Creek is not a designated ACEC.	**Accomplishment Creek** Designate as an ACEC to protect crucial Dolly Varden overwintering habitat.	**Accomplishment Creek** Designate as an ACEC to protect crucial Dolly Varden overwintering habitat.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Accomplishment Creek** Designate as an ACEC to protect crucial Dolly Varden overwintering habitat.

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
No similar action: Accomplishment Creek is not a designated ACEC.	• Pursue FLPMA withdrawal (on lands not already withdrawn) • Recommend withdrawal from locatable mineral entry • Closed to mineral materials disposal • Closed to fluid mineral leasing and development • Closed to nonenergy solid mineral leasing and development • Closed to mineral extraction or collection (i.e., casual use and prospecting) • Closed to summer OHV use • ROW exclusion area • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be in the 100-year floodplain, except for scientific purposes	• NSO for fluid mineral leasing • ROW avoidance area • All BLM-authorized camps and support facilities would not be located within the confines of the ACEC, including cabins and tent frames, except for scientific purposes	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	The allocations below apply to the 100-year floodplains: • Closed to mineral materials disposal • NSO for fluid mineral leasing • Closed to summer OHV use • ROW avoidance area • All BLM-authorized camps and support facilities would not be located within the confines of the ACEC, including cabins and tent frames, except for scientific purposes
Alatna River					
No similar action; Alatna River is not a designated ACEC.	**Alatna River** Designate as an ACEC to protect crucial whitefish and sheefish spawning habitat, supporting the main subsistence fishery resources for villages in the Upper Koyukuk River.	**Alatna River** Designate as an ACEC to protect crucial whitefish and sheefish spawning habitat, supporting the main subsistence fishery resources for villages in the Upper Koyukuk River.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Alatna River** Designate as an ACEC to protect crucial whitefish and sheefish spawning habitat, supporting the main subsistence fishery resources for villages in the Upper Koyukuk River

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
No similar action; Alatna River is not a designated ACEC.	• Pursue FLPMA withdrawal • Recommend withdrawal from locatable mineral entry • Closed to mineral materials disposal • Closed to fluid mineral leasing and development • Closed to nonenergy solid mineral leasing and development • Closed to mineral extraction or collection (i.e., casual use and prospecting) • Closed to summer OHV use • ROW exclusion area • Prohibit commercial timber development; prohibit non-subsistence collecting of live vegetation (subsistence use still requires a permit) • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be located in the 100-year floodplain, except for scientific purposes	• NSO for fluid minerals leasing • ROW avoidance area	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	• Closed to mineral materials disposal • Closed to fluid mineral leasing and development • Closed to nonenergy solid mineral leasing and development • ROW exclusion area • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be located in the 100-year floodplain, except for scientific purposes

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Jim River					
Jim River Designate as an ACEC to protect crucial salmon spawning habitat, recreational fishery, cultural resources, and high scenic values.	**Jim River** Designate as an ACEC to protect Dall sheep, crucial chinook and chum spawning habitat and overwintering habitat for resident fish, soils, water, and cultural resources and scenic values.	**Jim River** Designate as an ACEC to protect crucial Chinook and chum spawning habitat and overwintering habitat for resident fish, soils, water, and cultural resources and scenic values.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Jim River** Designate as an ACEC to protect crucial Chinook and chum spawning habitat and overwintering habitat for resident fish and water resources.
• Require plans of operation with protective stipulations and mitigation measures to all surface-disturbing activities to avoid unduly affecting aquatic and riparian habitat or threatened, endangered, or candidate species (including plants and peregrine falcons), or affecting any other protected resource • Seasonal use and surface occupancy restrictions, including oil and gas leasing, may be identified once	• Pursue FLPMA withdrawal (on lands not already withdrawn) • Recommend withdrawal from locatable mineral entry • Closed to mineral materials disposal • Closed to fluid mineral leasing and development • Closed to nonenergy solid mineral leasing and development • Closed to mineral extraction or collection (i.e., casual use and prospecting) • ROW avoidance area • Prohibit commercial timber development;	• NSO for fluid mineral leasing and development • ROW avoidance area • For all BLM-authorized camps and support facilities within the confines of the ACEC, if cultural resources are discovered, then camps and support must avoid impacts in these areas • All recreational facilities, such as campgrounds, and permitted activities would be developed in a manner to minimize disturbance	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	• NSO for fluid mineral leasing and development • ROW avoidance area • Manage as VRM Class III

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
inventory and monitoring studies have been conducted • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished • Protect habitat crucial to threatened and endangered species, especially peregrine falcons • Approve new mineral materials sites within the floodplain only if no other economically feasible sites are available	prohibit non-subsistence collecting of live vegetation (subsistence use still requires a permit) • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished; such facilities would not be located in the 100-year floodplain, except for scientific purposes; if cultural resources are discovered, then camps and support must avoid impacts in these areas • Closed to summer OHV use • Manage as VRM Class III • All recreation facilities, such as campgrounds, and permitted activities would be developed in a manner to avoid disturbance to protect resources in the ACEC (restricted to previously disturbed areas where possible).	to protect resources within the ACEC (restricted to previously disturbed areas where possible) • Manage as VRM Class III	(*see above*)	(*see above*)	(*see above*)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Mentanontli River/Lake Todatonten					
No similar action; the Mentanontli River/Lake Todatonten is not a designated ACEC.	**Mentanontli River/Lake Todatonten** Designate as an ACEC to protect crucial feeding habitat for humpback whitefish and whitefish migration route.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Mentanontli River/Lake Todatonten** Designate as an ACEC to protect crucial feeding habitat for humpback whitefish and whitefish migration route.
No similar action; the Mentanontli River/Lake Todatonten is not a designated ACEC.	• Pursue FLPMA withdrawal • Recommend withdrawal from locatable mineral entry • Closed to mineral materials disposal • Closed to fluid mineral leasing and development • Closed to nonenergy solid mineral leasing and development • Closed to mineral extraction or collection (i.e., casual use and prospecting) • Closed to summer OHV use • ROW exclusion area • Prohibit commercial timber development; prohibit non-subsistence collecting of live vegetation (subsistence use still requires a permit)	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	• Closed to mineral materials disposal • NSO for fluid mineral leasing and development • ROW avoidance area • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be located in the 100-year floodplain, except for scientific purposes

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	• All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be located in the 100-year floodplain, except for scientific purposes	(*see above*)	(*see above*)	(*see above*)	(*see above*)
Midnight Dome/Kalhabuk					
No similar action; Midnight Dome/Kalhabuk is not a designated ACEC.	**Midnight Dome/Kalhabuk** Designate as an ACEC to protect Dall sheep habitat and Mineral Lick Protection Zones.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Midnight Dome/Kalhabuk** Designate as an ACEC to protect Dall sheep habitat
No similar action; Midnight Dome/Kalhabuk is not a designated ACEC.	• Pursue FLPMA withdrawal (on lands not already withdrawn) • Recommend for withdrawal from locatable mineral entry • Closed to fluid mineral leasing and development • Closed to mineral materials disposal • Closed to nonenergy solid mineral leasing and development • Closed to summer OHV use • Exclusion area for rotor-wing aircraft landing, except for those related to fish and wildlife management activities • Prohibit surface-disturbing activity in priority habitat (including	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	• NSO for fluid mineral leasing and development • Closed to mineral materials disposal • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	identified migration or movement corridors) • Prohibit vegetation removal within a 0.5-mile radius of a mineral lick	(*see above*)	(*see above*)	(*see above*)	(*see above*)
Nugget Creek, Poss Mountain, Snowden Mountain, and West Fork Atigun					
Nugget Creek, **Poss Mountain**, **Snowden Mountain**, and **West Fork Atigun** as ACECs to protect crucial Dall sheep lambing areas and mineral lick.	**Nugget Creek**, **Poss Mountain**, and **West Fork Atigun** Designate as ACECs to protect priority Dall sheep habitat (including mineral licks). For Snowden Mountain, see *Sukakpak/Snowden Mountain ACEC*.	No similar action (the ACECs would not be designated under this alternative). For Snowden Mountain, see *Sukakpak/ Snowden Mountain ACEC*.	No similar action (the ACECs would not be designated under this alternative).	No similar action (the ACECs would not be designated under this alternative).	**Nugget Creek**, **Poss Mountain**, **Snowden Mountain**, and **West Fork Atigun** Designate as ACECs to protect priority Dall sheep habitat
• Mineral lick sites (160-acre parcels) are withdrawn from mineral entry and location to surface occupancy by BLM-authorized land activities and to mineral materials extraction • Apply NSO stipulations to fluid mineral leases • Allow only mineral materials extraction with stipulations to prevent disturbance of Dall sheep habitat or access • Plans of operation with protective stipulations and mitigation measures would be applied to all surface-disturbing	• Pursue FLPMA withdrawal (on lands not already withdrawn) • Closed to: o Locatable mineral entry and location o Fluid mineral leasing and development o Nonenergy solid mineral leasing and development • Closed to mineral materials disposal • Prohibit surface-disturbing activities with 1.5 miles (2.5 kilometers) of mineral lick sites	No similar action (the ACECs would not be designated under this alternative).	No similar action (the ACECs would not be designated under this alternative).	No similar action (the ACECs would not be designated under this alternative).	• NSO for fluid mineral leasing and development • Closed to nonenergy solid mineral leasing and development • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
activities to avoid restricting sheep movement, unduly disturbing sheep habitat, or affecting any other protected resource • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished • Aircraft associated with all BLM-authorized land use activities would be required to fly a minimum of 2,000 feet AGL from May 1 to August 31, unless doing so would endanger human life or be an unsafe flying practice	(*see above*)	(*see above*)	(*see above*)	(*see above*)	(*see above*)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
No similar action (see actions common to all four ACECs above).	**Nugget Creek** • Aircraft associated with all permitted use activities would be required to fly a minimum of 2,000 feet AGL from April 15 to September 30 in identified sheep habitat, unless doing so would endanger human life or be an unsafe flying practice or unless otherwise authorized or permitted • Any proposed surface-disturbing activities must mitigate wildlife impacts and impacts on connectivity corridors • 1.5-mile (2.5-kilometer) radius centered around mineral licks is an exclusion area for rotor-wing aircraft during peak lambing	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Nugget Creek** • Closed to mineral materials disposal

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
No similar action (see actions common to all four ACECs above).	**Poss Mountain** • Closed to summer OHV use • 1.5-mile (2.5-kilometer) radius centered around mineral licks is an exclusion area for rotor-wing aircraft during peak lambing • Avoid surface-disturbing activity in identified migration or movement corridors • Prohibit vegetation removal within a 0.5-mile (0.8-kilometer) radius of a mineral lick	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Poss Mountain**
No similar action (see actions common to all four ACECs above).	For Snowden Mountain, see *Sukakpak/Snowden Mountain ACEC*.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Snowden Mountain** (see actions common to all four ACECs above). • NSO for fluid mineral leasing and development • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would be temporary and must be removed after their purpose has been accomplished

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
No similar action (see actions common to all four ACECs above).	**West Fork Atigun** • 1.5-mile (2.5-kilometer) radius centered around mineral licks is an exclusion area for rotor-wing aircraft during peak lambing • Avoid surface-disturbing activity in identified migration or movement corridors	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**West Fork Atigun** • Closed to mineral materials disposal
Sukakpak/Snowden Mountain					
Sukakpak Mountain Desigante as an ACEC to protect high scenic values and geology.	**Sukakpak/Snowden Mountain** Designate as an ACEC to protect priority Dall sheep habitat (including mineral licks), high scenic values, and geology.	Designate the Sukakpak/Snowden ACEC to protect high scenic values and geology.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).
• Mineral materials extraction would not be allowed on the slopes of Sukakpak Mountain • NSO stipulations would be applied to fluid mineral leasing in the ACEC • All recreation facilities would be consistent with the Dalton Highway Recreation Activity Management Plan • Recreation opportunities in the area would be emphasized by trail development.	• Pursue FLPMA withdrawal • Recommend withdrawal from locatable mineral entry • Closed to fluid mineral leasing and development • Closed to mineral materials disposal • Closed to nonenergy solid mineral leasing and development • Prohibit timber harvest and vegetation removal, except as required for permitted activities • Prohibit subsistence timber harvest and vegetation removal • Avoid dozer use in fire suppression	• NSO for fluid mineral leasing and development • ROW avoidance area • Prohibit timber harvest and vegetation removal, except as required for permitted activities • Consider viewshed when planning dozer lines	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	• ROW avoidance area • Prohibit surface-disturbing activities with 1.5 miles (2.5 kilometers) of mineral lick sites • Closed to summer OHV use • Exclusion area for rotor-wing aircraft during peak lambing • Avoid surface-disturbing activity in identified migration or movement corridors • Prohibit vegetation removal within a 0.5-mile (0.8-kilometer) radius of a mineral lick • Manage as VRM Class III	(*see above*)	(*see above*)	(*see above*)	(*see above*)
Sulukna River					
Sulukna River Designate as an ACEC to protect crucial salmon and sheefish (inconnu) spawning habitat.	**Sulukna River** Designate as an ACEC to protect crucial spawning and rearing habitat for sheefish (inconnu) and other whitefish and salmon species.	**Sulukna River** Designate as an ACEC to protect crucial spawning and rearing habitat for sheefish (inconnu) and other whitefish and salmon species.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Sulukna River** Designate as an ACEC to protect crucial spawning and rearing habitat for sheefish (inconnu) and other whitefish and salmon species.
No similar action.	• Pursue FLPMA withdrawal • Recommend for withdrawal from locatable mineral entry within the 100-year floodplain • Closed to mineral materials disposal	• NSO for fluid mineral leasing • ROW avoidance area • All BLM-authorized camps and support facilities would not be located within the confines of the ACEC, including	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	• Closed to mineral materials disposal • Closed to fluid mineral leasing and development • Closed to nonenergy solid mineral leasing and development

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	• Closed to fluid mineral leasing and development • Closed to nonenergy solid mineral leasing and development • Closed to mineral extraction or collection (i.e., casual use and prospecting) within the 100-year floodplain • In summer, limit motorized vehicle use to designated routes, trails, or crossings and allow access through the ACEC for vehicles over 1,500 pounds curb weight by permit • ROW exclusion area with the 100-year floodplain • Prohibit commercial timber development; prohibit non-subsistence collecting of live vegetation (subsistence use still requires a permit) within the 100-year floodplain • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be in the 100-year floodplain	cabins and tent frames; except for scientific purposes	(*see above*)	(*see above*)	• Closed to mineral extraction or collection (i.e., casual use and prospecting) In summer, limit motorized vehicle use to designated routes, trails, or crossings and allow access through the ACEC for vehicles over 1,500 pounds curb weight by permit • ROW exclusion area • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be in the 100-year floodplain

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Toolik Lake					
Toolik Lake Designate as an ACEC and RNA to protect research activities.	**Toolik Lake** Designate as an ACEC and RNA to protect the high-value research station, supporting more than 14,000 scientific research plots, special status species, and vegetation.	**Toolik Lake** Designate as an RNA to protect high-value research station, supporting more than 14,000 scientific research plots, special status species, and vegetation.	**Toolik Lake** Designate as an RNA to protect research activities.	No similar action (the ACEC/RNA would not be designated under this alternative).	**Toolik Lake** Designate as an RNA to protect high-value research station, supporting more than 14,000 scientific research plots, special status species, and vegetation.
• Protect habitats crucial to species considered threatened, endangered, candidate, or sensitive by the U.S. Fish and Wildlife Service or the State of Alaska • All authorized actions would be reviewed to avoid conflict with ongoing research projects in the area • NSO stipulations would be applied to habitat for *Montia bostockii* locations • The sale of mineral materials would be confined to already-disturbed sites; new sites would be considered only if no other economically feasible alternatives are available	• All authorized actions would be reviewed to avoid conflict with permitted research projects in the area • Closed to new mineral materials disposal sites	• All authorized actions would be reviewed to avoid conflict with permitted research projects in the area • Mineral materials would be confined to already-disturbed sites; new sites would be considered only if no other economically feasible alternatives are available	• All authorized actions would be reviewed to avoid conflict with permitted research projects in the area • Closed to new mineral materials disposal sites	No similar action (the ACEC/RNA would not be designated under this alternative).	• All authorized actions would be reviewed to avoid conflict with permitted research projects in the area • Mineral materials would be confined to already-disturbed sites; new sites would be considered only if no other economically feasible alternatives are available

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
• No recreational camping would be permitted • No public use campgrounds would be developed at Toolik Lake • OHV access for research activities would be allowed through permit • Guiding operations would not be authorized at Toolik Lake	• Closed to summer OHV use, except for permitted activities • Prohibit Special Recreation Permits, commercial transporters, and air taxis on the shores of Toolik Lake	• See Dalton Highway Corridor SRMA (Outer Corridor RMZ and Brooks Range North/Galbraith Lake RMZ) for camping restrictions • Closed to summer OHV use, except for permitted activities • Prohibit Special Recreation Permits on the shores of Toolik Lake	• Closed to summer OHV use, except for permitted activities • Prohibit Special Recreation Permits, commercial transporters, and air taxis on the shores of Toolik Lake	No similar action (the ACEC/RNA would not be designated under this alternative).	• Closed to nonpermitted camping • See Dalton Highway Corridor SRMA (Brooks Range North/Galbraith Lake RMZ) for camping restrictions • Closed to summer OHV use, except for permitted activities • Prohibit Special Recreation Permits on the shores of Toolik Lake
No lands in the RNA would be made available for disposal (state selection, exchange, or sale).	No lands in the RNA would be made available for disposal (exchange or sale).	No lands in the RNA would be made available for disposal (exchange or sale).	No lands in the RNA would be made available for disposal (exchange or sale).	No similar action.	No lands in the RNA would be made available for disposal (exchange or sale).
Prepare a detailed management activity plan for the Toolik Lake Research Natural Area Plan, including the Galbraith Lake ACEC.	No similar action.	No similar action.	No similar action.	No similar action.	No similar action.
Kanuti Hot Springs					
Kanuti Hot Springs Designate as an ACEC to protect a hot springs system.	**Kanuti Hot Springs** Designate as an ACEC to protect a hot springs system.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
• The ACEC and surrounding lands (160 acres) closed to mineral entry under PLO 399 of August 20, 1947, which withdrew all hot springs in Alaska from entry and all forms of appropriation • Restrict leasing and development to actions that would not directly affect the hot springs, any identified crucial wildlife habitat, and rare, endangered, or listed plant species • Apply NSO stipulations to fluid mineral leases • Maintain water quality of the spring area and adhere to Environmental Protection Agency and state water quality standards • All surface-disturbing activities having any effect on the resources in the ACEC would require plans of operation and appropriate mitigation to eliminate or minimize any adverse impacts • Close to mineral materials disposal	• Same as Alternative A, plus: o Prohibit timber and vegetation removal o Prohibit subsistence timber harvest and vegetation removal o Prohibit camping o ROW exclusion area	No similar action (the ACEC would not be designated under this alternative). PLO 399 would remain withdrawn even when no ACEC is designated.	No similar action (the ACEC would not be designated under this alternative). PLO 399 would remain withdrawn even when no ACEC is designated.	No similar action (the ACEC would not be designated under this alternative). PLO 399 would remain withdrawn even when no ACEC is designated.	No similar action (the ACEC would not be designated under this alternative). PLO 399 would remain withdrawn even when no ACEC is designated.

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Huslia					
No similar action; Huslia is not a designated ACEC.	**Huslia** Designate as an ACEC to protect chinook, chum, coho, and sockeye salmon and whitefish spawning habitat.	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	**Huslia** Designate as an ACEC to protect chinook, chum, coho, and sockeye salmon and whitefish spawning habitat.
No similar action; Huslia is not a designated ACEC.	• Pursue FLPMA withdrawal • Recommend withdrawal from locatable mineral entry • Closed to mineral materials disposal • Closed to fluid mineral leasing and development • Closed to nonenergy solid mineral leasing and development • Closed to mineral extraction or collection (i.e., casual use and prospecting) • In summer, limit motorized vehicle use to designated routes, trails, or crossings • ROW avoidance area • For BLM-authorized activities, over-ice travel is limited to designated corridors and required engineer thickness/strength testing approval • Prohibit commercial timber development; prohibit non-subsistence collecting of live	• No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	• Closed to mineral materials disposal • ROW avoidance area • NSO for fluid mineral leasing and development • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, except for scientific purposes

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	vegetation (subsistence use still requires a permit) • All BLM-authorized camps and support facilities within the confines of the ACEC, including cabins and tent frames, would not be located in the 100-year floodplain, except for scientific purposes	(*see above*)	(*see above*)	(*see above*)	(*see above*)
Nigu-Iteriak					
Nigu-Iteriak Designate as an ACEC to protect geologic features and cultural resources (Utility Corridor Resource Management Plan).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).
• The upper Nigu section would remain closed to mineral location, mineral materials extraction, and mineral leasing • The Iteriak section would be opened to mineral development (entry and leasing), but closed to mineral materials extraction • OHV use only for subsistence purposes would be allowed • Manage as VRM Class III	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).	No similar action (the ACEC would not be designated under this alternative).

J.3 FORESTRY

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E

Action: Close the CAMA WSA to commercial harvesting of forest products.
 	
Implement provisions in the Alaska Forest Practices Act (Alaska Statute 41.17).
 	
No prohibition on commercial harvest, except in crucial wildlife habitat (e.g., RNAs).
 	
Stream buffers (50 feet) in the Utility Corridor; prohibit disturbance of vegetation within 300 feet of Jim River.
 	
Utility Corridor, Appendix N: Cutting trees within 50 feet of either side of a stream would be prohibited, unless the trees are a danger to human safety or are adversely affecting stream flow.
	Action: Prohibit commercial timber development and prohibit nonsubsistence collecting of live vegetation (subsistence use still requires a permit) in the following areas:
	• CAMA WSA
	• Suitable WSR segments classified as wild
	• Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses
	• Within 100 feet of a water body
	• sensitive soils
	• ACECs
	  ○ Alatna River
	  ○ Arms Lake
	  ○ Hogatza River Tributaries
	  ○ Huslia
	  ○ Indian River
	  ○ Ishtalitna Creek Hot Springs
	  ○ Jim River
	  ○ Klikhtentotzna Creek
	  ○ Lake Todatonten Pingos
	  ○ McQuesten Creek
	  ○ Mentanontli River/Lake Todatonten
		Action: Prohibit commercial timber development and prohibit nonsubsistence collecting of live vegetation (subsistence use still requires a permit) in the following areas:
		• CAMA WSA
		• Within 66 feet of a water body
		
		Prohibit timber harvest and woody vegetation removal, except as required for permitted activities, in the Sukakpak/Snowden Mountain ACEC.
			Action: Prohibit commercial timber development and prohibit nonsubsistence collecting of live vegetation (subsistence use still requires a permit) in the following areas:
			• CAMA WSA
			• Within 50 feet of a water body
				Action: Prohibit commercial timber development and prohibit nonsubsistence collecting of live vegetation (subsistence use still requires a permit) in the following areas:
				• CAMA WSA
				• Within 50 feet of a water body
					Action: Prohibit commercial timber development and prohibit nonsubsistence collecting of live vegetation (subsistence use still requires a permit) in the following areas:
					• CAMA WSA
					• Within 50 feet of a water body

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	○ Redlands Lake ○ Sethkokna River ○ South Fork Koyukuk River ○ South Todatonten Summit ○ Sukakpak/Snowden Mountain ○ Sulukna River (within the 100-year floodplain) ○ Tozitna (within the 100-year floodplain) ○ Upper Teedriinjik (Chandalar) River ○ Wheeler Creek Prohibit timber harvest and vegetation removal, except as required for permitted activities, in the Sukakpak/Snowden Mountain ACEC. Prohibit subsistence timber harvest and woody vegetation removal in the Kanuti Hot Springs ACEC.	(*see above*)	(*see above*)	(*see above*)	(*see above*)

J.4 ALASKA NATIVE CLAIMS SETTLEMENT ACT (ANCSA) 17(D)(1) WITHDRAWALS

Alternative A (*No Action*)	Alternative B	Alternatives C1 and C2 *(Preferred Alternative)*	Alternative D	Alternative E
Action: Seven ANCSA 17(d)(1) withdrawals are in place; generally, close lands to all forms of appropriation under public laws, including mining and mineral leasing.	**Action:** Recommend revoking all seven ANCSA 17(d)(1) withdrawals. However, revocations to ANCSA 17(d)(1)s are only recommended through this RMP if the PLO was included in the Draft RMP/EIS (5,252,000 acres). For the ANCSA 17(d)(1) PLOs that were identified in the land status corrections in the Proposed Plan Final EIS, the BLM recommends no change to those PLOs' statuses.	**Action:** Same as Alternative B.	**Action:** Same as Alternative B.	**Action:** recommend the Secretary revoke in part the 11,115,000 acres of ANCSA 17(d)(1) withdrawals to allow for allotment selection for Alaska Native Vietnam-era Veterans in compliance with the Dingell Act.
Action: PLO 5169 withdrawing lands from mineral leasing and mineral location and entry. (475,000 acres). • Lands that cover part of CAMA and Umiat Meridian, and other scattered locations. • Withdraws from location and entry under the mineral laws and from leasing under leasing laws • Withdrawals from state selection and reserves for native selection. • Modified and corrected by PLO No. 5191 • Amended by PLO Nos. 5256, 5396, 5428, 5439 and 5556.	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking the withdrawal.	**Action:** Recommend revoking the withdrawal.	**Action:** • Recommend partial revocation to allow for only allotment selection for Alaska Native Vietnam Veterans in compliance with the Dingell Act, on all of PLO 5169

Alternative A (*No Action*)	Alternative B	Alternatives C1 and C2 *(Preferred Alternative)*	Alternative D	Alternative E
Action: PLO 5173 withdrawing lands from mineral leasing and mineral location and entry (2,677,000 acres). • East edge of Nulato Hills, near Kanuti National Wildlife Refuge, and other scattered locations • Withdraws from location and entry under the mineral laws and from leasing under leasing laws • Paragraph 1 and 2—Reserved for selection under Section 12 of ANCSA and for reallocation under Section 12b of ANCSA • Paragraph 5—Reserved for study and review by the Secretary of the Interior for the purpose of classification or reclassification of any lands not conveyed, pursuant to Section 14 of ANCSA • Amended by PLOs 5252 (makes some land available for state selection), 5321 (correction land description), and 5391 (adds lands)	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking the withdrawal.	**Action:** Recommend revoking the withdrawal.	**Action:** • Recommend partial revocation to allow for only allotment selection for Alaska Native Vietnam Veterans in compliance with the Dingell Act, on all of PLO 5173
Action: PLO 5179 withdrawing lands from mineral leasing and mineral location and entry (1,027,000 acres). • Covers National Wildlife Refuges, part of Nigu River, and Veneti strip • Withdraws from location and entry under the mineral laws and from leasing under leasing laws • Paragraph 1—To reserve for study and possible recommendations to Congress for addition to or creation as units of National Park, Forest, Wildlife Refuge, and WSR system • Paragraph 2—To reserve for study and review by the Secretary of the Interior for the purpose of classification or reclassification, as appropriate • Amended by PLOs 5192 (adds and deletes lands), 5250 (adds lands), 5251 (deletes lands), 5257 (adds lands), and 5254 (deletes lands)	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking the withdrawal.	**Action:** Recommend revoking the withdrawal.	**Action:** • Recommend partial revocation to allow for only allotment selection for Alaska Native Vietnam Veterans in compliance with the Dingell Act on all of PLO 5179

Alternative A (*No Action*)	Alternative B	Alternatives C1 and C2 *(Preferred Alternative)*	Alternative D	Alternative E
Action: PLO 5180 withdrawing lands from mineral leasing and mineral location and entry, except for metalliferous minerals (6,435,000 acres). • Covers the Dalton Utiltiy Corridor, Nulato Hills, and other large block of BLM-managed lands • Withdraws from entry under the mineral laws (except location for metalliferous minerals) and the leasing laws • Reserved for study to determine the proper classification of the lands under Section 17(d)(1) of ANCSA and to ascertain the public values in the land that need protection • Amended by PLOs 5193 (corrects or modifies land description), 5242 (allows for native selection), 5250 (removed some lands), 5251 (added more lands), 5254 (removes some lands), 5257, 5321 (added more lands), 5391 (removes lands), and 5418 (adds all unreserved lands in Alaska)	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking the withdrawal.	**Action:** Recommend revoking the withdrawal.	**Action:** • Recommend partial revocation to allow for only allotment selection for Alaska Native Vietnam Veterans in compliance with the Dingell Act on all of PLO 5180
Action: PLO 5184 withdrawing lands from mineral leasing and mineral location and entry (1,516,000 acres). • Covers mostly checkerboard land around villages • Covers lands withdrawn under Section 11 of ANCSA, approximately 11 million acres • Withdraws from location and entry under the mineral laws and from leasing under leasing laws • Reserved for study and review by the Secretary of the Interior for classifying or reclassifying any lands not conveyed, pursuant to Section 14 of ANCSA	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking withdrawal.	**Action:** • Recommend partial revocation to allow for only allotment selection for Alaska Native Vietnam Veterans in compliance with the Dingell Act on all of PLO 5184

Alternative A (*No Action*)	Alternative B	Alternatives C1 and C2 *(Preferred Alternative)*	Alternative D	Alternative E
Action: PLO 5186 withdrawing lands from mineral leasing and mineral location and entry, except for metalliferous minerals (127,000 acres). • Covers North Slope, Poorman area, south of Gates of the Arctic, near Tanana Flats; not much appears to be on BLM-managed lands • Withdraws from entry under the mineral laws (except location for metalliferous minerals) and the leasing laws • Modified by PLO 5242	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking withdrawal.	**Action:** • Recommend partial revocation to allow for only allotment selection for Alaska Native Vietnam Veterans in compliance with the Dingell Act on all of PLO 5186
Action: PLO 5242 (6,000 acres): • Partial revocation of PLO 5180 and 5186 • Withdraws from location and entry under the mineral laws and from leasing under leasing laws	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking withdrawal.	**Action:** Recommend revoking withdrawal.	**Action:** • Recommend partial revocation to allow for only allotment selection for Alaska Native Vietnam Veterans in compliance with the Dingell Act on all of PLO 5242

J.5 RIGHT-OF-WAY ALLOCATIONS

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E

Action: Manage the CAMA WSA as ROW exclusion area.	**Action:** Manage as ROW exclusion areas:
	• Within the 100-year floodplain of high value watersheds
	• CAMA WSA
	• Hot Springs
	  ○ Kanuti
	  ○ Ishtalitna
	  ○ Ray River
	  ○ Kilo
	• Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses
	• ACECs
	  ○ Accomplishment Creek
	  ○ Alatna River
	  ○ Arms Lake
	  ○ Ishtalitna Creek Hot Springs
	  ○ Indian River
	  ○ Galena Mountain
	  ○ Kanuti Hot Springs
	  ○ Klikhetentotzan Creek
	  ○ Lake Todatonten Pingos
	  ○ Mcquesten Creek
	  ○ Mentanontli River/Lake Todatonten
	  ○ Redlands Lake
	  ○ Sethkokna River
		Action: Manage as ROW exclusion areas:
		• CAMA WSA
		• Hot Springs
		  ○ Kanuti
		  ○ Ishtalitna
		  ○ Ray River
		  ○ Kilo
		• Dall Sheep Habitat Area (DSHA) (see **Appendix I** for specifications)
			Action: Manage as ROW exclusion areas:
			• CAMA WSA
				Action: Manage as ROW exclusion areas:
				• CAMA WSA
					Action: Manage as ROW exclusion areas:
					• CAMA WSA
					• Hot Springs
					  ○ Kanuti
					  ○ Ishtalitna
					  ○ Ray River
					  ○ Kilo
					• ACECs
					  ○ Alatna River (5,000 acres)
					  ○ Within the stream order-based 100-year floodplain buffer areas, the following special management applies: Sulukna River (51,000 acres)

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	○ South Fork Koyukuk River ○ South Todatonten Summit ○ Sulukna River (within the 100-year floodplain) ○ Tozitna (within the 100-year floodplain) ○ Upper Teedriinjik (Chandalar) River ○ Wheeler Creek	(*see above*)	(*see above*)	(*see above*)	(*see above*)
Action: No similar action; no ROW avoidance areas are identified.	**Action**: Manage as ROW avoidance areas: • 160-acre area centered on hot springs • Within 0.25 miles of lentic areas • 100-year floodplain in non-high-value watersheds • Wetlands • Alpine vegetation • Lichen • Pingo clusters • Sensitive soils in high-value watersheds • Slopes greater than 35 percent • Lands with wilderness characteristics managed to emphasize other multiple uses, while applying management restrictions to reduce impacts on wilderness characteristics	**Action:** Manage as ROW avoidance areas: • 160-acre area centered on hot springs not otherwise managed as ROW exclusion • Within 0.25 miles of lentic areas • 100-year floodplain of high-value watersheds • Wetlands • Pingos • Slopes greater than 35 percent • Ray Mountans and Galena Mountain Core Caribou Ranges	**Action:** Manage as ROW avoidance areas: • Pingo clusters south of Lake Todatonten and adjacent to Kanuti Hot Springs • Ray Mountans and Galena Mountain Core Caribou Ranges • Venetie arm	**Action:** No similar action; no ROW avoidance areas are identified.	**Action:** Manage as ROW avoidance areas: • DSHA (see Appendix I for specifications) • 160-acre area centered on hot springs • 100-year floodplain of high-value watersheds • Venetie arm • Ray Mountans and Galena Mountain Core Caribou Ranges • Pingo clusters south of Lake Todatonten and adjacent to Kanuti Hot Springs • ACECs ○ Accomplishment Creek (41,000 acres) ○ 100-year floodplain portions of ACECs: 1. Hogatza River Tributaries (55,000 acres)

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E

(*see above*)	• Suitable WSR segments
	• ACECs
	  ○ Hogatza River tributaries
	  ○ Huslia
	  ○ Jim River
	  ○ Spooky Valley
	  ○ Sukakpak/Snowden Mountain
	  ○ Tozitna (outside of the 100-year floodplain)
	Upper Kanuti River
	• Dalton Corridor Backcountry Conservation Area
		• Dall sheep movement corridors (see **Appendix I** for specifications)
		• Lands with wilderness characteristics managed to emphasize other multiple uses, while applying management restrictions to reduce impacts on wilderness characteristics
		ACECs
		  ○ Accomplishment Creek
		  ○ Alatna River
		  ○ Jim River
		  ○ South Fork Koyukuk River
		  ○ Sukakpak Mountain
		  ○ Sulukna River
			(*see above*)	(*see above*)	2. Huslia River (9,000 acres)
					3. Indian River (17,000 acres)
					4. Jim River (30,000 acres)
					5. Klikhtentotzna Creek (18,000 acres)
					6. Sethkokna River (34,000 acres)
					7. South Fork Koyukuk River (44,000 acres)
					8. Tozitna River (85,000 acres)
					9. Upper Teedriinjik (Chandalar) River (31,000 acres)
					10. Wheeler Creek (16,000 acres)

J.6 TRAVEL AND TRANSPORTATION MANAGEMENT

Alternative A (*No Action*)	Alternative B	Alternatives C1 and C2 *(Preferred Alternative)*	Alternative D	Alternative E
Action: Manage the following TMAs (TMAs are limited for OHV use) (**Maps 2.47** and **2.49**–**2.51**, **Appendix A**): • Within 5 miles of the Dalton Highway • Nigu Wilderness and Iteriak ACEC (Upper Nigu) • Remainder of Dalton Plan Area	**Action:** Manage the following as TMAs (all TMAs are limited (per 43 CFR 8340.0-5[g]) for OHV use) (**Map 2.48**, **Appendix A**): • Dalton Corridor • CAMA lands • Yukon/rest of planning area			

Alternative A (*No Action*)	Alternative B	Alternatives C1 and C2 *(Preferred Alternative)*	Alternative D	Alternative E

Action: Limit use of vehicles greater than 1,500 pounds gross vehicle weight to the winter, with adequate snow cover, and to existing trails, where practical.	**Action:** Manage the following areas as subject to seasonal limitations for OHV use (closed in summer):
	• ACECs
	  ○ Accomplishment Creek
	  ○ Alatna River
	  ○ Indian River
	  ○ Jim River
	  ○ Klikhtentotzna Creek
	  ○ Mentanontli River/Lake Todatonten
	  ○ Midnight Dome/Kalhabuk
	  ○ Poss Mountain
	  ○ Sethkokna River
	  ○ South Fork Koyukuk River
	  ○ Sukakpak/Snowden Mountain
	  ○ Toolik Lake (except by permit)
	  ○ Upper Teedriinjik (Chandalar) River
	  ○ Wheeler Creek
	• Within 160 acres of hot springs
	• Naturally occurring asbestos sites
		Action: Manage the following areas as subject to seasonal limitations for OHV use (closed in summer):
		• Toolik Lake ACEC/RNA (except by authorization) (*Note: Toolik Lake ACEC/RNA has different boundaries; therefore, different acres in Alternatives C1 and C2, see **Table 2-1** in **Chapter 2**.)*
		• Naturally occurring asbestos sites
			Action: Manage the following areas as subject to seasonal limitations for OHV use (closed in summer):
			• Naturally occurring asbestos sites
				Action: Manage the following areas as subject to seasonal limitations for OHV use (closed in summer):
				• Naturally occurring asbestos sites
				• Toolik Lake

Action: No similar action.	**Action:** Manage the following areas as timing limitations for summer OHV travel (no OHVs May 1–June 30):
	• ACECs
	  ○ Spooky Valley
	  ○ Galena Mountain
	  ○ Tozitna
	  ○ Upper Kanuti
		Action: Manage the following areas as timing limitations to summer OHV travel (no OHVs May 1–June 30):
		• Galena Mountain Core Caribou Range
		• Ray Mountains Core Caribou Range
			Action: No similar action.	**Action:** Manage the following areas as timing limitations to summer OHV travel (no OHVs May 1–June 30):
				• Galena Mountain Core Caribou Range
				• Ray Mountains Core Caribou Range

J.7 MINERALS

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Fluid Leasable Minerals					
Action: The following areas are closed to fluid mineral leasing, due to resource concerns: • CAMA WSA • ACECs ○ Arms Lake ○ Dulbi River ○ Redlands Lake ○ Ishtalitna Creek Hot Springs ○ McQuesten Creek ○ Spooky Valley ○ Lake Todatonten Pingos ○ South Todatonten Summit ○ Upper Nigu-Iteriak	**Action:**The following areas are closed to fluid mineral leasing, due to resource concerns: • Within 160 acres of hot springs • Within 0.25 miles of lentic areas • Within 100-year floodplain of high-value watersheds • Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses • CAMA WSA • ACECs ○ Accomplishment Creek ○ Alatna River ○ Arms Lake ○ Galbraith Lake ○ Galena Mountain ○ Hogatza River Tributaries ○ Huslia ○ Indian River ○ Ishtalitna Creek Hot Springs ○ Jim River ○ Klikhtentotzna Creek ○ Lake Todatonten Pingos ○ McQuesten Creek ○ Mentanontli River/Lake Todatonten	**Action:** The following areas are closed to fluid mineral leasing, due to resource concerns: • Within 160 acres of hot springs • Ray Mountains Core Caribou Range • CAMA WSA	**Action:** The following areas are closed to fluid mineral leasing, due to resource concerns: • Within the 160-acre area centered on hot springs • CAMA WSA	**Action:** The following areas are closed to fluid mineral leasing, due to resource concerns: • CAMA WSA	**Action:** The following areas are closed to fluid mineral leasing, due to resource concerns: • Within 100-year floodplain of high-value watersheds • Ray Mountains Core Caribou Range • CAMA WSA • ACECs ○ Alatna River (5,000 acres) ○ Within the stream order-based 100-year floodplain buffer areas, the following special management applies: Sulukna River (51,000 acres)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	○ Midnight Dome/ Kahlabuk ○ Nugget Creek ○ Poss Mountain ○ Redlands Lake ○ Sethkokna River ○ Spooky Valley ○ South Fork Koyukuk River ○ South Todatonten Summit ○ Sukakpak/Snowden Mountain ○ Sulukna River (within the 100-year floodplain) ○ Toolik Lake ○ Tozitna ○ Upper Kanuti River ○ Upper Teedriinkjik (Chandalar) River ○ West Fork Atigun ○ Wheeler Creek	(*see above*)	(*see above*)	(*see above*)	(*see above*)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E

Per the Utility Corridor Resource Management Plan, NSO stipulations would apply to the inner corridor, eight identified mineral licks, Ivishak River and Kanuti Hot Springs ACECs, and streams closed to mineral location; these are the floodplains of the Jim River and Prospect Creek downstream of the eastern boundary of the inner corridor, and the Kanuti River downstream of the western boundary of the inner corridor. Rodo River, Kateel River, South Fork Huslia River, Ray River, and the three tributaries of Squaw Creek (northwest of Rampart) would be subject to a 300-foot NSO setback zone along either side of the water.
Manage the followng ACECs as open to fluid minierals, subject to NSO:
• Sukakpak Mountain
• Nugget Creek
• Poss Mtn
• Snowden Mtn
• W. Fork Atigun
• Galbraith Lake
	Action: Manage the following areas as open to fluid mineral leasing, subject to NSO:
	• 100-year floodplain not otherwise closed
	• Sensitive soils in high-value watersheds
	• Suitable WSR segments classified as wild
	• Lands with wilderness characteristics managed to emphasize other multiple uses, while applying management restrictions to reduce impacts on wilderness characteristics
	• emphasizing multiple use
	• Kanuti Hot Springs ACEC
	• Within 0.5 miles of golden eagle nests
		Action: Manage the following areas as open to fluid mineral leasing, subject to NSO:
		• DSHA
		• DSMC
		• Lands with wilderness characteristics managed to emphasize other multiple uses, while applying management restrictions to reduce impacts on wilderness characteristics
		• ACECs:
		  ○ Accomplishment Creek
		  ○ Alatna River
		  ○ Jim River
		  ○ South Fork Koyukuk River
		  ○ Sulukna River
		  ○ Sukapak/Snowden
		• Within 0.5 miles of golden eagle nests
			Action: No similar action.	**Action:** Manage the following areas as open to fluid mineral leasing, subject to NSO:
				• Within 160-acre area centered around hot springs, with an exception for geothermal leases or wells
					Action: Manage the following areas as open to fluid mineral leasing, subject to NSO:
					• Within 160-acre area centered around hot springs, with an exception for geothermal leases or wells
					• Within 0.25 miles of lentic areas
					• 100-year floodplain not otherwise closed
					• DSHA
					• Within 0.5 miles of active golden eagle nests
					• ACECs
					  ○ Accomplishment Creek (41,000 acres)
					  ○ Galbraith Lake (53,000 acres)
					  ○ Mentanontli River/Lake Todatonten (20,000 acres)
					  ○ Midnight Dome/ Kalhabuk (10,000 acres)
					  ○ Nugget Creek (3,000 acres)
					  ○ Poss Mountain (25,000 acres)
					  ○ Snowden Mountain (50,000 acres)
					  ○ West Fork Atigun (33,000 acres)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Note: Areas withdrawn from or closed to fluid mineral leasing may also be listed as NSO or controlled surface use because of land use plans and PLOs being designated at different times. However, the GIS model for this plan only counts NSO or controlled surface use acres if they are open to fluid mineral leasing.	(*see above*)	(*see above*)	(*see above*)	(*see above*)	Within the stream order-based 100-year floodplain buffer areas, the following special management applies: o Hogatza River Tributaries (55,000 acres) o Huslia River (9,000 acres) o Indian River (17,000 acres) o Jim River (30,000 acres) o Klikhtentotzna Creek (18,000 acres o Sethkokna River (34,000 acres) o South Fork Koyukuk River (44,000 acres) o Tozitna River (85,000 acres) o Upper Teedriinjik (Chandalar) River (31,000 acres) o Wheeler Creek (16,000 acres)
Action: No similar action.	**Action:** Manage the following areas as open to fluid mineral leasing, subject to controlled surface use. • Suitable WSR segments classified as recreational	**Action:** Manage the following areas as open to fluid mineral leasing, subject to controlled surface use: • Slopes greater than 35 percent and in areas with sensitive soils • Sensitive soils in high value watersheds	**Action:** Manage the following areas as open to fluid mineral leasing, subject to controlled surface use: • Slopes greater than 35 percent and in areas with sensitive soils	**Action:** Manage the following areas as open to fluid mineral leasing, subject to controlled surface use: • Slopes greater than 35 percent and in areas with sensitive soils	**Action:** Manage the following areas as open to fluid mineral leasing, subject to controlled surface use: • Slopes greater than 35 percent and in areas with sensitive soils

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Action: Manage the Utility Corridor—Seasonal closures may be applied to areas crucial to federally listed threatened or endangered species.	**Action:** Manage the following areas as open to fluid mineral leasing, subject to timing limitations: • Within 0.5 miles of any known priority raptor nests, from April 15 through August 15 (from March 15 through July 20 for gyrfalcon nests)	**Action:** Same as Alternative B.	**Action:** Same as Alternative B.	**Action:** No similar action.	**Action:** Same as Alternative B.

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Nonenergy Solid Leasable Minerals					

Action: The following areas are closed to nonenergy solid mineral leasing:
• CAMA WSA
• ACECs:
  ○ Arms Lake
  ○ Ishtalitna Creek Hot Springs
  ○ Lake Todatonten Pingos
  ○ McQuesten Creek
  ○ Redlands Lake
  ○ South Todatonten Summit
  ○ Spooky Valley
  ○ Upper Nigu-Iteriak
	Action: The following areas are closed to nonenergy solid mineral leasing:
	• CAMA WSA
	• 160-acre parcel around - hot springs
	• 100-year floodplains in high value watersheds
	• Within a 0.5-mile radius of golden eagle nests
	• Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses
	• Suitable WSR segments classified as wild
	• Naturally occurring asbestos sites
	• ACECs
	  ○ Accomplishment Creek
	  ○ Alatna River
	  ○ Arms Lake
	  ○ Galbraith Lake
	  ○ Galena Mountain
	  ○ Hogatza River Tributaries
	  ○ Huslia
	  ○ Indian River
	  ○ Ishtalitna Creek Hot Springs
	  ○ Jim River
	  ○ Klikhtentotzna Creek
	  ○ Lake Todatonten Pingos
	  ○ McQuesten Creek
	  ○ Mentanontli River/Lake Todatonten
		Action: The following areas are closed to nonenergy solid mineral leasing:
		• CAMA WSA
		• 160-acre parcel around hot springs
		• Slopes greater than 35 percent
		• DSHA
		• Ray Mountains Core Caribou Area *(where lands not conveyed)*
		• Naturally occurring asbestos sites
			Action: The following areas are closed to nonenergy solid mineral leasing:
			• CAMA WSA
			• 160-acre parcel around hot springs
			• Naturally occurring asbestos sites
				Action: The following areas are closed to nonenergy solid mineral leasing:
				• CAMA WSA
				• 160-acre parcel around hot springs
				• Naturally occurring asbestos sites
					Action: The following areas are closed to nonenergy solid mineral leasing:
					• CAMA WSA
					• 160-acre parcel around - hot springs
					• Ray Mountains Core Caribou Area *(where lands not conveyed)*
					• DSHA
					• ACECs
					  ○ Alatna River (5,000 acres)
					  ○ Nugget Creek (3,000 acres)
					  ○ West Fork Atigun (33,000 acres)
					  ○ Within the stream order-based 100-year floodplain buffer areas of Sulukna River (51,000 acres)
					• Naturally occurring asbestos sites

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	○ Midnight Dome/Kalhabuk ○ Nugget Creek ○ Poss Mountain ○ Redlands Lake ○ Sethkokna River ○ South Fork Koyukuk River ○ South Todatonten Summmit ○ Spooky Valley ○ Sukakpak/Snowden Mountain ○ Sulukna River ○ Toolik Lake (new sites) ○ Tozitna ○ Upper Kanuti River ○ Upper Teedriinjik (Chandalar) River ○ West Fork Atigun ○ Wheeler Creek • Dalton Corridor Backcountry Conservation Area	(*see above*)	(*see above*)	(*see above*)	(*see above*)
Locatable Minerals					
Action: The following areas are withdrawn from locatable mineral entry, including metalliferous minerals: • ANCSA PLOs • PLO 5150 (Inner Corridor) • Mineral licks (160-acre parcel) • Upper Nigu • Kanuti Hot Springs	**Action:** The inner corridor of PLO 5150 is withdrawn from locatable mineral entry.	**Action:** Same as Alternative B.	**Action:** No similar action (all PLOs would be lifted except Kanuti Hot Springs).	**Action:** No similar action (all PLOs would be lifted except Kanuti Hot Springs).	**Action:** The following areas are withdrawn from locatable mineral entry, including metalliferous minerals: • ANCSA PLOs • PLO 5150 (Inner Corridor) • Mineral licks (160-acre parcel) • Upper Nigu • Kanuti Hot Springs

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Action: The following areas are open to location of metalliferous minerals and closed to location of non-metalliferous minerals: • PLO 5180 • PLO 5186	**Action:** No similar action (these PLOs would be recommended for revocation).	**Action:** No similar action (these PLOs would be recommended for revocation).	**Action:** No similar action (these PLOs would be recommended for revocation).	**Action:** No similar action (these PLOs would be recommended for revocation).	**Action:** Same as Alternative A.

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Action: The following areas are recommended for withdrawal from locatable mineral entry (Central Yukon ROD, 1986, page 4, as per Section 204(a) of FLPMA): • Spawning habitat of selected anadromous streams, including portions of the North Fork Unalakleet River, Kateel River, Gisasa River, Tozitna River, Indian River, and Clear, Bear and Caribou Creeks (Hogatza River tributary streams) • Crucial peregrine falcon habitat • Kaltag and Nulato River watersheds • Subsistence withdrawal study areas • Withdrawal/exchange lands • RNAs: ○ Arms Lake ○ Ishtalitna Creek Hot Springs	**Action:** The following areas are recommended for withdrawal from locatable mineral entry: • Hot springs not already withdrawn (160 acres) • Within 0.5 miles of golden eagle nest sites • Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses • Suitable WSR segments classified as wild • ACECs ○ Arms Lake ○ Accomplishment Creek ○ Alatna River ○ Galbraith Lake ○ Galena Mountain ○ Hogatza River Tributaries ○ Huslia ○ Indian River ○ Ishtalitna Creek Hot Springs ○ Jim River ○ Klikhtentotzna Creek ○ Lake Todatonten Pingos ○ McQuesten Creek	**Action:** The following areas are recommended for withdrawal from locatable mineral entry: • DSHA • Ray Mountain Core Caribou Area *(where lands not conveyed)* • Within 0.5 miles of golden eagle nest sites Kanuti Hot Springs ACEC is currently withdrawn from locatable mineral entry as part of PLO 399.	**Action:** No areas are recommended for withdrawal from locatable mineral entry. Kanuti Hot Springs ACEC is currently withdrawn from locatable mineral entry as part of PLO 399.	**Action:** No areas are recommended for withdrawal from locatable mineral entry. Kanuti Hot Springs ACEC is currently withdrawn from locatable mineral entry as part of PLO 399.	**Action:** No areas are recommended for withdrawal from locatable mineral entry.

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
○ Lake Todatonten Pingos ○ McQuesten Creek ○ Redlands Lake ○ South Todatonten Summit ○ Spooky Valley • Floodplains of the Jim River and Prospect Creek, downstream of east boundary inner corridor • Five townships outside of the Southeast corner of Kanuti National Wildlife Refuge (T14N R19W; T16N R15 and 16W; T17N R16W; T18N R16W) Mineral licks (160-acre parcels) are recommended for withdrawal and the Upper Nigu is withdrawn from locatable mineral entry. 743,000 acres currently withdrawn from locatable mineral entry as part of the inner corridor (PLO 5150). Kanuti Hot Springs ACEC is currently withdrawn from locatable mineral entry as part of PLO 399.	○ Mentanontli River/Lake Todatonten ○ Midnight Dome/Kalhabuk ○ Nugget Creek ○ Poss Mountain ○ Redlands Lake ○ Sethkokna River ○ South Todatonten Summit ○ Spooky Valley ○ South Fork Koyukuk ○ Sukakpak/Snowden Mountain ○ Sulukna River (within the 100-year floodplain) ○ Tozitna ○ Upper Teedriinjik (Chandalar) River ○ Toolik Lake ○ Upper Kanuti River ○ West Fork Atigun ○ Wheeler Creek Kanuti Hot Springs ACEC is currently withdrawn from locatable mineral entry as part of PLO 399.	(*see above*)	(*see above*)	(*see above*)	(*see above*)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E

Action: No similar action.	**Action:** The following areas are closed to mineral extraction or collection (i.e., casual use and prospecting):
	• ACECs
	  ○ Accomplishment Creek
	  ○ Alatna River
	  ○ Hogatza River Tributaries
	  ○ Huslia
	  ○ Indian River
	  ○ Jim River
	  ○ Klikhtentotzna Creek
	  ○ Mentanontli River/Lake Todatonten
	  ○ Sethkokna River
	  ○ South Fork Koyukuk
	  ○ Sulukna River (within the 100-year floodplain)
	  ○ Tozitna
	  ○ Upper Teedriinjik (Chandalar) River
	  ○ Wheeler Creek
		Action: No similar action.	**Action:** No similar action.	**Action:** No similar action.	**Action:** The following areas are closed to mineral extraction or collection (i.e., casual use and prospecting):
					• Within the stream order-based 100-year floodplain buffer areas, the following special management applies: Sulukna River (51,000 acres)

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
Mineral Materials (Salable Minerals)					

Action: Manage the following areas as closed to mineral material disposal:
• 160-acre parcel around mineral lick sites
• ACECs
  ○ Nugget Creek, with stipulations to prevent disturbance of Dall sheep habitat or access
  ○ Sukakpak Mountain (on the slopes)
  ○ Kanuti Hot Springs
  ○ Nigu-Iteriak
• CAMA WSA (includes Nigu-Iteriak ACEC Alternative A boundary)
 	
Seasonal closures or other appropriate restrictions may also be applied to areas crucial to species covered by the Endangered Species Act (e.g., the Toolik Lake RNA).
	Action: Manage the following areas as closed to mineral material disposal:
	• 160-acre parcel around hot springs
	• 100-year floodplains in high-value watersheds
	• Within 0.5 miles of golden eagle nests
	• Naturally occurring asbestos sites
	• Portions of the Dalton Corridor Backcountry Conservation Area more than 5 miles from the Dalton Highway
	• CAMA WSA
	• Lands with wilderness characteristics managed to protect wilderness characteristics as a priority over other multiple uses
	• Suitable WSR segments classified as wild
	• ACECs
	  ○ Accomplishment Creek
	  ○ Alatna River
	  ○ Arms Lake
	  ○ Galbraith Lake
	  ○ Galena Mountain
	  ○ Hogatza River Tributaries
	  ○ Huslia
	  ○ Indian River
	  ○ Ishtalitna Creek Hot Springs
	  ○ Jim River
	  ○ Kanuti Hot Springs
		Action: Manage the following areas as closed to mineral material disposal:
		• 160-acre parcel around hot springs
		• Slopes greater than 35 percent
		• DSHA and DSMC (see *Wildlife* section for exceptions)
		• Galena Mountain and Ray Mountains Core Caribou Ranges
		• CAMA WSA
		• Naturally occurring asbestos sites
		• ACECs
		  ○ Alatna River
		  ○ Accomplishment Creek
		  ○ Jim River
		  ○ South Fork Koyukuk
		  ○ Sukapak Mountain
		  ○ Sulukna River
		• Toolik Lake RNA (confined to disturbed sites; new sites only if no other economically feasible alternatives)
			Action: Manage the following areas closed to mineral material disposal:
			• 160-acre parcel around hot springs
			• Naturally occurring asbestos sites
			• CAMA WSA
			• Toolik Lake ACEC/RNA
			• Galena Mountain and Ray Mountains Core Caribou Ranges
				Action: Manage the following areas closed to mineral material disposal:
				• 160-acre for hot springs
				• Naturally occurring asbestos sites
				• CAMA WSA
					Action: Manage the following areas as closed to new mineral material disposal:
					• 160-acre parcel around hot springs
					• Galena Mountain Core Caribou Range
					• DSHA (see *Wildlife* section for exceptions)
					• CAMA WSA
					• Naturally occurring asbestos sites
					• ACECs:
					  ○ Accomplishment Creek (41,000 acres)
					  ○ Alatna River (5,000 acres)
					  ○ Mentanontli River/Lake Todatonten (20,000 acres)
					  ○ Midnight Dome/ Kalhabuk (10,000 acres)
					  ○ Nugget Creek (3,000 acres)
					  ○ Poss Mountain (25,000 acres)
					  ○ Snowden Mountain (50,000 acres)
					  ○ Wheeler Creek 145,000 acres

Alternative A *(No Action)*	Alternative B	Alternative C1	Alternative C2 *(Preferred Alternative)*	Alternative D	Alternative E
(*see above*)	○ Klikhtentotzna Creek ○ Mentanontli River/Lake Todatonten ○ McQuesten Creek ○ Midnight Dome/ Kalhabuk ○ Nugget Creek ○ Poss Mountain ○ Redlands Lake ○ Sethkokna River ○ South Fork Koyukuk River ○ Spooky Valley ○ Sukakpak/Snowden Mountain ○ Sulukna River ○ Toolik Lake (new sites) ○ Tozitna ○ Upper Kanuti River ○ Upper Teedriinjik (Chandalar) River ○ West Fork Atigun ○ Wheeler Creek	(*see above*)	(*see above*)	(*see above*)	○ Within the stream order-based 100-year floodplain buffer areas, the following special management applies: ○ Hogatza River Tributaries (55,000 acres) ○ Huslia (9,000 acres) ○ Indian River (17,000 acres) ○ Jim River (30,000 acres) ○ Klikhtentotzna Creek (18,000 acres) ○ Sethkokna River (34,000 acres) ○ South Fork Koyukuk River (44,000 acres) ○ Sulukna River (51,000 acres) ○ Tozitna River (85,000 acres) ○ Upper Teedriinjik (Chandalar) River (31,000 acres)

J.8 REFERENCES

BLM (U.S. Department of the Interior Bureau of Land Management).1986. Central Yukon Planning Area Resource Management Plan Record of Decision. Fairbanks District Office, Northwest Resource Area. September 1986.

J.9 GLOSSARY

Alaska Native Claims Settlement Act (ANCSA). A law passed by Congress in 1971 to settle aboriginal land claims in Alaska. Under the settlement the Natives received title to over 44 million acres, to be divided among some 220 Native villages and 12 regional corporations established by the act. The corporations shared in a payment of $962,500,000.

Area of critical environmental concern (ACEC). Special area designation established through the BLM's land use planning process (43 CFR 1610.7-2) where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards. The level of allowable use within an ACEC is established through the collaborative planning process. Designation of an ACEC allows for resource use limitations to protect identified resources or values.

Dall sheep habitat area (DSHA). BLM-managed lands identified as having the highest habitat conservation value in relation to Dall sheep.

Dall sheep movement corridor (DSMC). BLM-managed lands identified as having significant value to Dall sheep for accessing seasonal ranges, mineral sources, forage habitat, and escape terrain.

Federal Land Policy and Management Act (FLPMA). A law passed in 1976 to establish public land policy, guidelines for its administration, and provide for the management, protection, development, and enhancement of the public lands.

No surface occupancy (NSO). A fluid mineral leasing constraint that prohibits occupancy or disturbance on all or part of the lease surface to protect special values or uses. Lessees may exploit the fluid mineral resources under the leases restricted by this constraint through use of directional drilling from sites outside the NSO area.

Research natural area. A land management status that reserves the area for uses that are compatible with the resource of interest and research for which the area was designated.

Unmanned aerial vehicle (UAV). A UAV is defined as an unmanned aerial vehicle and differs from an unmanned aircraft system in one major way: a UAV is just referring to the aircraft itself, not the ground control and communications units.

Appendix K

Recreation Management Areas and Backcountry Conservation Areas

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ACRONYMS AND ABBREVIATIONS

	Full Phrase
AIVC	Arctic Interagency Visitor Center
BCA	backcountry conservation area
BLM	Bureau of Land Management
EIS	environmental impact statement
ERMA	extensive recreation management area
MP	milepost
OHV	off-highway vehicle
RMA	recreation management area
RMP	resource management plan
RMZ	recreation management zone
RV	recreational vehicle
SRMA	special recreation management area
SRP	Special Recreation Permit
USFWS	United States Fish and Wildlife Service

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Appendix K. Recreation Management Areas (RMAs) and Backcountry Conservation Areas (BCAs)

This appendix provides additional details involving both recreation and visitor services and BCAs that are described in the alternatives comparison discussion in Chapter 2.

Table K-1
RMAs and BCAs Alternatives Comparison

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 (*Preferred Alternative*)	Alternative D	Alternative E (Proposed Plan)
Action: No similar action.	**Action:** Designate the Dalton Corridor BCA (from milepost [MP] 70 to MP 300) (1,605,000 acres).	**Action:** No similar action.	**Action:** No similar action.	**Action:** No similar action.	**Action:** Designate the following BCAs: • Dalton Corridor North (from MP 291 to MP 299; 109,000 acres) • Dalton Corridor South (from MP 68 to MP 199; 557,000 acres)
Action: Manage the following special recreation management areas (SRMAs): • Dalton Highway • Dalton Corridor	**Action:** Manage the following SRMAs: • Sukakpak Region (from MP 181, just north of Marion Creek, to MP 237, Chandalar Shelf; backcountry) (144,000 acres) • Central Dalton (from MP 56, Yukon River Crossing, to MP 181, Coldfoot, 353,000 acres), consisting of the following recreation management zones (RMZs): ○ Dalton Uplands (from MP 56 to MP 173; frontcountry; 339,000 acres) ○ Coldfoot (from MP 173 to MP 181; rural; 7,000 acres)	**Action:** Manage the following SRMAs: • Dalton Highway corridor (2,437,000), consisting of the following RMZs: ○ Yukon River (rural; 19,000 acres) ○ Finger Mountain (frontcountry; 33,000 acres) ○ Arctic Circle (frontcountry; 73,000 acres) ○ Grayling Lake (frontcountry; 11,000 acres) ○ Chapman Lake (backcountry; 8,000 acres) ○ Coldfoot (rural; 27,000 acres) ○ Brooks Range South (semi-primitive; 120,000 acres)	**Action:** Manage the Dalton SRMA consisting of the following RMZs (497,000): • Sukakpak Region (144,000 acres; backcountry) • Dalton Uplands (frontcountry; 339,000 acres) • Coldfoot (rural; 7,000 acres) • Yukon River Crossing (rural; 7,000 acres)	**Action:** No similar action.	**Action:** Manage the following SRMAs: • Sukakpak Region (from milepost 181, just north of Marion Creek, to MP 265, just south of Roche Moutonnee Creek; backcountry, 412,000 acres) • Central Dalton (904,000 acres), consisting of the following RMZs: ○ Dalton Uplands (from MP 54 to MP 173; frontcountry; 339,000 acres)

Alternative A (*No Action*)	Alternative B	Alternative C1	Alternative C2 (*Preferred Alternative*)	Alternative D	Alternative E (Proposed Plan)
Action: Manage the following special recreation management areas (SRMAs): • Dalton Highway • Dalton Corridor *(continued)*	○ Yukon River Crossing (from MP 56 to MP 62; rural; 7,000 acres)	○ Brooks Range North/Galbraith Lake (backcountry; 137,000 acres) ○ Outer corridor (semi-primitive; 2,009,000 acres)	***(see above)***	***(see above)***	○ East Dalton (from MP 68 to MP 206; semiprimitive; 565,000 acres) • Dalton Highway Corridor consisting of the Brooks Ranges North/Galbraith Lake RMZ (from MP 265 to MP 291;backcountry; 137,000 acres)
Action: Manage the following extensive recreation management areas (ERMAs): • Central Arctic Management Area • Nigu-Iteriak Area of Critical Environmental Concern/Research Management Area • Oolamnagavik-Colville	**Action:** Manage the following ERMAs: • Spooky Valley: Scenic value and remote recreation in a primitive setting • Nigu-Iteriak River (Central Arctic Management Area): Scenic values, float trips, and remote recreation in a primitive setting	**Action:** Same as Alternative B.	**Action:** Manage the Dalton ERMA: Existing values in a semi-primitive setting.	**Action:** No similar action.	**Action:** Manage the following ERMAs: • Nigu-Iteriak River (Central Arctic Management Area): Scenic values, float trips, and remote recreation in a primitive setting

K.1 RECREATION SETTING CHARACTERISTICS MATRIX

K.1.1 PHYSICAL COMPONENT—Qualities of the Landscape

Landscape	Primitive Classification	Semi-primitive Classification	Backcountry Classification	Frontcountry Classification	Rural Classification
Remoteness (approximate distance from routes)	More than 5 miles from either mechanized or motorized routes or established landing fields.	More than 1 mile from either mechanized or motorized routes or established landing fields.	Within 0.5 miles of mechanized routes or established landing fields.	Within 0.5 miles of low-clearance or passenger vehicle routes, four-wheel drive vehicles, and off-highway vehicles (OHVs) (includes unpaved roads and private land routes).	Within 0.5 miles of primary roads and highways.
Naturalness (landscape, line, and color)	Undisturbed natural landscape.	Undisturbed natural landscape with little evidence of previous human use.	Natural landscape without any modifications and in harmony with surroundings and not visually obvious or evident.	Character of the natural landscape partially modified, but nothing overpowers the natural landscape. Character of the natural landscape retained. A few modifications contrast with the character of the landscape.	Character of the natural landscape considerably modified.
Facilities	No structures. No sign of human trails or previous use.	No structures. Foot, horse, and water trails only.	Developed trails made mostly of native materials (for example bridges made from logs). Structures are rare and isolated.	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays. Maintained and marked trails, simple trailhead developments, and basic toilets.	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits.

K.1.2 SOCIAL COMPONENT—Qualities Associated with Use

Use	Primitive Classification	Semi-primitive Classification	Backcountry Classification	Frontcountry Classification	Rural Classification
Contacts with any other group (average).	Encounters with others rare.	Fewer than three encounters per day.	Three to six encounters per day.	Fifteen to 25 encounters per day off travel routes (e.g., campgrounds) and 30 or more encounters per day on travel routes. Seven to 14 encounters per day off travel routes (e.g., staging areas) and 15 to 29 encounters per day on travel routes.	People seem to be generally everywhere.
Group size (average, other than one's own group).	Three or fewer people per day. Group encounters are rare.	Six or fewer people per day. Groups are dispersed.	Four to six people per group. Groups are dispersed.	Thirteen to 25 people per group.	Twenty-six to 50 people per group.
Evidence of use	No alteration of the natural terrain. No sign of previous users.	No alteration of the natural terrain. Only footprints observed. Sounds of people are rare.	Areas of alteration are uncommon. Little surface vegetation wear observed. Sounds of people are infrequent.	Small areas of alteration are prevalent. Surface vegetation is gone with compacted soils observed. Sounds of people are regularly heard. Small areas of alteration. Surface vegetation showing wear with some bare soils. Sounds of people are occasionally heard.	A few large areas of alteration. Surface vegetation is absent with hardened soils. Sounds of people are frequently heard.

K.1.3 OPERATIONAL COMPONENT—Conditions Created by Management over Recreation Use

Recreation Use Management	Primitive Classification	Semi-primitive Classification	Backcountry Classification	Frontcountry Classification	Rural Classification
Access (types of travel allowed)	Foot, horse, and non-motorized travel are common. No trails or trailheads are managed for motorized activities. Snowmobile and other means of surface transportation, motorboat, and aircraft activity permissible through Alaska National Interest Lands Conservation Act 1110(a) and 811.	Foot, horse, and non-motorized and limited levels of dispersed mechanized travel are common. No trails or trailheads are managed for motorized activities. Snowmobile and other means of surface transportation, motorboat, and aircraft activity permissible through Alaska National Interest Lands Conservation Act 1110(a) and 811.	Various forms of dispersed motorized and non-motorized use may be present, but they are not substantially noticeable.	Two-wheel drive vehicles are predominant, but also four-wheel drives and non-motorized, mechanized modes of travel. Four-wheel drives, OHVs, dirt bikes, and snowmobiles, in addition to non-motorized, mechanical modes of travel.	Ordinary highway automobile and truck traffic are characteristic.
Visitor services and information.	No maps or brochures available on-site.	Basic maps available. Area personnel are rarely available to provide on-site assistance.	Basic maps. Staff are infrequently present (e.g., seasonally, during high-use periods) to provide on-site assistance.	Information materials describe the recreation area and activities; staff are seasonally present; area brochures and maps; staff are on-site late spring through early fall.	Same as frontcountry classification. Staff are seasonally present.

Recreation Use Management	Primitive Classification	Semi-primitive Classification	Backcountry Classification	Frontcountry Classification	Rural Classification
Management controls.	No on-site posting/signs of visitor regulations, interpretive information, or ethics. Few use restrictions.	Basic user regulations at key access points. Minimum use restrictions.	Limited regulatory signs. Some use limitations or restrictions.	Rules, regulations, and ethics are clearly posted. Use restrictions, limitations, and closures. Some regulatory and ethics signage. Moderate use restrictions (e.g., camping and human waste).	Regulations are strict, and ethics are prominent. Use may be limited by permit or reservation.

K.2 SUKAKPAK REGION SRMA

K.2.1 Supporting Information

The Sukakpak Region SRMA under Alternative B encompasses the area from Dalton Highway MP 181 just north of Marion Creek to MP 237 at Chandalar Shelf. This SRMA includes lands previously described as being in the inner utility corridor and outer utility corridor, as described in the Utility Corridor Resource Management Plan (RMP)/Environmental Impact Statement (EIS), signed in January 1991. In November 1991, the RMP for the Dalton Highway RMA was signed.

Under Alternative E, the Sukakpak Region SRMA encompasses the area just north of Marion Creek, to just south of Roche Moutonnee Creek. All other descriptions below pertain to Alternatives B and E within the area designated under each alternative.

K.2.2 SRMA Objectives Decisions

Objective Statement

Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities

Primary Activities—Driving and sight-seeing, photography, and watching wildlife

Secondary Activities—Camping, day hiking, birdwatching, and berry picking. There is seasonal use for big game hunting in the SRMA.

Experiences

Primary Experiences—Enjoying the sights and smells of nature, experiencing new and different things, and being away from crowds

Secondary Experiences—Getting away from the usual demands of life, being free to make their own choices, and being with friends

Benefits

Personal/individual—A greater connection with nature, an improved outlook on life, and an enhanced sense of personal freedom

Community/social—A greater appreciation for the cultural heritage, improved family bonding, and a heightened awareness of the natural world

Environmental—Increased knowledge and understanding of regional ecosystems and greater awareness of methods to minimize recreation impacts

K.2.3 Recreation Setting Characteristic Descriptions—Backcountry

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 268 road miles from the southern edge of the SRMA, at MP 181; it continues to MP 237 at Chandalar Shelf. The area has mountain peaks of global recognition, such as Sukakpak and Snowden Mountains. There are several waysides in the SRMA, which culminate at the north end, with far-reaching vistas of the Brooks Range and valleys from the Chandalar Shelf pullout at MP 237.

Social Components—Recreation users in this SRMA can at times expect encounters with groups of 15 when stopping at points of interest along the roadway. In most waysides, group sizes typically range from 2 to 10 individuals with a small number of commercial tour companies accessing the area and using 15-passenger vans to transport their guests. Use in the SRMA increases throughout the summer, with a peak in late summer/early fall for sheep and caribou hunting activities. The community of Wiseman, with residents living a modern-day subsistence lifestyle, provides travelers with an opportunity to learn about life in the far north.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Community Center in Fairbanks, and online. There is signage along the roadway directing travelers to recreation opportunities, and information materials, such as the Dalton Highway Guide, are available throughout the year at selected sites. Staff are present seasonally. Use may be limited and may require a permit.

K.2.4 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. Special Recreation Permits (SRPs) are issued to businesses, organizations, and individuals to allow the use of specific public lands and related waters for commercial, competitive, and organized group use. Recreation Use Permits are required at approved sites, such as developed day use areas or visitor centers.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 16.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

K.2.5 Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring.

K.3 CENTRAL DALTON SRMA

K.3.1 Supporting Information

The Central Dalton SRMA is described as the inner corridor and is bounded by the Yukon River Crossing RMZ to the south, the Coldfoot RMZ to the north, and, for much of the SRMA, the Backcountry Conservation Area to the east and west. Under Alternative B, the SRMA would be managed to provide three RMZs: Yukon River Crossing, Dalton Uplands, and Coldfoot. The Yukon River Crossing and Coldfoot RMZs are relatively small in scale, compared with the overall size of the Central Dalton SRMA. They provide critical support for recreation users in this remote, roaded region of the planning area. Management within the SRMA provides for positive interactions between user groups, while protecting recreation opportunities.

The SRMA begins at the Yukon River Crossing at MP 56 and ends at MP 181 north of Marion Creek (see **Table K-2**). This SRMA has historically had the greatest number of recreation users in the planning area.

Table K-2
Central Dalton SRMA, Alternative B

RMZs	Dalton MP	Setting Characteristics
Yukon River Crossing	MP 56–62	Rural
Dalton Uplands	MP 56–173	Frontcountry
Coldfoot	MP 173–181	Rural

Under Alternative E, the SRMA would be expanded to include some of the Dalton Corridor BCA. The Central Dalton Uplands encompasses the area from the Yukon River Crossing at MP 56 to MP 165. East Dalton RMZ is comprised of the Outer Corridor lands from approximately MP 70 (Ray River) to MP 184 (Moose Creek). It is bordered by the Yukon River Crossing RMZ to the south, the Sukakpak Region SRMA to the north, general BLM land for much of the east and inner Corridor of the Dalton to the west.

Visitors to this area are few due to the rugged terrain. Recreation activities consists of hunting and hiking. Areas of significance are the Kanuti River valley, Finger Mountain hills, upper Jim River, upper South Fork Koyukuk and Prospect Hills. The East Dalton RMZ would be managed to provide for semi-primitive recreation experiences. Management within the RMZ will provide for sustainable, dispersed recreation opportunities.

See **Table K-3**.

Table K-3
Central Dalton SRMA, Alternative E

RMZs	Dalton MP	Setting Characteristics
Dalton Uplands	MP 54–173	Frontcountry
East Dalton	MP 68-206	Semiprimitive

High-quality experiences in the SRMA include the Arctic Interagency Visitor Center (AIVC), which provides a focal point for the BLM, the United States Fish and Wildlife Service (USFWS), and the National Park Service to communicate to travelers where opportunities to recreate exist on public lands. The number one attraction is a visit to the Arctic Circle wayside, where adventurers can pose for a picture in front of the well-known Arctic Circle "trophy sign" and receive a certificate that they have crossed into the northernmost region of the world.

Waysides with interpretive signs describing the natural and cultural history of the region support recreation users looking for a respite from the many challenges of driving the Dalton Highway. The SRMA has three campgrounds: Five Mile, Arctic Circle, and Marion Creek. Campgrounds are open during the summer season; however, roadside camping in waysides and idle gravel pits occurs throughout the year. Night-sky viewing, and winter travel are gaining in popularity as visitors travel the area in search of the aurora borealis (northern lights). The landscape is free of noise and light influences, which provides for high-quality night-sky viewing.

K.3.2 SRMA/RMZ Objectives Decisions

Objective Statement

Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities

Primary activities include driving and sight-seeing, photography, wildlife watching, day hiking, walking or running, fishing, and camping. Visitors can take destination tours to the Yukon River and Arctic Circle. Bow hunting is allowed by State statute, 5 miles from either side of the highway. Rifle hunting is allowed outside the 5-mile limit set by the State.

Experiences

Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits

Survey results show the benefits that recreation users achieve in the SRMA are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway and reach the Arctic Circle.

K.3.3 Recreation Setting Characteristic Descriptions

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 140 road miles from the Yukon River bridge, where BLM-managed lands for this SRMA begin. Visitor facilities in the SRMA are the BLM contact station at the Yukon River Crossing, along with restrooms on the east and west sides of the road. There are three BLM campgrounds: Five Mile Campground; Arctic Circle Campground, which is a 19-site fee campground; and Marion Creek Campground, which is a 27-site fee campground, with parking for recreational vehicles (RVs), pull-through sites, potable water, an information kiosk, and outhouses. The Five Mile Campground is the only site along the highway with a seasonal dump station for RVs.

Truck and trailer parking for river boat traffic is available on a State of Alaska site northwest of the bridge. At the Yukon River, there is a BLM lease area that is occupied by a business providing lodging, meals, and fuel. This site is rustic and representative of lodging facilities along the Dalton Highway. The character of the natural landscape is partially modified by the linear feature of the Trans-Alaska Pipeline System, but it does not overpower the natural landscape.

Coldfoot facilities include the AIVC, and interpretive hiking trails connect to the east side of the road, where there is a truck stop, café, and lodging. Interpretive hiking trails adjacent to the AIVC feature panels at trailheads and the pioneer cemetery, a replica miner's cabin, and a drift mining display. There are rustic facilities, such as campsites, restrooms, trailheads, interpretive displays, maintained and marked trails, and simple trailhead developments. There are no recreation facilities in the planning area outside of those next to the Dalton Highway.

Airboat operators access the South Fork of the Koyukuk River on the west side of the bridge for big game hunting. At Grayling Lake, there is access for launching boats on the northwest end of the lake and adjacent to the road. Float plane access/use is popular at this site. Float boat recreationists can access the Middle Fork of the Koyukuk River at the bridge crossing, east of Wiseman on the Dalton Highway.

Social Components—Recreation users in this SRMA can at times expect encounters with groups of up to 50 people when arriving at destination sites, such as the Arctic Circle wayside. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Use of this site varies by season and time of day. Campground users will typically

experience small camping parties with users in tents and a variety of RVs. Seasonal spikes, with different recreation user groups, occur in the SRMA throughout the year.

Interaction with other visitors will often occur at any of the waysides within the SRMA. A designated interpretive hiking trail at Finger Mountain provides for a recreation experience close to the highway, where encounters with other users are possible.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Yukon Crossing Contact Station and the Arctic Interagency Visitor Center. There is signage along the roadway directing travelers to recreation opportunities.

K.3.4 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites. The Toolik Lake RNA would be closed to non-permitted camping.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

K.3.5 Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring.

Implementation Decisions—A plan decision under consideration is to open the Arctic Circle wayside and campground to commercial development, with the designation as a development node.

K.3.6 Dalton Uplands RMZ

Dalton Uplands RMZ Supporting Information

The Central Dalton SRMA encompasses the area from the Yukon River Crossing at MP 56 to MP 165. The Dalton Uplands RMZ is linear and covers lands described as the inner corridor. In Alternative B, it is bordered by the Yukon 24 Crossing RMZ to the south, the Coldfoot RMZ to the north and, for much of the RMZ, the Backcountry 25 Conservation Area to the east and west. In Alternative E, it is bordered by the private and non-recreation management area land to the south, private land around Coldfoot to the north, and, for much of the RMZ, the Backcountry Conservation Area on the west and the Central Dalton East Dalton RMZ on the east.

Activities that draw visitors to this unique road-accessible region include taking day trips to Finger Mountain, viewing the Arctic Circle, vehicle touring, and fishing in pristine streams. Other recreation sites of significance are Grayling Lake, Chapman Lake, and the numerous waysides with wildlife and scenic viewing opportunities.

The Dalton Uplands RMZ shall be managed to provide frontcountry recreation experiences. Management within the RMZ will provide for sustainable recreation opportunities.

Dalton Uplands SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Primary activities are driving and sight-seeing, photography, and watching wildlife. Secondary activities are camping, day hiking, birdwatching, and berry picking.

Experiences—Primary experiences are enjoying the sights and smells of nature, experiencing new and different things, and being away from crowds. Secondary experiences are getting away from the usual demands of life, being free to make their own choices, and being with friends.

Benefits—Personal/individual benefits are a greater connection with nature, an improved outlook on life, and an enhanced sense of personal freedom. Community/social benefits are greater appreciation for the cultural heritage, improved family bonding, and a heightened awareness of the natural world. Environmental benefits are an increased knowledge and understanding of regional ecosystems and a greater awareness of methods to minimize recreation impacts.

Recreation Setting Characteristic Descriptions—Frontcountry

Physical Components—The Dalton Uplands RMZ encompasses the area from MP 86 to MP 165 at Chapman Lake. The character of the natural landscape is retained in the majority of the RMZ. A few modifications contrast with the character of the landscape where the Trans-Alaska Pipeline System is aboveground and visible.

Rustic facilities, such as campsites, restrooms, trailheads, and interpretive displays, exist throughout the road corridor of the RMZ. There are maintained and marked trails of short distance, and simple trailhead developments. The Finger Mountain wayside and the Arctic Circle wayside are two of the most visited waysides in the RMZ. Visitation at the Arctic Circle wayside reaches into the tens of thousands, which puts pressure on the infrastructure. The RMZ also includes the Arctic Circle Campground one-half mile from the Arctic Circle wayside.

Social Components—Travelers in the inner corridor in the RMZ can expect to see groups ranging in size from 2 to 50 people on travel routes and 50 or more vehicle encounters per day on highway travel routes. Encounters with smaller groups occur during off-peak seasons.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the RMZ. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Yukon Crossing Contact Station. There is signage along the roadway directing travelers to recreation opportunities. Information materials are available throughout the year at selected sites.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.3.7 Coldfoot RMZ

Coldfoot RMZ Supporting Information

The Central Dalton SRMA encompasses the area from the Yukon River Crossing at MP 56 to MP 181. This SRMA has been divided into three RMZs. The Coldfoot RMZ encompasses lands from MP 165 to MP 190. **Map K-1** includes the inner utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. In November 1991, the RMP for the Dalton Highway RMA was signed.

The primary draw to this area is for travelers to explore the many remote recreation opportunities that are accessible by vehicle on the Dalton Highway. Activities that draw visitors to the Coldfoot RMZ are the world-class AIVC, access into remote areas of the foothills of the Brooks Range by foot, and access to rural and remote areas from the Coldfoot airport. The RMZ also has the Marion Creek Campground and the Coldfoot truck stop and restaurant, which serve as a fueling station and mail stop for many local placer miners. Management in the RMZ will provide for sustainable recreation opportunities.

Coldfoot SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Driving and sight-seeing, photography, watching wildlife, day hiking, walking or running, fishing, river float trips, visitor center and programs, and camping.

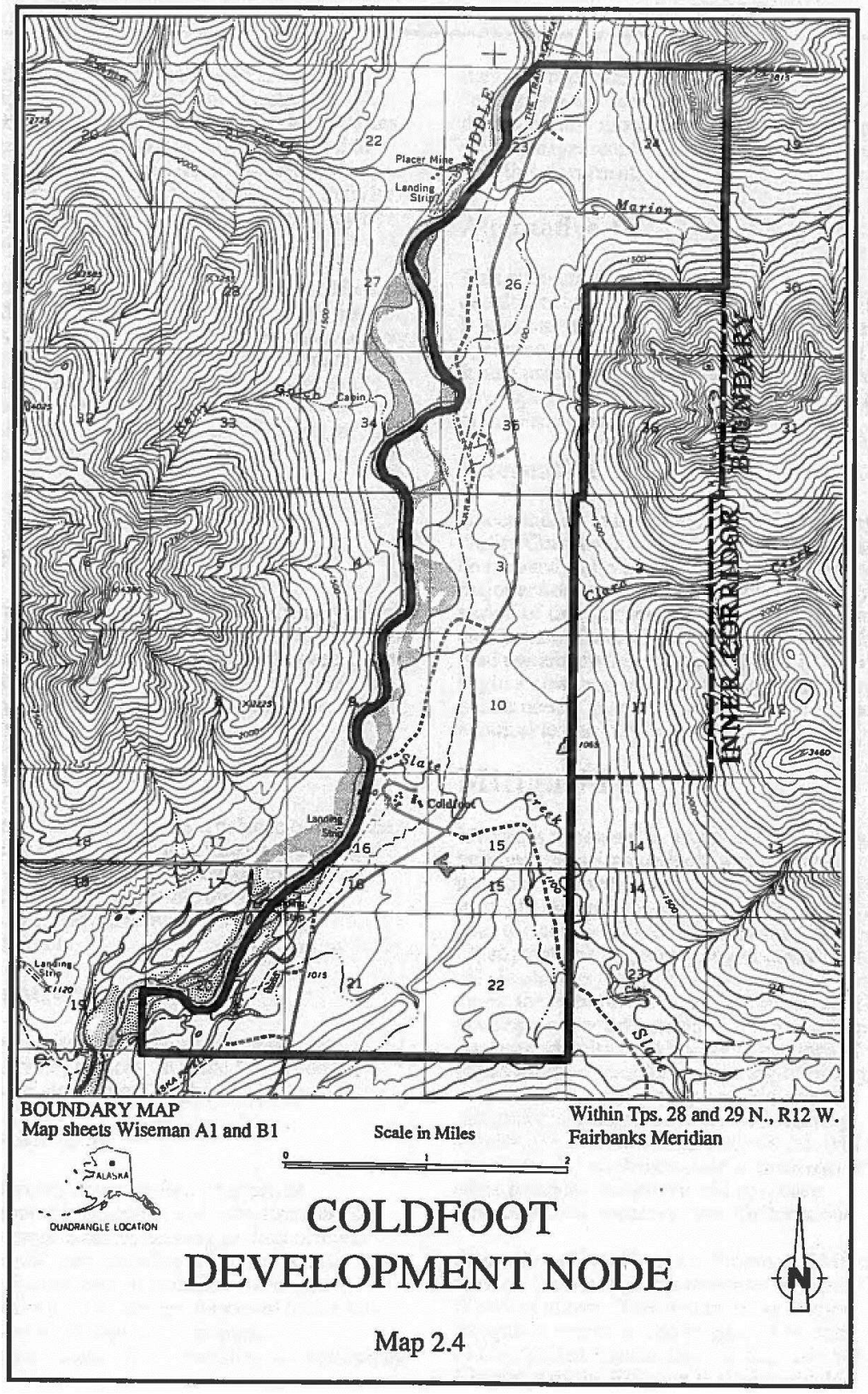
Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway.

Recreation Setting Characteristic Descriptions—Rural

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 259 road miles from Coldfoot. The BLM manages visitor facilities in the RMZ in the Coldfoot Development Node. Recreation facilities in the Coldfoot RMZ include the AIVC, interpretive hiking trails spanning from the AIVC, interpretive kiosks at trailheads, the pioneer cemetery with interpretive panels, Marion Creek Campground, a replica of a miner's cabin, and a drift mining display. Five miles north of Coldfoot and within the RMZ is Marion Creek Campground, a 27-site fee campground with RV parking, pull-through sites, potable water, an information kiosk, and outhouses.

Map K-1
Coldfoot Development Node



Social Components—Recreation users in this RMZ can at times expect encounters with groups of 50 when arriving in the Coldfoot truck stop. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Large concentrations of industrial traffic are to be expected. Campground users typically experience small camping parties with users in tents and a variety of RVs. Seasonal spikes occur in the RMZ with different recreation user groups from late February through early October.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Arctic Interagency Visitor Center. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. For example, the land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

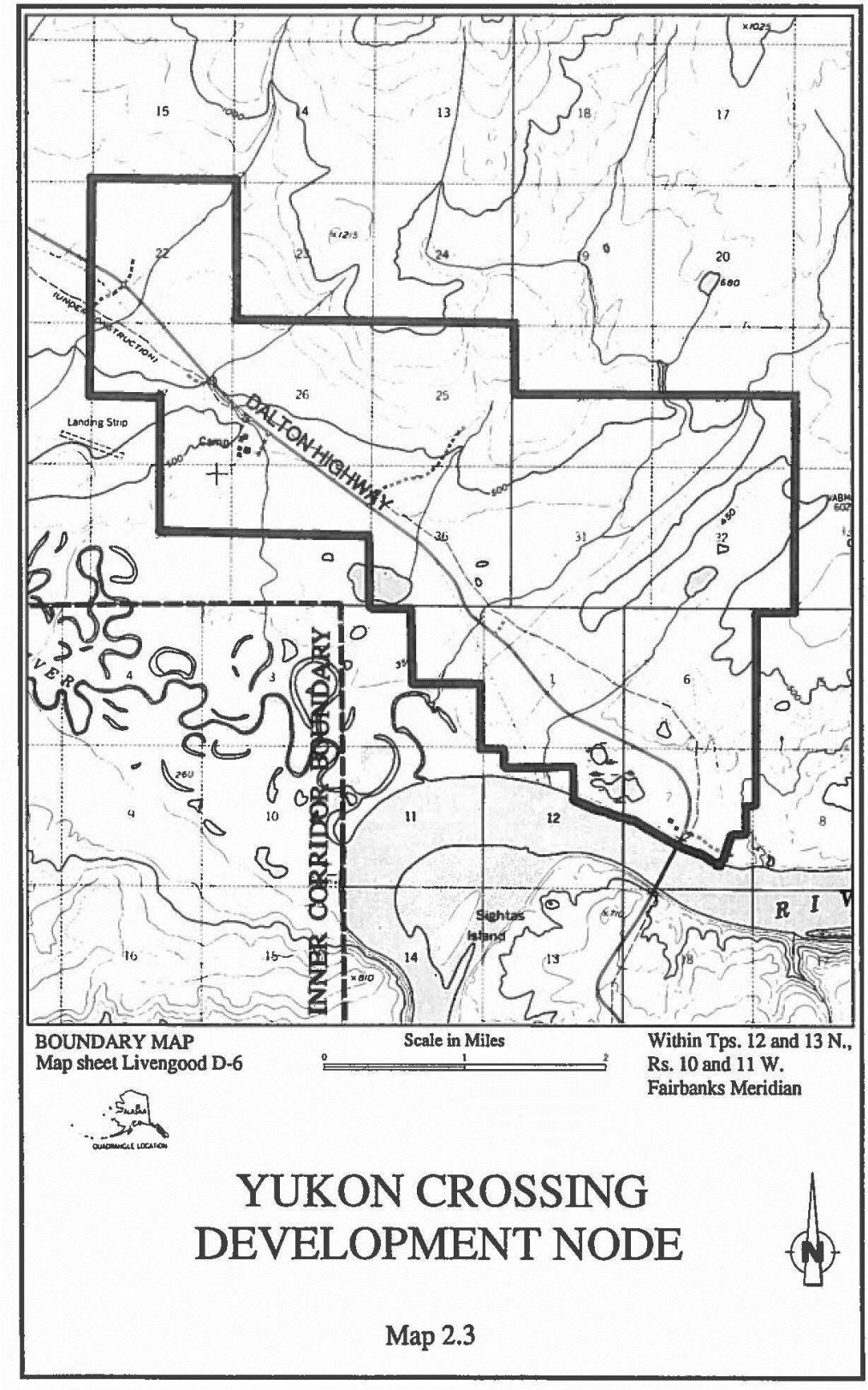
K.3.8 Yukon River Crossing RMZ

Yukon River Crossing RMZ Supporting Information

The Central Dalton SRMA encompasses the area from the Yukon River Crossing RMZ at MP 56 to MP 181, just north of Marion Creek. It includes the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. In November 1991, the RMP for the Dalton Highway RMA was signed.

The Yukon River Crossing RMZ, from MP 56 to MP 85, is described as the area known as the Yukon River Crossing Development Node, as shown in **Map K-2**.

Map K-2
Yukon Development Node



The Yukon River Crossing RMZ attracts recreationists seeking to experience the Yukon River and is an entry point to hunting, sight-seeing tours, and access to nearby villages. River access for hunters using boats in pursuit of big game is a popular fall activity for multigenerational families and friends. Reaching the destination of the legendary Yukon River is a highlight for many road touring travelers. The area includes rustic, seasonal lodging and restaurants, a BLM contact station with an information kiosk, a boat ramp and boat trailer parking, and the Five Mile Campground with a dump station and nearby artesian well.

Yukon River Crossing SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Primary activities include driving and sight-seeing, photography, bicycling, motorcycling, watching wildlife, day hiking, walking or running, fishing, and camping. During the fall hunting season, the boat launch at the Yukon River bridge provides access for hundreds of hunters in search of moose and other game.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway and reach the Yukon River Crossing.

Recreation Setting Characteristic Descriptions—Rural

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 140 road miles from the Yukon River bridge. The BLM manages visitor facilities in the RMZ that are located at the Yukon River Crossing; they include a contact station that is staffed in summer, which receives approximately 9,000 visitors per year.

There are two decks, with interpretive panels, overlooking the Yukon River. An additional deck is near the contact station, with information about the Trans-Alaska Pipeline and construction of the Yukon River bridge. There are outhouses near the contact station and an area for picnics. On the west side of the road is a boat launch, with space for vehicle and boat trailer parking as well as outhouse facilities. The Yukon River Camp is located on BLM-managed lands through a realty lease. It offers meals, accommodations, and fuel. In addition, there is a truckers' wayside with a large pullout and outhouse on the west side of the road.

The Five Mile Campground includes a limited number of developed sites that have picnic tables and fire rings. A dump station is near the campground and is open during the summer season. An artesian well with potable water is adjacent to the campground.

Social Components—When arriving at the Yukon River Camp, recreation users in this RMZ can at times expect encounters with groups of 50. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Use of this site varies by season and time of day. Campground users will typically experience small camping parties, with users in tents and a variety of RVs.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Yukon Crossing Contact Station. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreational uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.4 DALTON SRMA

The Dalton SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. This SRMA covers the same area as the Sukakpak Region SRMA and the Central Dalton SRMA under Alternative B. The Dalton SRMA under Alternative C2 would also be comprised of four RMZs that correspond with the Sukakpak Region SRMA and the three RMZs for the Central Dalton SRMA. The objectives, management actions, and allowable uses are the same as described for those SRMAs.

K.5 SPOOKY VALLEY ERMA—PRIMITIVE

The descriptions below are relevant for Alternatives B and C1.

K.5.1 ERMA Objectives Decision

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

K.5.2 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreational uses and are required at approved sites.

Other Programs—Designate for seasonal, non-motorized use. Access into the ERMA would be by airplane, foot or, in winter, snowmobile.

K.5.3 Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.6 NIGU-ITERIAK RIVER ERMA—PRIMITIVE

The descriptions below are relevant for Alternatives B, C1, and E.

K.6.1 ERMA Objectives Decision

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

K.6.2 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites. SRPs are required for any commercial recreation activities within this ERMA.

Other Programs—Designate for seasonal, non-motorized use. Access into the ERMA would be by airplane, foot or, in winter, snowmobile.

K.6.3 Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.7 DALTON HIGHWAY CORRIDOR SRMA

K.7.1 Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300 (see **Table K-4**). This SRMA has been divided into nine RMZs under Alternative C1. These include the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. In November 1991, the RMP for the Dalton Highway RMA was signed.

The primary draw to this area is for travelers to explore the many remote recreation opportunities that are accessible by vehicle along the Dalton Highway. Activities that draw visitors to this unique road-accessible region include day trips to the Arctic Circle; Dall sheep hunting in the Brooks Range; primitive backcountry camping within a short distance of the road; bridge-to-bridge river float trips; vehicle touring through the taiga, mountains, and arctic tundra; fishing in pristine streams; learning about the lifestyle of subsistence families; and visiting the world-class AIVC.

Table K-4
Dalton Highway Corridor SRMA

Recreation Management Zones	Dalton MP	Setting Characteristic
Yukon River	MP 56–86	Rural
Finger Mountain	MP 86–115	Frontcountry
Arctic Circle	MP 115–132	Frontcountry
Grayling Lake	MP 132–152	Frontcountry
Chapman Lake	MP 152–165	Backcountry
Coldfoot	MP 165–190	Rural
Brooks Range South	MP 190–245	Semi-primitive
Brooks Range North/Galbraith Lake	MP 245–300	Backcountry
Outer Corridor	N/A	Semi-primitive

K.7.2 SRMA/RMZ Objectives Decisions

Following is the overall description for the Dalton Highway Corridor SRMA. The following pages describe each of the nine RMZs within the Dalton Highway Corridor SRMA.

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Primary activities are driving and sight-seeing, photography, and watching wildlife. Secondary activities are camping, day hiking, birdwatching, and berry picking. RMZs in the Brooks Range North/Galbraith Lake, Yukon River, and Brooks Range South have seasonal high use for hunting.

Experiences—Primary experiences are enjoying the sights and smells of nature, experiencing new and different things, and being away from crowds. Secondary experiences are getting away from the usual demands of life, being free to make your own choices, and being with friends.

Benefits—Personal/individual benefits are a greater connection with nature, an improved outlook on life, and an enhanced sense of personal freedom. Community/social benefits are a greater appreciation for the cultural heritage, improved family bonding, and a heightened awareness of the natural world. Environmental benefits are increased knowledge and understanding of regional ecosystems and a greater awareness of methods to minimize recreation impacts.

K.7.3 Recreation Setting Characteristic Descriptions—Frontcountry

Physical Components—The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300.

The character of the natural landscape is retained in the majority of the SRMA. A few modifications contrast with the character of the landscape, with the Trans-Alaska Pipeline System line, pump stations, and Department of Transportation stations visible along the route.

Rustic facilities, such as campsites, restrooms, trailheads, and interpretive displays, are throughout the road corridor of the SRMA. There are maintained and marked trails of short distance, simple trailhead developments, and basic toilets.

Social Components—Travelers in the inner corridor in the SRMA, from the Yukon River to Wiseman, can expect to see groups ranging in size from 2 to 50 people on travel routes and 50 or more encounters per day on highway travel routes. Encounters with smaller groups can be expected north of Wiseman, and group sizes in the outer corridor would not exceed 10 people. Evidence of use is seen throughout the highway corridor.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, the AIVC in Coldfoot, the winter visitor center hosted by the USFWS, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Yukon Crossing Contact Station. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites.

K.7.4 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

K.7.5 Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.7.6 Yukon River RMZ

Yukon River RMZ Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. This SRMA has been divided into nine RMZs under Alternative C1. These include the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. The initial purpose for development of the corridor was for transportation of energy resources. In November 1991, the RMP for the Dalton Highway RMA was signed.

The Yukon River RMZ is from MP 56 to MP 86 covering the inner corridor. It attracts recreationists seeking to experience the Yukon River. It is an entry point to hunting, sight-seeing tours, and access to nearby villages. River access for hunters using boats in pursuit of big game is a popular fall activity for multigenerational families and friends. Reaching the destination of the legendary Yukon River is a highlight for many road-touring travelers. The area includes rustic, seasonal lodging and restaurants, a BLM contact station with an information kiosk, a boat ramp and boat trailer parking, and the Five Mile Campground with a dump station and nearby artesian well.

Yukon River SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Activities include driving and sight-seeing, bicycling, motorcycling, photography, watching wildlife, day hiking, walking or running, fishing, and camping. During the fall hunting season, the boat launch at the Yukon River bridge provides access for hundreds of hunters in search of moose and other game.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway and reach the Yukon Crossing.

Recreation Setting Characteristic Descriptions—Rural

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 140 road miles from the Yukon Crossing Bridge. The BLM manages visitor facilities in the RMZ located at the Yukon Crossing; they include a contact station that is staffed during the summer season. There are approximately 9,000 visitors per year.

There are two decks with interpretive panels overlooking the Yukon River. An additional deck is near the contact station, with information about the Trans-Alaska Pipeline and construction of the Yukon Bridge. There are outhouses near the contact station and an area for picnics. On the west side of the road is a boat launch with space for vehicle and boat trailer parking and outhouse facilities.

The Yukon River Camp is located on BLM-managed lands through a realty lease, which offers meals, accommodations, and fuel. In addition, there is a truckers' wayside, with a large pullout and outhouse, on the west side of the road.

The Five Mile Campground includes a limited number of developed sites that have picnic tables and fire rings. A dump station near the campground is open during the summer season. An artesian well with potable water is adjacent to the campground.

Social Components—When arriving at the Yukon Crossing wayside, recreation users in this RMZ can at times expect encounters with groups of 50. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Use of this site varies by season and time of day. Campground users will typically experience small camping parties, with users in tents and a variety of camper outfits.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, the AIVC in Coldfoot, the winter visitor center hosted by the USFWS, and online. The BLM has staff present seasonally—typically from

mid-May through mid-September—at the Yukon Crossing Contact Station. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. They include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.7.7 Finger Mountain RMZ

Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. Under Alternative C1, this SRMA has been divided into nine RMZs. It includes the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. In November 1991, the RMP for the Dalton Highway RMA was signed.

The primary draw to this area is for travelers to explore the unique geologic formations found in the area. Finger Mountain has a small interpretive trail, including panels that inform visitors about the landscape. The major feature of the site is a tall rock formation in the shape of a finger pointed in the direction of Fairbanks.

Finger Mountain SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Activities include driving and sight-seeing, photography, watching wildlife, day hiking on the designated trail system, and walking. Tour groups to the Arctic Circle frequently stop at this location when weather and access permit.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway into the Arctic region.

Recreation Setting Characteristic Descriptions—Frontcountry

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 182 road miles from Finger Mountain. This site offers travelers one of the few opportunities south of the Brooks Range to experience a virtually treeless landscape, with vast expanses of rolling hills and a tussock-filled valley. The BLM manages visitor facilities in the RMZ located at MP 98, with a large parking area, outhouses, and a trail complete with interpretive signs. Hiking opportunities to Finger Mountain are on non-designated trails.

Social Components—Recreation users in this RMZ can at times expect encounters with groups of 50, when arriving at the Finger Mountain wayside. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Use of this site varies by season and time of day.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Yukon Crossing Contact Station. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.7.8 Arctic Circle RMZ

Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. Under Alternative C1, this SRMA has been divided into nine RMZs. It includes the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. In November 1991, the RMP for the Dalton Highway RMA was signed.

The primary draw for travelers to this area is to explore the many remote recreation opportunities that are accessible by vehicle along the Dalton Highway. Of particular interest to visitors is the Arctic Circle

Campground and day-use wayside. Visitors from all over the world drive up the Dalton Highway to cross the Arctic Circle. Other activities that draw visitors to this unique, road-accessible region include day trips to the Arctic Circle, primitive backcountry camping within a short distance of the road, vehicle touring, fishing in pristine streams, and learning about the lifestyle of subsistence families.

SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Activities include driving and sight-seeing, photography, watching wildlife, day hiking, walking or running, fishing, and camping. Destination tours to the Arctic Circle are the single most sought-after activity by travelers on the Dalton Highway.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway and reach the Arctic Circle.

Recreation Setting Characteristic Descriptions—Rural

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 199 road miles from the Arctic Circle wayside. In the RMZ, the BLM manages visitor facilities located just north of MP 115; these facilities include the Arctic Circle wayside, with outhouses and the Arctic Circle trophy sign; the Arctic Circle Campground, with 19 developed sites that have picnic tables and fire rings; and the truckers' wayside, with a large pullout and outhouse. A deck with interpretive panels is next to the trophy sign.

Social Components—Recreation users in this RMZ can at times expect encounters with groups of 50 when arriving at the Arctic Circle wayside. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Use of this wayside varies by season and time of day. Campground users typically experience small camping parties, with users in tents and a variety of camper outfits.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, and the Morris Thompson Cultural Visitors Center in Fairbanks. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Arctic Interagency Visitor Center. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring.

K.7.9 Grayling Lake RMZ

Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. Under Alternative C1, this SRMA has been divided into nine RMZs. It includes the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. In November 1991, the RMP for the Dalton Highway RMA was signed. The Grayling Lake RMZ is from MP 123 to MP 152 of the Dalton Highway.

The primary draw for travelers to this area is to explore the many remote recreation opportunities that are accessible by vehicle along the Dalton Highway. Activities that draw visitors to this unique, road-accessible region include float plane access, hunting, fishing, wildlife, and scenic lake and mountain viewing opportunities.

SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Activities include driving and sight-seeing, photography, watching wildlife, day hiking, walking or running, fishing, and camping. Access to float planes for hunting is common in the late summer and fall seasons.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway and reach the Arctic Circle.

Recreation Setting Characteristic Descriptions—Frontcountry

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 234 road miles from the Grayling Lake wayside. The BLM manages visitor facilities in the RMZ located at

MP 150, with an outhouse and a large parking area. Interpretive panels are located near the outhouse and overlook the lake. There is access for launching boats on the northwest end of the lake and adjacent to the road. Float plane access and use are popular at this site.

Social Components—Recreation users in this RMZ can at times expect encounters with groups of 50. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Use of this site varies by season and time of day.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, the AIVC in Coldfoot, the winter visitor center hosted by the USFWS, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Yukon Crossing Contact Station. There is signage along the roadway, directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.7.10 Chapman Lake RMZ

Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. Under Alternative C1, this SRMA has been divided into nine RMZs. It includes the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. The initial purpose for development of the corridor was for transportation of energy resources.

The primary draw to Chapman Lake is road-accessible recreation and wildlife viewing, and a commercial transportation area for travelers to explore the many remote recreation opportunities that are accessible by vehicle travel along the Dalton Highway. Activities that draw visitors to this area are the exceptional birdwatching, wildlife viewing, nature photography, camping, and big game hunting.

SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Activities include driving and sight-seeing, photography, watching wildlife, day hiking, walking or running, fishing, and camping. Chapman Lake provides one of the best waterfowl viewing areas within the corridor.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway and reach the Arctic Circle.

Recreation Setting Characteristic Descriptions—Frontcountry

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 245 road miles from Chapman Lake. There are no visitor facilities at Chapman Lake (MP 161). A gravel pit and a gated and locked access road to mining operations lead to the southeast corner of the lake.

Social Components—Because access to the lake is off the highway via a mining road access, there is limited interaction with other travelers. Group size can be expected to be 15 people or less. Groups that camp in the area are typically fall hunting parties of less than five people.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Arctic Interagency Visitor Center. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use

plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.7.11 Coldfoot RMZ

Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. Under Alternative C1, this SRMA has been divided into nine RMZs. It includes the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. The initial purpose for development of the corridor was for transportation of energy resources.

The primary draw to this area is for travelers to explore the many remote recreation opportunities that are accessible by vehicle along the Dalton Highway. Activities that draw visitors to the Coldfoot RMZ are the world-class AIVC, access to remote areas of the foothills of the Brooks Range by foot, and access to urban and remote areas from the Coldfoot airport. The RMZ also has the Marion Creek Campground and the Coldfoot truck stop and restaurant. These serve as a fueling station and mail stop for many local placer miners. Management in the RMZ will provide for sustainable recreation opportunities.

SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Activities include driving and sight-seeing, bicycling, motorcycling, photography, watching wildlife, day hiking, walking or running, fishing, river float trips, attending interpretive presentations and films, visiting the visitor center, visiting interpretive sites, and camping. In the winter, visitors participate in aurora viewing.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway and reach the Arctic Circle.

Recreation Setting Characteristic Descriptions—Rural

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 259 road miles from Coldfoot. The BLM manages visitor facilities in the RMZ in the Coldfoot Development Node. Recreational facilities in the Coldfoot RMZ include the AIVC, interpretive hiking trails spanning from the AIVC, interpretive kiosks at trailheads, the pioneer cemetery with interpretive panels, Marion Creek Campground, a replica of a miner's cabin, and a drift mining display. Five miles north of Coldfoot and within the RMZ is Marion Creek Campground, a 27-site fee campground with RV parking, pull-through sites, potable water, an information kiosk, and outhouses.

Social Components—Recreation users in this RMZ can at times expect encounters with groups of 50 when arriving at the Coldfoot truck stop. Group sizes range from 2 to 50 individuals, with commercial tour

companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Large concentrations of industrial traffic are to be expected. Campground users typically experience small camping parties, with users in tents and a variety of camper outfits. Seasonal spikes occur in the RMZ, with different recreation user groups, from late February through early October.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, the AIVC in Coldfoot, the winter visitor center hosted by the BLM, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Yukon Crossing Contact Station. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use of the roadway may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Permit demand for this RMZ is high. The AIVC is open from late May through early September each year. Interpretive programs, interpretive displays, self-led day hikes, a campground, and a bookstore all represent visitor services delivered by the BLM. Commercial recreation vendors and individuals in Wiseman who provide lodging and tours offer additional recreation opportunities in the area.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.7.12 Brooks Range South RMZ

Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. Under Alternative C1, this SRMA has been divided into nine RMZs. It includes the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. The initial purpose for development of the corridor was for transportation of energy resources. This RMP states that the area ". . . shall be managed to provide a variety of developed and semi-developed motorized recreation opportunities."

To this day, the primary draw to this area is for travelers to explore the many remote recreation opportunities that are accessible by vehicle travel along the Dalton Highway. Activities that draw visitors to this unique, road-accessible region include day trips to the Arctic Circle; visits to the historic mining community of Wiseman; Dall sheep hunting in the Brooks Range; primitive backcountry camping within a

short distance of the road; bridge-to-bridge river float trips; vehicle touring through the taiga, mountains, and arctic tundra; fishing in pristine streams; learning about the lifestyle of subsistence families; and visiting the world-class AIVC.

SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Driving and sight-seeing, photography, watching wildlife, day hiking, walking or running, fishing, hunting, and camping.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway and reach the Arctic Circle.

Recreation Setting Characteristic Descriptions—Semi-primitive

Physical Components—The remoteness of this area is in relation to the urban area of Fairbanks, which is 274 road miles from the southern edge of the RMZ (at MP 190); the RMZ continues to MP 245. The BLM manages visitor facilities in the RMZ located at Sukakpak Mountain wayside (MP 204) and Farthest North Spruce Tree wayside (MP 235). Each site has parking, interpretive panels, and outhouses. Camping is frequent near river crossings, along gravel bars, and in cleared gravel pits. By design, and in reflection of other land managers in the area, hiking routes are not designated, and are developed free of signage. These informal routes follow streambeds and mining access roads just as they have for generations.

Social Components—Recreation users in this RMZ can at times expect encounters with groups of 15 when stopping at points of interest. Group sizes range from 2 to 50 individuals, with commercial tour companies using 15-passenger vans and 50-passenger motor coaches to transport their guests. Use in the RMZ increases throughout the summer, with a peak in late summer/early fall for sheep and caribou hunting.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff present seasonally—typically from mid-May through mid-September—at the Arctic Interagency Visitor Center. There is signage along the roadway directing travelers to recreation opportunities.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between

Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.7.13 Brooks Range North/Galbraith Lake RMZ

Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. Under Alternative C1, this SRMA has been divided into nine RMZs. It includes the inner utility corridor and outer utility corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. The initial purpose for development of the corridor was for transportation of energy resources.

The primary draw to this area is for travelers to explore the many remote recreation opportunities that are accessible by vehicle along the Dalton Highway. Of particular interest is the Galbraith Lake area. Visitors camp north of the Brooks Range at the BLM-developed campground. Here they hunt, hike, go dog mushing, view wildlife, and enjoy expansive vistas of the northern Brooks Range and the north slope.

SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Driving and sight-seeing, photography, hunting, watching wildlife, day hiking, walking or running, fishing, and camping.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities. In addition, a common benefit is achieving the life goal to travel the Dalton Highway and reach the Arctic region.

Recreation Setting Characteristic Descriptions—Backcountry

Physical Components—The remoteness of the Brooks Range North/Galbraith Lake RMZ area is in relation to the urban area of Fairbanks, which is 329 road miles from the southern edge of the RMZ (at MP 245); the RMZ continues to MP 300. This is the northern edge of BLM-managed lands, adjacent to the Dalton Highway. BLM-managed visitor facilities in the RMZ are located at Galbraith Lake Campground (MP 275), which includes 12 developed sites with picnic tables and fire rings. A state-leased airfield near the campground is used by private and commercial pilots, state, and federal agencies, and Alyeska, in support of the Trans-Alaska Pipeline System. Access to boat float trips for the Atigun River is at MP 271.

Social Components—Recreation users in this RMZ can at times expect encounters with groups of 15 when stopping at points of interest. When near the highway group sizes range from 2 to 15 individuals, with commercial tour companies using 15-passenger vans. In the backcountry group sizes range from 2-12, with 0 to 3 groups encountered per day. Use in the RMZ increases throughout the summer with a peak in late summer/early fall for sheep and caribou hunting.

Operational Components—Personal, commercial (tour companies), and industrial traffic are present throughout the year along the roadway of the SRMA. The BLM has produced and provides informational materials that describe the area and activities. These materials are available at kiosks, the BLM office in Fairbanks, the Morris Thompson Cultural Visitors Center in Fairbanks, and online. The BLM has staff has an intermittent presence seasonally from mid-May through the end of September. There is signage along the roadway directing travelers to recreation opportunities. Informational materials are available throughout the year at selected sites. Use may be limited and may require a permit.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.7.14 Outer Corridor RMZ

Supporting Information

The Dalton Highway Corridor SRMA encompasses the area from the Yukon River Crossing, at MP 56, to the northern edge of BLM-managed lands adjacent to the Utility Corridor at MP 300. The Outer Corridor RMZ encompasses lands adjacent to the inner corridor, as described in the Utility Corridor RMP/EIS, signed in January 1991. In November 1991, the RMP for the Dalton Highway RMA was signed.

The primary draw to this area is for travelers to explore the many remote recreation opportunities that are accessible by vehicle along the Dalton Highway. Access to the outer corridor is by foot, boat, or fixed-wing aircraft. Activities that draw visitors to the region include hunting in the Brooks Range, primitive backcountry camping, backpacking, and fishing in a pristine landscape.

SRMA/RMZ Objectives Decisions

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

Activities—Backpacking, camping, hiking, big game hunting, wildlife viewing, photography, fishing, and taking float trips.

Experiences—Survey responses reflect that recreation users want to experience new and different things, enjoy the sights and smells of nature, be away from crowds, get away from the usual demands of life, and be free to make their own choices.

Benefits—Survey results show the benefits that recreation users achieve in the RMZ are a greater connection with nature and improved knowledge of outdoor recreation, ecosystems, and local communities.

Recreation Setting Characteristic Descriptions—Semi-primitive

Physical Components—

a) Remoteness (approximate distance from routes)—The RMZ retains a current level of remoteness of more than 1 mile from either motorized routes or established landing fields. The existing, but varied, level of naturalness is maintained with no structures and no sign of existing human trails, aircraft landing areas, or previous use. Any new land uses would have a low level of contrast with the landscape and would not be visually obvious from recreation facilities. New rights-of-way (e.g., communication sites and utilities) are colocated with existing disturbances or at existing sites.
b) Naturalness (landscape texture form, line, and color)—The existing, but varied, level of naturalness is maintained. Any new land uses would have a low level of contrast with the landscape and would not be visually obvious from recreation facilities. New rights-of-way (e.g., communication sites and utilities) are colocated with existing disturbances or at existing sites.
c) Recreation facilities with basic visitor amenities occur at access points only.
d) Fish and wildlife habitat—Vegetation and habitat would be maintained in their current condition. Big game ranges would appear primarily as a mosaic of forests and tundra.

Social Components—

a) Contact with other groups—In the primary use season (August through November), participants experience an average of four encounters per day or fewer in areas classified as semi-primitive.
b) There is an undisturbed natural landscape with no structures and little evidence of human use.

Operational Components—

a) Public access (types of public travel allowed)—Away from the few motorized/mechanized access routes, recreationists use foot and horse travel predominantly within the Outer Corridor RMZ. Most roads and trails would be closed to vehicle traffic during the winter, and there would be minimal human disturbance of big game during this period.
b) Visitor management controls and regulations—An adequate but not overly restrictive level of visitor and land use restrictions would be initially in place to protect recreation setting characteristics. Rules, regulations, and ethics would be clearly posted at appropriate access points.

Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreation uses and are required at approved sites.

Other Programs—By Alaska state statute, the SRMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 17.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.8 DALTON CORRIDOR BCA

The descriptions below are relevant for Alternatives B, C1, and E within the area designated under each alternative.

K.8.1 Goal

Conserve backcountry conservation management criteria areas and provide for dispersed wildlife-dependent recreation through BCAs.

K.8.2 Wildlife Objective

Manage the areas to protect their intact and undeveloped character and manage habitats to support migration/movement corridors for recreationally important species of fish and wildlife; big game winter range, summer range, parturition areas, migration corridors, and associated stopover areas; and migratory bird habitats.

K.8.3 Recreation Objective

Provide for high-quality, wildlife-dependent, dispersed recreation opportunities, and foster realization of the targeted experiences and benefits listed below:

- Activities:
  - Hunting
  - Backpacking and climbing
  - Rafting
  - Dog sledding
  - Camping
  - Wildlife viewing and nonconsumptive tourism
  - Environmental and ecological studies
- Experiences:
  - Enjoying the area's wildlife, scenery, views, and aesthetics
  - Experiencing the natural surroundings with scant industrial disruptions
  - Seeking primitive recreation in untrammeled landscapes
  - Authentic personal challenge, subsistence, or sport
- Benefits:
  - Personal:
    - An improved opportunity to access remote public lands

    - A closer relationship with the natural world
    - A greater understanding of the importance of wildlife to quality of life
    - Developing stronger ties with family and friends
    - Living a more outdoor-oriented lifestyle
    - Affordable backcountry recreation
- Community/Social:
    - Strengthening relationships with family and friends
    - A greater household awareness and appreciation of the cultural heritage
    - Providing dispersed recreation opportunities, which enhance the experience
- Environmental:
    - Greater protection of fish, wildlife, and plant habitat from growth, development, and public use impacts
    - Promoting land connectivity and preventing fragmentation of habitat and big game ranges
- Economic:
    - Maintaining consumptive and nonconsumptive tourism revenue

K.8.4 Physical Components

The setting is primitive.

Remoteness (approximate distance from routes)

The BCA retains the current level of remoteness being 5 miles from either mechanized, motorized routes or established landing fields. The existing, but varied, level of naturalness is maintained as an undisturbed natural landscape. Any new land uses would have a low level of contrast with the landscape and would not be visually obvious from the Dalton Highway. New rights-of-way (e.g., communication sites and utilities) would be colocated within existing disturbances or at existing sites.

Naturalness (landscape texture form, line, and color)

The existing, but varied, level of naturalness is maintained. Any new land uses would have a low level of contrast with the landscape and would not be visually obvious from the Dalton Highway. New rights-of-way (e.g., communication sites and utilities) would be colocated within existing disturbances or at existing sites.

Visitor Facilities

The Arctic Interagency Visitors Center with basic visitor amenities remains available.

K.8.5 Social Components

The setting is primitive.

Contacts (with other groups)

Participants encounter a primary use season along the Dalton Highway (April through September) with user groups divided into three categories: road users, frontcountry users, and backcountry users. Road dwellers expect numerous encounters per day, whereas frontcountry users expect fewer than 10 encounters per day; beyond 1 mile from the road, encounters are fewer than two group sightings per week.

Group Size

Participants encounter a primary use season (April through September) and average up to six people per group in areas classified as frontcountry. Participants average typically one to four people per group in areas classified as backcountry.

Evidence of Use

There remains slight visible evidence of use (dispersed social trails, limited trailheads, and parking areas). There are some trailing paths with evidence of foot traffic during snow-free seasons. Snow season use will be more evident with snowmobile trails and dog mushing trails, but this use is expected in a semi-primitive environment.

K.8.6 Operational Components

The setting is semi-primitive.

Public Access (types of public travel allowed)

Beyond the road system, bush aircraft, raft, foot traffic, dog team, boat, and equestrian use are predominant in the BCA. Some evidence of motorized use is to be expected with the dispersed and vast terrain.

Visitor Services and Information

No maps or brochures are available on-site. Contacts with BLM staff are by chance and unlikely. Visitor services are available in Fairbanks, Yukon Crossing, and Coldfoot.

Visitor Management Controls and Regulations

There is no on-site posting or signage of visitor regulations, interpretive information, or ethics. The user has responsibility to research knowledge of restrictions from information the BLM provides. There are moderate use restrictions (e.g., camping and human waste). Use may require a permit.

K.9 DALTON ERMA—SEMI-PRIMITIVE

The descriptions below are relevant for Alternative C2.

K.9.1 ERMA Objectives Decision

Objective Statement—Participants in visitor assessments report an average 4.0 realization of the targeted experiences and benefit outcomes listed below (4.0 on a probability scale, where 1 is not at all realized and 5 is totally realized).

K.9.2 Management Actions and Allowable Use Decisions

Recreation and Visitor Services Program—Overnight camping is limited to 14 days in a 30-day period in one location. Campers must move 5 miles at the end of 14 days. SRPs are issued for commercial recreational uses and are required at approved sites.

Other Programs—By Alaska state statute, the ERMA is closed to OHVs and off-road vehicles, unless otherwise authorized. Per Alaska Statute 16.05.789, Prohibition on Hunting Adjacent to Highway between Yukon River and Arctic Ocean, hunting with firearms is prohibited north of the Yukon River in the area within 5 miles on either side of the highway between the Yukon River and the Arctic Ocean.

K.9.3 Implementation Decisions

Implementation decisions are actions to achieve or implement land use plan decisions. Implementation decisions include management, administration, information and education, and monitoring. The land use

plan decision may be to designate overnight camping areas, while the supporting implementation decision may be to address specific site locations, size, and amenities to be provided.

K.10 GLOSSARY

backcountry conservation area (BCA). Management allocation used to maintain and enhance habitat for recreationally important fish and wildlife species and to expand public access for hunting, angling, and other forms of wildlife-dependent recreation. When applied, they allow the BLM to prioritize habitat management actions, such as restoring riparian areas, controlling invasive species, managing vegetation, improving fish passage, and reducing wildfire risk.

extensive recreation management area (ERMA). A public lands unit identified in land use plans containing all acreage not identified as an SRMA. Recreation management actions within an ERMA are limited to only those of a custodial nature.

off-highway vehicle (OHV) area designations. BLM-managed lands are designated as Open, Limited, or Closed for OHV use.

- **Open.** Designated areas where all types of motorized vehicles (jeeps, all-terrain vehicles, motorized dirt bikes, etc.) are permitted at all times, anywhere in the area, on roads or cross country, subject to the operating regulations and vehicle standards set forth in 43 Code of Federal Regulations 8341 and 8342.
- **Limited.** Designated areas where motorized vehicles are restricted to designated routes. Off-road, cross-country travel is prohibited in Limited areas, unless an area is specifically identified as an area where cross-country over-snow travel is allowed. Some existing routes may be closed in Limited areas.
- **Closed.** Designated areas where off-road motorized vehicle travel is prohibited yearlong. Emergency use of vehicles is allowed yearlong.

recreation management zone (RMZ). SRMAs and/or ERMAs may be subdivided into recreation management zones to further delineate specific recreation opportunities and recreation setting characteristics.

special recreation management area (SRMA). A public lands unit identified in land use plans to direct recreation funding and personnel to fulfill commitments made to provide specific, structured recreation opportunities. Both land use plan decisions and subsequent implementing actions for recreation in each SRMA are geared to a strategically identified primary market—destination, community, or undeveloped.

special recreation permit (SRP). Permits issued to businesses, organization, and individuals to allow the use of specific public land and related waters for commercial, competitive, and organized group use.

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