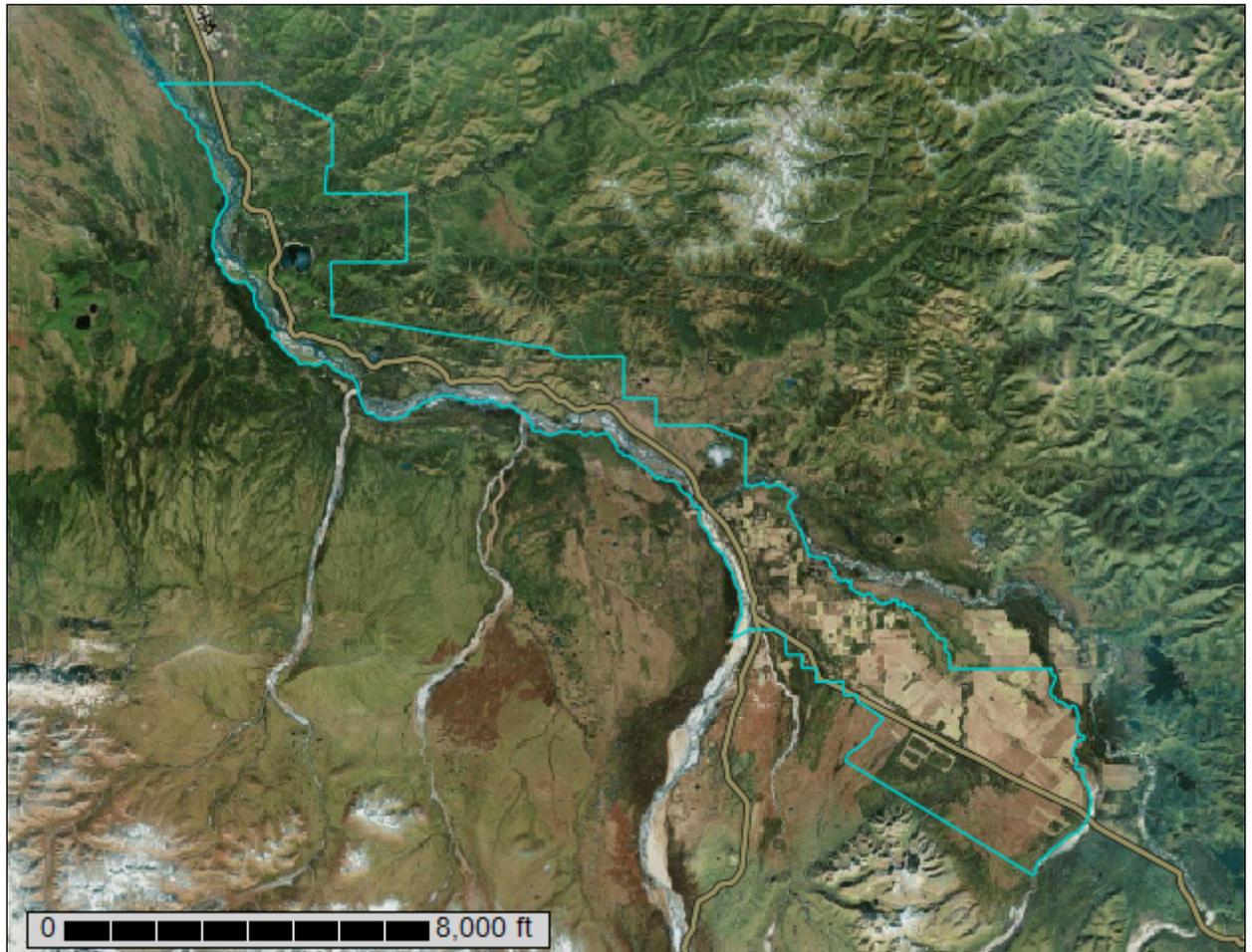


Custom Soil Resource Report for Greater Delta Area, Alaska



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means

for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

- Preface.....2
- Soil Information for All Uses.....5**
 - Soil Reports.....5
 - Land Classifications.....5
 - Hydric Soil List - All Components.....5

Soil Information for All Uses

Soil Reports

The Soil Reports section includes various formatted tabular and narrative reports (tables) containing data for each selected soil map unit and each component of each unit. No aggregation of data has occurred as is done in reports in the Soil Properties and Qualities and Suitabilities and Limitations sections.

The reports contain soil interpretive information as well as basic soil properties and qualities. A description of each report (table) is included.

Land Classifications

This folder contains a collection of tabular reports that present a variety of soil groupings. The reports (tables) include all selected map units and components for each map unit. Land classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Hydric Soil List - All Components

This table lists the map unit components and their hydric status in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part

Custom Soil Resource Report

(Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folists.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
3. Soils that are frequently ponded for long or very long duration during the growing season.
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;
4. Map unit components that are frequently flooded for long duration or very long duration during the growing season that:
 - A. Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or
 - B. Show evidence that the soil meets the definition of a hydric soil;

Custom Soil Resource Report

Hydric Condition: Food Security Act information regarding the ability to grow a commodity crop without removing woody vegetation or manipulating hydrology.

References:

- Federal Register. July 13, 1994. Changes in hydric soils of the United States.
- Federal Register. Doc. 2012-4733 Filed 2-28-12. February, 28, 2012. Hydric soils of the United States.
- Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.
- Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.
- Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.
- Vasilas, L.M., G.W. Hurt, and C.V. Noble, editors. Version 7.0, 2010. Field indicators of hydric soils in the United States.

Custom Soil Resource Report

Report—Hydric Soil List - All Components

Hydric Soil List - All Components—AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
28BU01: Butchlake-Southpaw-Salchaket family complex, 0 to 50 percent slopes	28-Butchlake	10-60	Hills	No	—
	28-Southpaw	10-60	Hills	No	—
	28-Salchaket family	5-20	Alluvial fans	No	—
	28-Terric Hemistels	0-15	Depressions on plains	Yes	1,3
28SP01: Southpaw-Butchlake complex, 0 to 12 percent slopes	28-Southpaw	35-65	Hills	No	—
	28-Butchlake	30-65	Hills	No	—
	28-Audrey	5-15	Hills	No	—
	28-Terric Hemistels	0-10	Depressions on plains	Yes	1,3
	28-Water	0-5	Lakes	—	—
28SP02: Southpaw-Butchlake complex, 5 to 20 percent slopes	28-Southpaw	35-60	Hills	No	—
	28-Butchlake	30-55	Hills	No	—
	28-Audrey	5-15	Hills	No	—
	28-Typic Aquiturbels	0-10	Depressions on hills	Yes	2
28TE01: Terric Hemistels-Typic Aquiturbels-Water complex, 0 to 3 percent slopes	28-Terric Hemistels	30-85	Depressions on plains	Yes	1,3
	28-Water	0-30	Lakes	Unranked	—
	28-Typic Aquiturbels	10-30	Depressions on plains	Yes	2
	28-Audrey	0-10	Hills	No	—
29AE01: Aquic Haplocryepts-Typic Cryaquepts complex	29-Aquic Haplocryepts	45-75	Flood plains	No	—
	29-Typic Cryaquepts	25-50	Depressions on flood plains	Yes	2
	29-Aquic Cryofluvents	0-15	Channels on flood plains	No	—
	29-Salchaket	0-15	Flood plains	No	—
29CH01: Chena very fine sandy loam	29-Chena	80-95	Flood plains	No	—
	29-Jarvis	0-10	Flood plains	No	—
	29-Noonku	0-10	Flood plains	Yes	2,3
29EL01: Eielson-Piledriver, occasionally flooded, complex	29-Eielson	50-70	Flood plains	No	—
	29-Piledriver-Occasionally flooded	25-40	Flood plains	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	29-Fubar-Occasionally flooded	0-5	Flood plains	No	—
	29-Noonku	0-5	Flood plains	Yes	2,3
	29-Riverwash	0-5	Flood plains	Unranked	—
29EL02: Eielson, rarely flooded-Tanana complex	29-Eielson-Rarely flooded	30-60	Flood plains	No	—
	29-Tanana	20-50	Flood plains,terraces	Yes	2,3
	29-Noonku	0-10	Flood plains	Yes	2,3
	29-Liscum	0-7	Flood plains	Yes	2,3
	29-Tanacross	0-7	Flood plains	Yes	2,3
29FU01: Fubar-Piledriver complex, occasionally flooded	29-Fubar-Occasionally flooded	40-60	Flood plains	No	—
	29-Piledriver-Occasionally flooded	30-50	Flood plains	No	—
	29-Eielson	0-5	Flood plains	No	—
	29-Noonku	0-5	Flood plains	Yes	2,3
	29-Riverwash	0-5	Flood plains	Unranked	—
29GE01: Gerstle-Moosehead complex, 0 to 3 percent slopes	29-Gerstle	60-70	Stream terraces	No	—
	29-Moosehead	25-35	Stream terraces	No	—
	29-Tanana	0-10	Flood plains	Yes	2,3
	29-Jarvis	0-10	Flood plains	No	—
29GE02: Gerstle-Tanana complex	29-Gerstle	40-60	Alluvial fans	No	—
	29-Tanana	30-60	Flood plains on alluvial fans	Yes	2,3
	29-Salchaket	0-10	Flood plains on alluvial fans	No	—
	29-Tanacross	0-10	Flood plains on alluvial fans	Yes	2,3
29GE04: Gerstle-Tanacross families complex, 0 to 4 percent slopes	29-Gerstle family	35-60	Flood plains on alluvial fans	No	—
	29-Tanacross family	10-35	Fan terraces on alluvial fans	Yes	2
	29-Moosehead	0-15	Flood plains on alluvial fans	No	—
	29-Donnelly	0-15	Flood plains on alluvial fans	No	—
29JV01: Jarvis very fine sandy loam	29-Jarvis	70-80	Flood plains	No	—
	29-Salchaket	0-15	Flood plains	No	—
	29-Noonku	0-10	Flood plains	Yes	2,3
	29-Tanana	0-5	Flood plains	Yes	2,3
	29-Chena	0-5	Flood plains	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
29JV02: Jarvis very fine sandy loam, occasionally flooded	29-Jarvis-Occasionally flooded	80-95	Flood plains	No	—
	29-Riverwash	0-20	Flood plains	Unranked	—
	29-Salchaket-Occasionally flooded	0-10	Flood plains on alluvial fans	No	—
29JV04: Jarvis-Salchaket complex	29-Salchaket	40-50	Flood plains	No	—
	29-Jarvis	40-50	Flood plains	No	—
	29-Tanana	0-5	Flood plains	Yes	2,3
	29-Chena	0-2	Flood plains	No	—
	29-Noonku	0-5	Flood plains	Yes	2,3
	29-North Pole	0-5	Flood plains	Yes	2,3
	29-Riverwash	0-5	Flood plains	Unranked	—
29JV05: Jarvis-Salchaket complex, occasionally flooded	29-Salchaket-Occasionally flooded	30-60	Flood plains	No	—
	29-Jarvis-Occasionally flooded	30-60	Flood plains	No	—
	29-Tanana-Occasionally flooded	0-10	Flood plains	Yes	2,3
	29-Chena-Occasionally flooded	0-5	Flood plains	No	—
	29-Noonku	0-5	Flood plains	Yes	2,3
29KU01: Koyukuk-Audrey family complex	29-Koyukuk	30-70	Terraces	No	—
	29-Audrey family	20-45	Flood plains,terraces	No	—
	29-Piledriver	0-10	Flood plains	No	—
	29-Lupine	0-10	Plains	No	—
	29-Fubar	0-10	Flood plains	No	—
29KZ01: Iksgiza-Histels complex, 0 to 15 percent slopes	29-Iksgiza	40-70	Plains	Yes	2
	29-Histels	15-45	Terraces	Yes	1
	29-Lupine family	5-15	Plains	No	—
29KZ02: Iksgiza-Lupine, sandy, complex, 1 to 15 percent slopes	29-Iksgiza	35-60	Plains	Yes	2
	29-Lupine family	30-45	Plains	No	—
	29-Histels	0-15	Terraces	Yes	1
	29-Beales	0-15	Plains	No	—
29LS03: Liscum-Terric Cryohemists complex, 0 to 3 percent slopes	29-Liscum	30-60	Flood plains	Yes	2,3
	29-Terric Cryohemists	30-60	Flood plains	Yes	1,3
	29-Mosquito	5-15	Flood plains	Yes	2,3
	29-Noonku	5-15	Flood plains	Yes	2,3

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
29LU01: Lupine very fine sandy loam	29-Lupine	50-80	Fan terraces,fans	No	—
	29-Donnelly	0-12	Alluvial fans	No	—
	29-Sawmill Creek	0-7	Alluvial fans	No	—
	29-Moosehead	0-30	Alluvial fans,terraces	No	—
	29-Volkmar	0-7	Stream terraces	No	—
	29-Browne	0-5	Alluvial fans	Yes	2
29LU02: Lupine family-Beales complex, 0 to 3 percent slopes	29-Lupine family	30-50	Plains	No	—
	29-Beales	30-45	Plains	No	—
	29-Bohica	0-15	Plains,terraces	No	—
	29-Moosehead	0-15	Plains	No	—
	29-Gerstle	0-10	Plains	No	—
29LU03: Lupine family-Beales complex, 3 to 12 percent slopes	29-Lupine family	30-50	Plains	No	—
	29-Beales	30-45	Plains	No	—
	29-Moosehead	0-15	Plains	No	—
	29-Bohica	0-15	Plains,terraces	No	—
	29-Gerstle	0-10	Plains	No	—
29LU04: Lupine family-Bohica-Iksgiza complex, 4 to 20 percent slopes	29-Lupine family	25-55	Hills	No	—
	29-Bohica	10-40	Hills	No	—
	29-Iksgiza	10-25	Hills	Yes	2
	29-Lupine family-Greater than 12 percent slopes	5-25	Hills	No	—
	29-Beales	5-15	Hills	No	—
	29-Gerstle	0-10	Plains	No	—
	29LU05: Lupine-Jarvis complex	29-Lupine	30-60	Alluvial fans	No
	29-Jarvis	20-40	Flood plains	No	—
	29-Donnelly	0-15	Alluvial fans	No	—
	29-Salchaket family	0-15	Flood plains on alluvial fans	No	—
29MH01: Moosehead family-Nenana complex, 3 to 10 percent slopes	29-Moosehead family	50-70	Flood plains on alluvial fans	No	—
	29-Nenana	15-40	Fan terraces on alluvial fans	No	—
	29-Tanacross family	5-15	Fan terraces on alluvial fans	Yes	2

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
29NE01: Nenana silt loam, 0 to 3 percent slope	29-Nenana	65-80	Alluvial fans	No	—
	29-Lupine	0-7	Fan terraces,alluvial fans	No	—
	29-Donnelly	0-10	Alluvial fans	No	—
	29-Moosehead	0-7	Alluvial fans,terraces	No	—
	29-Richardson	0-7	Stream terraces	No	—
	29-Sawmill Creek	0-7	Alluvial fans	No	—
	29-Histic Cryaquepts	0-5	Depressions on terraces	Yes	2,3
	29-Volkmar	0-5	Stream terraces	No	—
29NE03: Nenana-Donnelly complex, 0 to 3 percent slopes	29-Nenana	35-55	Plains	No	—
	29-Donnelly	35-55	Plains	No	—
	29-Lupine family	5-15	Plains	No	—
	29-Beales	0-10	Plains	No	—
29PL01: Eielson, rarely flooded-Piledriver, complex	29-Eielson-Rarely flooded	30-60	Flood plains	No	—
	29-Piledriver	25-60	Flood plains	No	—
	29-Tanana	0-7	Flood plains,terraces	Yes	2,3
	29-Salchaket	0-7	Flood plains	No	—
	29-Noonku	0-7	Flood plains	Yes	2,3
	29-Fubar	0-5	Flood plains	No	—
	29-Riverwash	0-5	Flood plains	Unranked	—
29PT01: Pits, gravel	29-Pits-Gravel	100-100	—	Unranked	—
29PT02: Pits, quarry	29-Pits-Quarry	100-100	—	Unranked	—
29RC01: Richardson-Salchaket complex, 0 to 3 percent slopes	29-Richardson	40-60	Plains	No	—
	29-Salchaket-Occasionally flooded	15-30	Flood plains	No	—
	29-Gerstle	5-15	Plains	No	—
	29-Volkmar	5-15	Plains	No	—
29SA01: Sawmill Creek silt loam	29-Sawmill Creek	75-90	Alluvial fans	No	—
	29-Gerstle	0-15	Alluvial fans,terraces	No	—
	29-Browne	0-10	Alluvial fans	Yes	2
29SC01: Salchaket-Hogan families complex, 1 to 4 percent slopes	29-Salchaket family	50-85	Flood plains on alluvial fans	No	—
	29-Hogan family	15-50	Flood plains on alluvial fans	No	—
	29-Tanacross family	0-10	Fan terraces on alluvial fans	Yes	2

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
29SC02: Salchaket very fine sandy loam	29-Salchaket	80-90	Flood plains	No	—
	29-Jarvis	5-10	Flood plains	No	—
	29-Tanana	5-10	Flood plains	Yes	2,3
	29-Chena	0-2	Flood plains	No	—
29SC03: Salchaket very fine sandy loam, occasionally flooded	29-Salchaket-Occasionally flooded	70-95	Flood plains	No	—
	29-Jarvis-Occasionally flooded	5-15	Flood plains	No	—
	29-Tanana-Occasionally flooded	0-15	Flood plains on alluvial fans	Yes	2,3
29TC01: Tanacross peat	29-Tanacross	70-80	Flood plains	Yes	2,3
	29-Tanana	0-7	Flood plains,terraces	Yes	2,3
	29-Liscum	0-7	Flood plains	Yes	2,3
	29-Noonku	0-7	Flood plains	Yes	2,3
	29-Eielson-Rarely flooded	0-10	Flood plains	No	—
	29-Jarvis	0-7	Flood plains,terraces	No	—
29TC02: Tanacross family-Moosehead complex, 0 to 5 percent slopes	29-Tanacross family	40-80	Fan terraces on alluvial fans	Yes	2
	29-Moosehead	15-45	Alluvial fans	No	—
	29-Moosehead family	5-15	Flood plains on alluvial fans	No	—
	29-Donnelly	0-15	Fan terraces on alluvial fans	No	—
29TC03: Tanacross, occasionally flooded-Histels association	29-Tanacross-Occasionally flooded	5-95	Flood plains	Yes	2
	29-Histels	5-95	Terraces	Yes	1
	29-Browne	0-15	Plains	Yes	2
	29-Tanana	65-90	Flood plains,terraces	Yes	2,3
29TN01: Tanana silt loam	29-Tanacross	2-15	Flood plains	Yes	2,3
	29-Jarvis	0-10	Terraces on flood plains	No	—
	29-Noonku	0-10	Flood plains	Yes	2,3
29TS01: Terric Sapristels	29-Terric Sapristels	85-95	Plains	Yes	1
	29-Windy Creek	5-15	Plains	Yes	2
29VM01: Volkmar silt loam	29-Volkmar	80-95	Stream terraces	No	—
	29-Richardson	0-10	Stream terraces	No	—
	29-Tanana	0-10	Flood plains	Yes	2,3
29WR01: Water-Riverwash complex	29-Water	35-60	Rivers,streams	—	—
	29-Riverwash	20-45	Flood plains	Unranked	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	29-Piledriver	2-10	Flood plains	No	—
	29-Eielson	3-10	Flood plains	No	—
	29-Jarvis	1-5	Flood plains	No	—
	29-Salchaket	1-5	Flood plains	No	—
31AN02: Angel-McCloud complex, 15 to 40 percent slopes	31-McCloud	30-55	Hills	No	—
	31-Angel	30-55	Hills	No	—
	31-Angel-Less than 15 percent slopes	1-10	Hills	No	—
	31-McCloud-Less than 15 percent slope	1-10	Hills	No	—
31AN03: Angel-McCloud complex, 3 to 15 percent slopes	31-Angel	40-60	Hills	No	—
	31-McCloud	30-50	Hills	No	—
	31-Angel-Greater than 15 percent slopes	0-5	Hills	No	—
	31-McCloud-Greater than 15 percent slopes	0-5	Hills	No	—
31BR01: Brigadier-Ester complex, 15 to 45 percent slopes	31-Brigadier	40-60	Hills	No	—
	31-Ester	20-50	Hills	Yes	2
	31-Brigadier-Less than 15 percent slopes	2-7	Hills	No	—
	31-Ester-Greater than 45 percent slopes	0-7	Hills	Yes	2
	31-Gilmore	0-10	Hills	No	—
	31-Manchu	0-5	Hills	No	—
	31-Saulich	0-5	Hills	Yes	2
31BR02: Brigadier-Ester complex, 45 to 70 percent slopes	31-Brigadier	30-55	Hills	No	—
	31-Ester	20-50	Hills	Yes	2
	31-Ester-Less than 45 percent slopes	0-7	Hills	Yes	2
	31-Brigadier-Less than 45 percent slopes	2-7	Hills	No	—
	31-Manchu	0-5	Hills	No	—
	31-Gilmore	0-10	Hills	No	—
31BR08: Brigadier and Manchu silt loams, 3 to 15 percent slopes	31-Brigadier	10-90	Hills	No	—
	31-Manchu	10-90	Hills	No	—
	31-Gilmore	0-15	Hills	No	—
	31-Steese	0-10	Hills	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
31BR09: Brigadier and Manchu silt loams, 3 to 45 percent slopes	31-Brigadier	40-90	Hills	No	—
	31-Manchu	0-50	Hills	No	—
	31-Gilmore	0-15	Hills	No	—
	31-Steese	0-10	Hills	No	—
31CH04: Chatanika-Goldstream complex, 0 to 5 percent slopes	31-Chatanika	40-60	Hills	Yes	2
	31-Goldstream	25-50	Valley floors	Yes	2,3
	31-Chatanika-Greater than 5 percent slopes	0-7	Hills	Yes	2
	31-Histels	0-7	Flats on terraces, depressions on terraces	Yes	1,2,3
	31-Minto	0-7	Hills	No	—
	31-Saulich	0-7	Hills	Yes	2
	31-Water	0-5	Lakes on flood plains, depressions on flood plains	Unranked	—
	31ES01: Ester peat, 20 to 45 percent slopes	31-Ester	65-75	Hills	Yes
	31-Brigadier	0-10	Hills	No	—
	31-Ester-Greater than 45 percent slopes	0-5	Hills	Yes	2
	31-Ester-Less than 20 percent slopes	0-10	Hills	Yes	2
	31-Saulich	0-5	Hills	Yes	2
	31-Steese	0-5	Hills	No	—
	31FA02: Fairbanks silt loam, 7 to 12 percent slopes	31-Fairbanks	75-90	Hills	No
31-Fairbanks-Greater than 12 percent slopes		0-15	Hills	No	—
31-Fairbanks-Less than 7 percent slopes		0-5	Hills	No	—
31-Minto		0-10	Hills	No	—
31-Steese		2-10	Hills	No	—
31FA03: Fairbanks silt loam, 12 to 20 percent slopes	31-Fairbanks	65-80	Hills	No	—
	31-Fairbanks-Greater than 20 percent slopes	0-15	Hills	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	31-Fairbanks-Less than 12 percent slopes	0-15	Hills	No	—
	31-Minto	0-6	Hills	No	—
	31-Steese	0-5	Hills	No	—
31FA04: Fairbanks silt loam, 20 to 30 percent slopes	31-Fairbanks	75-90	Hills	No	—
	31-Fairbanks-Less than 20 percent slopes	0-15	Hills	No	—
	31-Fairbanks-Greater than 30 percent slopes	0-5	Hills	No	—
	31-Steese	0-10	Hills	No	—
31FA05: Fairbanks silt loam, 30 to 45 percent slopes	31-Fairbanks	80-90	Hills	No	—
	31-Fairbanks-Greater than 45 percent slopes	0-15	Hills	No	—
	31-Fairbanks-Less than 30 percent slopes	0-5	Hills	No	—
	31-Steese	0-15	Hills	No	—
31FA07: Fairbanks silt loams, gullied, 7 to 70 percent slopes	31-Fairbanks-Gullied	55-65	Hills	No	—
	31-Fairbanks-Gullied, steep	25-45	Hills	No	—
	31-Minto	0-10	Hills	No	—
	31-Steese	0-10	Hills	No	—
	31-Typic Cryaquents	0-3	Valley floors	Yes	2,3
31FA11: Fairbanks-Steese complex, 20 to 30 percent slopes	31-Fairbanks	30-60	Hills	No	—
	31-Steese	15-50	Hills	No	—
	31-Fairbanks-Less than 20 percent slopes	3-15	Hills	No	—
	31-Steese-Greater than 30 percent slopes	3-10	Hills	No	—
	31-Steese-Less than 20 percent slopes	3-10	Hills	No	—
	31-Gilmore	0-5	Hills	No	—
31GD01: Goldstream peat, 0 to 3 percent	31-Goldstream	70-85	Valley floors	Yes	2,3
	31-Saulich	0-5	Hills	Yes	2

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	31-Histels	0-5	Flats on terraces, depressions on terraces	Yes	1,2,3
	31-Chatanika	2-7	Hills	Yes	2
	31-Goldstream-Greater than 3 percent slopes	0-5	Valley floors	Yes	2,3
	31-Happy	0-5	Natural levees on flood plains	No	—
	31-Typic Cryaquents	0-5	Depressions	Yes	2,3
31GD02: Goldstream peat, 3 to 7 percent slopes	31-Goldstream	70-85	Valley floors	Yes	2,3
	31-Chatanika	0-15	Hills	Yes	2
	31-Histels	0-7	Flats on terraces, depressions on terraces	Yes	1,2,3
	31-Minto	0-5	Hills	No	—
	31-Goldstream-Less than 3 percent slopes	0-5	Valley floors	Yes	2,3
	31-Saulich	0-5	Hills	Yes	2
	31-Typic Cryaquents	0-5	Depressions	Yes	2,3
31GD03: Goldstream-Histels complex	31-Goldstream	50-72	Valley floors	Yes	2,3
	31-Histels	15-40	Flats on terraces, depressions on terraces	Yes	1,2,3
	31-Chatanika	3-12	Hills	Yes	2
	31-Terric Cryofibrists	2-7	Thermokarst depressions	Yes	1,3
31GL02: Gilmore silt loam, 7 to 12 percent slopes	31-Gilmore	65-75	Hills	No	—
	31-Gilmore-Greater than 12 percent slopes	5-15	Hills	No	—
	31-Gilmore-Less than 7 percent slopes	5-10	Hills	No	—
	31-Steese	5-10	Hills	No	—
31GL03: Gilmore silt loam, 12 to 20 percent slopes	31-Gilmore	70-80	Hills	No	—
	31-Gilmore-Greater than 20 percent slopes	10-15	Hills	No	—
	31-Steese	5-10	Hills	No	—
	31-Gilmore-Less than 12 percent slopes	5-12	Hills	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	31-Ester	0-5	Hills	Yes	2
	31-Brigadier	0-5	Hills	No	—
31GL04: Gilmore silt loam, 20 to 30 percent slopes	31-Gilmore	65-80	Hills	No	—
	31-Gilmore-Less than 20 percent slopes	5-15	Hills	No	—
	31-Gilmore-Greater than 30 percent slopes	0-5	Hills	No	—
	31-Steese	5-10	Hills	No	—
	31-Ester	0-5	Hills	Yes	2
	31-Brigadier	0-5	Hills	No	—
31GL05: Gilmore silt loam, 30 to 45 percent slopes	31-Gilmore	80-90	Hills	No	—
	31-Gilmore-Less than 30 percent slopes	5-10	Hills	No	—
	31-Steese	3-10	Hills	No	—
	31-Ester	0-5	Hills	Yes	2
	31-Rock outcrop	0-5	Hills	Unranked	—
	31-Brigadier	0-5	Hills	No	—
31GL06: Gilmore silt loam, 45 to 70 percent slopes	31-Gilmore	80-90	Hills	No	—
	31-Gilmore-Less than 45 percent slopes	0-10	Hills	No	—
	31-Ester	0-10	Hills	Yes	2
	31-Steese	0-10	Hills	No	—
	31-Rock outcrop	0-5	Hills	Unranked	—
31HA01: Happy silt loam, 1 to 7 percent slopes	31-Happy	70-85	Natural levees on flood plains	No	—
	31-Water	2-8	Lakes on flood plains,rivers on flood plains,depressions on flood plains,streams on flood plains	—	—
	31-Goldstream	0-5	Valley floors	Yes	2,3
	31-Histels	0-7	Depressions on terraces,flats on terraces	Yes	1,2,3
	31-Aquic Cryofluvents	0-5	Flood plains	No	—
	31-Chatanika	0-5	Hills	Yes	2
31MC01: McCloud silt loam, 12 to 20 percent slopes	31-McCloud	75-95	Hills	No	—
	31-Angel	5-15	Hills	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	31-McCloud-Greater than 20 percent slopes	0-5	Hills	No	—
	31-McCloud-Less than 7 percent slopes	0-5	Hills	No	—
31MC02: McCloud silt loam, 20 to 30 percent slopes	31-McCloud	75-95	Hills	No	—
	31-Angel	5-15	Hills	No	—
	31-McCloud-Less than 20 percent slopes	0-5	Hills	No	—
	31-McCloud-Greater than 30 percent slopes	0-5	Hills	No	—
31MC03: McCloud-Fairbanks complex, 15 to 40 percent slopes	31-McCloud	30-60	Hills	No	—
	31-Fairbanks	40-60	Hills	No	—
	31-Minto	0-10	Hills	No	—
31MN01: Minto silt loam, 0 to 3 percent slopes	31-Minto	75-85	Hills	No	—
	31-Chatanika	1-12	Hills	Yes	2
	31-Minto-Greater than 3 percent slopes	2-10	Hills	No	—
	31-Fairbanks	0-10	Hills	No	—
31MN02: Minto silt loam, 3 to 7 percent slopes	31-Minto	75-85	Hills	No	—
	31-Minto-Less than 3 percent slopes	0-5	Hills	No	—
	31-Minto-Greater than 7 percent slopes	5-10	Hills	No	—
	31-Chatanika	3-10	Hills	Yes	2
	31-Fairbanks	0-10	Hills	No	—
31MN03: Minto silt loam, 7 to 12 percent	31-Minto	60-70	Hills	No	—
	31-Minto-Less than 7 percent slopes	5-15	Hills	No	—
	31-Minto-Greater than 12 percent slopes	5-15	Hills	No	—
	31-Saulich	0-5	Hills	Yes	2
	31-Chatanika	2-10	Hills	Yes	2
	31-Fairbanks	5-15	Hills	No	—
31MN04: Minto silt loam, 12 to 20 percent slopes	31-Minto	70-85	Hills	No	—
	31-Minto-Less than 12 percent slopes	5-15	Hills	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	31-Typic Cryaquents	0-5	Depressions	Yes	2,3
	31-Chatanika	1-10	Hills	Yes	2
31MN05: Minto-Chatanika complex, 0 to 3 percent slopes	31-Minto	35-50	Hills	No	—
	31-Chatanika	35-50	Hills	Yes	2
	31-Goldstream	0-10	Valley floors	Yes	2,3
	31-Chatanika-Greater than 3 percent slopes	0-5	Hills	Yes	2
	31-Minto-Greater than 3 percent slopes	2-10	Hills	No	—
31MN06: Minto-Chatanika complex, 3 to 7 percent slopes	31-Minto	30-40	Hills	No	—
	31-Chatanika	30-40	Hills	Yes	2
	31-Minto-Greater than 7 percent slopes	5-10	Hills	No	—
	31-Minto-Less than 3 percent slopes	5-10	Hills	No	—
	31-Saulich	0-10	Hills	Yes	2
	31-Chatanika-Less than 3 percent slopes	0-5	Hills	Yes	2
	31-Chatanika-Greater than 7 percent slopes	0-5	Hills	Yes	2
	31-Goldstream	0-5	Valley floors	Yes	2,3
31MN07: Minto-Chatanika complex, 7 to 12 percent slopes	31-Minto	40-50	Hills	No	—
	31-Chatanika	40-50	Hills	Yes	2
	31-Minto-Greater than 12 percent slopes	2-10	Hills	No	—
	31-Minto-Less than 7 percent slopes	2-10	Hills	No	—
	31-Chatanika-Less than 7 percent slopes	2-10	Hills	Yes	2
31RS01: Rosie silt loam, 15 to 90 percent slopes	31-Rosie	80-100	Hills	No	—
	31-Rock outcrop	0-20	Hills	Unranked	—
31SA06: Saulich-Minto complex, 7 to 12 percent slopes	31-Saulich	30-45	Hills	Yes	2
	31-Minto	30-45	Hills	No	—
	31-Minto-Greater than 12 percent slopes	0-7	Hills	No	—
	31-Chatanika	0-7	Hills	Yes	2

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	31-Saulich-Greater than 12 percent slopes	0-7	Hills	Yes	2
	31-Minto-Less than 7 percent slopes	0-7	Hills	No	—
	31-Saulich-Less than 7 percent slopes	0-7	Hills	Yes	2
	31-Goldstream	0-5	Valley floors	Yes	2,3
31SA08: Saulich-Chatanika complex, 3 to 7 percent slopes	31-Saulich	30-60	Hills	Yes	2
	31-Chatanika	20-50	Hills	Yes	2
	31-Minto	5-15	Hills	No	—
	31-Goldstream	5-15	Hills	Yes	2,3
31SR02: Strelna very fine sandy loam, 12 to 20 percent slopes	31-Strelna	70-95	Hills	No	—
	31-Fairbanks	5-15	Hills	No	—
	31-Minto	0-15	Hills	No	—
31SR03: Strelna very fine sandy loam, 20 to 50 percent slopes	31-Strelna	70-90	Hills	No	—
	31-Fairbanks	5-15	Hills	No	—
	31-Manchu	5-15	Hills	No	—
31SR04: Strelna very fine sandy loam, 7 to 12 percent slopes	31-Strelna	70-95	Hills	No	—
	31-Minto	5-15	Hills	No	—
	31-Fairbanks	0-15	Hills	No	—
31SR05: Strelna-Toghotthele complex 10 to 40 percent slopes	31-Strelna	45-80	Hills	No	—
	31-Toghotthele	10-45	Hills	No	—
	31-Fairbanks	0-10	Hills	No	—
31ST01: Steese silt loam, 3 to 7 percent slopes	31-Steese	75-85	Hills	No	—
	31-Steese-Greater than 7 percent slopes	2-10	Hills	No	—
	31-Fairbanks	2-10	Hills	No	—
	31-Gilmore	2-10	Hills	No	—
31ST02: Steese silt loam, 7 to 12 percent slopes	31-Steese	70-80	Hills	No	—
	31-Steese-Less than 7 percent slopes	2-10	Hills	No	—
	31-Steese-Greater than 12 percent slopes	2-10	Hills	No	—
	31-Fairbanks	2-10	Hills	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
	31-Gilmore	2-10	Hills	No	—
31ST03: Steese silt loam, 12 to 20 percent slopes	31-Steese	60-85	Hills	No	—
	31-Fairbanks	3-10	Hills	No	—
	31-Steese-Less than 12 percent slopes	2-10	Hills	No	—
	31-Gilmore	2-10	Hills	No	—
	31-Steese-Greater than 20 percent slopes	2-10	Hills	No	—
31ST04: Steese silt loam, 20 to 30 percent slopes	31-Steese	70-85	Hills	No	—
	31-Steese-Less than 20 percent slopes	2-10	Hills	No	—
	31-Steese-Greater than 30 percent slopes	2-10	Hills	No	—
	31-Gilmore	2-10	Hills	No	—
	31-Fairbanks	2-10	Hills	No	—
	31-Ester	0-5	Hills	Yes	2
31ST05: Steese silt loam, 30 to 45 percent slopes	31-Steese	75-95	Hills	No	—
	31-Steese-Less than 30 percent slopes	5-15	Hills	No	—
	31-Gilmore	0-10	Hills	No	—
	31-Fairbanks	2-10	Hills	No	—
	31-Ester	0-5	Hills	Yes	2
31ST06: Steese silt loam, 45 to 70 percent slopes	31-Steese	85-95	Hills	No	—
	31-Steese-Less than 45 percent slopes	5-10	Hills	No	—
	31-Gilmore	0-10	Hills	No	—
31ST08: Steese-Gilmore complex, 12 to 20 percent slopes	31-Steese	30-60	Hills	No	—
	31-Gilmore	20-40	Hills	No	—
	31-Steese-Greater than 20 percent slopes	2-15	Hills	No	—
	31-Gilmore-Less than 12 percent slopes	2-15	Hills	No	—
	31-Fairbanks	0-10	Hills	No	—
	31-Steese-Less than 12 percent slopes	2-10	Hills	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
31ST09: Steese-Gilmore complex, 20 to 30 percent slopes	31-Steese	30-60	Hills	No	—
	31-Gilmore	30-50	Hills	No	—
	31-Steese-Less than 20 percent slopes	2-10	Hills	No	—
	31-Gilmore-Less than 20 percent slopes	2-15	Hills	No	—
	31-Fairbanks	0-10	Hills	No	—
	31-Steese-Greater than 30 percent slopes	2-10	Hills	No	—
31ST10: Steese-Gilmore complex, 30 to 45 percent slopes	31-Steese	30-50	Hills	No	—
	31-Gilmore	30-50	Hills	No	—
	31-Steese-Less than 30 percent slopes	2-10	Hills	No	—
	31-Steese-Greater than 45 percent slopes	2-10	Hills	No	—
	31-Gilmore-Less than 30 percent slopes	5-15	Hills	No	—
31ST11: Steese-Gilmore complex, 45 to 70 percent slopes	31-Steese	30-60	Hills	No	—
	31-Gilmore	30-60	Hills	No	—
	31-Steese-Less than 45 percent slopes	2-10	Hills	No	—
	31-Gilmore-Less than 45 percent slopes	2-10	Hills	No	—
31TG01: Toghotthele silt loam, 20 to 90 percent slopes	31-Toghotthele	80-95	Climbing dunes on hills	No	—
	31-Rosie	0-5	Hills	No	—
	31-Fairbanks	0-5	Hills	No	—
	31-Steese	0-5	Hills	No	—
31TG02: Toghotthele-Fairbanks complex, 12 to 20 percent slopes	31-Gilmore	0-5	Hills	No	—
	31-Toghotthele	30-60	Hills	No	—
	31-Fairbanks	20-50	Hills	No	—
	31-Minto	0-15	Hills	No	—
31TG03: Toghotthele-Fairbanks complex, 12 to 50 percent slopes	31-Strelna	5-15	Hills	No	—
	31-Toghotthele	20-50	Hills	No	—
	31-Fairbanks	20-50	Hills	No	—
	31-Strelna	5-15	Hills	No	—
	31-Toghotthele	5-15	Hills	No	—

Custom Soil Resource Report

Hydric Soil List - All Components--AK657-Greater Delta Area, Alaska					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
31TG04: Toghotthele-Fairbanks complex, 20 to 40 percent slopes	31-Toghotthele	30-70	Hills	No	—
	31-Fairbanks	20-50	Hills	No	—
	31-Strelna	5-15	Hills	No	—
	31-Minto	0-15	Hills	No	—
31TG05: Toghotthele-Fairbanks complex, 7 to 12 percent slopes	31-Toghotthele	30-70	Hills	No	—
	31-Fairbanks	20-50	Hills	No	—
	31-Strelna	5-15	Hills	No	—
	31-Minto	5-12	Hills	No	—
R29WAA: Interior Alaska Lowlands, Water	29-Water	93-100	Lakes	Unranked	—
	29-Beaches	0-7	Beaches	Unranked	—
R31WAA: Interior Alaska Highlands, Water	29-Water	95-100	Lakes	Unranked	—
	29-Beaches	0-5	Beaches	Unranked	—