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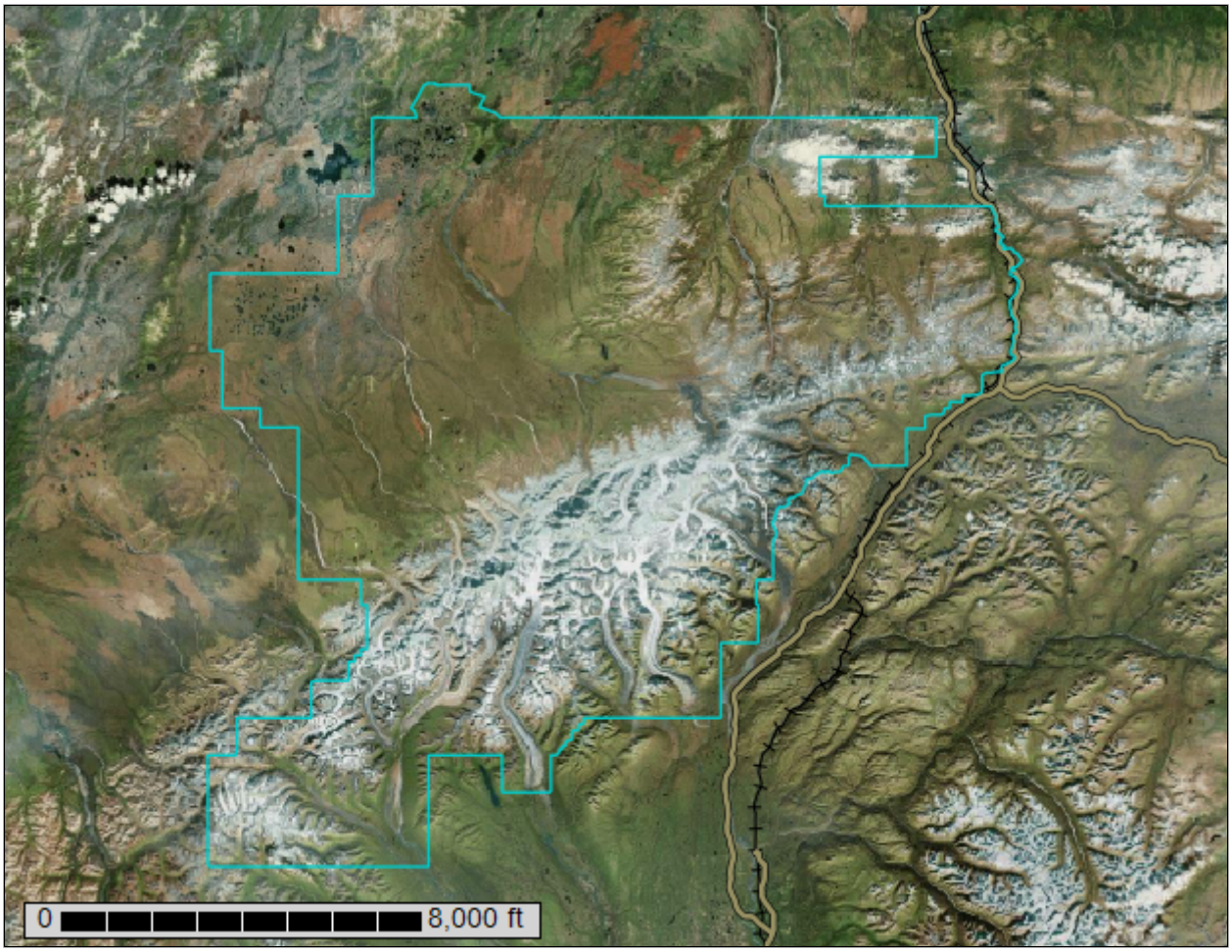
A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Denali National Park and Preserve Area, Alaska



August 22, 2014

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.

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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

(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;

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.

Report—Hydric Soil List - All Components

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
401: Badlands	Badlands	100	Hills	Unranked	—
402: Chistochina silt loam, 0 to 7 percent slopes	Chistochina	85	Drumlins on till plains	No	—
	Permafrost soils	8	Depressions	Yes	2
	Steeper slopes	7	Drumlins on till plains	No	—
403: Copper River peat, 0 to 7 percent slopes	Copper River	90	Till plains,stream terraces,lake plains	Yes	2
	Steeper slopes	4	Till plains,lake plains,stream terraces	Yes	2
	Histosols	3	Depressions	Yes	1
	Better drained soils	3	Stream terraces,lake plains,till plains	No	—
404: Copper River peat, 2 to 7 percent slopes	Copper River	90	Till plains,lake plains,stream terraces	Yes	2
	Better drained soils	4	Stream terraces,lake plains,till plains	No	—
	Histosols	3	Depressions	Yes	1
	Steeper slopes	3	Lake plains,stream terraces,till plains	Yes	2
405: Copper River peat, 7 to 12 percent slopes	Copper River	90	Till plains,lake plains,stream terraces	Yes	2
	Better drained soils	4	Lake plains,till plains,stream terraces	No	—
	Histosols	3	Depressions	Yes	1
	Lesser slopes	3	Lake plains,stream terraces,till plains	Yes	2
406: Copper River peat, 12 to 20 percent slopes	Copper River	90	Till plains,hills,stream terraces,lake plains	Yes	2
	Better drained soils	6	Hills,till plains,lake plains,stream terraces	No	—
	Histosols	4	Depressions	Yes	1
407: Kenny Lake silt loam, 0 to 2 percent slopes	Kenny Lake	90	Lake plains	No	—
	Shallower soils	4	Terraces	No	—
	Permafrost soils	3	Depressions	Yes	2
	Steeper slopes	3	Lake plains	No	—

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
408: Kenny Lake silt loam, 2 to 7 percent slopes	Kenny Lake	85	Lake plains	No	—
	Permafrost soils	8	Depressions	Yes	2
	Shallower soils	7	Terraces	No	—
409: Kenny Lake silt loam, 7 to 12 percent slopes	Kenny Lake	90	Lake plains	No	—
	Shallower soils	6	Terraces	No	—
	Permafrost soils	4	Depressions	Yes	2
410: Kenny Lake silt loam, 12 to 20 percent slopes	Kenny Lake	85	Escarpments on lake plains,hills on lake plains	No	—
	Permafrost soils	8	Depressions	Yes	2
	Shallower soils	7	Terraces	No	—
411: Chitina silt loam, 0 to 2 percent slopes	Chitina	85	Stream terraces,lake plains	No	—
	Steeper slopes	5	Lake plains,stream terraces	No	—
	Permafrost soils	5	Depressions	Yes	2
	Shallower soils	5	Terraces	No	—
412: Chitina silt loam, 2 to 7 percent slopes	Chitina	85	Lake plains,stream terraces	No	—
	Permafrost soils	8	Depressions	Yes	2
	Shallower soils	7	Terraces	No	—
413: Chitina silt loam, 7 to 12 percent slopes	Chitina	90	Lake plains,stream terraces	No	—
	Permafrost soils	6	Depressions	Yes	2
	Shallower soils	4	Terraces	No	—
414: Chitina silt loam, 12 to 20 percent slopes	Chitina	85	Stream terraces,lake plains	No	—
	Permafrost soils	8	Depressions	Yes	2
	Shallower soils	7	Terraces	No	—
415: Tonsina silt loam, 0 to 2 percent slopes	Tonsina	85	Till plains,drumlins	No	—
	Permafrost soils	5	Depressions	Yes	2
	Shallower soils	5	Drumlins	No	—
	Steeper slopes	5	Drumlins,till plains	No	—
416: Tonsina silt loam, 2 to 7 percent slopes	Tonsina	85	Till plains,drumlins	No	—
	Permafrost soils	8	Depressions	Yes	2
	Shallower soils	7	Drumlins	No	—
417: Tonsina silt loam, 7 to 12 percent slopes	Tonsina	85	Drumlins,till plains	No	—
	Permafrost soils	8	Depressions	Yes	2

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
	Shallower soils	7	Drumlins	No	—
418: Tonsina silt loam, 12 to 20 percent slopes	Tonsina	85	Hills,till plains	No	—
	Permafrost soils	8	Depressions	Yes	2
	Shallower soils	7	Till plains	No	—
419: Copper River-Hanagita complex, 2 to 20 percent slopes	Copper River	65	Hills	Yes	2
	Hanagita	25	Hills	No	—
	Shallower soils	3	Hills	No	—
	Rock outcrop	3	Hills,mountains	Unranked	—
	Steeper slopes	2	Hills	No	—
420: Tonsina-Hanagita complex, 2 to 20 percent slopes	Tonsina	65	Hills	No	—
	Hanagita	25	Hills	No	—
	Shallower soils	5	Hills	No	—
	Histosols	5	Depressions	Yes	1
421: Cryochrepts-Rock outcrop complex, 30 to 70 percent slopes	Cryochrepts	65	Escarpments,mountains	No	—
	Rock outcrop	25	Mountains,hills	Unranked	—
	Lesser slopes	10	Mountains,escarpments	No	—
422: Cryofibrists-Cryohemists complex, 0 to 2 percent slopes	Cryofibrists	50	Muskegs	Yes	1,3
	Cryohemists	40	Depressions	Yes	1
	Water	4	Lakes	Unranked	—
	Steeper slopes	3	Terraces	Yes	1
	Better drained soils	3	Lake plains,stream terraces,till plains	No	—
423: Cryohemists, 0 to 2 percent slopes	Cryohemists	90	Depressions	Yes	1
	Steeper slopes	5	Terraces	Yes	1
	Better drained soils	5	Lake plains,till plains,stream terraces	No	—
424: Cryorthents and Cryochrepts, 30 to 70 percent slopes	Cryochrepts	45	Escarpments	No	—
	Cryorthents	45	Escarpments	No	—
	Lesser slopes	10	Escarpments	No	—
425: Dadina peat, 0 to 2 percent slopes	Dadina	90	Outwash terraces on lake plains,outwash terraces on till plains	Yes	2
	Histosols	4	Depressions	Yes	1

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
	Shallower soils	3	Outwash terraces on lake plains,outwash terraces on till plains	No	—
	Steeper slopes	3	Outwash terraces on till plains,outwash terraces on lake plains	Yes	2
426: Dadina-Klanelneechena complex, 0 to 2 percent slopes	Dadina	45	Outwash terraces on lake plains,outwash terraces on till plains	Yes	2
	Klanelneechena	45	Outwash terraces on lake plains,outwash terraces on till plains	Yes	2
	Shallower soils	4	Outwash terraces on lake plains,outwash terraces on till plains	No	—
	Histosols	3	Depressions	Yes	1
	Steeper slopes	3	Outwash terraces on till plains,outwash terraces on lake plains	No	—
427: Dadina-Tolsona complex, 0 to 5 percent slopes	Tolsona	45	Outwash terraces on till plains	Yes	2
	Dadina	45	Outwash terraces on till plains	Yes	2
	Shallower soils	4	Outwash terraces on till plains	No	—
	Histosols	3	Depressions	Yes	1
	Steeper slopes	3	Outwash terraces on till plains	Yes	2
428: Pits, gravel	Pits-Gravel	100	Drumlins,till plains,moraines,stream terraces	Unranked	—
429: Gulkana silt loam, 0 to 2 percent slopes	Gulkana	85	Stream terraces	No	—
	Shallower soils	8	Stream terraces	No	—
	Steeper slopes	7	Stream terraces	No	—
430: Gulkana silt loam, 2 to 7 percent slopes	Gulkana	85	Stream terraces	No	—
	Shallower soils	15	Stream terraces	No	—
431: Gulkana silt loam, 7 to 12 percent slopes	Gulkana	85	Stream terraces	No	—
	Shallower soils	15	Stream terraces	No	—
432: Gulkana silt loam, 12 to 20 percent slopes	Gulkana	85	Stream terraces	No	—
	Shallower soils	15	Stream terraces	No	—

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
433: Klawasi peat, 0 to 2 percent slopes	Klawasi	90	Lake plains	Yes	2
	Better drained soils	4	Lake plains	No	—
	Histosols	3	Depressions	Yes	1
	Steeper slopes	3	Lake plains	Yes	2
434: Klawasi peat, 2 to 7 percent slopes	Klawasi	90	Lake plains	Yes	2
	Better drained soils	6	Lake plains	No	—
	Histosols	4	Depressions	Yes	1
435: Klawasi peat, 7 to 12 percent slopes	Klawasi	85	Lake plains	Yes	2
	Histosols	9	Depressions	Yes	1
	Better drained soils	6	Lake plains	No	—
436: Klawasi peat, cool, 0 to 7 percent slopes	Klawasi-Cool	90	Lake plains	Yes	2
	Better drained soils	4	Lake plains	No	—
	Histosols	3	Depressions	Yes	1
	Steeper slopes	3	Lake plains	Yes	2
437: Klawasi peat, cool, 7 to 20 percent slopes	Klawasi-Cool	90	Lake plains	Yes	2
	Better drained soils	5	Lake plains	No	—
	Histosols	5	Depressions	Yes	1
438: Klawasi peat, depressional, 0 to 2 percent slopes	Klawasi-Depressional	85	Depressions on lake plains	Yes	2
	Steeper slopes	4	Lake plains	Yes	2
	Water	4	Lakes	Unranked	—
	Histosols	4	Depressions	Yes	1
	Better drained soils	3	Lake plains	No	—
439: Gakona silt loam, cool, 0 to 7 percent slopes	Gakona-Cool	85	Lake plains	No	—
	Permafrost soils	8	Terraces	Yes	2
	Steeper slopes-Cool	7	Lake plains	No	—
440: Gakona silt loam, cool, 7 to 20 percent slopes	Gakona-Cool	90	Hills on lake plains	No	—
	Permafrost soils	10	Depressions	Yes	2
441: Gakona silt loam, 0 to 2 percent slopes	Gakona	90	Lake plains	No	—
	Steeper slopes	6	Lake plains	No	—
	Permafrost soils	4	Terraces	Yes	2
442: Gakona silt loam, 2 to 7 percent slopes	Gakona	90	Lake plains	No	—
	Permafrost soils	10	Terraces	Yes	2

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
443: Gakona silt loam, 7 to 12 percent slopes	Gakona	90	Lake plains	No	—
	Permafrost soils	10	Terraces	Yes	2
444: Gakona silt loam, 12 to 20 percent slopes	Gakona	85	Lake plains	No	—
	Permafrost soils	15	Terraces	Yes	2
445: Klawasi-Tolsona complex, 0 to 2 percent slopes	Klawasi	50	Lake plains	Yes	2
	Tolsona	35	Till plains	Yes	2
	Histosols	6	Depressions	Yes	1
	Steeper slopes	5	Lake plains	No	—
	Better drained soils	4	Lake plains	No	—
446: Gakona-Stuck complex, 0 to 2 percent slopes	Gakona	55	Lake plains	No	—
	Stuck	30	Drainageways on lake plains,depressions on lake plains	No	—
	Flooded areas	4	Drainageways	Yes	4
	Histosols	4	Depressions	Yes	1
	Permafrost soils	4	Terraces	Yes	2
	Steeper slopes	3	Lake plains	No	—
447: Gakona-Chetaslina complex, 0 to 2 percent slopes	Gakona	45	Lake plains	No	—
	Chetaslina	40	Lake plains	No	—
	Permafrost soils	8	Terraces	Yes	2
	Steeper slopes	7	Lake plains	No	—
448: Klawasi-Wrangell complex, 0 to 2 percent slopes	Klawasi	40	Lake plains	Yes	2
	Wrangell	30	Muskegs on lake plains	Yes	1
	Klawasi-Depressional	25	Depressions on lake plains	Yes	2
	Histosols	2	Depressions	Yes	1
	Water	2	Lakes	Unranked	—
	Better drained soils	1	Lake plains	No	—
449: Klutina-Klutina, rarely flooded, complex, 0 to 2 percent slopes	Klutina	60	Stream terraces,flood plains	No	—
	Klutina-Rarely flooded	25	Stream terraces	No	—
	Riverwash	4	Flood plains	Unranked	—
	Steeper slopes	4	Stream terraces	No	—
	Gravelly soils	4	Stream terraces	No	—
	Permafrost soils	3	Terraces	Yes	2

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
450: Klutina silt loam, rarely flooded, 2 to 7 percent slopes	Klutina-Rarely flooded	85	Stream terraces	No	—
	Gravelly soils	5	Stream terraces	No	—
	Permafrost soils	5	Terraces	Yes	2
	Steeper slopes	5	Stream terraces	No	—
451: Klutina-Nizina complex, 0 to 2 percent slopes	Klutina	35	Flood plains,stream terraces	No	—
	Nizina	35	Flood plains	No	—
	Klutina-Rarely flooded	20	Stream terraces	No	—
	Riverwash	4	Flood plains	Unranked	—
	Cryorthents	4	Escarpments	No	—
	Gravelly soils	2	Flood plains,stream terraces	No	—
452: Kuslina peat, 0 to 2 percent slopes	Kuslina	85	Stream terraces	Yes	2
	Better drained soils	4	Stream terraces	No	—
	Gravelly and sandy soils	4	Stream terraces	No	—
	Histosols	4	Depressions	Yes	1
	Steeper slopes	3	Stream terraces	No	—
453: Kuslina peat, 2 to 7 percent slopes	Kuslina	85	Stream terraces	Yes	2
	Gravelly and sandy soils	4	Stream terraces	No	—
	Histosols	4	Depressions	Yes	1
	Better drained soils	4	Stream terraces	No	—
	Steeper and lesser slopes	3	Stream terraces	No	—
454: Mendeltna peat, 0 to 7 percent slopes	Mendeltna	85	Lake plains	Yes	2
	Histosols	4	Depressions	Yes	1
	Better drained soils	4	Lake plains	No	—
	Gravelly and sandy soils	4	Lake plains	No	—
	Steeper slopes	3	Lake plains	Yes	2
455: Chetaslina silt loam, 0 to 7 percent slopes	Chetaslina	85	Lake plains	No	—
	Gravelly and sandy soils	5	Lake plains	No	—
	Permafrost soils	5	Terraces	Yes	2
	Steeper slopes	5	Lake plains	No	—

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
456: Chetaslina silt loam, thin surface, 0 to 7 percent slopes	Chetaslina	85	Lake plains	No	—
	Permafrost soils	5	Terraces	Yes	2
	Steeper slopes	5	Lake plains	No	—
	Gravelly and sandy soils	5	Lake plains	No	—
457: Mendeltna-Tebay complex, 0 to 10 percent slopes	Mendeltna	55	Lake plains	Yes	2
	Tebay	30	Moraines on lake plains,drumlins on lake plains	No	—
	Histosols	8	Depressions	Yes	1
	Steeper slopes	7	Lake plains	No	—
458: Nizina-Nizina, rarely flooded, complex, 0 to 5 percent slopes	Nizina	50	Flood plains	No	—
	Nizina-Rarely flooded	35	Stream terraces	No	—
	Riverwash	5	Flood plains	Unranked	—
	Steeper slopes	5	Flood plains	No	—
	Gravelly and sandy soils	5	Flood plains	No	—
459: Pippin silt loam, 0 to 12 percent slopes	Pippin	90	Till plains	No	—
	Loamy and clayey soils	4	Till plains	No	—
	Steeper slopes	3	Till plains	No	—
	Permafrost soils	3	Till plains	Yes	2
460: Pippin silt loam, 12 to 45 percent slopes	Pippin	90	Till plains	No	—
	Steeper slopes	4	Till plains	No	—
	Loamy and clayey soils	3	Till plains	No	—
	Permafrost soils	3	Till plains	Yes	2
461: Riverwash-Nizina complex, 0 to 2 percent slopes	Nizina	45	Flood plains	No	—
	Riverwash	45	Flood plains	Unranked	—
	Gravelly soils	4	Flood plains	No	—
	Steeper slopes	3	Flood plains	No	—
	Water	3	Lakes	Unranked	—
462: Taral mucky silt loam, 20 to 45 percent slopes	Taral	90	Till plains	No	—
	Permafrost soils	4	Depressions	Yes	2
	Loamy and clayey soils	3	Till plains	No	—
	Rock outcrop	3	Mountains,hills	Unranked	—

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
463: Taral-Hanagita complex, 12 to 35 percent slopes	Taral	65	Till plains	No	—
	Hanagita	25	Hills	No	—
	Histosols	4	Depressions	Yes	1
	Gravelly and sandy soils	3	Till plains	No	—
	Rock outcrop	3	Hills,mountains	Unranked	—
464: Strelna-Hanagita-Copper River complex, 15 to 55 percent slopes	Strelna	50	Till plains	No	—
	Hanagita	20	Hills	No	—
	Copper River	20	Hills	Yes	2
	Histosols	4	Depressions	Yes	1
	Gravelly and sandy soils	3	Till plains	No	—
	Rock outcrop	3	Mountains,hills	Unranked	—
465: Tebay silt loam, 0 to 7 percent slopes	Tebay	85	Drumlins on lake plains,moraines on lake plains	No	—
	Histosols	8	Depressions	Yes	1
	Rock outcrop	7	Hills,mountains	Unranked	—
466: Tebay silt loam, 7 to 20 percent slopes	Tebay	85	Drumlins on lake plains,moraines on lake plains	No	—
	Steeper slopes	5	Drumlins on lake plains,moraines on lake plains	No	—
	Gravelly and sandy soils	5	Drumlins	No	—
	Permafrost soils	5	Depressions	Yes	2
467: Tebay silt loam, thin surface, 0 to 7 percent slopes	Tebay-Thin surface	85	Drumlins on lake plains,moraines on lake plains	No	—
	Gravelly and sandy soils	8	Drumlins	No	—
	Permafrost soils	7	Depressions	Yes	2
468: Tebay silt loam, thin surface, 7 to 20 percent slopes	Tebay-Thin surface	85	Moraines on lake plains,drumlins on lake plains	No	—
	Permafrost soils	5	Depressions	Yes	2
	Steeper slopes	5	Moraines on lake plains,drumlins on lake plains	No	—
	Gravelly and sandy soils	5	Drumlins	No	—

Hydric Soil List - All Components–AK612-Copper River Area, Alaska					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
469: Tolsona peat, 0 to 7 percent slopes	Tolsona	85	Till plains	Yes	2
	Gravelly and sandy soils	8	Till plains	No	—
	Permafrost soils	7	Till plains	Yes	2
470: Tolsona peat, 7 to 12 percent slopes	Tolsona	85	Till plains	Yes	2
	Better drained soils	6	Till plains	No	—
	Histosols	5	Depressions	Yes	1
	Steeper slopes	4	Till plains	Yes	2
471: Tsana silt loam, 0 to 7 percent slopes	Tsana	85	Till plains	No	—
	Tolsona	5	Till plains	Yes	2
	Histosols	5	Depressions	Yes	1
	Shallower soils	5	Till plains	No	—
472: Tsana silt loam, thin surface, 0 to 7 percent slopes	Tsana-Thin surface	85	Till plains	No	—
	Gravelly and sandy soils	5	Till plains	No	—
	Permafrost soils	5	Depressions	Yes	2
	Steeper slopes	5	Till plains	No	—
473: Tsana silt loam, thin surface, 7 to 20 percent slopes	Tsana-Thin surface	85	Hills,till plains	No	—
	Gravelly and sandy soils	8	Till plains	No	—
	Permafrost soils	7	Depressions	Yes	2
474: Tolsona-Klanelneechena complex, 0 to 7 percent slopes	Tolsona	50	Till plains	Yes	2
	Klanelneechena	35	Till plains	Yes	2
	Gravelly and sandy soils	5	Till plains	No	—
	Histels	5	Depressions	Yes	1
	Steeper slopes	5	Till plains	No	—
475: Wrangell peat, 0 to 2 percent slopes	Wrangell	85	Muskegs on lake plains	Yes	1
	Better drained soils	4	Lake plains	No	—
	Water	3	Lakes	Unranked	—
	Steeper slopes	3	Lake plains	Yes	1
476: Water	Water	100	Lakes	Unranked	—