

Irrigated and Nonirrigated Yields by Map Unit Component

The average yields per acre that can be expected of the principal crops under a high level of management are shown in this table. In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations also are considered.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

If yields of irrigated crops are given, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

Pasture yields are expressed in terms of animal unit months. An animal unit month (AUM) is the amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the table are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or of the Cooperative Extension Service can provide information about the management and productivity of the soils for those crops.

The land capability classification of map units in the survey area is shown in this table. This classification shows, in a general way, the suitability of soils for most kinds of field crops (United States Department of Agriculture, Soil Conservation Service, 1961). Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for forestland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels: capability class, subclass, and unit.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

- Class 1 soils have slight limitations that restrict their use.
- Class 2 soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.
- Class 3 soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
- Class 4 soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
- Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.
- Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.
- Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Capability subclasses are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion.

Capability units are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not given in all soil surveys.

Reference:

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

Report—Irrigated and Nonirrigated Yields by Map Unit Component

Irrigated and Nonirrigated Yields by Map Unit Component— Kittitas County Area, Washington								
Map symbol and soil name	Land capability		Grass-legume hay		Pasture		Sweet corn	
	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated
			Tons		AUM		Tons	
558—Argixerolls-Durixerolls complex, 30 to 70 percent north slopes								
Argixerolls, north slopes	—	7e	—	—	—	—	—	—
Durixerolls, north slopes	—	7e	—	—	—	—	—	—
563—Mendian very fine sandy loam, 0 to 2 percent slopes								
Mendian	2c	2c	6.00	—	11.0	—	—	—
584—Varodale clay, 0 to 2 percent slopes								
Varodale	3s	3s	5.00	—	9.0	—	8.00	—
587—Argixerolls, 15 to 30 percent slopes								
Argixerolls	6e	4e	—	—	8.0	—	—	—
589—Nack-Brickmill complex, 0 to 5 percent slopes								
Nack	4w	4w	4.00	—	9.0	—	—	—
Brickmill	3w	3w	4.00	—	7.0	—	6.00	—
592—Umtanum ashy silt loam, 2 to 5 percent slopes								
Umtanum	2e	3e	6.50	—	12.0	—	10.00	—
602—Brickmill gravelly ashy loam, 2 to 5 percent slopes								
Brickmill	3w	3w	4.00	—	7.0	—	6.00	—

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	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated
			Tons		AUM		Tons	
603—Reeser ashy clay loam, 2 to 5 percent slopes								
Reeser	3s	3s	5.00	—	9.0	—	9.00	—
610—Ackna ashy loam, 2 to 5 percent slopes								
Ackna	2e	3e	6.50	—	12.0	—	9.00	—
621—Mitta ashy silt loam, flooded, 0 to 2 percent slopes								
Mitta, flooded	3w	3w	6.00	—	11.0	—	9.00	—
715—Weirman gravelly sandy loam, 0 to 2 percent slopes								
Weirman	4s	4s	3.00	—	6.0	1.0	5.00	—
720—Nanum ashy sandy clay loam, 0 to 2 percent slopes								
Nanum	3w	3w	5.00	—	9.0	—	9.00	—
793—Zillah-Kayak complex, 0 to 2 percent slopes								
Zillah	—	3w	—	—	—	5.0	—	—
Kayak	3w	3w	5.00	—	9.0	—	8.00	—
794—Kayak-Weirman complex, 0 to 2 percent slopes								
Kayak	3w	3w	5.00	—	9.0	—	8.00	—
Weirman	4s	4s	4.00	—	7.0	—	5.50	—
800—Brysill gravelly ashy loam, 2 to 5 percent slopes								
Brysill	3e	3e	4.00	—	7.0	—	6.00	—

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	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated
			Tons		AUM		Tons	
806—Weirman complex, channeled, 0 to 2 percent slopes								
Weirman, very gravelly sandy loam	4s	4s	3.00	—	6.0	1.0	5.00	—
Weirman, very cobbly sandy loam	—	4w	—	—	—	—	—	—
809—Weirman-Kayak-Zillah complex, 0 to 2 percent slopes								
Weirman	4s	4s	3.00	—	6.0	1.0	5.00	—
Kayak	3w	3w	5.00	—	9.0	—	8.00	—
Zillah	—	3w	—	—	—	5.0	—	—
816—Patron complex, landslide, 5 to 15 percent slopes								
Patron	—	3e	—	—	—	—	—	—
Patron	—	3e	—	—	—	—	—	—
822—Reeser-Reelow-Sketter complex, 2 to 5 percent slopes								
Reeser	3s	3s	5.00	—	9.0	—	9.00	—
Reelow	6s	6s	4.00	—	7.0	—	6.00	—
Sketter	4s	4s	4.00	—	7.0	—	6.00	—
841—Metser clay loam, 2 to 5 percent slopes								
Metser	3w	4e	5.00	—	9.0	—	9.00	—

Irrigated and Nonirrigated Yields by Map Unit Component— Kittitas County Area, Washington								
Map symbol and soil name	Land capability		Grass-legume hay		Pasture		Sweet corn	
	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated	Irrigated	Nonirrigated
			<i>Tons</i>		<i>AUM</i>		<i>Tons</i>	
957—Kayak-Weirman complex, rarely flooded, 0 to 2 percent slopes								
Kayak, rarely flooded	3w	3w	5.00	—	9.0	—	8.00	—
Weirman, rarely flooded	4s	4s	4.00	—	7.0	—	5.50	—
W—Water								
Water	—	—	—	—	—	—	—	—

Data Source Information

Soil Survey Area: Kittitas County Area, Washington
 Survey Area Data: Version 3, Jun 15, 2009

Prime and other Important Farmlands

This table lists the map units in the survey area that are considered important farmlands. Important farmlands consist of prime farmland, unique farmland, and farmland of statewide or local importance. This list does not constitute a recommendation for a particular land use.

In an effort to identify the extent and location of important farmlands, the Natural Resources Conservation Service, in cooperation with other interested Federal, State, and local government organizations, has inventoried land that can be used for the production of the Nation's food supply.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. Because the supply of high-quality farmland is limited, the U.S. Department of Agriculture recognizes that responsible levels of government, as well as individuals, should encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland, as defined by the U.S. Department of Agriculture, is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas. The soil quality, growing season, and moisture supply are those needed for the soil to economically produce sustained high yields of crops when proper management, including water management, and acceptable farming methods are applied. In general, prime farmland has an adequate and dependable supply of moisture from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, an acceptable salt and sodium content, and few or no rocks. The water supply is dependable and of adequate quality. Prime farmland is permeable to water and air. It is not excessively erodible or saturated with water for long periods, and it either is not frequently flooded during the growing season or is protected from flooding. Slope ranges mainly from 0 to 6 percent. More detailed information about the criteria for prime farmland is available at the local office of the Natural Resources Conservation Service.

For some of the soils identified in the table as prime farmland, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. Onsite evaluation is needed to determine whether or not the hazard or limitation has been overcome by corrective measures.

A recent trend in land use in some areas has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty, and less productive and cannot be easily cultivated.

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, such as citrus, tree nuts, olives, cranberries, and other fruits and vegetables. It has the special combination of soil quality, growing season, moisture supply, temperature, humidity, air drainage, elevation, and aspect needed for the soil to economically produce sustainable high yields of these crops when properly managed. The water supply is dependable and of adequate quality. Nearness to markets is an additional consideration. Unique farmland is not based on national criteria. It commonly is in areas where there is a special microclimate, such as the wine country in California.

In some areas, land that does not meet the criteria for prime or unique farmland is considered to be *farmland of statewide importance* for the production of food, feed, fiber, forage, and oilseed crops. The criteria for defining and delineating farmland of statewide importance are determined by the appropriate State agencies.

Generally, this land includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. Some areas may produce as high a yield as prime farmland if conditions are favorable. Farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

In some areas that are not identified as having national or statewide importance, land is considered to be *farmland of local importance* for the production of food, feed, fiber, forage, and oilseed crops. This farmland is identified by the appropriate local agencies. Farmland of local importance may include tracts of land that have been designated for agriculture by local ordinance.

Report—Prime and other Important Farmlands

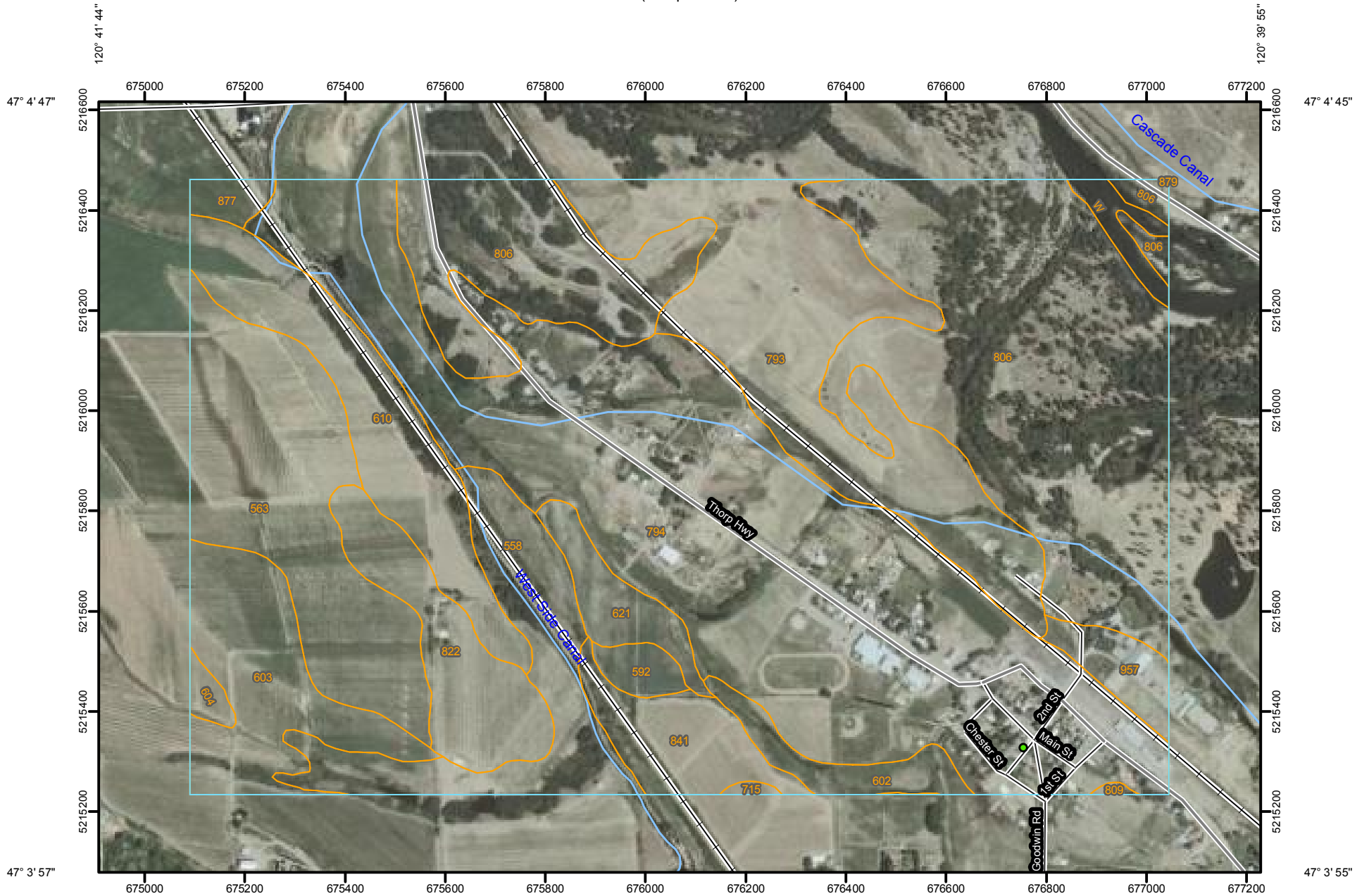
Prime and other Important Farmlands— Kittitas County Area, Washington		
Map Symbol	Map Unit Name	Farmland Classification
558	Argixerolls-Durixerolls complex, 30 to 70 percent north slopes	Not prime farmland
563	Mendian very fine sandy loam, 0 to 2 percent slopes	Prime farmland if irrigated
592	Umtanum ashy silt loam, 2 to 5 percent slopes	Prime farmland if irrigated
602	Brickmill gravelly ashy loam, 2 to 5 percent slopes	Prime farmland if irrigated
603	Reeser ashy clay loam, 2 to 5 percent slopes	Prime farmland if irrigated
604	Reeser ashy clay loam, 5 to 10 percent slopes	Farmland of statewide importance
610	Ackna ashy loam, 2 to 5 percent slopes	Prime farmland if irrigated
621	Mitta ashy silt loam, flooded, 0 to 2 percent slopes	Prime farmland if irrigated
715	Weirman gravelly sandy loam, 0 to 2 percent slopes	Not prime farmland
793	Zillah-Kayak complex, 0 to 2 percent slopes	Prime farmland if irrigated and drained
794	Kayak-Weirman complex, 0 to 2 percent slopes	Prime farmland if irrigated and drained
806	Weirman complex, channeled, 0 to 2 percent slopes	Not prime farmland
809	Weirman-Kayak-Zillah complex, 0 to 2 percent slopes	Prime farmland if irrigated and drained
822	Reeser-Reelow-Sketter complex, 2 to 5 percent slopes	Not prime farmland
841	Metser clay loam, 2 to 5 percent slopes	Farmland of statewide importance
877	Maxhill ashy loam, 0 to 5 percent slopes	Prime farmland if irrigated
879	Patron complex, landslide, 15 to 45 percent slopes	Not prime farmland
957	Kayak-Weirman complex, rarely flooded, 0 to 2 percent slopes	Prime farmland if irrigated and drained
W	Water	

Data Source Information

Soil Survey Area: Kittitas County Area, Washington

Survey Area Data: Version 3, Jun 15, 2009

Soil Map—Kittitas County Area, Washington
(Thorp Soils 1)




Map Scale: 1:11,000 if printed on A size (8.5" x 11") sheet.



Soil Map–Kittitas County Area, Washington
(Thorp Soils 1)

MAP LEGEND






















Area of Interest (AOI)




 Area of Interest (AOI)

Soils




 Soil Map Units

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

-  Very Stony Spot
-  Wet Spot
-  Other



Special Line Features

-  Gully
-  Short Steep Slope
-  Other






Political Features

-  Cities

Water Features

-  Oceans
-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:11,000 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Kittitas County Area, Washington
Survey Area Data: Version 3, Jun 15, 2009

Date(s) aerial images were photographed: 7/16/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Kittitas County Area, Washington (WA637)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
558	Argixerolls-Durixerolls complex, 30 to 70 percent north slopes	30.2	5.1%
563	Mendian very fine sandy loam, 0 to 2 percent slopes	50.8	8.6%
592	Umtanum ashy silt loam, 2 to 5 percent slopes	3.7	0.6%
602	Brickmill gravelly ashy loam, 2 to 5 percent slopes	8.4	1.4%
603	Reeser ashy clay loam, 2 to 5 percent slopes	28.7	4.8%
604	Reeser ashy clay loam, 5 to 10 percent slopes	2.0	0.3%
610	Ackna ashy loam, 2 to 5 percent slopes	32.9	5.5%
621	Mitta ashy silt loam, flooded, 0 to 2 percent slopes	9.4	1.6%
715	Weirman gravelly sandy loam, 0 to 2 percent slopes	0.6	0.1%
793	Zillah-Kayak complex, 0 to 2 percent slopes	66.9	11.3%
794	Kayak-Weirman complex, 0 to 2 percent slopes	168.3	28.4%
806	Weirman complex, channeled, 0 to 2 percent slopes	139.7	23.6%
809	Weirman-Kayak-Zillah complex, 0 to 2 percent slopes	0.4	0.1%
822	Reeser-Reelow-Sketter complex, 2 to 5 percent slopes	21.5	3.6%
841	Metser clay loam, 2 to 5 percent slopes	15.0	2.5%
877	Maxhill ashy loam, 0 to 5 percent slopes	3.1	0.5%
879	Patron complex, landslide, 15 to 45 percent slopes	0.0	0.0%
957	Kayak-Weirman complex, rarely flooded, 0 to 2 percent slopes	7.0	1.2%
W	Water	3.9	0.7%
Totals for Area of Interest		592.5	100.0%