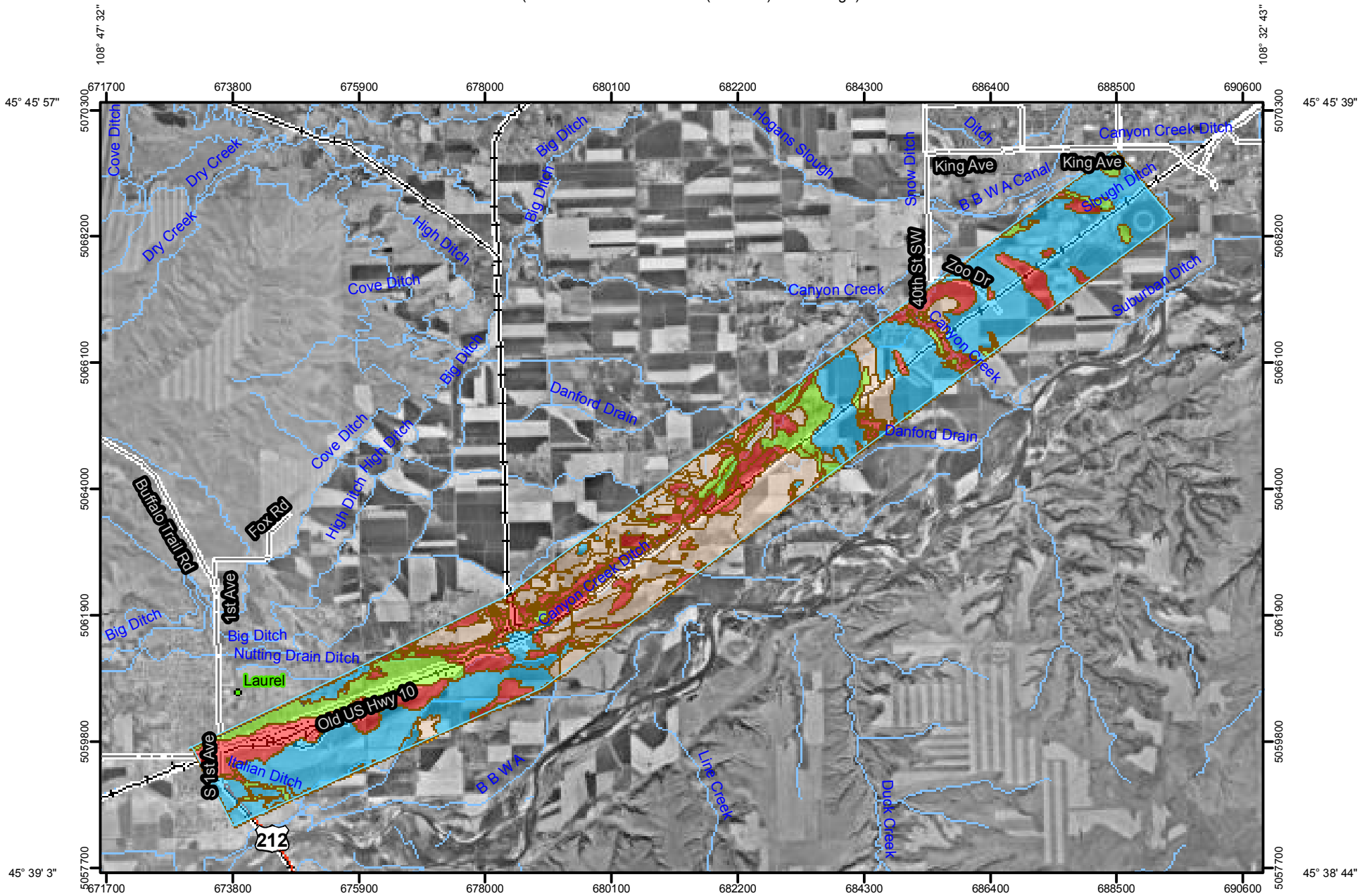
Appendix 1

Farmland Classification Maps

Farmland Classification—Yellowstone County, Montana
(I-90 - Laurel to the Pinehill (I-90/I-94) Interchange)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Soil Ratings
- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Political Features
- Cities

Water Features
- Oceans
- Streams and Canals

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

MAP INFORMATION

Map Scale: 1:91,700 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

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 12N NAD83

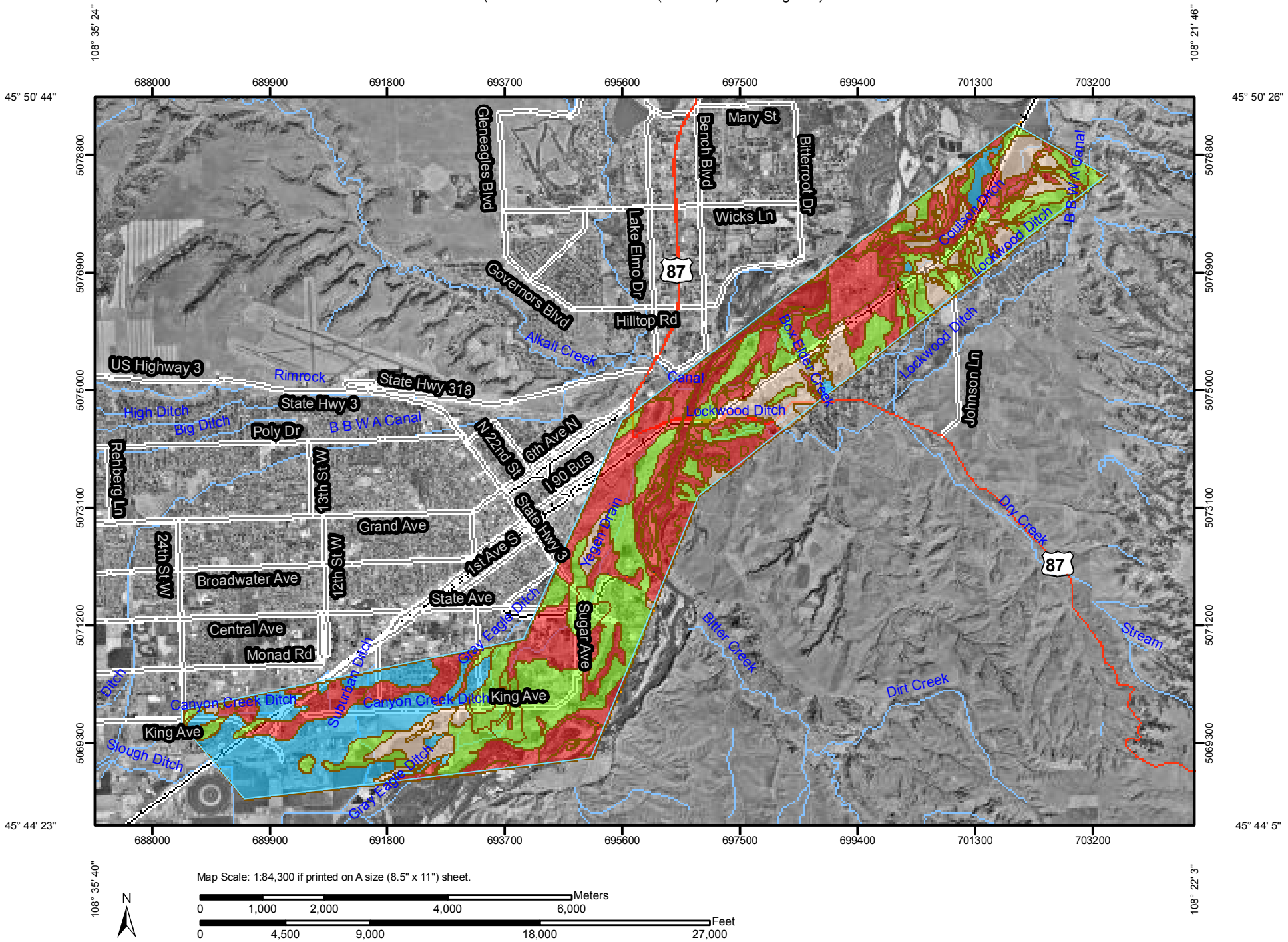
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Yellowstone County, Montana
Survey Area Data: Version 8, Jan 6, 2010

Date(s) aerial images were photographed: 8/23/1996

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.

Farmland Classification—Yellowstone County, Montana
(I-90 - Laurel to the Pinehill (I-90/I-94) Interchange - 2)



Map Scale: 1:84,300 if printed on A size (8.5" x 11") sheet.

N

Meters
0 1,000 2,000 4,000 6,000

Feet
0 4,500 9,000 18,000 27,000

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

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- Soil Map Units

Soil Ratings

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Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 12N NAD83

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

Soil Survey Area: Yellowstone County, Montana
Survey Area Data: Version 8, Jan 6, 2010

Date(s) aerial images were photographed: 8/23/1996; 8/10/1996

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.

Farmland Classification

Farmland Classification— Summary by Map Unit — Yellowstone County, Montana				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Al	Alluvial land, mixed	Not prime farmland	0.9	0.0%
Am	Alluvial land, seeped	Not prime farmland	62.7	0.9%
An	Alluvial land, wet	Not prime farmland	202.6	2.9%
Ax	Arvada-Bone silty clay loams, 0 to 1 percent slopes	Not prime farmland	11.5	0.2%
Bm	Bew silty clay loam, 0 to 1 percent slopes	Prime farmland if irrigated	183.6	2.6%
Bo	Bew clay, 1 to 4 percent slopes	Farmland of statewide importance	0.3	0.0%
Bt	Bone silty clay, 0 to 1 percent slopes	Not prime farmland	7.8	0.1%
Cg	Clapper gravelly loam, 7 to 15 percent slopes	Not prime farmland	27.0	0.4%
GP	Gravel pit	Not prime farmland	42.9	0.6%
Ha	Haverson loam, 0 to 1 percent slopes	Farmland of statewide importance	219.4	3.1%
Hb	Haverson loam, clay substratum, 0 to 1 percent slopes	Farmland of statewide importance	9.4	0.1%
Hd	Haverson silty clay loam, 0 to 1 percent slopes	Farmland of statewide importance	28.3	0.4%
He	Haverson silty clay loam, 1 to 3 percent slopes	Farmland of statewide importance	22.9	0.3%
Hl	Haverson and Lohmiller soils, 0 to 4 percent slopes	Not prime farmland	20.3	0.3%
Hm	Haverson and Lohmiller soils, channeled, 0 to 35 percent slopes	Not prime farmland	63.1	0.9%
Hx	Hysham-Laurel loams, 0 to 2 percent slopes	Not prime farmland	4.4	0.1%
Hy	Hysham-Laurel silty clay loams, 0 to 2 percent slopes	Not prime farmland	20.0	0.3%
Kc	Keiser silty clay loam, 0 to 1 percent slopes	Not prime farmland	6.6	0.1%
Ke	Keiser silty clay loam, 1 to 4 percent slopes	Not prime farmland	0.4	0.0%
Kh	Keiser and Hesper silty clay loams, 0 to 1 percent slopes	Not prime farmland	303.2	4.3%
Km	Kyle silty clay, 1 to 4 percent slopes	Not prime farmland	2.6	0.0%
La	Lambert silt loam, 1 to 4 percent slopes	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	14.6	0.2%

Farmland Classification— Summary by Map Unit — Yellowstone County, Montana				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
Lb	Lambert silt loam, 4 to 7 percent slopes	Farmland of statewide importance	50.0	0.7%
Lc	Lambert silt loam, 7 to 15 percent slopes	Not prime farmland	6.4	0.1%
Ld	Lambert soils, 7 to 35 percent slopes	Not prime farmland	20.6	0.3%
Le	Larim loam, 0 to 4 percent slopes	Not prime farmland	43.7	0.6%
Lg	Larim gravelly loam, 0 to 4 percent slopes	Not prime farmland	175.8	2.5%
Lh	Larim gravelly loam, 4 to 7 percent slopes	Not prime farmland	14.9	0.2%
Ll	Larim gravelly loam, 15 to 35 percent slopes	Not prime farmland	121.2	1.7%
Lr	Lohmiller silty clay, 0 to 1 percent slopes	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	2,732.2	38.7%
Ls	Lohmiller soils, seeped, 0 to 2 percent slopes	Farmland of statewide importance	395.1	5.6%
Lv	Lohmiller silty clay, gravelly variant, 0 to 1 percent slopes	Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	196.3	2.8%
Mm	McRae loam, 0 to 1 percent slopes	Prime farmland if irrigated	152.1	2.2%
Mn	McRae loam, 1 to 4 percent slopes	Prime farmland if irrigated	39.1	0.6%
Mo	McRae loam, 4 to 7 percent slopes	Farmland of statewide importance	20.5	0.3%
So	Shorey gravelly loam, 1 to 4 percent slopes	Farmland of statewide importance	4.3	0.1%
Te	Toluca clay loam, 0 to 1 percent slopes	Prime farmland if irrigated	127.4	1.8%
Th	Toluca clay loam, 1 to 4 percent slopes	Prime farmland if irrigated	28.1	0.4%
Tm	Toluca clay loam, 4 to 7 percent slopes	Farmland of statewide importance	36.4	0.5%
Tn	Toluca and Wanetta clay loams, 0 to 2 percent slopes	Prime farmland if irrigated	406.1	5.7%
To	Toluca and Wanetta clay loams, 2 to 4 percent slopes	Prime farmland if irrigated	7.7	0.1%
Va	Vananda silty clay, 0 to 1 percent slopes	Not prime farmland	444.4	6.3%
W	Water	Not prime farmland	17.5	0.2%
Wc	Wanetta loam, 1 to 4 percent slopes	Prime farmland if irrigated	5.2	0.1%
We	Wanetta gravelly loam, 0 to 2 percent slopes	Prime farmland if irrigated	167.4	2.4%

Farmland Classification— Summary by Map Unit — Yellowstone County, Montana				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
Wf	Wanetta clay loam, 0 to 1 percent slopes	Prime farmland if irrigated	475.3	6.7%
Wg	Wanetta clay loam, 1 to 4 percent slopes	Prime farmland if irrigated	47.1	0.7%
Wh	Wanetta-Larim clay loams, 0 to 1 percent slopes	Not prime farmland	57.9	0.8%
Wk	Wanetta-Larim clay loams, 1 to 4 percent slopes	Not prime farmland	17.1	0.2%
Totals for Area of Interest			**7,063.7**	**100.0%**

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The majority of soil attributes are associated with a component of a map unit, and such an attribute has to be aggregated to the map unit level before a thematic map can be rendered. Map units, however, also have their own attributes. An attribute of a map unit does not have to be aggregated in order to render a corresponding thematic map. Therefore, the "aggregation method" for any attribute of a map unit is referred to as "No Aggregation Necessary".

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.