

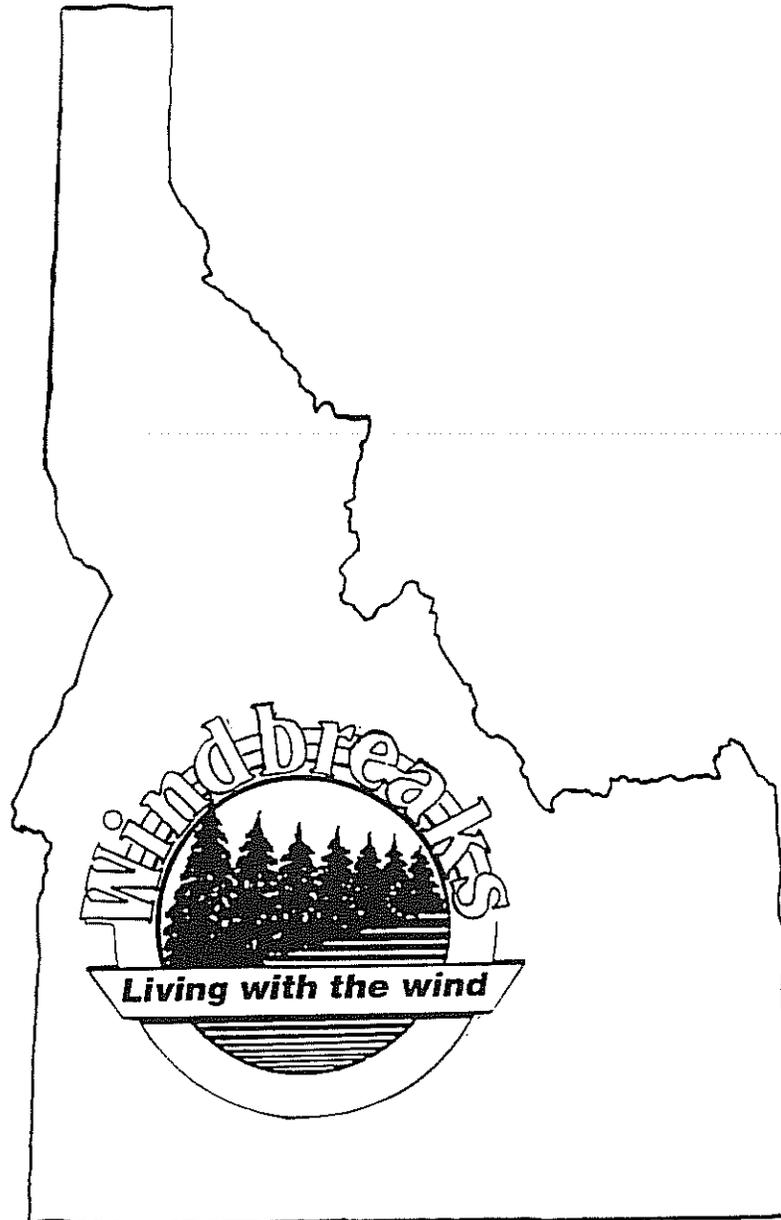
United States  
Department of  
Agriculture

Soil  
Conservation  
Service

Boise, Idaho



# Windbreak Suitability Groups for Idaho



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## Windbreak Interpretations

Windbreaks protect livestock, buildings, and yards from wind and snow. They also protect fruit trees and gardens and furnish habitat for wildlife. Several rows of low-growing and high-growing broadleaf and coniferous trees and shrubs provide the most protection.

Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil. Field windbreaks protect cropland and crops from wind, help to keep snow on fields, and provide food and cover for wildlife.

Windbreaks are often planted on land that did not grow trees originally. Knowledge of how trees perform on such land can be gained only by observing and recording their performance where trees have been planted and survived. The problem is compounded by the fact that many favorite windbreak species are not indigenous to the areas in which they are planted.

Each tree or shrub species has certain climatic and physiographic limits. Within these parameters a tree may be well or poorly suited because of soil characteristics. The windbreak suitability groups have been developed by considering individual species performance under specified conditions of soil, climate, physiography, and management, including species spacing and arrangement.

All soil series mapped in the state have been placed in 10 groups of similar soils. Groups 1, 2, 4, 5, 6, and 9 are further divided into subgroups. In addition, all groups provide information by MLRAs. Care must be taken to ensure that subgroups are considered and the proper MLRA is followed when selecting species suitability and performance.

The tree or shrub heights listed in the following tables are the height the plant is expected to reach in 20 years after planting with no sustained irrigation. Tree/shrub heights in parenthesis ( ) are expected 20 year heights with permanent irrigation. Ten-year tree heights can be determined by reducing heights by 50 percent.

Named varieties of plants cooperatively released through the SCS Plant Materials Program have been listed in the tables. These varieties have proven superior and should be used when they are available.

A listing of the soils that are applicable to each group and subgroup follow this page. See part 537 of the National Forestry Manual for additional information.

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Windbreaks are often planted on land that did not grow trees originally. Knowledge of how trees perform on such land can be gained only by observing and recording their performance where trees have been planted and survived. The problem is compounded by the fact that many favorite windbreak species are not indigenous to the areas in which they are planted.

## Windbreak Suitability Groups

Each tree or shrub species has certain climatic and physiographic limits. Within these parameters a tree may be well or poorly suited because of soil characteristics. The windbreak suitability groups have been developed by considering individual species performance under specified conditions of soil, climate, physiography, and management, including species spacing and arrangement.

Windbreak suitability groups are your guide for selecting species best suited for different kinds of soils and for predicting height growth and effectiveness. They may be used to select plants for windbreaks, recreation and wildlife plantings, ornamental or environmental plantings, reforestation, and critical area plantings.

All soil series mapped in the state have been placed in 10 groups of similar soils. Groups 1, 2, 4, 5, 6, and 9 are further divided into subgroups. In addition, all groups provide information by MLRAs. Care must be taken to ensure that subgroups are considered and the proper MLRA is followed when selecting species suitability and performance. Soil map units over 35% were not put into windbreak suitability groups.

The tree or shrub heights listed in the following tables are the height the plant is expected to reach in 20 years after planting with no sustained irrigation. Tree/shrub heights in parenthesis ( ) are expected 20 year heights with permanent irrigation. Ten-year tree heights can be determined by reducing heights by 50 percent. This information should be used to determine the placement of a windbreak, area protected, and arrangement of species. Also, specific tree and shrub species within each group that are underlined are the preferred species to list on Soil Interpretation Records (SCS-Soil-5s).

Named varieties of plants cooperatively released through the SCS Plant Materials Program have been listed in the tables. These varieties have proven superior and should be used when they are available.

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## WISG INDEX

Soil Group Symbol	Name	Page
1	WET, FAVORABLE	II-1
1K, 1KK	WET, FAVORABLE, CARBONATES	II-1
2	WET, DRAINED	II-1
2K, 2KK	WET, DRAINED, CARBONATES	II-1
3	LOAMY	II-1
4	CLAYEY, FAVORABLE	II-2
4C	CLAYEY	II-2
4CK	CLAYEY, CARBONATES	II-2
5	DROUGHTY	II-2
5K, 5KK	DROUGHTY, CARBONATES	II-2
6	VERY DROUGHTY	II-2
6K, 6KK	VERY DROUGHTY, CARBONATES	II-2-3
6D	MODERATELY DEEP, FAVORABLE	II-3
6DK	MODERATELY DEEP, CARBONATES	II-3
6G	LOAMY/CLAYEY, DROUGHTY	II-3
6GK, 6GKK	LOAMY/CLAYEY, DROUGHTY, CARBONATES	II-3
7	SANDY	II-3
8, 8K	LOAMY, CARBONATES	II-4
9W	WET, SALINE/ALKALINE	II-4
9C	DRY, SALINE/ALKALINE	II-4
9L	DRY, SALINE/ALKALINE, FAVORABLE	II-4
10	UNSUITED	II-4



Criteria for Windbreak Suitability Soil Groups and Subgroups of the West Region.

The criteria below define windbreak suitability soil groups used in the west region. A soil group is assigned to all soil map unit components needing windbreak interpretations. Compare a soil component's features and properties with those of each group until a matching group is identified. For further assistance, consult with the state staff forestry and soils specialists.

Group	Soil Depth (in.)	Rock Fragments (% by Vol.)	Available Water Capacity	CACO3 Equivalent (upper 12 in.)	pH (upper 12 in.)	Electrical Conductivity (upper 12 in.)	Water Table During Growing Season (ft.)	Permeability (in/hr.)	Associated Family Particle Size Class	Associated Soil Drainage
1	≥40	0-35	≥7.5	<5	≤ 7.8	≤ 2 mmhos/cm	≥3.0 ≤5.0	≥0.2 ≤6.0	Loamy	Well, mod. well, somewhat poorly; Beneficial Moisture = Yes
1H	≥20	Any in layers beneath	≥7.5	-	≤ 7.8	≤ 4 mmhos/cm	≥3.0 ≤5.0	-	(Histosols)	(Altered drainage): Beneficial Moisture = Yes
1K	≥40	0-35	≥7.5	≥5 ≤15	7.9-8.4	≤ 4 mmhos/cm	≥3.0 ≤5.0	≤0.2 ≤6.0	Loamy	Well, mod. well, somewhat poorly; Beneficial Moisture = Yes
1KK	≥40	0-35	≥7.5	≥15	7.9-8.4	≤ 4 mmhos/cm	≥3.0 ≤5.0	≥0.2 ≤6.0	Loamy	Well, mod. well, somewhat poorly; Beneficial Moisture = Yes
2	≥40	0-60	≥2.0	≤5	≤7.8	≤ 2 mmhos/cm	≥1.5 ≤3.0	-	All (except Histosols)	Poorly, somewhat poorly
2K	≥40	0-60	≥2.0	≥5 ≤15	7.9-8.4	≤4 mmhos/cm	≥1.5 ≤3.0	-	All (except Histosols)	Poorly, somewhat poorly
2KK	≥40	0-60	≥2.0	≥15 ≤40	7.9-8.4	≤4 mmhos/cm	≥1.5 ≤3.0	-	All (except Histosols)	Poorly, somewhat poorly
2H	≥40	Any, in layers	≥7.5	-	≤ 7.8	≤ 2 mmhos/cm	≥1.5 ≤3.0	-	(Histosols)	Poorly, somewhat poorly
3	≥40	0-35	≥7.5	≥5	≤ 7.8	≤ 2 mmhos/cm	≥5.0	≥0.2 ≤6.0	Loamy	Well, moderately well

## SOIL-TREE RELATIONSHIPS AND INTERPRETATIONS

G R O U P	Soil Depth (in.)	Rock Frag- ments (% by Vol.)	Avail- able Water Capa- city	CACO <sub>3</sub> EQUIVA- LENT (upper 12 in.)	pH (upper 12 in.)	Elec- trical Conduc- tivity (upper 12 in.)	Water Table During Growing Season (ft.)	Perm- eabil- ity ("hr.)	Associated Family Particle Size Class	Associated Soil Drainage
4	≥20	Any	≥5.0	≤5	≤7.8	≤2 mmhos/cm	≥5.0	8-20" of 0.2-6.0 over .06-0.2	8-20" of Loamy over Clayey or Clayey- Skeletal	Well, moderately well, somewhat poorly
4K	≥20	Any	≥5.0 ≤15	≥5	7.9-8.4	≤4 mmhos/cm	≥5.0	8-20" of 0.2-6.0 over .06-0.2	8-20" of Loamy over Clayey or Clayey- Skeletal	Well, moderately well, somewhat poorly
4C	≥20	Any	≥3.75	≥5	≤7.8	≤2 mmhos/cm	≥5.0	≥0.06 ≤0.2	Clayey; 0-8" Loamy over Clayey	Well, mod. well somewhat poorly
4CK	≥20	Any	≥3.75	≥5 ≤15	7.9-8.4	≤4 mmhos/cm	≥5.0	≥0.06 ≤0.2	Clayey; 0-8" Loamy over Clayey	Well, mod. well, somewhat poorly
5	≥40	Any	3.75- 7.5	≤5	≤7.8	≤2 mmhos/cm	≥5.0	≥0.2 ≤6.0	Loamy; Loamy- skeletal	Well, moderately well
5K	≥40	Any	3.75- 7.5	≥5 ≤15	7.9-8.4	≤4 mmhos/cm	≥5.0	≥0.2 ≤6.0	Loamy; Loamy- skeletal	Well, moderately well
5KK	≥40	Any	3.75- 7.5	≥15 ≤40	7.9-8.4	≤4 mmhos/cm	≥5.0	≥0.2 ≤6.0	Loamy; Loamy- skeletal	Well, moderately well
6	≥20	Any	2.0- 3.75	≤5	≤7.8	≤2 mmhos/cm	≥5.0	≥0.2 ≤6.0 (≥20.0 for un- derly'g sands/ gravel)	Loamy; Loamy-skeletal (over impervious layer or sands/gravels)	Excessive, some- what excessive, well
6K	≥20	Any	2.0- 3.75	≥5 ≤15	7.9-8.4	≤4 mmhos/cm	≥5.0	≥0.2 ≤6.0 (≥20.0 for un- derly'g sands/ gravel)	Loamy; Loamy-skeletal (over impervious layer or sands/gravels)	Excessive, some- what excessive, well

## SOIL-TREE RELATIONSHIPS AND INTERPRETATIONS

G R O U P	Soil Depth (in.)	Rock Frag- ments (% by Vol.)	Avail- able Water Capa- city	CACO3 EQUIVA- LENT (upper 12 in.)	pH (upper 12 in.)	Elec- trical Conduc- tivity (upper 12 in.)	Water Table During Growing Season (ft.)	Perm- cabil- ity (* /hr.)	Associated Family Particle Size Class	Associated Soil Drainage
6KK	≥20	Any	2.0 3.75	≥15 ≤40	7.9-8.4	≤ 4 mmhos/cm	≥5.0	≥0.2 ≤6.0 20.0 for un- derly'g sands/ gravel)	Loamy; Loamy-skeletal (over impervious layer or sands/gravels)	Excessive, some- what excessive well
6D	20-40	Any	≥3.75	≤5	≤ 7.8	≤ 2 mmhos/cm	≥5.0	≥0.2 ≤6.0	Loamy; Clayey-skeletal; Loamy-skeletal (over impervious layer)	Somewhat exces- sive, well, moderately well
6DK	20-40	Any	≥3.75	≥5 ≤15	7.9-8.4	≤ 4 mmhos/cm	≥5.0	≥0.2 ≤6.0	Loamy; Clayey-skeletal; Loamy-skeletal (over impervious layer)	Somewhat exces- sive, well,
6G	≥20	Any	≥3.75	≥5	≤ 7.8	≤ 2 mmhos/cm	≥5.0	≥0.2 ≤6.0 ≥20.0 for un- derly'g sands/ gravel)	Loamy; Clayey-skeletal Loamy-skeletal (over sands/gravels)	Somewhat exces- sive, well, moderately well
6GK	≥20	Any	≥3.75	≥5 ≤15	7.9-8.4	≤ 4 mmhos/cm	≥5.0	≥0.2 ≤6.0 ≥20.0 for un- derly'g sands/ gravel)	Loamy; Clayey-skeletal Loamy-skeletal (over sands/gravels)	Somewhat exces- sive, well, moderately well
6GKK	≥20	Any	≥3.75	≥15 ≤40	7.9-8.4	≤ 4 mmhos/cm	≥5.0	≥0.2 ≤6.0 ≥20.0 for un- derly'g sands/ gravel)	Loamy; Clayey-skeletal; Loamy-skeletal (over sands/gravels)	Somewhat exces- sive, well, moderately well
7	≥40	0-35	≥2.0	≤5	≤7.8	≤ 2 mmhos/cm	≥5.0	≥6.0	Sandy (with sandy surface)	Excessive, some- what excessive, well

## SOIL-TREE RELATIONSHIPS AND INTERPRETATIONS

G R O U P	Soil Depth (in.)	Rock Frag- ments (% by Vol.)	Avail- able Water Capa- city	CACO <sub>3</sub> EQUIVA- LENT (upper 12 in.)	pH (upper 12 in.)	Elec- trical Conduc- tivity (upper 12 in.)	Water Table During Growing Season (ft.)	Perm- eabil- ity (*hr.)	Associated Family Particle Size Class	Associated Soil Drainage
8	≥40	0-35	≥7.5	≥5 ≤15	7.9-8.4	≤ 4 mmhos/cm	≥5.0	≥0.2 ≤6.0	Loamy	Well, moderately well
8K	≥40	0-35	≥7.5	≤15 ≤40	7.9-8.4	≤ 4 mmhos/cm	≥5.0	≥0.2 ≤6.0	Loamy	Well, moderately well
9W	≥20	Any	≥2.0	--	--	4.16 mmhos/cm	≥1.5 ≤5.0	--	Any	Mod. well, some- what poorly, poorly
9C	≥20	0-35	≥3.75	--	--	4-16 mmhos/cm	≥5.0	≥0.06 ≤0.2	Clayey; 0-8" Loamy over Clayey	Well, mod.well, somewhat poorly
9L	≥20	0-35	≥3.75	--	--	4-16 mmhos/cm	≥5.0	≥0.2 ≤6.0; (over ≥0.06 ≤0.2 if appli- cable)	Loamy; 8-20" Loamy over Clayey	Well, mod. well, somewhat poorly

10 <----- One or more characteristics requiring an on-site investigation ----->

## EXHIBITS

### Soil Science Terms and Definitions

The notes below explain each column heading on the table. Numeric values and other information listed on the guide are consistent with guidelines and definitions in the Soil Survey Manual, Soils Handbook, and Soil Taxonomy.

**Group Symbol:** The 31 groups are based on the original ten-group system developed in the Midwest by the SCS. The new groups significantly affect the selection and growth of trees and shrubs. The letters used to identify groups were chosen to represent a key soil characteristic associated with that group, i.e. K - carbonates; H - histic; C - clay; D - restrictive layer to roots; W - wetness; G - gravels/sands; and L - loamy.

**Soil Depth:** Depth, in inches, to underlying bedrock or other restrictive layer; measured from the top of the uppermost mineral horizon (or surface for Histosols) to the top of the restrictive layer.

**Rock Fragments:** The content of rock fragments as a percent of the volume.

**Available Water Capacity (AWC):** The potential AWC, in inches, of the total profile to a restrictive layer, layer with sands/gravels (permeability > 20 inches/hour) or to 60" if no restrictive layer.

**CACO<sub>3</sub> Equivalent:** Percent of free lime is by weight per soil unit in the upper 12 inches.

**pH:** Values less than 7.9 indicate a moderately alkaline, neutral or acidic soil; 7.9-8.4, a strongly alkaline soil; and greater than 8.4, a very strongly alkaline soil.

**Electrical Conductivity:** The standard measure of salinity or amount of salts in a soil; < 2 mmhos/cm indicates little or no salinity; < 4 mmhos/cm indicates a very slightly saline soil; 4-8 mmhos/cm, slightly saline; and greater than 8 mmhos/cm, moderately to strongly saline.

**Water Table During Growing Season:** Depth, in inches, to a water table during the growing season.

**Permeability:** Rate (inches/hour) at which soil transmits water while saturated (saturated hydraulic conductivity expressed as "permeability."

**Associated Family Particle Size Class:** Refers to the grain-size distribution of the soil including the fine earth fraction. The classes are:

**Loamy:** Sandy loam, silt loam, silt, loamy very fine sand, very fine sand, clay loam (less than 35% clay), silty clay loam (less than 35% clay), and sandy clay loam; rock fragments make up less than 35% by volume.

**Clayey:** Clay, sandy clay, silty clay, clay loam (greater than 35% clay); rock fragments make up less than 35%, by volume.

**Sandy:** Loamy fine sand, loamy sand, sand (not including loamy very fine sand and very fine sand); rock fragments make up less than 35%, by volume.

**Skeletal:** When used with the texture class, denotes that rock fragments make up > 35%, by volume.

**Associated Soil Drainage:** Excessively and somewhat excessively drained describe soils that are dry longer than is typical for the dominant soils of an area; well drained are neither unusually dry nor unusually wet; increasing degrees of wetness limits use of mod. well to very poorly drained soils. If "Beneficial Moisture" is listed "Yes," the soil is in a topographic

setting or location to receive water in addition to that provided by normal amounts of rain and/or snow. On-site investigation may require reclassification of some soil map unit components (that normally do not receive beneficial moisture) to 1, 1K or 1KK.

## EXHIBITS

### Descriptions of Soil Groups and Subgroups of the West Region

#### Group 1

Soils are deep and somewhat poorly to well drained. Rock fragments do not exceed 35 percent by volume throughout the profile. Textures are in the loamy family particle size class. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 7.5 inches. Free carbonates are generally absent, but never exceed a concentration of five percent calcium carbonate equivalent in the upper 12 inches of the soil profile. In the upper 12 inches, the pH is less than 7.9 and electrical conductivity is less than two millimhos/centimeter. Depth to a water table during the growing season is 3 to 5 feet or the site receives beneficial moisture from surrounding landscapes.

#### Subgroup 1H

Soils are histosols greater than 20 inches thick and do not have a water table within three feet of the surface (or the water table has been altered to lower the water table to 3 to 5 feet). Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 7.5 inches. In the upper 12 inches, there is no calcium carbonate equivalent, pH is less than 7.9, and electrical conductivity is less than four millimhos/centimeter. Depth to the water table during the growing season is 3 to 5 feet or the site receives beneficial moisture from surrounding landscapes.

#### Subgroup 1K

Soils are deep and well drained. Rock fragments do not exceed 35 percent by volume throughout the profile. Textures are in the loamy family particle size class. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 7.5 inches. Free carbonates range from 5 to 15 percent calcium carbonate equivalent in the upper 12 inches of the soil profile. In the upper 12 inches, the pH values range from 7.9 to 8.4 and electrical conductivity is less than four millimhos/centimeter. Depth to a water table during the growing season is 3 to 5 feet or the site receives beneficial moisture from surrounding landscapes.

### Subgroup 1KK

Soils are deep and somewhat poorly to well drained. Rock fragments do not exceed 35 percent by volume in the profile. Textures are in the loamy family particle size class. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 7.5 inches. Free carbonates range from 15 to 40 percent calcium carbonate equivalent in the upper 12 inches of the soil profile. In the upper 12 inches, the pH values range from 7.9 to 8.4 and electrical conductivity is less than 4 millimhos/centimeter. Depth to a water table during the growing season is 3 to 5 feet or the site receives beneficial moisture from surrounding landscapes.

### Group 2

Soils are deep, poorly to somewhat poorly drained, excessively wet or ponded during the spring or overflow periods. All textural classes are included except those associated with histosols. Rock fragments may range up to 60 percent by volume in the profile. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than two inches. Free carbonates are generally absent but never exceed a concentration of five percent calcium carbonate equivalent in the upper 12 inches of the soil profile. In the upper 12 inches, the pH is less than 7.9 and electrical conductivity is less than two millimhos/centimeter. Depth to a water table during the growing season is 1.5 to 3 feet.

### Subgroup 2H

Soils are somewhat poorly to poorly drained, deep histosols. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 7.5 inches. In the upper 12 inches, there is no calcium carbonate equivalent, pH is less than 7.9, and electrical conductivity is less than 2 millimhos/centimeter. Depth to a water table during the growing season is 1.5 to 3 feet.

### Subgroup 2K

Soils are deep, poorly to somewhat poorly drained, and excessively wet or ponded during the spring or overflow periods. Rock fragments may range up to 60 percent by volume in the profile. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than two inches. Free carbonates range from a concentration of 5 to 15 percent calcium carbonate equivalent in the upper 12 inches of the soil profile. In the upper 12 inches of the profile, the pH values range from 7.9 to 8.4 and electrical conductivity is less than 4 millimhos/centimeter. Depth to a water table during the growing season is 1.5 to 3 feet.

### Subgroup 2KK

Soils are deep, poorly to somewhat poorly drained, excessively wet or ponded during the spring or overflow periods. All textural classes are included except those associated with histosols. Rock fragments may range up to 60 percent by volume in the profile. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 2 inches. Free carbonates range from a concentration of 15 to 40 percent calcium carbonate equivalent in the upper 12 inches of the soil profile. In the upper 12 inches of the profile, the pH ranges from 7.9 to 8.4 and electrical conductivity is less than 4 millimhos/centimeter. Depth to a water table during the growing season is 1.5 to 3 feet.

### Group 3.

Soils are deep and moderately well to well drained soils. Rock fragments do not exceed 35 percent by volume throughout the profile. Textures are in the loamy family particle size class. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 7.5 inches. Free carbonates are generally absent, but never exceed a concentration of five percent calcium carbonate equivalent in the upper 12 inches of the profile. In the upper 12 inches, the pH is less than 7.9 and electrical conductivity is less than 2 millimhos/centimeter. Depth to a water table during the growing season is greater than 3 feet.

### Group 4

Soils are moderately deep to deep and somewhat poorly to well drained. Textures in the first 8 to 20 inches are in the loamy family particle size class. The remainder of the profile is clayey or clayey-skeletal. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than five inches. Free carbonates are generally absent, but never exceed a concentration of 5 percent calcium carbonate equivalent in the upper 12 inches of the profile. In the upper 12 inches, the pH is less than 7.9 and the electrical conductivity is less than 2 millimhos/centimeter. Depth to a water table during the growing season is greater than 5 feet.

### Subgroup 4K

Soils are moderately deep to deep and somewhat poorly to well drained. Textures in the first 8 to 20 inches are in the loamy family particle size class. The remainder of the profile is clayey or clayey-skeletal. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than five inches. Free carbonates range a concentration of 5 to 15 percent calcium carbonate equivalent in the upper 12 inches of the profile. In the upper 12 inches, the pH ranges from 7.9 to 8.4 and the electrical conductivity is less than two millimhos/centimeter. Depth to a water table during the growing season is greater than 5 feet.

#### Subgroup 4C

Soils are moderately deep to deep and somewhat poorly to well drained. Typically, textures are in the clayey textural class. However, the first 8 inches may fall into the loamy family particle size class with the remainder being clayey or clayey-skeletal. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 3.75 inches. In the upper 12 inches, the pH is less than 7.9, the electrical conductivity is less than 2 millimhos/centimeter. Depth to a water table during the growing season is greater than 5 feet.

#### Subgroup 4CK

Soils are moderately deep to deep and somewhat poorly to well drained. Typically, textures are in the clayey textural class. However, the first 8 inches may fall into the loamy family particle size class with the remainder being clayey or clayey-skeletal. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 3.75 inches. Free carbonates range from 5 to 15 percent calcium carbonate equivalent in the upper 12 inches of the soil profile. In the upper 12 inches, the pH ranges from 7.9 to 8.4 and the electrical conductivity is less than 4 millimhos/centimeter. Depth to a water table during the growing season is greater than 5 feet.

#### Group 5

Soils are deep, well to moderately well drained. Textures are in the loamy family particle size class. Available water capacity of the soil to underlying bedrock or other restrictive layer ranges from 3.75 to 7.5 inches. In the upper 12 inches of the profile, the pH is less than 7.9, electrical conductivity is less than 2 millimhos/centimeter. Depth to a water table during the growing season is greater than 5 feet.

#### Group 5K

Soils are deep, well to moderately well drained. Textures are in the loamy family particle size class. Available water capacity of the soil to underlying bedrock or other restrictive layer ranges from 3.75 to 7.5 inches. In the upper 12 inches of the profile, the pH ranges from 7.9 to 8.4 and electrical conductivity is less than four millimhos/centimeter. The concentration of calcium carbonate equivalent ranges from 5 to 15 feet. Depth to a water table during the growing season is greater than 5 feet.

#### Group 6

Soils are moderately deep and deep over sands, gravel, and similar layers having a permeability greater than 20 inches per hour. Soils are well to excessively drained. Textures are in the loamy or loamy-skeletal family particle size class. Available water-holding capacity of the soil to underlying bedrock or other restrictive layer is 2.0 to 3.75 inches. In the upper 12 inches of soil, the pH is less than 7.9, electrical conductivity is less than 2 millimhos/centimeter, and the calcium carbonate equivalent is less than 5 percent. Depth to a water table during the growing season is greater than 5 feet.

#### Group 6K

Soils are moderately deep and deep over sands, gravel, and similar layers having a permeability greater than 20 inches per hour. Soils are well to excessively drained. Textures are in the loamy or loamy-skeletal family particle size class. Available water-holding capacity of the soil to underlying bedrock or other restrictive layer is 2.0 to 3.75 inches. In the upper 12 inches of soil, the pH ranges from 7.9 to 8.4 and electrical conductivity is less than 4 millimhos/centimeter. The concentration of calcium carbonate equivalent ranges from 5 to 15 percent. Depth to a water table during the growing season is greater than 5 feet.

#### Group 6KK

Soils are moderately deep and deep over sands, gravel, and similar layers having a permeability greater than 20 inches per hour. Soils are well to excessively drained. Textures are in the loamy or loamy-skeletal family particle size class. Available water-holding capacity of the soil to underlying bedrock or other restrictive layer is 2.0 to 3.75 inches. In the upper 12 inches of soil, the pH ranges from 7.9 to 8.4, and electrical conductivity is less than 4 millimhos/centimeter. The concentration of calcium carbonate equivalent ranges from 15 to 40 percent. Depth to a water table during the growing season is greater than 5 feet.

#### Subgroup 6D

Soils are moderately deep over an impervious layer. Soils are well to excessively drained. Textures are in the loamy, clayey-skeletal, or loamy-skeletal family particle soil class. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 3.75 inches. In the upper 12 inches of the soil, the calcium carbonate equivalent is less than 5 percent, pH is less than 7.9 and electrical conductivity is less than 2 millimhos per centimeter. Depth to a water table during the growing season is greater than 5 feet.

#### Subgroup 6DK

Soils are moderately deep over an impervious layer. Soils are well to excessively drained. Textures are in the loamy, clayey-skeletal, or loamy-skeletal family particle soil class. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 3.75 inches. In the upper 12 inches of soil, the pH ranges from 7.9 to 8.4 and electrical conductivity is less than 4 millimhos per centimeter. The concentration of calcium carbonate equivalent ranges from 5 to 15 percent. Depth to a water table during the growing season is greater than 5 feet.

#### Subgroup 6G

Soils are moderately deep and deep over sands, gravel and similar layers having water permeability greater than 20 inches per hour. Soils are well to excessively drained. Upper soil layers are in the loamy, clayey-skeletal or loamy-skeletal family particle size class. Available water-holding capacity of the soil to underlying bedrock or other restrictive layer is greater than 3.75 inches. In the upper 12 inches of soil, the pH ranges from 7.9 to 8.4 and electrical conductivity is less than 4 millimhos/centimeter. The concentration of calcium carbonate equivalent ranges from 5 to 15 percent. Depth to a water table during the growing season is greater than 5 feet.

#### Subgroup 6GK

Soils are moderately deep and deep over sands, gravel and similar layers having water permeability greater than 20 inches per hour. Soils are well to excessively drained. Upper soil layers are in the loamy, clayey-skeletal or loamy-skeletal family particle size class. Available water-holding capacity of the soil to underlying bedrock or other restrictive layer is greater than 3.75 inches. In the upper 12 inches of soil, the pH ranges from 7.9 to 8.4 and electrical conductivity is less than 4 millimhos/centimeter. The concentration of calcium carbonate equivalent ranges from 5 to 15 percent. Depth to a water table during the growing season is greater than 5 feet.

#### Subgroup 6GKK

Soils are moderately deep and deep over sands, gravel and similar layers having water permeability greater than 20 inches per hour. Soils are well to excessively drained. Upper soil layers are in the loamy, clayey-skeletal or loamy-skeletal family particle size class. Available water-holding capacity of the soil to underlying bedrock or other restrictive layer is greater than 3.75 inches. In the upper 12 inches of soil, the pH ranges from 7.9 to 8.4 and electrical conductivity is less than 4 millimhos/centimeter. The concentration of calcium carbonate equivalent ranges from 5 to 15 percent. Depth to a water table during the growing season is greater than 5 feet.

### Group 7

Soils are deep and well to excessively drained. Textures are in the sandy textural family particle size class; surface textures are sands and loamy sands. Rock fragments do not exceed 35 percent by volume throughout the profile. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 2 inches. In the upper 12 inches of the soil, the calcium carbonate equivalent is less than 5 percent, pH is less than 7.9 and electrical conductivity is less than 2 millimhos/centimeter. Depth to a water table during the growing season is greater than 5 feet. The sandy soil surface textures require specialized site preparation, planting methods and management to ensure successful tree and shrub plantings.

### Group 8

Soils are moderately well to well drained. Textures are in the loamy family particle size class. Rock fragments do not exceed 35 percent by volume throughout the profile. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 7.5 inches. In the upper 12 inches of the soil, the calcium carbonate equivalent is 5 to 15 percent, pH is 7.9 to 8.4 and electrical conductivity is up to 4 millimhos/centimeter. Depth to a water table during the growing season is greater than 5 feet.

### Subgroup 8K

Soils are moderately well to well drained. Textures are in the loamy family particle size class. Rock fragments do not exceed 35 percent by volume throughout the profile. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 7.5 inches. In the upper 12 inches of soil, the pH ranges from 7.9 to 8.4 and electrical conductivity is up to 4 millimhos/centimeter. The concentration of calcium carbonate equivalent ranges from 15 to 40 percent. Depth to a water table during the growing season is greater than 5 feet.

### Subgroup 9W

Soils are poorly to moderately well drained and moderately deep to deep. In the upper 12 inches of soil, the electrical conductivity ranges from 4 to 16 millimhos/centimeter. Depth to a water table during the growing season ranges from 1.5 to 5 feet.

### Subgroup 9C

Soils are moderately deep to deep and somewhat poorly to well drained. Typically, textures are in the clayey textural class. However, the first 8 inches may fall into the loamy family particle size class with the remainder being clayey or clayey-skeletal. Rock fragments do not exceed 35 percent by volume throughout the profile. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 3.75 inches. In the upper 12 inches, the electrical conductivity ranges from 4 to 16 millimhos/centimeter. Depth to a water table during the growing season is greater than 5 feet.

### Subgroup 9L

Soils are moderately deep to deep and somewhat poorly to well drained. Textures in the first 8 to 20 inches fall into the loamy family particle size class. The remainder of the profile is loamy, clayey or clayey-skeletal. Rock fragments do not exceed 35 percent by volume throughout the profile. Available water capacity of the soil to underlying bedrock or other restrictive layer is greater than 3.75 inches. In the upper 12 inches, the electrical conductivity ranges from 4 to 16 millimhos/centimeter. Depth to a water table during the growing season is greater than 5 feet.

### Group 10

Soils have one or more characteristics that are severely limiting to the planting and growth of trees and shrubs: shallow depths; available water capacity of the soil to underlying bedrock or other restrictive layer less than 2 inches; in the upper 12 inches of the soil, the calcium carbonate equivalent greater than 40 percent or the electrical conductivity greater than 16 millimhos/centimeter; depth to a water table during the growing season within 18 inches of the soil surface. On-site investigations may reveal that tree and shrub plantings can be made with specialized treatments and careful selection of species.

ASSIGNED WBSG'S FOR IDAHO SOILS

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compname	s5id	WISG
-----	-----	-----
ABGESE		5K
ABO		9L
ABO VARIANT		9W
ACKELTON		5
ACKETT		10
ACORD		4C
ACRELANE		10
ADA		3
ADAMSON		6G
ADEK		10
ADIOS		6D
AECET		6DK
AERIC FLUVAQUENTS		10
AERIC HAPLAQUEPTS		2K
AGATHA		5
AGER		4CK
AGER VARIANT		4CK
AGERDELLY		4C
AHRS		5
AHSAHKA		4
AIKMAN		4C
AJAX		2
ALDERMAND		6G
ALEX		1
ALEX VARIANT		6
ALIBI		4C
ALLWIT		10
ALMOTA		6D
ALPINEPEAK		10
ALPON		3
ALPOWA		5K
ALZOLA		5K
AMBOAT		4C
AMMON		3
ANCHUSTEQUI		1K
ANINTO		4C
ANNIS	ID0047	1K
ANNIS	ID0048	1K
ANNIS	ID0049	9W
ANNIS	ID0050	10
ANT FLAT		4C
ANTELOPE SPRINGS		9L
APPLEDELLIA		4
APPLESHALL		10
AQUENTS		10
AQUIC CRYOBOROLLS		10
AQUIC UDIFLUVENTS		10
AQUIC XEROFLUVENTS		2
AQUOLLS		10
ARAVETON		3
ARBIDGE		6D
ARBONE		8
ARBONE VARIANT		8K
ARBUS		10

ARCHABAL		3
ARCO		2KK
ARD		6DK
ARDENVOIR		5
ARDOO		6
ARGIXEROLLS		10
ARIDIC ARGIXEROLLS		10
ARIMO		6G
ARLOVAL		2K
ARNESS		10
ATHENA		3
ATOMIC		5K
AVONVILLE		6G
AVTABLE		10
AYSEES		5K
BABBINGTON		1
BADGE		5
BADGERTON		6G
BADGERTON VARIANT		6
BAHEM		8
BAILING		4C
BAKEOVEN		10
BALAAM		7
BALDOCK		2KK
BANBURY		10
BANCROFT		3
BANCY		10
BANE		7
BANIDA		10
BANNER		4K
BANNOCK		6GK
BARKLEY		3
BARNARD		4C
BARRYMORE		6D
BARTONFLAT		10
BARTONFLAT VARIANT		5K
BATTLE CREEK		9W
BAUSCHER	ID0361	3
BAUSCHER	ID1171	5
BAYHOOK		9L
BAYHORSE		10
BEAR LAKE		10
BEAR LAKE VARIANT		10
BEARHOLLOW		8K
BEARSKIN VARIANT		10
BEARTRAP		5K
BEAVERDAM		10
BECHTEL		5
BECREEK		6K
BEDKE		3
BEDSTEAD		10
BEETVILLE		1K
BELLSLAKE		10
BENEWAH		10
BENNING		8
BERENICETON		8

BERN		1K
BESSLEN		10
BEZZANT		5K
BEZZANT VARIANT		5KK
BICKETT		10
BIEBER		10
BIGFLAT		4C
BIGLOST	ID1370	1
BIGLOST	ID1436	2
BIGRANT		10
BINGHAM		6G
BIRCHCREEK		4C
BISSELL		3
BLACK CANYON	ID0663	2
BLACK CANYON	ID0664	1
BLACKFOOT	ID0947	2K
BLACKFOOT	ID0054	2K
BLACKFOOT	ID0101	1K
BLACKFOOT	ID1125	9W
BLACKLEG		4
BLACKNEST		6G
BLACKNOLL		6D
BLACKOTTER		10
BLACKSAN		10
BLACKSPAR		10
BLACKSPOT		10
BLACKWELL		10
BLACKWELL VARIANT		10
BLINN		6
BLISSHILL		4C
BLOOR		9W
BLUEBELL		6D
BLUECREEK		4
BLUECREEK VARIANT		6D
BLUEDOME		6K
BLUEGULCH		5
BLUEHILL		6D
BLUESPRIN		6
BOBBITT		6
BOCK		6G
BOCKSTON		6GK
BOLES		4
BONDFARM		10
BONDRANCH		10
BONNER		6G
BOOFORD		4C
BOONEVILLE		5
BOOTJACK		10
BORAH		10
BORCO		10
BOSTRUM		4C
BOTHWELL		3
BOULDER LAKE		2
BOULDERCREEK		5
BOWMAN		2K
BOWNS		4C

BOZEMAN		3
BRABAS		10
BRACE		6K
BRAILSFORD		2
BRAILSFORD VARIANT		9W
BRAM		9W
BRAMARD		3
BRAMWELL		9W
BRAY		4C
BREGAR		10
BREITENBACH		6K
BRENT		4
BRIABBIT		6D
BRICKEL		6
BRIDGEWATER		10
BRIFOX		4CK
BRINEGAR		1
BRINGMEE		3
BRINNUM		10
BROAD CANYON		6
BROADAX		3
BROADHEAD		4
BRODEER		3
BRODY		6D
BROMAGLIN		6
BRONCHO		10
BRONCHO VARIANT		5K
BROQUITO		3
BROSE		10
BROSHELL		3
BROWER		5K
BROWLEE	ID0265	5
BROWLEE	ID0104	3
BROWLEE	ID1102	3
BROXON		6GK
BRUNCAN		10
BRUNEEL		2
BRUNZELL		5
BRYAN		10
BRYDEN		6D
BUCKBOARD		3
BUCKSKIN		4
BUDLEWIS		4C
BUIST	ID0173	5
BUIST	ID1567	5KK
BUIST	ID0974	5KK
BUKO	ID0175	6GK
BUKO	ID0176	2K
BULAKE		4C
BUNCELVOIR		4C
BUNTING		6
BURCH		3
BURMAH VARIANT		4
BURNTCREEK		3
BURSTEADT		2K
BURWILL		5

BUSTERBACK		6
BUTTERFIELD		6K
CABARTON		10
CABINET		10
CACHECAN		2KK
CALCIXEROLLIC XEROCH		5K
CALD		1
CALDWELL		1
CALOUSE		3
CALPAC		5
CAMBORTHIDS		6D
CAMELBACK		5
CAMELBACK VARIANT		5
CAPEHORN		10
CAREY LAKE		3
CARIBEL		3
CARLINTON		2
CASHMERE		5
CASTLEPEAK		10
CATCHELL		4C
CATHERINE		2
CAVANAUGH		4C
CAVENDISH		3
CEDARHILL		5K
CEDRON		10
CENCOVE		6GK
CHAMBERLAIN		6G
CHANCE		10
CHARD	WA1764	3
CHARD	WA0038	6G
CHARD, MOIST		3
CHARD VARIANT		10
CHARDOTON	ID0365	4CK
CHARDOTON	ID1194	4
CHATBURN		3
CHATCOLET		3
CHAYSON	ID1516	6DK
CHAYSON	ID0616	6D
CHAYSON	ID1385	6DK
CHEDEHAP	ID0177	6GK
CHEDEHAP	ID0178	10
CHEN		4C
CHESBROOK		10
CHIARA		10
CHICANE		2
CHICKREEK		10
CHIJER		5K
CHILCOTT	ID0146	4
CHILCOTT	ID0341	4
CHILCOTT	ID1103	4CK
CHILCOTT	ID1310	4C
CHILCOTT	ID1108	4CK
CHILLYBU		10
CHINABUTTE		10
CHINAHAT		3
CHINHILL		8K

CHUBBFLAT		2
CHUSKA		10
CINDERHURST		10
CINDERSPRING		5
CLARKIA		2
CLAVICON		6K
CLAYBURN		3
CLEAVAGE		10
CLEGG		3
CLEMS	ID0225	3
CLEMS	ID1142	5
CLOUDLESS		3
COALBANK		5
COLBURN		2
COLLINSTON		8K
COLTHORP		10
COLVILLE VARIANT		2
CONGLE		3
CONNERIDGE		6
CONNET		10
COOKCAN		10
COONSKIN		6DK
COPENHAGEN		10
COPPERBASIN		10
CORRALCREEK		8
CORRALRIDGE		8
COSER		4C
COSKI	ID0292	6G
COSKI	ID1085	6G
COSKI	ID1104	5
COSKI VARIANT		6
COTTLE		10
COTTONTHOMAS		3
COUGARBAY		10
COWBONE		10
COWDREY		4
COWGIL		6G
COX		10
CRABCREEK		6G
CRAMONT		4
CRANECREEK		4
CRONKS		4
CROOKED CREEK		2
CROW CREEK		3
CRUICKSHANK		1K
CRUMARINE		10
CRYAQUEPTS		10
CRYAQUOLLS		10
CRYOBOROLLS		6
CRYSTALBUTTE		3
CULDECOLE		3
CULDESAC		3
CUMULIC HAPLAQUOLLS		2
CUSTCO		5
DACORE		5K
DAGOR		3

DANSKIN		7
DARKBULL		5K
DARLINGTON		6
DARRAH		3
DATEMAN		6
DAVEGGIO		3
DAVEY		7
DAWTONIA		5K
DAY		4C
DE MASTERS		3
DEADHORSE		6DK
DECKER		2K
DECLO	ID0196	8K
DECLO	ID0746	9L
DECLO VARIANT		5K
DECREE		6K
DECROSS		3
DEERHORN		6D
DEHANA		3
DEJARNET		5
DELISH		9W
DEMAST		3
DEMASTERS		5
DEMOSS		10
DERWELL		5K
DESHLER		4
DETER		3
DETERSON		4
DEUNAH		4C
DEVNOT		10
DEVOIGNES		2
DIAWELL		10
DICKEYPEAK		9W
DIPCREEK		10
DIPMAN		10
DIRTYHEAD		6DK
DISABEL VARIANT		4C
DISAUTEL		8
DISHNER		10
DISHPAN		6D
DISTON		6K
DOLLARHIDE		10
DOLMAN		6D
DONKEHILL		10
DONNARDO		5K
DONNEL		6G
DOODLELINK		5
DORB		6
DORS		6K
DOUGAL		10
DOWNATA		10
DOWNEY		6G
DRA		6D
DRAGE		5
DRANYON	ID1515	3
DRANYON	ID0888	5

DRANYON	ID0229	2
DRANYON	ID0247	3
DRAPER	ID0200	2K
DRAPER	ID0894	2
DRAPER	ID0197	1K
DRAX	ID0197	1K
DRAX	ID0198	2K
DRIGGS		6G
DRIGGS VARIANT		6GK
DRISCOLL		2
DRYCK		6
DUCCO		10
DUFORT		5
DUGUESCLIN		4C
DURARGIDIC ARENTS		10
DURIC NATRARGIDS		10
DURIKERALFS		10
DUSTON		6G
DUTCHATT		6K
DUTCHCANYON		8K
DWORSHAK		3
DYSTROCHREPTIC ARENT		10
EARCREE		5
ECCLES		6GKK
EEP		5
EGINBENCH		10
ELBOW		6K
ELEVATOR		4
ELHINA		6DK
ELIJAH		6D
ELKCREEK	ID1314	6
ELKCREEK	ID0368	6D
ELKRIDGE		5
ELKSEL		6G
LEMHI		2KK
ELMIRA		7
ELMIRA VARIANT		10
ELMORE		5
EMBERTON		6
EMERSON		6G
ENDICOTT		6D
ENGETT		10
ENKO		1
ENOCHVILLE		10
ENOCHVILLE VARIANT		10
EPHRATA		6
ERICSON		3
ESCALANTE	UT0927	5K
ESCALANTE	UT0380	8
ESCALANTE	UT0144	5K
ESCARLO		10
EZBIN		5
FAIRYLAWN		4C
FALK		1
FANDOW		10
FARMELL		4CK

FARNHAMTON		1K
FARROT		6K
FARVANT		10
FATHOM		7
FELT		6G
FELTHAM		7
FELTONIA		3
FENN		4CK
FENN VARIANT		2
FERDINAND		4C
FERGIE		5
FEZIP		10
FINGAL		9W
FIREBOX		6
FIRTH	ID0714	2K
FIRTH	ID0802	1K
FISHAVEN		6KK
FLATRON		10
FLEWSIE		6G
FLOODWOOD		3
FLUVAQUENTS		10
FLYBOW		10
FORDCREEK		10
FORMATION		5KK
FORVIC		4C
FOURME		6
FOXCREEK		10
FOXCREEK VARIANT		10
FOXMOUNT		6
FRAILTON		10
FREEDOM		2K
FRENCHJOHN		4C
FRENCHHOLLOW		4
FRESHWATER		10
FRIDLO		9W
FRIEDMAN		4
FRYINGPAN		10
FULCRUM		6
FULMER	ID0831	10
FULMER	ID0830	2K
FURNISS		10
FURSHUR		10
FURY		10
GACEY		10
GACIBA		10
GAIB		10
GAIBSON		10
GANY		5K
GARBUTT		5K
GARFIELD		4C
GARIPER		4C
GARRISON		6G
GARVESON		6
GEEMORE		6D
GEM		4C
GENOLA		5K

GEORGE CANYON		5KK
GERMER		10
GESTRIN		5
GILISPIE		10
GILLISPIE		10
GIMLETT		5
GLASGOW		4C
GOLDAHO		10
GOLDHILL		4C
GOODING		4C
GOODINGTON		4C
GOOSE CREEK	ID0200	2K
GOOSE CREEK	ID1522	1
GOOSE CREEK	ID0199	1K
GOOSEBURY		6K
GOOSENAWT		3
GOSINTA		2
GRADCO		6
GRAMIL	ID1775	2
GRAMIL	ID1776	10
GRANDJEAN		10
GRANDVIEW	ID0801	9W
GRANDVIEW	ID1193	9C
GRANGEMONT		4C
GRANGEMONT VARIANT		4G
GRASSY BUTTE		7
GRASSY RIDGE		7
GRAVEYA		5
GRAYLOCK		6
GREENCREEK		3
GREENLEAF		3
GREENLEAF VARIANT		1K
GREENTIMBER		4
GREYBACK		6K
GREYBO		3
GREYS		3
GREYS VARIANT		3
GROSS		6
GROUSE CREEK		6
GROUSEVILLE		4C
GUNNEL		10
GWIN		10
HADES		3
HAGENBARTH	ID0468	4
HAGENBARTH	ID1588	5
HAGENBARTH	ID1321	3
HAGENBARTH	ID1320	4
HAGENBARTH	ID0911	4
HAMPSON		1
HAMRUB		5
HANS		4
HAPLAQUOLLS		10
HAPLOXERALFS		10
HAPLOXEROLLS		3
HAPUR		2
HARAHILL		6D

HARDISTER		3
HARDTRIGGER		5K
HARKNESS		9L
HARPT		3
HARPT VARIANT		1
HARROUN		10
HARSAN		3
HARSTON		6K
HAT		6
HATPEAK		4C
HATWAI		4
HAW		6G
HAWSLEY		7
HAYESTON		6K
HAYSPUR		2
HEATHCOAT		4C
HECKISON		6D
HEGLAR		5K
HEISETON	ID0421	3
HEISETON	ID0064	5K
HEISETON	ID0065	9W
HEISETON	ID0066	9W
HELMER		2
HELMER VARIANT		10
HENRYSLAKE		10
HIGHAMS		10
HIGHCREEK		8
HILLFIELD		8
HISTIC HAPLAQUOLLS		1H
HOBACKER		6K
HOBBY		4C
HOBO		3
HOGMALAT		10
HOLINROCK		10
HOLMES		6
HONDEE		5K
HONDOHO		5K
HONEYJONES		5
HOODOO		10
HOOSGOW		3
HOTCREEK		10
HOUK		2
HOVEY		9W
HOVEY VARIANT		9W
HOWCAN		5
HOWCREE		4C
HUCKLEBERRY		6D
HUFFINE		6G
HUFFMAN		3
HUGUS		5
HUMDUN		5
HUNNTON		4
HURRYBACK		3
HUTCHLEY		10
HUTTON		2
HUTTON VARIANT		4C

HYMAS		10
IBOLA		6D
IDAHOME		5K
IDAMONT		3
IDMONTON		2
IDOW		6D
IGERT		6D
IKE		10
IMMIANT		6D
INKOM	ID0960	10
INKOM	ID0961	2K
INSIDERT		4C
IPHIL		8
IPHIL BEDROCK SUBSTRATUM		8
IRELAND		6K
ISKNAT		5
ITCA		10
IWICA		4C
JACKET		4
JACKET VARIANT		3
JACKNIFE		4
JACKNIFE VARIANT		3
JACOT		5
JACQUITH		6D
JANSITE		9L
JENNESS	ID0338	3
JENNESS	ID1307	6GK
JENNY		4C
JENOR		6DK
JENSEN	ID1502	3
JENSEN	ID1647	6GK
JERU		6
JESTRICK		6
JETT		1K
JIMBEE		10
JIPPER		5
JOEBALDY		6
JOEL		3
JOES	ID0546	3
JOES	ID1629	8
JOEVAR		8
JOHNSON	ID1843	3
JOHNSON	ID1475	5
JOHNSON	ID0275	3
JOSEPH		10
JOVINE		3
JUDKINS		6
JUGHANDLE		5
JUGHANDLE VARIANT		10
JUGSON		6
JUMPCREEK		6
JUNIPERBUTE		10
JURVANNAH		10
JUSTESEN		3
KABEAR		6
KACKLEY		6D

KADLETZ		6
KANCAN		5
KANGAS		7
KANIKSU		7
KANLEE		6D
KARCAL		4C
KARLAN		6D
KATSEANES		10
KAUDER		10
KAVON		5
KEARNS		3
KEARNS VARIANT		3
KECKO	ID0248	5K
KECKO	ID1397	5
KECKO	ID1786	5K
KEELER		3
KEELER, WARM		3
KEHAR		4CK
KEMAN		5
KEPLER		4
KETCHUM		5
KETTENBACH		6
KEUTERVILLE		5
KEVANTON		6D
KIDMAN		3
KIESEL VARIANT		4CK
KILGORE		10
KIMAMA		2
KIMMERLING		2
KINZIE		4C
KITCHELL		5K
KIYI		4
KLICKEK		6
KLICKSON		5
KLOOTCH		10
KLUG		5
KNULL		8
KOFFGO		5
KOFFGO, HIGH PRECIPITATION		5
KOOSHAREM		3
KOOSKIA		2
KOOTENAI		6
KOPPES		7
KOVICH		2
KRIEST		5
KRUSE		3
KRUSE VARIANT		6
KUCERA		8
KUDLAC	ID1640	4K
KUDLAC	ID0479	4CK
KUNATON		10
LABENZO		1K
LABUCK		6
LACROL		10
LACY		10
LADD		3

LADO		3
LAG		6
LAGO		2KK
LAGONOT		2KK
LAHONTAN		9W
LAIL		9L
LAJARA		10
LAMONTA		4C
LANARK		3
LANDO		2K
LANGER		10
LANGLESS		10
LANGRELL		5
LANKBUSH		3
LANKBUSH VARIANT		3
LANKTREE		4
LANOAK		3
LANTONIA		3
LAPED		10
LAPWAI		3
LARABEE		6
LARIOSCAMP		4C
LARKIN		3
LASAUSES VARIANT		10
LATAH		10
LATAHCO	ID0115	10
LATAHCO	ID1659	2
LATAHCO VARIANT		2
LATOUR		5
LAUBY		3
LAURENTZEN		3
LAVACREEK		5
LAYTON		10
LEADORE		6
LEATHERMAN		10
LEAVITTVILLE		8
LEMCO		9L
LENZ		6
LESBUT		6
LETHA		6GK
LEVELTON	ID0069	10
LEVELTON	ID0656	9W
LEVELTON	ID0070	10
LEWHAND		10
LEWNOT		2K
LICKSKILLET		10
LIDY		6GK
LIGGET		5
LILYLAKE		10
LINKLETTER		3
LINVILLE		3
LIONHEAD		6G
LITHIC TORRIORTHENTS		10
LITTLE WOOD		6
LITTLESALMON		7
LIZDALE		6GKK

LIZZANT		5K
LOBEISNER		3
LOCHSA		5
LOCKMAN		5
LOGAN		10
LOLALITA		6G
LONGCREEK		4C
LONIGAN	ID0967	6K
LONIGAN	ID0625	6DK
LONJON		6KK
LOOMIS		4
LORAY		6KK
LORELLA		4
LOSTINE		3
LOSTVALLEY		4C
LOUPENCE		3
LOVELL		2
LUD		10
MACKEY		6K
MAGIC		4C
MAHAFFEY		2
MALLORY		4
MALM	ID1446	6DK
MALM	ID0072	6KK
MALM	ID0073	6K
MALM LOAMS		6K
MALONEY		10
MANARD		4C
MANASSA		5K
MANILA		4C
MAPLECREEK		2K
MARBLE		7
MARBLECREEK		6
MARKET		4C
MARLEY		3
MAROTZ		3
MARSHDALE		2
MARSING		6GK
MARYSTOWN		3
MATHESON		5K
MATHON		5K
MAXEY		2
MAZIE		10
MAZUMA		1K
MCBIGGAM		4
MCCAIN		6D
MCCAREY		6DK
MCCAREY VARIANT		10
MCCLENDEN		3
MCCROSKET		5
MCDANIEL		5
MCDOLE		8
MCDOLE VARIANT		8
MCGUIRE		10
MCHANDY		4C
MCHANDY (STONY)		4C

MCKEETH		5K
MCMEEN		6D
MCMURDIE		4K
MCPAN		6DK
MEADOWPORT		2
MEDANO		10
MEDICINE		6GK
MEEGERNOT		5
MEEGERO		5
MEHLHORN		4C
MELAND		6D
MELDER		5
MELLOR		9L
MELTON		6G
MERKLEY		1K
MERLIN		10
MIDDLEHILL		6
MIDRAW		4C
MIDVALE		4
MIESEN		2
MIKE		10
MIKESELL		9L
MILLERDITCH		2KK
MILLHI		10
MILLIGAN		6
MINERAL MOUNTAIN		4CK
MINIDOKA		6DK
MINNEWAUKAN		10
MINVENO		10
MISFIRE		5
MISSION		10
MITRING		10
MOCTILEME		1
MODKIN		6D
MOFFSPRING		1
MOGG		10
MOHLER		3
MOKINS		10
MOLLIC HAPLOXERALFS		4C
MOLLY		5
MOLYNEUX		3
MONASTERIO		6
MONROE		3
MONTLID	ID0080	9W
MONTLID	ID0079	1K
MONTLID	ID0099	9W
MONTOUR		4C
MOOHOO		5
MOONLIGHT		3
MOONSTONE		6
MOORETOWN	ID1532	5K
MOORETOWN	ID1533	2K
MORAN		6
MOREGLADE		5
MORPHEY		10
MOSCOW		10

MOULTON		2
MOUNTAINBOY		10
MOUNTAINVIEW		2H
MUG		10
MULDOON		5
MULETT		6
MULSHOE		6
MUMFORD		10
MUNDOS		5
MURPHILL		10
NAFF		3
NAFF, ERODED		3
NAGITSY		6
NAKARNA		5
NAMMOTH		6
NANNYTON		6GK
NARCISSE		1
NARROWS		10
NAWT		4C
NAYRIB		10
NAZ	ID0382	5
NAZ	ID0041	6G
NAZATON		5
NEELEY		8
NEELEY VARIANT		6D
NEWDALE		3
NEWELL		3
NEZ PERCE	ID1511	10
NEZ PERCE	ID0278	2
NIBBS		5
NICHOLFLAT		10
NICHOLIA		10
NICODEMUS		2
NICODEMUS VARIANT		1
NIELSEN		10
NIPINTUCK		10
NISULA		3
NITCHLY		5K
NITER		4CK
NORTHCASTLE		6D
NORTHWATER		5
NOTUS		2
NUFFER		2K
NURKEY		5
NURKEY, STONY		5K
NYSSATON		8
OENOT		10
OBRAY		4C
ODENSON		10
ODERMOTT		6G
ODONNELL		2
OLA		6
OLAND		5
OLAND VARIANT		3
OLDSFERRY		6
OLIAGA		5K

OLIAGA VARIANT		2K
OLIPHANT		3
OLIPHANT, GRAVELLY SUBSTRATU		3
ONYX		3
ORNEA		6K
OROVADA		5
ORTHIDS		10
OSHONE		4C
OSMUND		5
OUTLET		2
OUTLET VARIANT		2
OVIDCREEK		9W
OWINZA		4CK
OWSEL		3
OWYHEE		8
OXFORD		10
OXHEAD		8
OXHEAD VARIANT		5K
PACHIC ARGIXEROLLS		6
PACHIC CRYOBOROLLS		5
PACKHAM		10
PACKMO		6GK
PAESL		6GK
PAGARI		5
PAHSIMEROI		10
PAINT		10
PALOUSE		3
PANCHERI		8
PANDOAH		6K
PANIOGUE	ID0207	6GK
PANIOGUE	ID0208	2K
PANIOGUE	ID1135	9L
PANIOGUE	ID1136	9L
PANIOGUE	ID0157	6K
PANMOD		6GK
PAREHAT	ID0252	2K
PAREHAT	ID1137	9W
PAREHAT	ID1138	2K
PAREHAT	ID1691	2K
PARKAY		5
PARKAY VARIANT		5
PARLEYS		3
PARLEYS WET		1KK
PATTEE		6
PAUL		3
PAULSON		3
PAULVILLE		3
PAULVILLE VARIANT		4
PAVOHROO		3
PAYETTE		6GK
PAYNECREEK		5
PAYNECREEK VARIANT		6G
PEASLEY		6D
PEDEE		2
PEDLEFORD		6
PEDOLI		6K

PEEVYWELL		4C
PEGRAM		6G
PENAGUL		10
PEND OREILLE	ID0892	6G
PEND OREILLE	ID0011	5
PENOYER	ID0890	8
PENOYER	NV0985	9L
PENOYER VARIANT		2K
PERAZZO		6GK
PERLA		4C
PERREAU		6G
PETAN		10
PETEETNEET		10
PETEETNEET VARIANT		10
PHILBON		10
PICABO	ID1162	9W
PICABO	ID1275	2KK
PIGTAIL		4C
PILINE		4C
PINEBUTTE		3
PIPELINE		10
PIXLEY		10
PLAYAS		10
PLAYER		4C
PLUSH		5
POCATELLO		8
POCATELLO VARIANT		5K
POISONCREEK		10
POISONHOL		6K
POKEY		2
POLATIS		6DK
POLECREEK		10
POLLYNOT		3
PORMONT		10
PORRETT		10
PORTHILL		10
PORTINO		6DK
PORTNEUF		8
POTELL		8
POTLATCH		2
POTRATZ		6D
POVEY	ID0968	5
POVEY	ID0503	5
POVEY	ID1212	6
POVEY	ID1431	5
POVEY	ID1456	5
POVIRT		10
POWER		3
PRESTO		8
PRESTON		7
PRIESTLAKE		10
PRUCREE		6
PRUDY		6G
PSAMMAQUENTS		10
PURDAM		6D
PURDAM VARIANT		1K

PYLE		10
PYRAT		10
PYWELL		10
QUARTZBURG		10
QUARTZBURG VARIANT		6
QUENCHEROO		5
QUENZER		2
QUICKSILVER		10
QUIERO		6D
QUINCY		7
RAD		5K
RAFTRIVER		6DK
RAGPIE		10
RAINEY		6
RAKANE		6D
RALOCK		5
RAMMEL		6D
RAMSDELL	ID0125	10
RAMSDELL	ID1044	2
RAMSDELL	ID1099	10
RANDS		2
RASSER		3
RATHDRUM		3
RATSNEST		4C
RAYNAL		2K
RAYNOLDSON		5K
REAM		6GK
RECK		10
REDFISH		10
REDMANSON		5KK
REDMORE		4
REDRAVEN		5
REGGEAR		2
REHFIELD		3
REKIMA		10
RENSLOW		3
RESOOT		4C
REXBURG		3
REXBURG BEDROCK SUBSTRATUM		3
REYWAT		10
RICETON		5
RICHMOND		10
RICHVALE		3
RICREST	ID1213	3
RICREST	ID0254	3
RICREST	ID1139	5
RIDENBAUGH		4C
RIDGECREST		6KK
RIGGINS		10
RIN		3
RINGLE		10
RIRIE		8
RIRIE BEDROCK SUBSTRATUM		8
RISWOLD		3
RITZ		2K
ROANHIDE		6

ROBANA		3
ROBIN		3
ROBINLEE		3
ROCA		4C
ROCKLY		6
ROCKYBAR		5
ROGERSON		10
ROOSET		4
ROSEBERRY		2
ROSEBRIAR		10
ROSEWORTH		10
ROYAL		5
ROYSTONE		3
ROZA		4CK
RUBSON		3
RUCKLES		10
RUCLICK	ID1372	6K
RUCLICK	ID1406	6
RUDEEN		10
RUTHERFORD		6
SACTUS		10
SADORUS		10
SAGLE		2
SALISBURY	OR0136	6
SALISBURY	OR0635	6
SALISBURY	OR1221	4C
SALLYANN		6
SAMARIA		8
SANCRANE		10
SANDCREEK		10
SANFELIPE		5KK
SANTA		2
SANTA VARIANT		10
SANYON		10
SARALEGUI		5
SARILDA		6D
SASSER		6GK
SATTLEY		6
SATURDAY		5
SAWTELPEAK		10
SAXBY		10
SCALPCREEK		6G
SCHNIPPER		6D
SCHNOORSON		2K
SCHODSON		2K
SCHOOLER		4C
SCHOOLHOUSE		10
SCHUMACHER		5
SCHUMACHER VARIANT		10
SCISM		10
SCOON		10
SCOUT VARIANT		5
SEARLA		5
SEARLES		6
SEBREE		9L
SEDDOW		5

SEDGWAY		5
SEELOVERS		2
SELLE		5
SESSIONS		4
SETTERS		10
SHABLISS		10
SHANO	WA1395	8
SHANO	WA1914	3
SHARESNOUT		6
SHATTUCK		3
SHEBANG		10
SHEEGE		10
SHELLROCK		7
SHENON		8
SHILLA		3
SHOEPEG		2
SHOOFLY		10
SHOTGUN		6D
SIDDOWAY	ID0989	7
SIDDOWAY	ID0991	10
SIDLAKE	ID1196	6
SIDLAKE	ID1600	6D
SIDLAKE	ID0931	6D
SIDLAKE	ID1471	6D
SIMEROI		5KK
SIMONTON	ID0378	3
SIMONTON	ID0930	5
SKALAN		10
SKELTER		6G
SKIBO		5K
SLICKPOO		5
SLUKA		6D
SLY		3
SMELTER		3
SMOUT		6K
SNAKE		10
SNELL		6D
SNOWMORE	NV2184	6K
SNOWMORE	NV0990	6D
SNOWMORE	NV2482	6D
SNOWSHOE		5
SNOWSLIDE	ID0759	5KK
SNOWSLIDE	ID1112	6GKK
SOELBERG		6G
SOEN	ID1683	4
SOEN	ID1371	4CK
SOEN	ID0904	4CK
SOMSEN		6DK
SONLET		10
SOONAHBE		3
SOONAHBE VARIANT		6D
SOUTHMOUNT		1
SOUTHWICK		2
SPAA		10
SPARMO		5KK
SPLITBUTTE		6

SPLITEN		10
SPLITRO		10
SPLITTOP		6D
SPOKANE		6
SPRABAT		5KK
SPRINGCOVE		9L
SPRINGHOLLOW		6DK
SPROLLOW		6KK
SQUAW	ID0814	6G
SQUAW	ID0815	5
SQUAWCREEK		4C
ST. ANTHONY		6
STABERG		6D
STAKE		4C
STAMP		10
STAN		5K
STANROD		9L
STARBUCK		10
STARHOPE		4C
STARLEY		10
STARLEY VARIANT		8
STARVEOUT		3
STASH		4C
STATEMEADOW		3
STAVELY		5
STEMBER		6DK
STERLING		5K
STIEN		6
STINES		5
STIPE		6D
STREVELL	ID1016	6GKK
STREVELL	ID0948	9L
STRICKER		5
STRICKLAND		6D
STRINGAM		4
STROM		2
STRUGGLE		10
SUCCOR		4C
SUDDUTH VARIANT		4
SUDPEAK	ID0360	4
SUDPEAK	ID1380	4C
SUEPERT		6
SUGARCREEK		6
SULOAF		3
SURRETT		6K
SURYON		3
SUTTLE		3
SWAHLEN		5
SWAMPYDRAW		6GK
SWANNER		10
SWAYNE		3
SWEDE		3
SWEET		6D
SWEITING		4
SWITCHBACK		6D
TAHQUATS		5

TAHQUATS VARIANT		4C
TAKEUCHI		6
TALMAKS		3
TAMMANY		6
TAMRED		6
TANEY		2
TANNAHILL		5K
TANNER		4C
TARGHEE		6
TAUNTON		6D
TEAKEAN		3
TECHICK		6G
TEEWINOT		10
TEKOA		6
TELCHER		3
TENDOY		10
TENMILE		4
TENNO		10
TENSED		2
TEPETE		10
TERRACE ESCARPMENT		10
TERRACECREEK		6
TERRETON		4CK
TETONIA		3
THACKER		4C
THATCHER		3
THATCHERFLATS		9W
THATUNA		2
THAYNE		5
THIOKOL		8
THOMASFORK		2K
THORNCREEK		4C
THORNOCK		10
THOSAND	ID1365	10
THOSAND	ID1655	9W
THREEDOT		10
THREEDOT VARIANT		3
THREEK		4C
TICA		10
TICANOT		6D
TICESKA		6DK
TICKASON		3
TIGLEY		5
TILMA		2
TIMMERMAN	WA0316	6G
TIMMERMAN	WA1418	6GK
TIMMERMAN	WA1419	6K
TINDAHAY		7
TIROD		3
TOCK		4C
TOEFOOT		8
TOEHEAD VARIANT		3
TOHOBIT		2K
TOMBEALL		10
TOMSHERRY		6D
TONKS		2

TONKS VARIANT		2K
TOPONCE		4
TORNEY VARIANT		4C
TORRIORTHENTS		10
TRAILCREEK		6K
TREBLE		6
TRENTON		9W
TREVINO		10
TRIO		10
TROSI		10
TROUGHS		10
TRUDE		6G
TRUESDALE		6K
TSCHAMMAN		4C
TUCKER		2
TUCKER VARIANT		2
TULCH		3
TUPPER		6G
TURBYFILL		5K
TURNERVILLE		3
TURSON		2K
TUSEL		5
TYPIC CALCIORTHIDS		5K
TYPIC CRYAQUEPTS		10
TYPIC CRYAQUOLLS		10
TYPIC FLUVAQUENTS		10
TYPIC HAPLOXEROLLS		10
TYPIC PSAMMAQUENTS		10
TYPIC TORRIFLUVENTS		10
TYPIC TORRIORTHENTS		10
TYPIC TORRIPSAMMENTS		10
TYPIC XEROFLUVENTS		10
UDAHO		6
UDARENTS		10
UHLIG		3
UHLORN		3
ULRICHER	ID0243	5
ULRICHER	ID0244	6G
UPCREEK		2
UPTMOR	ID1868	4
UPTMOR	ID0287	4C
UREAL		10
USHAR		3
UVI		3
VADNAIS		4
VALLEONO		6G
VALMAR		6
VALMAR VARIANT		6
VAN DUSEN		3
VANDERHOFF		6K
VASSAR		5
VAY		5
VAYWOOD		5
VENUM		4C
VERTINE		10
VETA		5

VICKERY		6D
VICKING		3
VINING	ID1198	6D
VINING	ID0211	6
VINING	ID0210	6
VIPONT		6
VITALE		6
VODERMAIER		6
VOLLMER		6
WAGONBOX		10
WAGONJACKET		2
WAHA		6D
WAHTIGUP		5K
WAKO		6D
WALCO		6
WAPELLO		8
WAPI		10
WAPSHILLA		5
WARDBORO		10
WARDWELL		1
WAREAGLE		5
WASATCH		7
WATAMA		6D
WATCHABOB		6
WATERCANYON		8K
WATERCANYON VARIANT		9L
WAYCUP		5K
WEASH		10
WEEDING		10
WEEDMARK		5
WEEKS		6K
WELBY		8K
WELCH		5
WELLSBENCH		4
WENDELL		6D
WESO		5
WESTINDIAN		6KK
WESTLAKE	ID0327	10
WESTLAKE	ID1658	2
WHEELER		8K
WHEELERVILLE		8
WHEELON		8K
WHITECLOUD		10
WHITEHEAD		10
WHITEKNOB		6GKK
WHOLAN		3
WICKAHONEY		2
WIGGLETON		10
WILDORS		6K
WILKINS		10
WILLHILL		6K
WILLHO		4C
WILLOW CREEK		3
WIMPEY		1K
WINDCOAT		10
WINDERNOT		6K

WINDYPOINT		6G
WINRIDGE		4C
WINU		6
WISKISPRINGS		10
WISTONA		3
WITHERS		2K
WODSKOW	ID0215	2K
WODSKOW	ID0216	5K
WOLVERINE		10
WOMACK		6D
WOOLSTED		3
WORLEY		10
WORM CREEK		5KK
WRENCOE		10
WURSTEN		8K
XERIC TORRIFLUVENTS	ID7042	5K
XERIC TORRIFLUVENTS	ID7023	10
XERIC TORRIFLUVENTS	ID7025	2K
XERIC TORRIORTHENTS		10
XEROCHREPTS		6
XEROFLUVENTS	ID7031	2
XEROFLUVENTS	ID7025	2K
XEROLLC CALCIORTHID	ID7045	5K
XEROLLC CALCIORTHID	ID7001	10
XEROLLC CAMBORTHIDS		10
XEROLLC HAPLARGIDS		10
XEROLLC PALEARGIDS		10
XEROLLS		10
YAGO	ID0965	4
YAGO	ID1654	4C
YAHOO		10
YAKUS		10
YANKEEFORK		6
YATAHONEY		4C
YEARIAN		2
YEATES HOLLOW		4C
YUTRUE		4C
ZAZA		10
ZEALE		10
ZECANYON		4C
ZEEBAR		5
ZEEGEE		10
ZEELNOT		5K
ZEPH		10
ZER	ID1005	6KK
ZER	ID1489	9L
ZER	ID1199	6K
ZER VARIANT	ID0755	5KK
ZER VARIANT	ID1666	6GKK
ZOHNER		10
ZOHNER VARIANT		10
ZOLA		1
ZUFELT		2
ZUNDELL		10
ZUNHALL		2KK
ZWIEFEL		7



## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
<u>Tree Heights @ Age 20, Irrigated ( )</u>						
<u>Evergreen Trees:</u>						
<u>Austrian Pine</u>	26-30(42)	16-20(30)	22-26(36)	- - (30)	18-22 (32)	20-24 (34)
<u>Blue spruce</u>	25-27(42)	18-19(32)	24-25(38)	- - (32)	20-21 (34)	22-23 (36)
Douglas-fir	22-25(38)	18-19(32)	24-25(38)	- - (32)	20-21 (34)	22-23 (36)
Eastern redcedar	19-22(32)	11-14(24)	17-20(30)	- - (24)	13-16 (26)	15-18 (28)
Lodgepole pine	26-28(40)	16-18(30)	22-24(36)	- - (30)	18-20 (32)	20-22 (34)
Northern white cedar	14-15(28)	- - - -	- - (26)	- - (20)	- -(22)	- -(24)
Norway spruce	26-30(42)	18-19(32)	24-25(38)	- - (32)	20-21 (34)	22-23 (36)
<u>Ponderosa pine</u>	26-28(40)	16-18(30)	22-24(36)	- - (30)	18-20 (32)	20-22 (34)
<u>Rocky Mtn. juniper</u>	19-22(32)	11-14(24)	17-20(30)	- - (24)	13-16 (26)	15-18 (28)
<u>Scotch pine</u>	28-32(42)	19-21(34)	25-27(40)	- - (34)	21-23 (36)	23-25 (38)
White spruce	26-28(40)	18-19(32)	24-25(38)	- - (32)	20-21 (34)	22-23 (36)

---- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )
Deciduous Trees:

Amur maple	22-24(32)	- - (24)	- - (30)	- - (24)	- -(26)	- - (28)
Arnold Hawthorne	22-24(32)	8-10(24)	- - (30)	- - (24)	- -(26)	- - (28)
Black cottonwood	40-45(60)	- - (45)	- - (55)	- - (50)	- -(52)	- -(54)
<u>Black willow</u>	30-35(45)	- - (32)	- - (38)	- - (32)	- -(34)	- -(36)
<u>Black locust</u>	30-35(45)	15-16(27)	21-22(33)	- - (27)	17-18(29)	19-20(31)
Bur oak	24-27(40)	18-19(32)	24-25(38)	- - (32)	20-21(34)	22-23(36)
Chinese elm	32-36(54)	24-28(46)	30-34(52)	- - (46)	26-30(48)	28-32(50)
Golden willow	25-30(40)	- - (32)	- - (38)	- - (32)	- -(34)	- -(36)
<u>Green ash</u>	30-35(45)	18-19(32)	24-25(38)	- - (32)	20-21(34)	22-23(36)
Hackberry	30-35(45)	18-19(32)	24-25(38)	- - (32)	20-21(34)	22-23(36)
Honeylocust	30-33(40)	15-16(27)	21-22(33)	- - (27)	17-18(29)	19-20(31)
Idahybrid, poplar	60-65(90)	- - (75)	- - (92)	- - (80)	- -(85)	- -(90)
'Imperial' Carolina poplar	50-55(75)	- - (55)	- - (72)	- - (60)	- -(65)	- -(70)
Laurel willow	20-25(35)	- - (26)	- - (32)	- - (26)	- -(28)	- -(30)
<u>Lombardi poplar</u>	60-65(90)	- - (75)	- - (92)	- - (80)	- -(85)	- -(90)

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---- Denotes species not adapted.    \_\_\_ Preferred species to list on SCS-SOI-5

## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )Deciduous Trees: Cont'd

Manchurian crabapple	19-22(32)	- - (24)	- - (30)	- - (24)	- - (26)	- - (28)
McDermand (Harbin) pear	19-22(32)	- - (24)	- - (30)	- - (24)	- - (26)	- - (28)
Nor' easter cottonwood	50-55(75)	- - (55)	- - (75)	- - (60)	- - (65)	- - (70)
<u>Plains cottonwood</u>	50-55(75)	- - (55)	- - (75)	- - (60)	- - (65)	- - (70)
Robusta poplar	50-55(75)	- - (55)	- - (75)	- - (60)	- - (65)	- - (70)
<u>Russian olive</u>	21-23(32)	13-15(24)	19-21(30)	- - (24)	15-17(26)	17-19(28)
'King-Red' Russian olive	21-23(32)	13-15(24)	19-21(30)	- - (24)	15-17(26)	17-19(28)
<u>Siberian crabapple</u>	21-23(32)	13-15(24)	19-21(30)	- - (24)	15-17(26)	17-19(28)
<u>Siberian elm</u>	34-36(54)	26-28(46)	32-34(52)	- - (46)	28-30(48)	30-32(50)
Silver maple	40-45(65)	- - - -	- - (62)	- - (50)	- - (55)	- - (60)
Siouxland cotton- wood	50-55(75)	- - (55)	- - (75)	- - (60)	- - (65)	- - (70)
White willow	25-30(40)	- - (32)	- - (38)	- - (32)	- - (34)	- - (36)

----- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )Shrubs:

<u>American plum</u>	10-11 (16)	6-7 (11)	9-10 (15)	-- (12)	7-8 (13)	8-9 (14)
<u>Amur honeysuckle</u>	9-10 (14)	5-6 (9)	8-9 (13)	-- (10)	6-7 (11)	7-8 (12)
Blue artic willow	9-10 (17)	-- (11)	-- (16)	-- (13)	-- (14)	-- (15)
Blueleaf honeysuckle	9-10 (14)	5-6 (9)	8-9 (13)	-- (10)	6-7 (11)	7-8 (12)
Centennial cotton- easter	9-10 (14)	5-6 (9)	8-9 (13)	-- (10)	6-7 (11)	7-8 (12)
<u>Common chokecherry</u>	9-10 (14)	5-6 (9)	8-9 (13)	-- (10)	6-7 (11)	7-8 (12)
Common chokecherry 'shuberts'	9-10 (14)	5-6 (9)	8-9 (13)	-- (10)	6-7 (11)	7-8 (12)
<u>Common lilac</u>	9-10 (14)	5-6 (9)	8-9 (13)	-- (10)	6-7 (11)	7-8 (12)
European privet	9-10 (14)	5-6 (9)	8-9 (13)	-- (10)	6-7 (11)	7-8 (12)
Fourwing saltbush	8 (12)	3 (7)	7 (11)	-- (8)	5 (9)	6 (10)
Golden currant	9-10 (14)	5-6 (9)	8-9 (13)	-- (10)	6-7 (11)	7-8 (12)

-- Denotes species not adapted.  
 Preferred species to list on SCS-SOI-5

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs: Cont'd

Nanking cherry	9-10(14)	5-6 ( 9)	8-9(11)	-- (10)	6-7 (11)	7-8 (12)
<u>Peking cotoneaster</u>	9-10(14)	5-6 ( 9)	8-9(13)	-- (10)	6-7 (11)	7-8 (12)
<u>Redosier dogwood</u>	6-8 (12)	-- ( 7)	-- (11)	-- ( 8)	-- ( 9)	-- (10)
Saskatoon service- berry	8 (12)	4 ( 7)	7(11)	-- ( 8)	5 ( 9)	6 (10)
<u>Siberian peashrub</u> (caragana)	8-10(14)	4-5 ( 9)	8-9(13)	-- (10)	6-7 (11)	7-8 (12)
Silver buffaloberry	8-10(14)	4-5 ( 9)	8-9(13)	-- (10)	6-7 (11)	7-8 (12)
'Sakakawea' silver buffaloberry	8-10(14)	4-5 ( 9)	8-9(13)	-- (10)	6-7 (11)	7-8 (12)
Skunkbush sumac	8-10(14)	4-5 ( 9)	8-9(13)	-- (10)	6-7 (11)	7-8 (12)
Western sandcherry	-----	-----	-----	-----	-----	-----

-- Denotes species not adapted.  
 Preferred species to list on SCS-SOI-5

WBSG 1K - All species listed

1KK - Use species only noted with \*. Reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Evergreen Trees:

* <u>Austrian Pine</u>	22-26(40)	14-16(24)	18-20(30)	- - (24)	16 (26)	18 (28)
<u>Blue spruce</u>	24-28(40)	16-18(26)	22(32)	- - (26)	18 (28)	20 (30)
Douglas-fir	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* <u>Eastern redcedar</u>	19-23(27)	11-13(17)	15-17(25)	- - (19)	13 (21)	15 (23)
Lodgepole pine	22-26(40)	16-18(30)	20(30)	- - - -	16 (28)	18 (28)
* Northern white cedar	- - (24)	- - - -	- - (22)	- - (16)	- -(18)	- -(20)
Norway spruce	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Ponderosa pine	22-26(40)	12-14(24)	20-22(30)	- - (24)	16 (26)	18 (28)
* <u>Rocky Mtn. juniper</u>	17-19(27)	9-11(17)	15-17(25)	- - (19)	11-13(21)	3-15(23)
Scotch pine	28-26(40)	14-16(24)	- - (34)	- - (28)	- - (30)	- - (32)
White spruce	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

----- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 1K - All species listed

1KK - Use species only noted with \*. Reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees:

Amur maple	-----	-----	-----	-----	-----	-----
Arnold Hawthorne	12-16(24)	10-12(22)	-- (22)	-- (16)	--(18)	-- (20)
Black cottonwood	40-45(70)	-- (55)	-- (75)	-- (60)	--(65)	-- (70)
Black willow	30-35(40)	-- (25)	-- (40)	-- (30)	--(35)	-- (40)
* <u>Black locust</u>	21-25(30)	15-17(22)	19-21(28)	-- (22)	15 (24)	17 (26)
Bur oak	23-27(34)	15-17(22)	21-23(32)	-- (26)	17 (28)	19 (30)
* <u>Chinese elm</u>	27-31(46)	19-21(36)	25-29(44)	-- (38)	21-25(40)	23-27(42)
* <u>Golden willow</u>	30-35(40)	-- (25)	-- (40)	-- (30)	-- (35)	-- (40)
* <u>Green ash</u>	22-26(34)	14-16(22)	20-22(32)	-- (26)	16-18(28)	18-20(30)
Hackberry	22-26(34)	14-16(22)	20-22(32)	-- (26)	16-18(28)	18-20(30)
Honeylocust	21-25(30)	12-14(20)	16-19(28)	-- (22)	12-15(24)	14-17(26)
* <u>Idahybrid, poplar</u>	40-45(75)	-- (60)	-- (75)	-- (65)	-- (70)	-- (75)
* 'Imperial' Carolina poplar	35-40(60)	-- (45)	-- (60)	-- (50)	-- (55)	-- (60)

----- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 1K - All species listed

1KK - Use species only noted with \*. Reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees: Cont'd

* Laurel willow	20-25(30)	- - (30)	- - (30)	- - (25)	- - (30)	- - (30)
* <u>Lombardi poplar</u>	45-50(75)	- - (60)	- - (75)	- - (65)	- - (70)	- - (75)
* <u>Manchurian crabapple</u>	10-14(27)	8-12(17)	- - (25)	- - (19)	- - (21)	- - (23)
McDermid (Harbin) pear	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* Nor' easter cottonwood	35-40(60)	- - (45)	- - (60)	- - (50)	- - (55)	- - (60)
* <u>Plains cottonwood</u>	35-40(60)	- - (45)	- - (60)	- - (50)	- - (55)	- - (60)
* <u>Robusta poplar</u>	17-21(27)	- - (45)	- - (60)	- - (50)	- - (55)	- - (60)
* <u>Russian olive</u>	19-23(29)	9-11(17)	15-17(25)	- - (19)	11-13(21)	13-15(23)
* <u>'King-Red' Russian olive</u>	10-14(27)	11-13(19)	17-19(27)	- - (21)	12-15(23)	15-17(25)
* <u>Siberian crabapple</u>	27-31(46)	8-10(23)	- - (25)	- - (19)	- - (21)	- - (23)
* <u>Siberian elm</u>	26-30(40)	19-21(36)	25-29(44)	- - (38)	21-25(40)	23-27(42)
Silver maple	40-45(70)	- - - -	- - (40)	- - (38)	- - - -	- - - -
* Siouxlant cotton- wood	30-35(40)	- - (55)	- - (60)	- - (60)	- - (65)	- - (70)
* White willow	30-35(40)	- - (25)	- - (40)	- - (30)	- - (35)	- - (40)

---- Denotes species not adapted.

Preferred species to list on SCS-SOI-5

WBSG 1K - All species listed

1KK - Use species only noted with \*. Reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
Tree Heights @ Age 20, Irrigated ( )						
<u>Shrubs:</u>						
* American plum	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* <u>Amur honeysuckle</u>	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* Blue artic willow	5-7 ( 9)	3 ( 5)	- - ( 9)	- - ( 6)	- - ( 7)	- - ( 8)
* <u>Blueleaf honeysuckle</u>	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* Centennial cotton- easter	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* Common chokecherry	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* Common chokecherry 'shuberts'	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* <u>Common lilac</u>	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
<u>European privet</u>	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* <u>Fourwing saltbush</u>	4-6 ( 8)	1-2 ( 3)	4-5 ( 7)	- - ( 4)	3 ( 5)	4 ( 6)
* Golden currant	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
Nanking cherry	4-6 ( 8)	1-2 ( 3)	4-5 ( 7)	- - ( 4)	- - ( 5)	- - ( 6)-

---- Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 1K - All species listed

1KK - Use species only noted with \*. Reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
<u>Tree Heights @ Age 20, Irrigated ( )</u>						

Shrubs: Cont'd

<u>Peking cotoneaster</u>	6-8 (12)	3-5 ( 7)	8-10(12)	- - ( 7)	5 ( 9)	7 (11)
* <u>Redosier dogwood</u>	8-10(12)	3-5 ( 7)	- - (11)	- - ( 5)	- - ( 7)	- - ( 9)
Saskatoon service berry	8-10(12)	3-5 ( 7)	7-9 (11)	- - ( 5)	3 ( 7)	5 ( 9)
* <u>Siberian peashrub</u> (caragana)	11-13(15)	4-6 ( 8)	10-12(14)	- - ( 9)	6 (11)	8 (13)
* <u>Silver buffaloberry</u>	10-12(15)	3-5 ( 8)	9-11(13)	- - ( 7)	5 ( 9)	7 (11)
* <u>'Sakakawea' silver</u> <u>buffaloberry</u>	10-12(15)	4-6 ( 9)	10-12(14)	- - ( 8)	6 (10)	8 (12)
* <u>Skunkbush sumac</u>	8-10(12)	4-6 ( 8)	8-10(12)	- - ( 7)	5 ( 9)	7 (11)
Western sandcherry	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

----- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 2 (drained phases) - All species listed  
 2K (drained phases) - Species noted by \* and \*\*, Reduce tree and shrub heights 1 foot  
 2KK (drained phases) - Species noted \*\* only, Reduce tree heights 2 feet, shrub heights 1 foot

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
Tree Heights @ Age 20, Irrigated ( )						
<u>Evergreen Trees:</u>						
* <u>Austrian Pine</u>	20-21(30)	11-12(21)	17-18(27)	- - (21)	13-14(25)	15-16(25)
* <u>Blue spruce</u>	21-22(31)	12-13(22)	18-19(28)	- - (22)	14-15(24)	16-17(26)
Douglas-fir	21-23(32)	12-14(23)	18-20(29)	- - (23)	14-16(25)	16-18(27)
** <u>Eastern redcedar</u>	17-19(26)	8-10(17)	14-16(23)	- - (17)	10-12(19)	12-14(21)
* <u>Lodgepole pine</u>	20-21(30)	11-12(21)	17-18(27)	- - (21)	13-14(23)	15-16(25)
** <u>Northern white cedar</u>	- - (23)	- - (14)	- - (20)	- - (14)	- - (16)	- - (18)
Norway spruce	22-24(33)	13-15(24)	19-21(30)	- - (24)	15-17(26)	17-19(28)
* <u>Ponderosa pine</u>	20-21(30)	12-13(21)	17-18(27)	- - (21)	14-15(23)	15-16(25)
** <u>Rocky Mtn. juniper</u>	17-19(26)	8-10(17)	14-16(23)	- - (17)	10-12(19)	12-14(21)
* <u>Scotch pine</u>	22-24(34)	13-15(25)	19-21(31)	- - (25)	15-17(27)	17-19(29)
White spruce	21-22(31)	12-13(22)	18-19(28)	- - (22)	14-15(24)	16-17(26)

-- Denotes species not adapted.  
 \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 2 (drained phases) - All species listed  
 2K (drained phases) - Species noted by \* and \*\*, Reduce tree and shrub heights 1 foot  
 2KK (drained phases) - Species noted \*\* only, Reduce tree heights 2 feet, shrub heights 1 foot  
 M L R A 's

Species Common Name	9, 44	43, 43a, 43b 47	10, 10a (Western half)	10a (East- ern half), 11, 11a, 11b	12 13	25 25a
<u>Tree Heights @ Age 20, Irrigated ( )</u>						
<u>Deciduous Trees:</u>						
Amur maple	12-14(22)	- - (16)	12-14(22)	- - (16)	- - (18)	- - (20)
* Arnold Hawthorne	12-14(22)	- - (16)	12-14(22)	- - (16)	- - (18)	- - (20)
**Black cottonwood	22-30(42)	- - (36)	- - (42)	- - (36)	- - (38)	- - (40)
**Black willow	17-22(31)	- - (23)	- - (29)	- - (23)	- - (25)	- - (27)
** <u>Black locust</u>	16-19(29)	10-11(19)	16-17(25)	- - (19)	12-13(21)	14-15(23)
* Bur oak	18-20(29)	12-14(23)	18-20(29)	- - (23)	14-16(25)	16-18(27)
**Chinese elm	23-27(42)	17-21(34)	23-27(40)	- - (34)	19-23(36)	21-25(38)
** <u>Golden willow</u>	18-20(31)	- - (23)	- - (29)	- - (23)	- - (25)	- - (27)
** <u>Green ash</u>	20-22(31)	12-14(23)	18-20(29)	- - (23)	14-16(25)	16-18(27)
* Hackberry	20-22(31)	12-14(23)	18-20(29)	- - (23)	14-16(25)	16-18(27)
* Honeylocust	17-19(27)	9-11(19)	15-17(25)	- - (19)	11-13(21)	13-15(23)
** <u>Idahybrid, poplar</u>	45-55(72)	- - (64)	- - (70)	- - (64)	- - (66)	- - (68)
**'Imperial' Carolina poplar	33-40(54)	- - (46)	- - (52)	- - (46)	- - (48)	- - (50)
**Laurel willow	15-17(29)	- - (21)	- - (27)	- - (21)	- - (23)	- - (25)

- - Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 2 (drained phases) - All species listed  
 2K (drained phases) - Species noted by \* and \*\*, Reduce tree and shrub heights 1 foot  
 2KK (drained phases) - Species noted \*\* only, Reduce tree heights 2 feet, shrub heights 1 foot  
 M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
<u>Tree Heights @ Age 20, Irrigated ( )</u>						
<u>Deciduous Trees: Cont'd</u>						
** <u>Lombardi poplar</u>	45-55(72)	- - (64)	- - (70)	- - (64)	- - (66)	- - (68)
* <u>Manchurian crabapple</u>	15-17(24)	- - (16)	- - (22)	- - (16)	- - (18)	- - (20)
McDermid (Harbin) pear	15-17(24)	- - (16)	- - (22)	- - (16)	- - (18)	- - (20)
** <u>Nor' easter cottonwood</u>	30-40(54)	- - (46)	- - (52)	- - (46)	- - (48)	- - (50)
** <u>Plains cottonwood</u>	24-30(44)	- - (36)	- - (42)	- - (36)	- - (38)	- - (40)
** <u>Robusta poplar</u>	30-40(54)	- - (46)	- - (52)	- - (46)	- - (48)	- - (50)
** <u>Russian olive</u>	15-17(24)	7-9 (16)	13-15(22)	- - (16)	9-11(18)	11-13(20)
** <u>'King-Red' Russian olive</u>	15-17(24)	7-9 (16)	13-15(22)	- - (16)	9-11(18)	11-13(20)
* <u>Siberian crabapple</u>	15-17(24)	7-9 (16)	14-15(22)	- - (16)	10-11(18)	12-13(20)
** <u>Siberian elm</u>	24-27(40)	16-19 (32)	22-25(38)	- - (32)	18-21(34)	20-23(36)
* <u>Silver maple</u>	26-30(44)	- - (36)	- - (42)	- - (36)	- - (38)	- - (40)
** <u>Siouxland cotton- wood</u>	30-40(54)	- - (46)	- - (52)	- - (46)	- - (48)	- - (50)
** <u>White willow</u>	18-20(31)	- - (23)	- - (29)	- - (23)	- - (25)	- - (27)

-- Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 2 (drained phases) - All species listed  
 2K (drained phases) - Species noted by \* and \*\*, Reduce tree and shrub heights 1 foot  
 2KK (drained phases) - Species noted \*\* only, Reduce tree heights 2 feet, shrub heights 1 foot

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs:

* American plum	8(12)	4 ( 8)	8(12)	- - ( 8)	5 ( 9)	6 (10)
** <u>Amur honeysuckle</u>	8(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* Blue artic willow	9(12)	- - ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
** <u>Blueleaf honeysuckle</u>	8(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* Centennial cotton- easter	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* Common chokecherry	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
Common chokecherry 'shuberts'	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
** <u>Common lilac</u>	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* European privet	7(10)	3 ( 6)	7(10)	- - ( 6)	4 (7)	5 ( 8)
**Fourwing saltbush	7(10)	2-3 ( 5)	6-7( 9)	2-3 ( 5)	3-4 ( 6)	4-5 ( 7)
Golden currant	7(10)	3 ( 6)	7 (10)	- - ( 6)	4 ( 7)	5 ( 8)
* Nanking cherry	7(10)	3 ( 6)	7 (10)	- - ( 6)	4 ( 7)	5 ( 8)

-- Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 2 (drained phases) - All species listed  
 2K (drained phases) - Species noted by \* and \*\*, Reduce tree and shrub heights 1 foot  
 2KK (drained phases) - Species noted \*\* only, Reduce tree heights 2 feet, shrub heights 1 foot  
 M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs: Cont'd

* <u>Peking cotoneaster</u>	7 (10)	3 ( 6)	7 (10)	-- ( 6)	4 ( 7)	5 ( 8)
** <u>Redosier dogwood</u>	7-8 (11)	-- ( 5)	-- ( 9)	-- ( 5)	-- ( 6)	-- ( 7)
Saskatoon serviceberry	7 (10)	3 ( 5)	6-7 ( 9)	-- ( 5)	3-4 ( 6)	4-5 ( 7)
** <u>Siberian peashrub</u> (caragana)	8 (12)	6 ( 8)	8 (12)	-- ( 8)	5 ( 9)	6 (10)
**Silver buffaloberry	7 (10)	4 ( 6)	7 (10)	-- ( 6)	4 ( 7)	5 ( 8)
**'Sakakawea' silver buffaloberry	7 (10)	4 ( 6)	7 (10)	-- ( 6)	4 ( 7)	5 ( 8)
** <u>Skunkbush sumac</u>	7 (10)	3 ( 6)	7 (10)	-- ( 6)	4 ( 7)	4-5 ( 8)
Western sandcherry	6 ( 9)	2 ( 5)	6 ( 9)	-- ( 5)	3 ( 6)	4-5 ( 7)

-- Denotes species not adapted.  
 Preferred species to list on SCS-SOI-5

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
<u>Tree Heights @ Age 20, Irrigated ( )</u>						
<u>Evergreen Trees:</u>						
<u>Austrian Pine</u>	27-30(41)	17-20(27)	20-23(33)	- - (27)	17 (29)	19 (31)
<u>Blue spruce</u>	32-35(45)	17-19(29)	22-25(35)	- - (29)	18 (31)	20 (33)
Douglas-fir	30-33(43)	17-19(29)	22-25(35)	- - (29)	18 (31)	20 (33)
<u>Eastern redcedar</u>	17-20(28)	13-15(19)	15-17(27)	- - (21)	13 (23)	15 (25)
Lodgepole pine	22-25(35)	17-20(30)	20-23(33)	- - - -	17 (29)	19 (31)
Northern white cedar	- - (25)	- - - -	- - (24)	- - (18)	- - (20)	- - (22)
Norway spruce	32-35(43)	17-19(29)	22-25(35)	- - (29)	18 (31)	20 (33)
<u>Ponderosa pine</u>	28-31(41)	17-19(29)	20-23(33)	- - (27)	17 (29)	19 (31)
<u>Rocky Mtn. juniper</u>	17-20(28)	15-17(19)	15-17(27)	- - (21)	13 (23)	15 (25)
<u>Scotch pine</u>	32-35(45)	18-20(31)	24-27(37)	- - (41)	20 (33)	22 (35)
White spruce	26-30(40)	16-18(26)	- - (32)	- - (26)	17 (28)	19 (30)

- - - - Denotes species not adapted.  
 Preferred species to list on SCS-SOI-5

## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
Tree Heights @ Age 20, Irrigated ( )						
<u>Deciduous Trees:</u>						
Amur maple	12-14(24)	8-10(18)	-- (24)	-- (18)	--(20)	--(22)
Arnold Hawthorne	10-12(24)	8-10(18)	-- (24)	-- (18)	--(20)	--(22)
Black cottonwood	35-37(75)	-- (65)	-- (80)	-- (65)	--(70)	--(75)
Black willow	27-30(35)	-- (25)	-- (35)	-- (26)	--(28)	--(30)
<u>Black locust</u>	30-35(45)	16-18(25)	18-21(31)	-- (25)	16 (27)	18(29)
Bur oak	30-33(35)	16-18(25)	22-25(35)	-- (29)	18 (31)	20(33)
Chinese elm	40-42(45)	25-28(40)	26-30(48)	-- (42)	26 (44)	28(46)
<u>Golden willow</u>	27-30(45)	-- (30)	-- (45)	-- (35)	-- (40)	--(43)
<u>Green ash</u>	35-40(45)	16-18(25)	23-25(35)	-- (29)	18 (31)	20(33)
Hackberry	30-33(35)	16-18(25)	23-25(35)	-- (29)	18 (31)	20(33)
Honeylocust	33-35(40)	13-15(21)	18-21(31)	-- (25)	15 (27)	17(29)
Idahybrid, poplar	45-50(75)	-- (70)	-- (85)	-- (75)	-- (80)	--(82)
'Imperial' Carolina poplar	45-50(70)	-- (60)	-- (75)	-- (60)	-- (65)	--(70)

-- Denotes species not adapted.  
 Preferred species to list on SCS-SOI-5

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half) 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees: Cont'd

Laurel willow	15-20(35)	- - (20)	- - (35)	- - (25)	- - (30)	- -(33)
<u>Lombardi poplar</u>	45-50(75)	- - (70)	- - (85)	- - (75)	- - (80)	- -(32)
<u>Manchurian crabapple</u>	18-20(25)	13-15(20)	10-14(26)	- - (21)	- - (23)	- -(25)
McDermid (Harbin) pear	18-20(25)	8-10(15)	- - (22)	- - (16)	- - (18)	- -(20)
Nor' easter cottonwood	30-35(70)	- - (50)	- - (70)	- - (55)	- - (60)	- -(65)
<u>Plains cottonwood</u>	30-35(70)	- - (50)	- - (70)	- - (55)	- - (60)	- -(65)
<u>Robusta poplar</u>	30-35(70)	- - (50)	- - (70)	- - (55)	- - (60)	- -(65)
<u>Russian olive</u>	20-25(30)	15-17(27)	15-17(27)	- - (21)	13 (23)	15 (25)
<u>'King-Red' Russian olive</u>	20-25(30)	17-19(22)	17-19(29)	- - (23)	15 (25)	17 (27)
<u>Siberian crabapple</u>	18-20(25)	15-17(20)	15-17(27)	- - (21)	13 (23)	15 (25)
<u>Siberian elm</u>	40-42(45)	26-28(40)	28-30(48)	- - (42)	26 (44)	28 (46)
Silver maple	30-35(50)	- - - -	- - (45)	- - (40)	- - - -	- - - -
Siouxland cotton- wood	30-35(70)	- - (60)	- - (80)	- - (65)	- - (70)	- - (70)
White willow	27-30(45)	- - (30)	- - (45)	- - (35)	- - (40)	- - (43)

---- Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs:

<u>American plum</u>	8-10(12)	5-7 ( 9)	10-12(14)	- - ( 9)	6 (11)	8 (13)
Amur honeysuckle	8-10(12)	3-5 ( 7)	8-12(12)	- - ( 7)	5 ( 9)	7 (11)
Blue artic willow	8-10(12)	- - ( 7)	- - (10)	- - ( 5)	- - ( 7)	- - ( 9)
Blueleaf honeysuckle	8-10(12)	3-5 ( 7)	8-10(12)	- - ( 7)	5 ( 9)	7 (11)
Centennial cotton- easter	6-8 (12)	3-5 ( 7)	8-10(12)	- - ( 7)	5 ( 9)	7 (11)
Common chokecherry	8-10(12)	4-5 ( 7)	9-11(13)	- - ( 7)	5 ( 9)	7 (11)
Common chokecherry 'shuberts'	8-10(12)	4-5 ( 7)	9-11(13)	- - ( 7)	5 ( 9)	7 (11)
<u>Common lilac</u>	8-10(12)	4-5 ( 7)	9-11(13)	- - ( 7)	5 ( 9)	7 (11)
European privet	8-10(12)	4-5 ( 7)	8-10(12)	- - ( 7)	5 ( 9)	7 (11)
Fourwing saltbush	- - - -	- - - -	6-8 (10)	2 ( 5)	3 ( 7)	5 ( 9)
Golden currant	6-8 (10)	3-5 ( 7)	8-10(12)	- - ( 7)	5 ( 9)	7 (11)
Nanking cherry	6-8 (12)	3-5 ( 7)	8-10(12)	- - ( 7)	5 ( 9)	7 (11)

---- Denotes species not adapted.      \_\_\_ Preferred species to list on SCS-SOI-5

## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
Tree Heights @ Age 20, Irrigated ( )						

Shrubs: Cont'd

<u>Peking cotoneaster</u>	6-8 (12)	3-5 ( 7)	8-10 (12)	- - ( 7)	5 ( 9)	7 (11)
Redosier dogwood	8-10(12)	3-5 ( 7)	- - (11)	- - ( 5)	- - ( 7)	- - ( 9)
Saskatoon service berry	8-10(12)	3-5 ( 7)	7-9 (11)	- - ( 5)	3 ( 7)	5 ( 9)
<u>Siberian peashrub</u> (caragana)	11-13(15)	4-6 ( 8)	10-12(14)	- - ( 9)	6 (11)	8 (13)
Silver buffaloberry	10-12(15)	3-5 ( 8)	9-11(13)	- - ( 7)	5 ( 9)	7 (11)
'Sakakawea' silver buffaloberry	10-12(15)	4-6 ( 9)	10-12(14)	- - ( 8)	6 (10)	8 (12)
<u>Skunkbush sumac</u>	8-10(12)	4-6 ( 8)	8-10(12)	- - ( 7)	5 ( 9)	7 (11)
Western sandcherry	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

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---- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 4 - All species listed, increase tree heights by 2 feet.

4C - All species listed

4CK - Only species noted by \*. Reduce tree and shrub height by 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Evergreen Trees:

* <u>Austrian Pine</u>	12-14 (25)	7 (17)	12 (23)	- - (17)	8 (19)	10 (21)
* <u>Blue spruce</u>	13-15 (26)	10 (18)	16 (24)	- - (18)	12 (20)	14 (22)
Douglas-fir	12-14 (25)	7 (17)	12 (23)	- - (17)	8 (19)	10 (21)
* Eastern redcedar	11-13 (21)	7 (13)	13 (19)	- - (13)	9 (15)	11 (17)
* Lodgepole pine	12-14 (25)	10 (17)	16 (23)	- - (17)	12 (19)	14 (21)
Northern white cedar	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Norway spruce	13-15 (26)	10 (18)	16 (24)	- - (18)	12 (20)	13 (22)
* <u>Ponderosa pine</u>	12-14 (25)	10 (17)	16 (23)	- - (17)	12 (19)	14 (21)
* <u>Rocky Mtn. juniper</u>	11-13 (21)	7 (13)	13 (19)	- - (13)	9 (15)	11 (17)
* <u>Scotch pine</u>	15-17 (28)	11 (20)	17 (26)	- - (20)	13 (22)	15 (24)
White spruce	12-14 (25)	7 (17)	12 (23)	- - (17)	8 (19)	10 (21)

-- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 4 - All species listed, increase tree heights by 2 feet.

4C - All species listed

4CK - Only species noted by \*. Reduce tree and shrub heights by 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees:

Amur maple	8-10(17)	-- (11)	-- (17)	-- (11)	--(13)	--(15)
* Arnold Hawthorne	8-10(17)	-- (11)	-- (17)	-- (11)	--(13)	--(15)
* Black cottonwood	25-27(37)	-- (31)	-- (37)	-- (31)	--(33)	--(35)
* Black willow	12-14(24)	-- (18)	-- (24)	-- (18)	--(20)	--(22)
* <u>Black locust</u>	13-15(22)	9(16)	15(22)	-- (16)	11(18)	13(20)
* Bur oak	14-16(22)	10(18)	16(24)	-- (18)	12(20)	14(22)
* Chinese elm	20-23(34)	14-17(28)	20-23(34)	-- (28)	16-19(30)	18-21(32)
* Golden willow	12-14(24)	-- (18)	-- (24)	-- (18)	-- (20)	-- (22)
* <u>Green ash</u>	16-18(24)	10(18)	16(24)	-- (18)	12(20)	14(22)
* Hackberry	16-18(24)	10(16)	16(24)	-- (18)	12(20)	14(22)
* Honeylocust	14-16(22)	8(16)	14(22)	-- (16)	10(18)	12(22)
* <u>Idahybrid, poplar</u>	30-40(58)	-- (52)	-- (58)	-- (52)	-- (54)	-- (56)
* 'Imperial' Carolina poplar	25-35(42)	-- (36)	-- (42)	-- (36)	-- (38)	-- (40)

-- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 4 - All species listed, increase tree heights by 2 feet.

4C - All species listed

4CK - Use species noted by \*. Reduce tree and shrub heights by 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees: Cont'd

* Laurel willow	15-20(27)	- - (21)	- - (27)	- - (21)	- - (23)	- - (25)
* <u>Lombardi poplar</u>	35-45(58)	- - (52)	- - (58)	- - (52)	- - (54)	- - (56)
* Manchurian crabapple	12(19)	6 (13)	12 (19)	- - (13)	8 (15)	10 (17)
McDermid (Harbin) pear	12(19)	- - (13)	- - (19)	- - (13)	- - (15)	- - (17)
* Nor' easter cottonwood	26-29(37)	- - (31)	- - (37)	- - (31)	- - (33)	- - (35)
* <u>Plains cottonwood</u>	26-29(37)	- - (31)	- - (37)	- - (31)	- - (33)	- - (35)
* <u>Robusta poplar</u>	29-32(42)	- - (36)	- - (42)	- - (36)	- - (38)	- - (40)
* <u>Russian olive</u>	13(19)	7 (13)	13(19)	- - (13)	9 (15)	11 (17)
* <u>'King-Red' Russian olive</u>	13(19)	7 (13)	13(19)	- - (13)	9 (15)	11 (17)
* Siberian crabapple	12(19)	6 (13)	12(19)	- - (13)	8 (15)	10 (17)
* <u>Siberian elm</u>	22(34)	16 (28)	22(34)	- - (28)	18 (30)	20 (32)
* Silver maple	20-22(32)	- - (26)	- - (32)	- - (26)	- - (28)	- - (30)
* Siouland cotton- wood	23-25(37)	- - (31)	- - (37)	- - (31)	- - (33)	- - (35)
* White willow	12-14(24)	- - (18)	- - (24)	- - (18)	- - (20)	- - (22)

-- 1 species not adapted. \_\_\_\_\_ Preferred

species to list on SCS-SOI-5

WBSG 4 - All species listed, increase tree heights by 2 feet.  
 4C - All species listed  
 4CK - species noted by \*. Reduce tree and shrub heights by 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs: Cont'd

* <u>Peking cotoneaster</u>	7(10)	3 ( 6)	7(10)	-- ( 6)	4 ( 7)	5 ( 8)
* Redosier dogwood	6( 8)	-- ( 4)	-- ( 8)	-- ( 4)	-- ( 5)	-- ( 6)
<u>Saskatoon serviceberry</u>	7(10)	3 ( 6)	7(10)	-- ( 6)	4 ( 7)	5 ( 8)
* <u>Siberian peashrub</u> (caragana)	7(11)	4 ( 7)	7(11)	-- ( 7)	4 ( 8)	5 ( 9)
* Silver buffaloberry	7(10)	3 ( 6)	7(10)	-- ( 6)	4 ( 7)	5 ( 8)
* 'Sakakawea' silver buffaloberry	7(10)	3 ( 6)	7(10)	-- ( 6)	4 ( 7)	5 ( 8)
* <u>Skunkbush sumac</u>	7(10)	3 ( 6)	7(10)	-- ( 6)	4 ( 7)	5 ( 8)
Western sandcherry	6( 8)	2 ( 4)	6( 8)	-- ( 4)	3 ( 5)	4 ( 6)

-- Denotes species not adapted.  
 Preferred species to list on SCS-SOI-5

- WBSG 4 - All species listed, increase tree heights by 2 feet.  
 4C - All species listed  
 4CK - Species noted by \*, reduce tree and shrub heights by 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs:

American plum	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* <u>Amur honeysuckle</u>	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* Blue artic willow	7(10)	- - ( 6)	- - (10)	- - ( 6)	- - ( 7)	- - ( 8)
* <u>Blueleaf honeysuckle</u>	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* Centennial cotton- easter	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* Common chokecherry	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* Common chokecherry 'shuberts'	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* <u>Common lilac</u>	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
European privet	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
* Fourwing saltbush	6( 8)	2 ( 4)	6( 8)	2 ( 4)	3 ( 5)	4 ( 6)
* Golden currant	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)
<u>Nanking cherry</u>	7(10)	3 ( 6)	7(10)	- - ( 6)	4 ( 7)	5 ( 8)

---- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG

- 5 - All species listed
- 5K - Use only species noted with \* and \*\*. Reduce tree heights by 1 foot.
- 5KK - Use only species noted with \*\*, reduce tree heights by 2 feet.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Evergreen Trees:

* <u>Austrian Pine</u>	20-23(34)	7-9 (16)	15-17(24)	- - (18)	11-13(20)	13-15(22)
* <u>Blue spruce</u>	21-24(33)	8-10(18)	16-18(26)	- - (20)	12-14(22)	14-16(24)
Douglas-fir	21-24(33)	8-10(18)	16-18(26)	- - (20)	12-14(22)	14-16(24)
**Eastern redcedar	14-17(28)	4-6 (12)	12-14(20)	- - (14)	8-10(16)	10-12(18)
Lodgepole pine	20-23(32)	7-9 (16)	15-16(24)	- - (18)	11-13(20)	13-14(22)
* Northern white cedar	- - (26)	- - - -	- - (18)	- - (12)	- - (14)	- - (16)
Norway spruce	21-24(33)	8-10(18)	16-18(26)	- - (20)	12-14(22)	14-16(24)
* <u>Ponderosa pine</u>	20-23(32)	7-9 (16)	15-16(24)	- - (18)	11-12(20)	13-14(22)
** <u>Rocky Mtn. juniper</u>	14-17(28)	4-6 (12)	12-14(20)	- - (14)	8-10(16)	10-12(18)
<u>Scotch pine</u>	22-25(34)	10-12(20)	18-19(28)	- - (22)	14-15(24)	16-17(26)
White spruce	20-23(32)	8-10(18)	16-18(26)	- - (20)	12-14(22)	14-16(24)

---- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 5 - All species listed

5K - Use only species noted with \* and \*\*, reduce tree heights by 1 foot.  
 5KK - Use only species noted with \*\*, reduce tree heights by 2 feet.

M L R A 's

Species Common Name	9, 44	43, 43a, 43b 47	10, 10a (Western half)	10a (East- ern half), 11, 11a, 11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees:

Amur maple	12-14 (19)	4-6 (10)	-- (18)	-- (12)	-- (14)	-- (16)
* Arnold Hawthorne	12-14 (19)	4-6 (10)	-- (18)	-- (12)	-- (14)	-- (16)
**Black cottonwood	22-24 (33)	-- (44)	-- (52)	-- (46)	-- (48)	-- (50)
* Black willow	12-14 (23)	-- (18)	-- (26)	-- (20)	-- (22)	-- (24)
** <u>Black locust</u>	12-14 (22)	7-9 (15)	15-16 (23)	-- (17)	11-12 (19)	13-14 (21)
* Bur oak	14-16 (25)	8-10 (18)	16-18 (26)	-- (20)	12-14 (22)	14-16 (24)
**Chinese elm	24-26 (32)	14-16 (28)	21-24 (36)	-- (30)	17-20 (32)	19-22 (34)
**Golden willow	14-16 (25)	-- (18)	-- (26)	-- (20)	-- (22)	-- (24)
** <u>Green ash</u>	14-16 (25)	8-10 (18)	16-18 (26)	-- (20)	12-14 (22)	14-16 (24)
* Hackberry	14-16 (25)	8-10 (18)	16-18 (26)	-- (20)	12-14 (22)	14-16 (24)
* <u>Honeylocust</u>	12-14 (22)	8-10 (15)	14-16 (23)	-- (17)	10-12 (19)	12-14 (21)
** <u>Idahybrid, poplar</u>	35-40 (57)	-- (54)	-- (62)	-- (56)	-- (58)	-- (60)
**'Imperial' Carolina poplar	30-35 (47)	-- (44)	-- (52)	-- (56)	-- (58)	-- (50)

-- Denotes species not adapted.      \_\_\_ Preferred species to list on SCS-SOI-5

WBSG 5 - All species listed.

5K - Use only species noted with \* and \*\*, reduce tree heights by 1 foot.

5KK - Use only species noted with \*\*, reduce tree heights by 2 feet.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees: Cont'd

**Laurel willow	10-12(17)	- - ( 9)	- - (17)	- - (11)	- - (13)	- - (15)
** <u>Lombardi poplar</u>	35-40(65)	- - (54)	- - (62)	- - (56)	- - (58)	- - (60)
* Manchurian crabapple	12-15(20)	6-8 (12)	12-14(20)	- - (14)	- - (16)	- - (18)
McDermand (Harbin) pear	12-15(20)	6-8 (12)	- - (20)	- - (14)	- - (16)	- - (18)
**Nor' easter cottonwood	27-32(57)	- - (54)	- - (62)	- - (56)	- - (58)	- - (60)
** <u>Plains cottonwood</u>	22-27(52)	- - (44)	- - (52)	- - (46)	- - (48)	- - (50)
** <u>Robusta poplar</u>	22-27(52)	- - (44)	- - (52)	- - (46)	- - (48)	- - (50)
** <u>Russian olive</u>	14-16(23)	6-8 (12)	12-14(20)	- - (14)	8-10(21)	13-15(23)
** <u>'King-Red' Russian olive</u>	14-16(23)	6-8 (12)	12-14(20)	- - (14)	8-10(16)	10-12(18)
* Siberian crabapple	14-16(23)	7-9 (12)	13-14(20)	- - (14)	8-10(16)	10-12(18)
** <u>Siberian elm</u>	22-24(23)	14-17(28)	22-24(36)	- - (30)	17-20(32)	19-22(34)
Silver maple	22-24(32)	- - - -	- - (42)	- - (36)	- - (38)	- - (40)
**Siouxland cotton- wood	22-27(52)	- - (44)	- - (52)	- - (46)	- - (48)	- - (50)
* White willow	14-16(35)	- - (18)	- - (26)	- - (20)	- - (22)	- - (24)

---- Denotes species not adapted.      Preferred species to list on SCS-SOI-5

WBSG 5 - All species listed

5K - Use only species noted with \* and \*\*, reduce tree heights by 1 foot

5KK - Use only species noted with \*\*, reduce tree heights by 2 feet.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs:

* American plum	8(12)	4 ( 7)	7(11)	- - ( 8)	5 ( 9)	6 (10)
**Amur honeysuckle	7(10)	3 ( 5)	6( 9)	- - ( 6)	4 ( 7)	5 ( 8)
* Blue artic willow	8-10(12)	- - ( 7)	- - (11)	- - ( 8)	- - ( 9)	- - (10)
**Blueleaf honeysuckle	8(12)	4 ( 7)	7(11)	- - ( 8)	5 ( 9)	6 (10)
* Centennial cotton- easter	7(10)	3 ( 5)	6( 9)	- - ( 6)	4 ( 7)	5 ( 8)
* Common chokecherry	7(10)	3 ( 5)	6( 9)	- - ( 6)	4 ( 7)	5 ( 8)
* Common chokecherry 'shuberts'	7(10)	3 ( 5)	6( 9)	- - ( 6)	4 ( 7)	5 ( 8)
** <u>Common lilac</u>	7(10)	3 ( 5)	6( 9)	- - ( 6)	4 ( 7)	5 ( 8)
European privet	7(10)	3 ( 5)	6( 9)	- - ( 6)	4 ( 7)	5 ( 8)
**Fourwing saltbush	4-6( 8)	2 ( 3)	4-5( 7)	- - ( 4)	2-3 ( 5)	3-4 ( 6)
* Golden currant	7(10)	3 ( 5)	6( 9)	- - ( 6)	4 ( 7)	5 ( 8)

-- Denotes species not adapted.      Preferred species to list on SCS-SOI-5

WBSG 5 - All species listed

5K - Use only species noted with \* and \*\*, reduce tree heights by 1 foot.

5KK - Use only species noted with \*\*, reduce tree heights by 2 feet.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs: Cont'd

Nanking cherry	7(10)	3 ( 5)	6( 9)	-- ( 6)	4 ( 7)	5 ( 8)
* Peking cotoneaster	7(10)	3 ( 5)	6( 9)	-- ( 6)	4 ( 7)	5 ( 8)
**Redosier dogwood	4-6 ( 8)	2 ( 3)	-- ( 7)	-- ( 4)	-- ( 5)	-- ( 6)
Saskatoon service- berry	5 ( 8)	2 ( 3)	5( 7)	-- ( 4)	3 ( 5)	4 ( 6)
** <u>Siberian peashrub</u> (caragana)	8 (12)	4 ( 7)	7(11)	-- ( 8)	5 ( 9)	6 (10)
** <u>Silver buffaloberry</u>	7 (10)	3 ( 5)	6( 9)	-- ( 6)	4 ( 7)	5 ( 8)
** <u>'Sakakawea' silver</u> <u>buffaloberry</u>	7 (10)	3 ( 5)	6( 9)	-- ( 6)	4 ( 7)	5 ( 8)
** <u>Skunkbush sumac</u>	7 (10)	3 ( 5)	6( 9)	-- ( 6)	4 ( 7)	5 ( 8)
Western sandcherry	6 ( 8)	2 ( 3)	5( 7)	-- ( 4)	3 ( 5)	4 ( 6)

-- Denotes species not adapted.

\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 6 and 6D - All species listed.  
 6K - Species noted with \* and \*\*.  
 6KK - Species noted with \*\* only.  
 6G - Add 2 feet to tree heights,  
 1 foot to shrub heights.

6GK' - Add 2 feet to tree heights; 1 foot  
 to shrub heights. For species  
 noted with \* and \*\*.  
 6GKK} - Add 2 feet to tree heights, 1 foot  
 6DK} - for shrubs. For species noted with \*\*.

M L R A 's

Species Common Name	9, 44	43, 43a, 43b 47	10, 10a (Western half)	10a (East- ern half), 11, 11a, 11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Evergreen Trees:

* <u>Austrian Pine</u>	18-21(30)	8-10(16)	12-14(22)	- - (16)	10 (18)	12 (20)
* <u>Blue spruce</u>	19-22(31)	9-11(17)	12-14(23)	- - (17)	11 (19)	13 (21)
Douglas-fir	19-22(31)	9-11(17)	12-14(23)	- - (17)	11 (19)	13 (21)
** <u>Eastern redcedar</u>	12-15(26)	6-8 (12)	8-10(18)	- - (12)	8 (14)	10 (16)
Lodgepole pine	18-21(30)	10-12(18)	12-14(22)	- - (16)	10 (18)	12 (20)
* Northern white cedar	- - (24)	- - - -	- - (16)	- - (10)	- - (12)	- - (14)
Norway spruce	19-22(31)	9-11(17)	12-14(23)	- - (17)	11 (19)	13 (21)
* <u>Ponderosa pine</u>	18-21(30)	10-12(18)	12-14(22)	- - (16)	10 (18)	12 (20)
** <u>Rocky Mtn. juniper</u>	12-15(26)	6-8 (12)	8-10(18)	- - (12)	8 (14)	10 (16)
<u>Scotch pine</u>	20-23(32)	10-12(18)	13-15(24)	- - (18)	11 (20)	13 (22)
White spruce	18-21(30)	8-10(16)	12-14(22)	- - (16)	10 (18)	12 (20)

-- Denotes species not adapted.      \_\_\_ Preferred species to list on SCS-SOI-5

WBSG 6 and 6D -All species listed.

6K - Species noted with \* and \*\*.

6KK - Species noted with \*\* only.

6G - Add 2 feet to tree height,  
1 foot to shrub height

6GK - Add 2 feet to tree heights, 1 foot to  
shrub heights. For species noted with  
\* and \*\*.

6GKK}- Add 2 feet to tree heights, 1 foot for  
6DK}- shrubs. For species noted with \* and \*\*.

M L R A 's

Species	9,44	43,43a,43b	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12	25
Common Name		47			13	25a

Tree Heights @ Age 20, Irrigated ( \_\_\_\_\_ )

Deciduous Trees:

Amur maple	10-12(17)	6-8 (11)	- - (17)	- - (11)	- - (13)	- - (15)
* Arnold Hawthorne	10-12(17)	6-8 (11)	- - (17)	- - (11)	- - (13)	- - (15)
**Black cottonwood	20-22(31)	- - (24)	- - (36)	- - (24)	- - (29)	- - (31)
**Black willow	10-12(21)	- - (17)	- - (26)	- - (17)	- - (19)	- - (21)
** <u>Black locust</u>	10-12(20)	8-10(14)	10-12(20)	- - (14)	9 (16)	11 (18)
* Bur oak	12-14(23)	10-12(17)	12-14(23)	- - (17)	11 (19)	13 (21)
** <u>Chinese elm</u>	20-22(30)	15-17(25)	20-22(31)	- - (25)	16 (27)	18 (29)
**Golden willow	12-14(23)	- - (17)	- - (23)	- - (17)	11 (19)	- - (21)
** <u>Green ash</u>	12-14(23)	10-12(17)	12-14(23)	- - (17)	11 (19)	13 (21)
* Hackberry	12-14(23)	10-12(17)	12-14(23)	- - (17)	11 (19)	13 (21)
* Honeylocust	10-12(20)	8-10(14)	10-12(20)	- - (14)	10 (16)	12 (18)
**Idahybrid, poplar	30-35(55)	- - (45)	- - (55)	- - (45)	- - (50)	- - (52)
**'Imperial' Carolina poplar	25-30(45)	- - (35)	- - (45)	- - (35)	- - (38)	- - (40)
**Laurel willow	8-10(15)	- - ( 8)	- - (15)	- - ( 8)	- - (10)	- - (12)

-- Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 6 and 6D - All species listed.  
 6K - Species noted with \* and \*\*.  
 6KK - Species noted with \*\* only.  
 6G - Add 2 feet to tree height,  
 1 foot to shrub heights

6GK -Add 2 feet to tree heights, 1 foot to  
 shrub heights. For species noted with  
 \* and \*\*.

6GKK}-Add 2 feet to tree heights, 1 foot for  
 6DK} -shrubs. For species noted with \* and \*\*.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
Tree Heights @ Age 20, Irrigated ( )						
<u>Deciduous Trees: Cont'd</u>						
**Lombardi poplar	30-35(60)	- - (45)	- - (55)	- - (45)	- - (50)	- - (52)
* Manchurian crabapple	10-12(18)	- - (12)	10-12(18)	- - (12)	- - (14)	- - (16)
McDermand (Harbin) pear	10-12(18)	- - (12)	- - (18)	- - (12)	- - (14)	- - (16)
**Nor' easter cottonwood	25-30(55)	- - (40)	- - (55)	- - (45)	- - (50)	- - (52)
**Plains cottonwood	20-25(50)	- - (30)	- - (45)	- - (35)	- - (40)	- - (42)
**Robusta poplar	20-25(50)	- - (30)	- - (45)	- - (35)	- - (38)	- - (40)
** <u>Russian olive</u>	12-14(21)	6-8 (10)	12-14(21)	- - (12)	8(14)	10(16)
** <u>'King-Red' Russian olive</u>	12-14(21)	6-8 (10)	12-14(21)	- - (12)	8(14)	10(16)
* Siberian crabapple	12-14(21)	6-8 (10)	12-14(21)	- - (12)	8(14)	10(16)
** <u>Siberian elm</u>	20-22(30)	12-14(23)	20-22(31)	- - (25)	16(27)	18(29)
Silver maple	18-20(30)	- - - -	- - (30)	- - (25)	- - - -	- - - -
**Siouxland cotton- wood	20-25(50)	- - (40)	- - (55)	- - (45)	- - (50)	- - (52)
* White willow	12-14(23)	- - (15)	- - (23)	- - (17)	- - (19)	- - (21)

-- denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 6 and 6D - All species listed.  
 6K - Species noted with \* and \*\*.  
 6KK - Species noted with \*\* only.  
 6G - Add 2 feet to tree height,  
 1 foot to shrub height.

6GK - Add 2 feet to tree heights, 1 foot to  
 shrub heights. For species noted with  
 \* and \*\*.  
 6GKK}- Add 2 feet to tree heights, 1 foot for  
 6DK}- shrubs. For species noted with \*\*.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs:

* American plum	5-7( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
** <u>Amur honeysuckle</u>	5-7( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* Blue artic willow	5-7( 9)	3 ( 5)	- - ( 9)	- - ( 6)	- - ( 7)	- - ( 8)
** <u>Blueleaf honeysuckle</u>	5-7( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* Centennial cotton- easter	5-7( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* Common chokecherry	5-7( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
* Common chokecherry 'shuberts'	5-7( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
** <u>Common lilac</u>	5-7( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
<u>European privet</u>	5-7( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
** <u>Fourwing saltbush</u>	4-6( 8)	1-2 ( 3)	4-5 ( 7)	- - ( 4)	3 ( 5)	4 ( 6)
* Golden currant	5-7( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
Nanking cherry	4-6( 8)	1-2 ( 3)	4-5 ( 7)	- - ( 4)	- - ( 5)	- - ( 6)

-- Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 6 and 6D - All species listed.  
 6K - Species noted with \* and \*\*.  
 6KK - Species noted with \*\* only.  
 6G - Add 2 feet to tree height,  
 1 foot to shrub height.

6GK - Add 2 feet to tree heights, 1 foot to  
 shrub heights. For species noted with  
 \* and \*\*.  
 6GKK} - Add 2 feet to tree heights, 1 foot fo  
 6DK} - shrubs. For species noted with \*\*.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs: Cont'd

* <u>Peking cotoneaster</u>	5-7 ( 9)	2 ( 4)	4-6 ( 8)	- - ( 5)	3 ( 6)	4 ( 7)
** <u>Redosier dogwood</u>	4-6 ( 8)	1-2 ( 3)	- - ( 7)	- - ( 4)	- - ( 5)	- - ( 6)
<u>Saskatoon serviceberry</u>	4-6 ( 8)	1-2 ( 3)	4-5 ( 7)	- - ( 4)	3 ( 5)	4 ( 6)
** <u>Siberian peashrub (caragana)</u>	6-8 (11)	3-4 ( 6)	6-8 (10)	- - ( 6)	4 ( 7)	5 ( 8)
** <u>Silver buffaloberry</u>	6-8 (10)	2-3 ( 5)	5-7 ( 9)	- - ( 5)	3 ( 6)	4 ( 7)
** <u>'Sakakawea' silver buffaloberry</u>	6-8 (10)	2-3 ( 5)	5-7 ( 9)	- - ( 5)	3 ( 6)	4 ( 7)
** <u>Skunkbush sumac</u>	6-8 (10)	2-3 ( 5)	6-8 (10)	- - ( 6)	3 ( 7)	4 ( 8)
<u>Western sandcherry</u>	4-6 ( 8)	1-2 ( 3)	4-6 ( 8)	- - ( 4)	3 ( 5)	4 ( 6)

-- Denotes species not adapted.  
 Preferred species to list on SCS-SOI-5

## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )Shrubs:

American plum	8-10 (12)	4-5 ( 6)	6 ( 9)	- - ( 6)	4 ( 7)	5 ( 8)
Amur honeysuckle	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
Blue artic willow	- - (11)	- - ( 6)	- - ( 9)	- - ( 6)	- - ( 7)	- - ( 8)
Blueleaf honeysuckle	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
Centennial cotton- easter	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
Common chokecherry	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
Common chokecherry 'shuberts'	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
<u>Common lilac</u>	8-10(12)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
<u>European privet</u>	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
<u>Fourwing saltbush</u>	5-6 ( 9)	2 ( 4)	4-5( 7)	- - ( 4)	2-3 ( 5)	3-4 ( 6)
Golden currant	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)

-- Denotes species not adapted.      Preferred species to list on SCS-SOI-5

## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )Deciduous Trees: Cont'd

Manchurian crabapple	10-12(20)	- - (12)	- - (18)	- - (12)	- - (14)	- - (16)
McDermand (Harbin) pear	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Nor' easter cottonwood	- - (54)	- - (48)	- - (54)	- - (48)	- - (50)	- - (52)
<u>Plains cottonwood</u>	- - (54)	- - (48)	- - (54)	- - (48)	- - (50)	- - (52)
Robusta poplar	- - (54)	- - (48)	- - (54)	- - (48)	- - (50)	- - (52)
<u>Russian olive</u>	15-17(25)	5-6 (12)	11-12(18)	- - (12)	7-8 (14)	9-10(16)
<u>'King-Red' Russian olive</u>	15-17(25)	5-6 (12)	11-12(18)	- - (12)	7-8 (14)	9-10(16)
Siberian crabapple	14(20)	5-6 (12)	12(18)	- - (11)	8 (14)	10(16)
<u>Siberian elm</u>	25-30(40)	12-15(25)	18-21(31)	- - (25)	14-17(27)	16-19(29)
Silver maple	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Siouxland cotton- wood	- - (54)	- - (48)	- - (54)	- - (48)	- - (50)	- - (52)
White willow	- - (25)	- - (17)	- - (23)	- - (17)	- - (19)	- - (21)

---- Denotes species not adapted.      \_\_\_\_\_ Preferred species to list on SCS-SOI-5

## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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 Tree Heights @ Age 20, Irrigated ( )
 

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Deciduous Trees:

Amur maple	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Arnold Hawthorne	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Black cottonwood	- - (40)	- - (27)	- - (33)	- - (27)	- - (29)	- - (31)
Black willow	- - (25)	- - (17)	- - (23)	- - (17)	- - (19)	- - (21)
<u>Black locust</u>	23-25(35)	7-8 (14)	13-14(20)	- - (14)	9-10(16)	11-12(18)
Bur oak	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Chinese elm	28-31(40)	12-15(25)	18-21(31)	- - (25)	14-17(27)	16-19(29)
Golden willow	- - (25)	- - (17)	- - (23)	- - (17)	- - (19)	- - (21)
<u>Green ash</u>	20-21(35)	9-10(17)	15-16(23)	- - (17)	11-12(19)	13-14(21)
Hackberry	17-18(30)	9-10(17)	15-16(23)	- - (17)	11-12(19)	13-14(21)
Honeylocust	20-21(35)	6-8 (14)	12-14(20)	- - (14)	8-10(16)	10-12(18)
Idahybrid, poplar	- - (54)	- - (48)	- - (54)	- - (48)	- - (50)	- - (52)
'Imperial' Carolina poplar	- - (54)	- - (48)	- - (54)	- - (48)	- - (50)	- - (52)
Laurel willow	- - (20)	- - (12)	- - (18)	- - (12)	- - (14)	- - (16)
Lombardi poplar	- - (54)	- - (48)	- - (54)	- - (48)	- - (50)	- - (52)

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 ---- Denotes species not adapted.      Preferred species to list on SCS-SOI-5
 

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## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )Evergreen Trees:

<u>Austrian Pine</u>	22-26(30)	8-12(16)	13-18(22)	- - (16)	10-14 (18)	12-16(20)
<u>Blue spruce</u>	16-17(25)	9-10(17)	15-16(23)	- - (17)	11-12 (19)	13-14(21)
Douglas-fir	20-21(28)	9-10(17)	15-16(23)	- - (17)	11-12 (19)	13-14(21)
Eastern redcedar	13-14(20)	5-6 (12)	11-12(18)	- - (12)	7-8 (14)	9-10(16)
Lodgepole pine	16-17(25)	8-12(16)	14-15(22)	- - (16)	10-11 (18)	12-13(20)
Northern white cedar	- - (18)	- - - -	- - (16)	- - (10)	- - (12)	- - (14)
Norway spruce	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
<u>Ponderosa pine</u>	22-23(30)	8-12(16)	14-15(22)	- - (16)	10-11 (18)	12-13(20)
<u>Rocky Mtn. juniper</u>	13-14(20)	5-6 (12)	11-12(18)	- - (12)	7-8 (14)	9-10(16)
<u>Scotch pine</u>	23-24(30)	9-10(18)	15-16(24)	- - (18)	11-12 (20)	13-14(22)
White spruce	16-17(25)	9-10(17)	15-16(23)	- - (17)	11-12 (19)	13-14(21)

----- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

## M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )Shrubs: Cont'd

Nanking cherry	6-7 ( 9)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
Peking cotoneaster	6-8 (10)	2-3 ( 5)	5-6( 9)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
Redosier dogwood	6-8 (10)	- - ( 4)	- - ( 7)	- - ( 4)	- - ( 5)	- - ( 6)
Saskatoon service- berry	6-8 (10)	( 4)	5( 7)	- - ( 4)	3 ( 5)	4 ( 6)
<u>Siberian peashrub</u> (caragana)	8-10(14)	3-4 ( 6)	5-6( 9)	- - ( 6)	3-4 ( 7)	4-5 ( 8)
Silver buffaloberry	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
'Sakakawea' silver buffaloberry	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
<u>Skunkbush sumac</u>	6-8 (10)	2-3 ( 5)	5-6( 8)	- - ( 5)	3-4 ( 6)	4-5 ( 7)
<u>Western sandcherry</u>	6-7( 9)	2 ( 4)	4-5( 7)	- - ( 4)	2-3 ( 5)	3-4 ( 6)

-- Denotes species not adapted. \_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 8 - All species listed

8K - Only species noted with \*. Reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Evergreen Trees:

* <u>Austrian Pine</u>	20-25(35)	14-16(27)	20(30)	- - (25)	16 (27)	18(29)
* <u>Blue spruce</u>	21-26(36)	17-19(29)	20-22(32)	- - (26)	16-18 (28)	18-20(30)
Douglas-fir	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* <u>Eastern redcedar</u>	15-17(25)	12-14(20)	15-17(25)	- - (19)	11-13 (21)	13-15(23)
Lodgepole pine	19-20(30)	17-18(29)	19-20(30)	- - (24)	15-16 (26)	17-18(28)
* Northern white cedar	14-16(24)	- - - -	- - (22)	- - (16)	- - (18)	- - (20)
Norway spruce	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Ponderosa pine	21-22(32)	18-19(29)	19-20(30)	- - (24)	15-16 (26)	17-18(28)
* <u>Rocky Mtn. juniper</u>	15-17(25)	12-14(20)	15-17(25)	- - (19)	11-13 (21)	13-15(23)
Scotch pine	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
White spruce	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

---- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 8 - All species listed

8K - Only species noted with \*, reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees:

Amur maple	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Arnold Hawthorne	10-12(22)	- - (15)	- - (18)	- - (16)	- -(18)	- -(20)
* Black cottonwood	25-30(50)	- - (42)	- - (43)	- - (41)	- -(43)	- -(45)
* Black willow	15-20(35)	- - (25)	- - (32)	- - (26)	- -(28)	- -(30)
* <u>Black locust</u>	20-21(30)	13-14(23)	18-19(28)	- - (22)	14-15(24)	16-17(26)
Bur oak	18-21(30)	12-13(22)	16-18(28)	- - (22)	12-15(24)	14-17(26)
* Chinese elm	27-31(46)	17-21(36)	25-29(44)	- - (38)	21-25(40)	23-27(42)
* <u>Golden willow</u>	15-20(35)	- - (26)	- - (32)	- - (28)	- -(30)	- -(30)
* <u>Green ash</u>	22-24(34)	14-16(26)	20-22(32)	- - (26)	16-18(28)	18-20(30)
Hackberry	22-24(34)	14-16(26)	20-22(32)	- - (26)	16-18(28)	18-20(30)
Honeylocust	18-21(30)	10-12(22)	16-19(28)	- - (22)	12-15(24)	14-17(26)
* <u>Idahybrid, poplar</u>	45-50(75)	- - (70)	- - (77)	- - (71)	- -(73)	- -(75)
* 'Imperial' Carolina poplar	35-40(60)	- - (55)	- - (62)	- - (56)	- -(58)	- -(60)
* Laurel willow	10-15(25)	- - (15)	- - (22)	- - (16)	- -(18)	- -(20)

----- Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 8 - All species listed

8K - Only species noted with \*, reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees: Cont'd

* Lombardi poplar	45-50(75)	- - (70)	- - (77)	- - (71)	- - (73)	- - (75)
* Manchurian crabapple	10-15(25)	- - (20)	- - (25)	- - (19)	- - (21)	- - (23)
McDermand (Harbin) pear	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* Nor' easter cottonwood	35-40(62)	- - (60)	- - (62)	- - (56)	- - (58)	- - (60)
* <u>Plains cottonwood</u>	35-40(62)	- - (60)	- - (62)	- - (56)	- - (58)	- - (60)
* <u>Robusta poplar</u>	35-40(62)	- - (60)	- - (62)	- - (56)	- - (58)	- - (60)
* <u>Russian olive</u>	15-17(25)	9-11(19)	15-17(25)	9-11(19)	11-13(21)	13-15(23)
* <u>'King-Red' Russian olive</u>	15-17(25)	9-11(19)	15-17(25)	9-11(19)	11-13(21)	13-15(23)
* Siberian crabapple	10-15(25)	- - (19)	- - (25)	- - (19)	- - (21)	- - (23)
* <u>Siberian elm</u>	25-30(45)	17-21(36)	25-29(44)	19-23(38)	21-25(40)	23-27(42)
Silver maple	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* Siouxlant cotton- wood	35-40(65)	- - (60)	- - (67)	- - (61)	- - (63)	- - (65)
* White willow	15-20(35)	- - (25)	- - (32)	- - (26)	- - (28)	- - (30)

---- Denotes species not adapted.      Preferred species to list on SCS-SOI-5

WBSG 8 - All species listed  
 8K - Only species noted with \*, reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs:

* American plum	10-12(15)	4 (19)	7-8 (13)	- - (10)	5-6 (11)	7-8 (12)
* <u>Amur honeysuckle</u>	8-10(12)	3-4 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
Blue artic willow	6-8 (10)	3 ( 6)	- - (11)	- - ( 7)	- - ( 8)	- - ( 9)
* <u>Blueleaf honeysuckle</u>	8-10(12)	3-4 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
Centennial cotton- easter	8-10(12)	3-4 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
Common chokecherry	8-10(12)	3-4 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
Common chokecherry 'shuberts'	8-10(12)	3-4 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
* <u>Common lilac</u>	8-10(12)	3-4 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
European privet	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* <u>Fourwing saltbush</u>	6-7 ( 9)	3 ( 5)	6 ( 9)	- - ( 6)	3-4 ( 7)	4-5 ( 8)
Golden currant	8-10(12)	3 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
Nanking cherry	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

---- Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 8 - All species noted

8K - only species noted with \*, reduce tree heights 2 feet, shrub heights 1 foot.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs: Cont'd

Peking cotoneaster	8-10(12)	3-4 ( 7)	7 (11)	- - ( 8)	3-5 ( 9)	4-6 (10)
* Redosier dogwood	6-8 (10)	- - ( 5)	- - ( 9)	- - ( 6)	- - ( 7)	- - ( 8)
Saskatoon service berry	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* <u>Siberian peashrub</u> (caragana)	8-12(14)	5 ( 9)	9 (13)	- - (10)	6-7 (11)	7-8 (12)
* <u>Silver buffaloberry</u>	8-10(12)	4 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
* <u>'Sakakawea' silver</u> <u>buffaloberry</u>	8-10(12)	4 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
* <u>Skunkbush sumac</u>	8-10(12)	4 ( 7)	7 (11)	- - ( 8)	5 ( 9)	6 (10)
Western sandcherry	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

---- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 9W  
9C, 9N  
9L

M L R A 's

Species	43, 43a, 43b	10, 10a	10a (East- ern half),	12	25
Common Name	9, 44 47	(Western half)	11, 11a, 11b	13	25a

Tree Heights @ Age 20, Irrigated ( )

Evergreen Trees:

Austrian Pine

Blue Spruce

Douglas-fir

Eastern redcedar

{NONE}

Lodgepole pine

Northern white cedar

Norway spruce

Ponderosa pine

Rocky Mtn. juniper

Scotch pine

White spruce

WBSG 9W - Only species noted by \*

9C, 9N - All species with heights listed, reduce tree heights by 3 feet, shrub heights by 1 foot

9L - All species with heights listed, reduce tree heights by 2 feet.

M L R A 's

Species Common Name	9, 44	43, 43a, 43b 47	10, 10a (Western half)	10a (East- ern half), 11, 11a, 11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees:

Amur maple	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
Arnold Hawthorne	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
* Black cottonwood	18-20(31)	-- (21)	-- (29)	-- (23)	--(25)	--(27)
* <u>Black willow</u>	10-12(24)	-- (12)	-- (20)	-- (14)	--(16)	--(18)
Black locust	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
Bur oak	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
Chinese elm	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
* <u>Golden willow</u>	8-10(22)	-- (12)	-- (20)	-- (14)	--(16)	--(18)
* <u>Green ash</u>	8-10(22)	-- (12)	-- (20)	-- (14)	--(16)	--(18)
Hackberry	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
Honeylocust	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
Idahybrid, poplar	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
'Imperial' Carolina poplar	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --
Laurel willow	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --	-- -- --

-- Denotes species not adapted. \_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 9W - Only species noted by \*.

9C, 9N - All species with heights listed, reduce tree heights by 3 feet, shrub heights by 1 foot.

9L - All species with heights listed, reduce tree heights by 2 feet.

M L R A 's

Species Common Name	9, 44	43, 43a, 43b 47	10, 10a (Western half)	10a (East- ern half), 11, 11a, 11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Deciduous Trees: Cont'd

Lombardi poplar	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Manchurian crabapple	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
McDermand (Harbin) pear	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* Nor'easter cottonwood	18-20(31)	- - (21)	- - (29)	- - (23)	- - (25)	- - (27)
* <u>Plains cottonwood</u>	18-20(31)	- - (21)	- - (29)	- - (23)	- - (25)	- - (27)
Robusta poplar	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* <u>Russian olive</u>	12(18)	5 (10)	11(16)	- - (12)	7(12)	9(14)
* <u>'King-Red' Russian olive</u>	12(18)	5 (10)	11(16)	- - (12)	7(12)	9(14)
Siberian crabapple	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* <u>Siberian elm</u>	19-25(29)	12-18(22)	18-24(28)	- - (22)	14-20(24)	16-22(26)
Silver maple	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Siouxland cotton- wood	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
<u>White willow</u>	18-20(31)	- - (21)	- - (29)	- - (23)	- - (25)	- - (27)

----- Denotes species not adapted. \_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 9W - Only species noted by \*.

9C, 9N - All species with heights listed, reduce tree heights by 3 feet, shrub heights by 1 foot.

9L - All species with heights listed, reduce tree heights by 2 feet.

M L R A 's

Species Common Name	9, 44	43, 43a, 43b 47	10, 10a (Western half)	10a (East- ern half), 11, 11a, 11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs:

American plum	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Amur honeysuckle	6 ( 8)	3 ( 5)	5 ( 7)	- - ( 6)	3 ( 6)	4 ( 6)
Blue artic willow	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Blueleaf honeysuckle	6 ( 8)	3 ( 5)	5 ( 7)	- - ( 6)	3 ( 6)	5 ( 6)
Centennial cotton- easter	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Common chokecherry	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Common chokecherry (shuberts')	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* <u>Common lilac</u>	6 ( 8)	3 ( 5)	5 ( 7)	- - ( 6)	5 ( 7)	5 ( 7)
European privet	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
* Fourwing saltbush	5 ( 7)	1-2 ( 3)	4 ( 6)	- - ( 3)	2 ( 4)	2-3 ( 5)
Golden currant	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -
Nanking cherry	- - - -	- - - -	- - - -	- - - -	- - - -	- - - -

- - - - Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5

WBSG 9W - Only species noted by \*.

9C,9N - All species with heights listed, reduce tree heights by 3 feet, shrub heights by 1 foot.

9L - All species with heights listed, reduce tree heights by 2 feet.

M L R A 's

Species Common Name	9,44	43,43a,43b 47	10, 10a (Western half)	10a (East- ern half), 11,11a,11b	12 13	25 25a
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Tree Heights @ Age 20, Irrigated ( )

Shrubs: Cont'd

Peking cotoneaster	----	----	----	----	----	----
* <u>Redosier dogwood</u>	6-7 (10)	-- (6)	-- (9)	-- (6)	3-4 (7)	4-5 (7)
Saskatoon service berry	----	----	----	----	----	----
* <u>Siberian peashrub</u> (caragana)	6-7 (9)	3-4 (6)	5-6 (8)	-- (6)	3-4 (7)	4-5 (7)
* <u>Silver buffaloberry</u>	6 (8)	2-3 (5)	5 (7)	-- (5)	3 (6)	4 (6)
* <u>'Sakakawea' silver</u> <u>buffaloberry</u>	6 (8)	2-3 (5)	5 (7)	-- (5)	3 (6)	4 (6)
* <u>Skunkbush sumac</u>	6 (8)	2-3 (5)	5 (7)	-- (5)	3 (6)	4 (6)
Western sandcherry	----	----	----	----	----	----

---- Denotes species not adapted.

\_\_\_\_\_ Preferred species to list on SCS-SOI-5