General Soil Map Explanation

For the purpose of this map, the soils of Nebraska have been grouped into 80 soil associations. A soil association is a grouping of soil series geographically associated in a characteristic repeating pattern and directly related to topographic areas such as uplands, terraces and bottom lands. They are numbered in the order of their estimated extent within the state; that is, the association with the most acreage is number 1 and that with the least acreage is number 80 (an estimation of the acreages is given after the association name). The associations are grouped by the dominant type of parent material the soils formed in, for instance: SOILS FORMED DOMINANTLY IN LOESS.

This map is part of a series of soil maps available for Nebraska and contains less detail than most of the other maps. The least detailed soil map available is a page-sized map with the scale of approximately 1: 2,500,000. For more detail, consult one of the 11 General Soil Maps for Nebraska areas at the scale of 1:250,000. The most detail is available in Nebraska's county soil survey reports, where the maps are at a scale of 1:24,000 or larger.

SOILS FORMED DOMINANTLY IN LOESS

2 COLY-ULY-HOLDREGE ASSOCIATION - 4,511,600 acres
COLY: Very deep, strongly sloping to steep, well-and excessively drained, silty soils on uplands. **ULY:** Very deep, gently sloping to steep, well-drained, silty soils on uplands. **HOLDREGE:** Very deep, gently sloping, well-drained, silty soils on uplands.

4 NORA-CROFTON-MOODY ASSOCIATION - 1,614,400 acres
NORA: Very deep, gently sloping to steep, well-drained, silty soils on uplands. **CROFTON:** Very deep, strongly sloping to steep, and somewhat excessively drained, silty soils on uplands. **MOODY:** Very deep, gently sloping to steep, well-drained, silty soils on uplands.

6 NORA-MOODY-JUDSON ASSOCIATION - 1,346,700 acres
NORA: Very deep, nearly level to moderately steep, well-drained, silty soils formed in loess on uplands. **MOODY:** Very deep, nearly level to moderately steep, well-drained, silty soils formed in loess on uplands. **JUDSON:** Very deep, nearly level, well-drained, silty soils formed in colluvium on foot slopes.

7 KUMA-KEITH-COLBY ASSOCIATION - 1,294,500 acres
KUMA: Very deep, nearly level, well-drained, silty soils on uplands. **KEITH:** Very deep, nearly level, well-drained, silty soils on uplands. **COLBY:** Very deep, strongly sloping to steep, well-and excessively drained, silty soils on uplands.

8 HASTINGS-FILLMORE ASSOCIATION - 1,223,500 acres
HASTINGS: Very deep, nearly level to strongly sloping, moderately well-drained, silty soils on uplands and in depressions. **FILLMORE:** Very deep, nearly level, poorly-drained, silty soils with clayey subsoils in depressions.

11 CRETE-HASTINGS-BUTLER ASSOCIATION - 819,000 acres
CRETE: Very deep, nearly level, moderately well-drained, silty soils with clayey subsoils on uplands. **HASTINGS:** Very deep, nearly level to gently sloping, moderately well-drained, silty soils on uplands. **BUTLER:** Very deep, nearly level, somewhat poorly-drained, silty soils with clayey subsoils on uplands.

14 HASTINGS-CRETE-FILLMORE ASSOCIATION - 731,900 acres
HASTINGS: Very deep, nearly level to gently sloping, moderately well-drained, silty soils on uplands. **CRETE:** Very deep, nearly level, moderately well-drained, silty soils with clayey subsoils on uplands. **FILLMORE:** Very deep, nearly level, poorly-drained, silty soils with clayey subsoils in depressions.

17 SHARPSBURG ASSOCIATION - 677,000 acres
Very deep, nearly level to strongly sloping, moderately well-drained, silty soils on uplands.

21 HOLDREGE-ULY-COLY ASSOCIATION - 581,800 acres
HOLDREGE: Very deep, nearly level to strongly sloping, well-drained, silty soils on uplands. **ULY:** Very deep, strongly sloping to steep, well-drained, silty soils on uplands. **COLY:** Very deep, strongly sloping to steep, well-and somewhat excessively drained, silty soils on uplands.

24 HOLDER-ULY-COLY ASSOCIATION - 526,300 acres
HOLDER: Very deep, nearly level to strongly sloping, well-drained, silty soils on uplands. **ULY:** Very deep, nearly level to sleep, well-drained, silty soils on uplands. **COLY:** Very deep,strongly sloping to steep, well-and somewhat excessively drained, silty soils on uplands.

25 MARSHALL-PONCA ASSOCIATION - 515,500 acres
MARSHALL: Very deep, gently sloping to moderately steep, well-drained, silty soils on uplands. **PONCA:** Very deep, gently sloping to moderately steep, well-drained, silty soils on uplands.

31 MONONA-IDA ASSOCIATION - 423,900 acres
MONONA: Very deep, strongly sloping to very steep, well-to excessively drained silty soils on uplands. **IDA:** Deep, strongly sloping to very steep, well-to excessively drained silty soils on uplands.

33 COLY-ULY ASSOCIATION - 411,100 acres
COLY: Very deep, strongly sloping to very steep well-to excessively drained, silty soils on uplands. **ULY:** Very deep, strongly sloping to steep, well-drained, silty soils on uplands.

37 CROFTON-ALCESTER-NORA ASSOCIATION - 381,000 acres
CROFTON: Very deep, gently sloping to very steep, well-to excessively drained, silty soils on uplands. **ALCESTER:** Very deep, gently sloping, well-drained, silty soils formed on foot slopes. **NORA:** Very deep, gently sloping to moderately steep, well-drained, silty soils on uplands.

53 HASTINGS-HOLDER ASSOCIATION - 241,600 acres
HASTINGS: Very deep, nearly level to gently sloping, moderately well-drained, silty soils on uplands. **HOLDER:** Very deep, nearly level to gently sloping, well-drained, silty soils on uplands.

72 MOODY-FILLMORE ASSOCIATION - 115,900 acres
MOODY: Very deep, nearly level to gently sloping, well-drained, silty soils on high terraces. **FILLMORE:** Very deep, nearly level, poorly drained, silty soils with clayey subsoils in depressions.

74 SHARPSBURG-FILLMORE ASSOCIATION - 105,400 acres
SHARPSBURG: Very deep, nearly level to gently sloping, well-drained, silty soils on high terraces. **FILLMORE:** Very deep, nearly level, poorly drained, silty soils with clayey subsoils in depressions.

76 ONITA-RELIANCE-REE ASSOCIATION - 91,500 acres
ONITA: Very deep, nearly level, moderately well-drained, silty soils on uplands. **RELIANCE:** Very deep, nearly level to strongly sloping, moderately well-drained, silty soils on uplands. **REE:** Very deep, nearly level to moderately steep, well-drained, loamy soils on uplands.

SOILS FORMED DOMINANTLY IN SANDY AND LOAMY MATERIALS

15 HERSH-VALENTINE ASSOCIATION - 699,800 acres
HERSH: Deep, nearly level to moderately steep, well-to excessively drained, loamy soils formed in eolian material on uplands. **VALENTINE:** Deep, nearly level to moderately steep, excessively drained, sandy soils formed in eolian sand on uplands.

18 VALENT -WOODLY-JAYEM ASSOCIATION - 662,100 acres
VALENT: Deep, nearly level to moderately steep, excessively drained, sandy soils formed in eolian sand on uplands. **WOODLY:** Deep, nearly level to gently sloping, well-drained, loamy soils formed in eolian material on uplands. **JAYEM:** Deep, nearly level to moderately steep, well-to somewhat excessively drained, loamy soils formed in eolian material on uplands.

27 THURMAN-BOELUS-NORA ASSOCIATION - 488,500 acres
THURMAN: Deep, nearly level to moderately steep, somewhat excessively drained, sandy soils formed in eolian sand. **BOELUS:** Deep, nearly level to strongly sloping, well-drained, sandy over loamy soils formed in eolian sand over loess on uplands. **NORA:** Deep, nearly level to moderately steep, well-drained, silty soils formed in loess on uplands.

36 JAYEM-SARBEN-VALENT ASSOCIATION - 401,000 acres
JAYEM: Deep, nearly level to moderately steep, well-to somewhat excessively drained, loamy soils formed in eolian material on uplands. **SARBEN:** Deep, nearly level to moderately steep, well-to somewhat excessively drained, loamy soils formed in eolian material on uplands. **VALENT:** Deep, nearly level to moderately steep, excessively drained, sandy soils formed in eolian sand on uplands.

40 SATANTA-JAYEM-CANYON ASSOCIATION - 358,000 acres
SATANTA: Deep, nearly level to strongly sloping, well-drained, loamy soils formed in eolian material on uplands. **JAYEM:** Deep, nearly level to moderately steep, well-to somewhat excessively drained, loamy soils formed in eolian material on uplands. **CANYON:** Shallow, nearly level to moderately steep, excessively drained, loamy soils formed in eolian material and weathered sandstone on uplands.

47 KENESAW-HERSH ASSOCIATION - 278,500 acres
KENESAW: Deep, nearly level to strongly sloping, well-drained, silty soils formed in loess uplands and terraces. **HERSH:** Deep, nearly level to strongly sloping, well-drained, loamy soils formed in eolian sand on uplands and terraces.

51 BAZILE-THURMAN-BOELUS ASSOCIATION - 244,900 acres
BAZILE: Moderately deep over sand, nearly level to moderately steep, well-drained, silty soils formed in loess and eolian sand on uplands. **THURMAN:** Deep, nearly level to moderately steep, somewhat excessiveiy drained, sandy soils formed in eolian sand on uplands. **BOELUS:** Deep, nearly level to gently sloping, well-drained, sandy over loamy soils formed in eolian sand over loess on uplands.

54 MOODY-THURMAN ASSOCIATION - 232,400 acres
MOODY: Deep, nearly level to strongly sloping, well-drained, silty soils lormed in loess on uplands. **THURMAN:** Deep, nearly level to strongly sloping, somewhat excessively drained, sandy soils formed in eolian sand on uplands.

SOILS FORMED DOMINANTLY IN LOESS AND TILL

5 WYMORE-PAWNEE-BURCHARD ASSOCIATION - 1,555,300 acres
WYMORE: Very deep, nearly level to strongly sloping, moderately well-drained, silty soils with clayey subsoils on uplands. **PAWNEE:** Very deep, nearly level to strongly sloping, moderately well-drained, loamy soils with clayey subsoils on uplands. **BURCHARD:** Very deep, nearly level to moderately steep, well-drained, loamy soils with clayey subsoils on uplands.

29 CRETE-MAYBERRY-BURCHARD ASSOCIATION - 436,000 acres
CRETE: Very deep, nearly level to gently sloping, moderately well-drained, silty soils with clayey subsoils on uplands. **MAYBERRY:** Very deep, nearly level to strongly sloping, moderately well-drained, loamy soils with clayey subsoils on uplands. **BURCHARD:** Very deep, nearly level to moderately steep, well-drained, loamy soils with clayey subsoils on uplands.

43 SHARPSBURG-PAWNEE-STEINAUER ASSOCIATION - 339,300 acres
SHARPSBURG: Very deep, nearly level to strongly sloping, moderately well-drained, silty soils with clayey subsoils on uplands. **PAWNEE:** Very deep, nearly level to strongly sloping, moderately well-drained,loamy soils with clayey subsoils on uplands. **STEINAUER:** Very deep, strongly sloping to steep, excessively drained, loamy soils on uplands.

SOILS FORMED DOMINANTLY IN SANDSTONE, SILTSTONE, LIMESTONE AND SHALE

9 BUSHER-SARBEN-TASSEL ASSOCIATION - 933,900 acres
BUSHER: Deep, gently sloping to steep, well-to somewhat excessively drained, loamy soils formed in eolian material and weathered sandstone on uplands. **SARBEN:** Very deep, gently sloping to steep, well-drained, loamy soils formed in eolian material on uplands. **TASSEL:** Shallow, nearly level to steep, well-to somewhat excessively drained, loamy soils formed in weathered sandstone and eolian material on uplands.

10 ROSEBUD-ALLIANCE-CANYON ASSOCIATION - 894,000 acres
ROSEBUD: Moderately deep, nearly level to strongly sloping, well-drained, loamy soils formed in weathered sandstone and eolian material on uplands. **ALLIANCE:** Very deep, nearly level to strongly sloping, well-drained, silty soils formed in loess and weathered sandstone on uplands. **CANYON:** Shallow, nearly level to steep, well-to somewhat excessively drained, loamy soils formed in weathered sandstone and eolian material on uplands.

22 TASSEL-BUSHER-ROCK OUTCROP ASSOCIATION - 578,100 acres
TASSEL: Shallow, strongly sloping to very steep, somewhat excessively drained, loamy soils formed in weathered sandstone and eolian material on uplands. **BUSHER:** Deep, strongly sloping to steep, well-to somewhat excessively drained, loamy soils formed in weathered sandstone and eolian material on uplands. **ROCK OUTCROP:** Very shallow, very steep, excessively drained, weathered sandstone on uplands.

34 LABU-BRISTOW-SANSARC ASSOCIATION - 406,700 acres
LABU: Moderately deep, gently sloping to steep, well-drained, clayey soils formed in weathered shale on uplands. **BRISTOW:** Shallow, gently sloping to very steep, well-drained, clayey soils formed in weathered shale on uplands. **SANSARC:** Shallow, gently sloping to very steep, well-drained, clayey soils formed in weathered shale on uplands.

44 PIERRE-SAMSIL-KYLE ASSOCIATION - 316,000 acres
PIERRE: Moderately deep, nearly level to steep, well-drained, clayey soils formed in weathered shale on uplands. **SAMSIL:** Shallow, nearly level to steep, well-drained, clayey soils formed in weathered shale on uplands. **KYLE:** Very deep, nearly level to gently sloping, well-drained, clayey soils formed in weathered shale on uplands.

46 CANYON-ALLIANCE-ROSEBUD ASSOCIATION - 279,000 acres
CANYON: Shallow, gently sloping to steep, well-to somewhat excessively drained, loamy soils formed in weathered sandstone and eolian material on uplands. **ALLIANCE:** Deep, gently to strongly sloping, well-drained, silty soils formed in loess on uplands. **ROSEBUD:** Moderately deep, gently to strongly sloping, well-drained, loamy soils formed in weathered sandstone and eolian materials on uplands.

48 TASSEL-MCKELVIE-ROCK OUTCROP ASSOCIATION - 270,500 acres
TASSEL: Shallow, moderately steep to very steep, somewhat excessively drained, loamy soils formed in weathered sandstone and eolian material on uplands. **MCKELVIE:** Very deep, gently sloping to steep, excessively drained, sandy soils formed in eolian sand and weathered sandstone on uplands. **ROCK OUTCROP:** Very shallow, very steep, excessively drained, weathered sandstone on uplands.

59 BUFTON-ORELLA-NORREST ASSOCIATION - 220,300 acres
BUFTON: Deep, nearly level to sleep, well-drained, silty soils formed in shale and clayey sediments on uplands and terraces. **ORELLA:** Shallow, nearly level to steep, well-drained, clayey soils formed in shale and clayey sediments on uplands. **NORREST:** Moderately deep, nearly level to steep, well-drained, silty soils formed in shale and clayey sediments on uplands.

62 CANYON-BRIDGET-OGLALA ASSOCIATION - 212,400 acres
CANYON: Shallow, gently sloping to steep, well-to somewhat excessively drained, loamy soils formed in weathered sandstone and eolian material on uplands. **BRIDGET:** Very deep, gently sloping to steep, well-drained, loamy soils formed in loamy sediments on terraces and foot slopes. **OGLALA:** Deep, gently sloping to steep, well-drained, silty soils formed in weathered sandstone and eolian material on uplands.

64 CANYON-ROSEBUD-ROCK OUTCROP ASSOCIATION - 196,400 acres
CANYON: Shallow, gently sloping to steep, well- to somewhat excessively drained, loamy soils formed in weathered sandstone and eolian material on uplands. **ROSEBUD:** Moderately deep, gently to strongly sloping, well-drained, loamy soils formed in weathered sandstone and eolian materials on uplands. **ROCK OUTCROP:** Very shallow, very steep, excessively drained, weathered sandstone on uplands.

73 BRUNSWICK-PAKA-SIMEON ASSOCIATION - 106,200 acres
BRUNSWICK: Moderately deep, gently sloping to steep, well-drained, loamy soils formed in weathered sandstone and eolian materials on uplands. **PAKA:** Deep, nearly level to moderately steep, well-drained, silty soils formed in weathered siltstone and eolian materials on uplands. **SIMEON:** Deep, nearly level to steep, excessively drained, sandy soils formed in sandy sediments on uplands.

78 KIPSON-SOGN-WYMORE ASSOCIATION - 85,200 acres
KIPSON: Shallow and very shallow, gently sloping to steep, somewhat excessively drained, loamy soils formed in weathered shale on uplands. **SOGN:** Shallow and very shallow, moderately steep to steep, somewhat excessively drained, loamy soils formed in weathered limestone on uplands. **WYMORE:** Very deep, nearly level to strongly sloping, moderately well-drained, silty soils formed in loess on uplands.

79 LANCASTER-BENFIELD-CRETE ASSOCIATION - 50,200 acres
LANCASTER: Moderately deep, gently sloping to moderately steep, well-drained, loamy soils formed in weathered sandstone and shale on uplands. **BENFIELD:** Moderately deep, gently sloping to steep, well-drained, silty soils with clayey subsoils formed in weathered shale and loess on uplands. **CRETE:** Very deep, nearly level to strongly sloping, well-drained, silty soils with clayey subsoils formed in loess on uplands.

80 LORETTO-REDSTOE-GAVINS ASSOCIATION - 46,800 acres
LORETTO: Very deep, gently to strongly sloping, well-drained, loamy soils formed in eolian sediments on uplands. **REDSTOE:** Moderately deep, gently to strongly sloping, well-drained, silty soils formed in weathered, chalky limestone and loess on uplands. **GAVINS:** Shallow, gently sloping to steep, well-and somewhat excessively drained, loamy soils formed in weathered, chalky limestone and loess on uplands.

SOILS FORMED DOMINANTLY IN ALLUVIUM OR LOESS ON STREAM TERRACES AND BOTTOMLANDS

13 TRIPP-MITCHELL-ALICE ASSOCIATION - 760,000 acres
TRIPP: Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and alluvium on stream terraces. **MITCHELL:** Deep, nearly level to gently sloping, well-drained, silty soils formed in colluvium and alluvium on stream terraces. **ALICE:** Deep, nearly level to gently sloping, well-drained, loamy soils formed in eolian sand on stream terraces.

30 HORD-COZAD-BOEL ASSOCIATION - 436,300 acres
HORD: Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and alluvium on stream terraces. **COZAD:** Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and alluvium on stream terraces. **BOEL:** Deep, nearly level, somewhat poorly drained, sandy soils formed in alluvium on bottomlands.

35 COZAD-HORD ASSOCIATION - 401,400 acres
COZAD: Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and alluvium on stream terraces and foot slopes. **HORD:** Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and alluvium on stream terraces and foot slopes.

41 BRIDGET-TRIPP-McCOOK ASSOCIATION - 346.800 acres
BRIDGET: Deep, nearly level to strongly sloping, well-drained, silty soils formed in colluvium and loess on foot slopes and stream terraces. **TRIPP:** Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and alluvium on stream terraces. **McCOOK:** Deep, nearly level, sloping, well-drained, silty soils formed in alluvium on bottomlands.

45 HORD-McCOOK-INAVALE ASSOCIATION - 283,800 acres
HORD: Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and alluvium on stream terraces. **McCOOK:** Deep, nearly level, well-drained, silty soils formed in alluvium on bottomlands. **INAVALE**: Deep, gently to strongly sloping, somewhat excessively drained, sandy soils formed in alluvium on stream terraces and bottomlands.

58 HORD-HALL ASSOCIATION - 225,000 acres
HORD: Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and alluvium on stream terraces. **HALL:** Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and alluvium on stream terraces.

SOILS FORMED DOMINANTLY IN SANDY AND LOAMY MATERIALS UNDERLAIN BY COARSE SAND AND GRAVEL

23 JANSEN-O'NEILL-MEADIN ASSOCIATION - 554,600 acres
JANSEN: Moderately deep over sand and gravel, nearly level to moderately steep, well-drained, loamy soils formed in loamy sediments over sand and gravel on uplands. **O'NEILL:** Moderately deep over sand and gravel, nearly level to moderately steep, well-drained, loamy soils formed in loamy sediments over sand and gravel on uplands. **MEADIN:** Shallow over sand and gravel, nearly level to moderately steep, excessively drained, sandy soils formed in sandy sediments over sand and gravel on uplands.

65 DIX-ALTVAN-COLBY ASSOCIATION - 184,700 acres
DIX: Shallow over gravelly sand, nearly level to steep, excessively drained, loamy soils formed in sandy and gravelly sediments on uplands and terraces. **ALTVAN:** Moderately deep over gravelly sand, nearly level to strongly sloping, well-drained, loamy soils formed in loamy sediments over sand and gravel on uplands and terraces. **COLBY:** Deep, gently sloping to steep, well-and excessively drained, silty soils formed in loess on uplands.

71 DUNDAY-PIVOT ASSOCIATION - 123,100 acres
DUNDAY: Deep, nearly level to gently sloping, somewhat excessively drained, sandy soils formed in eolian sand on uplands. **PIVOT:** Moderately deep over sand and gravel, nearly level to gently sloping, somewhat excessively drained, sandy soils formed in eolian sand over sand and gravel on terraces.

SOILS FORMED DOMINANTLY IN ALLUVIUM ON BOTTOMLANDS

20 HOBBS-HORD ASSOCIATION - 594,900 acres
HOBBS: Deep, nearly level, well-drained, silty soils formed in alluvium on bottomlands. **HORD:** Deep, nearly level and gently sloping, well-drained, silty soils formed in alluvium and loess on stream terraces.

28 SHELL-MUIR-HOBBS ASSOCIATION - 459,000 acres
SHELL: Deep, nearly level, well-drained, silty soils formed in alluvium on bottomlands. **MUIR:** Deep, nearly level, well-drained, silty soils formed in alluvium and loess on stream terraces. **HOBBS:** Deep, nearly level, well-drained, silty soils formed in alluvium on bottomlands.

38 ALBATON-HAYNIE-SARPY ASSOCIATION - 380,200 acres
ALBATON: Deep, nearly level, poorly drained, clayey soils formed in alluvium on bottomlands. **HAYNIE:** Deep, nearly level, well-drained, silty soils formed in alluvium on bottomlands. **SARPY:** Deep, nearly level, excessively drained, sandy soils formed in alluvium on bottomlands.

39 GIBBON-GOTHENBURG-PLATTE ASSOCIATION - 379,000 acres
GIBBON: Deep, nearly level, somewhat poorly drained, silty soils formed in alluvium on bottomlands. **GOTHENBURG:** Shallow over sand and gravel, nearly level, poorly drained, sandy soils formed in alluvium on bottomlands. **PLATTE:** Shallow over sand and gravel, nearly level, poorly drained, sandy soils formed in alluvium on bottomlands.

49 LAWET-GOTHENBURG-PLATTE ASSOCIATION - 269,100 acres
LAWET: Deep, nearly level, somewhat poorly drained, loamy soils formed in alluvium on bottomlands. **GOTHENBURG:** Shallow over sand and gravel, nearly level, poorly drained, sandy soils formed in alluvium on bottomlands. **PLATTE:** Shallow over sand and gravel, nearly level, poorly drained, sandy soils formed in alluvium on bottomlands.

50 GIBBON-ZOOK ASSOCIATION - 258,900 acres
GIBBON: Deep, nearly level, somewhat poorly drained, silty soils formed in alluvium on bottomlands. **ZOOK:** Deep, nearly level, poorly drained, clayey soils formed in alluvium on bottomlands.

56 ALMERIA-BOLENT-CALAMUS ASSOCIATION - 227,600 acres
ALMERIA: Deep, nearly level, poorly and very poorly drained, sandy soils formed in alluvium. **BOLENT:** Deep, nearly level, somewhat poorly drained, sandy soils formed in alluvium. **CALAMUS:** Deep, nearly level to gently sloping, moderately well-drained, sandy soils formed in alluvium.

60 GOTHENBURG-PLATTE-LAWET ASSOCIATION - 214,800 acres
GOTHENBURG: Shallow over sand and gravel, nearly level, poorly drained, sandy soils formed in alluvium on bottomlands. **PLATTE:** Shallow over sand and gravel, nearly level, poorly drained, sandy soils formed in alluvium on bottomlands. **LAWET:** Deep, nearly level, somewhat poorly drained, loamy soils formed in alluvium on bottomlands.

61 KENNEBEC-NODAWAY-ZOOK ASSOCIATION - 212,600 acres
KENNEBEC: Deep, nearly level, moderately well-drained, silty soils formed in alluvium on bottomlands. **NODAWAY:** Deep, nearly level, moderately well-drained, silty soils formed in alluvium on bottomlands. **ZOOK:** Deep, nearly level, poorly drained, silty soils formed in alluvium on bottomlands.

66 GIBBON-WANN ASSOCIATION - 183,900 acres
GIBBON: Deep, nearly level, somewhat poorly drained, silty soils formed in alluvium on bottomlands. **WANN:** Deep, nearly level, somewhat poorly drained, loamy soils formed in alluvium on bottomlands.

70 INAVALE-BOEL-BARNEY ASSOCIATION - 155,838 acres
INAVALE: Deep, nearly level to gently sloping, somewhat excessively drained, sandy soils formed in alluvium on bottomlands. **BOEL:** Deep, nearly level, somewhat poorly drained, sandy soils formed in alluvium on bottomlands. **BARNEY:** Shallow over sand and gravel, nearly level, poorly drained, sandy soils formed in alluvium on bottomlands.

77 HAVERSON-TRIPP-GLENBURG ASSOCIATION - 91,300 acres
HAVERSON: Deep, nearly level, well-drained, loamy soils formed in alluvium on bottomlands. **TRIPP:** Deep, nearly level and gently sloping, well-drained, loamy soils formed in loess and alluvium on stream terraces. **GLENBURG:** Deep, nearly level, well-drained, loamy soils formed in alluvium on bottomlands.

75 JAYEM-KEITH ASSOCIATION - 98,800 acres
JAYEM: Deep, nearly level to gently sloping, well-drained, loamy soils formed in eolian sand on uplands. **KEITH:** Deep, nearly level to gently sloping, well-drained, silty soils formed in loess on uplands.

SOILS FORMED DOMINANTLY IN LOESS, SANDSTONE, SILTSTONE AND LIMESTONE

12 ALLIANCE-ROSEBUD-KUMA ASSOCIATION - 811,200 acres
ALLIANCE: Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and weathered sandstone on uplands. **ROSEBUD:** Moderately deep, nearly level to gently sloping, well-drained, loamy soils formed in loess and weathered sandstone on uplands. **KUMA:** Very deep, nearly level, well-drained, silty soils formed in loess on uplands.

32 KUMA-SATANTA-ROSEBUD ASSOCIATION - 411,400 acres
KUMA: Very deep, nearly level to gentlysloping, well-drained, silty soils formed in loess on uplands. **SATANTA:** Very deep, nearly level to gently sloping, well-drained, loamy soils formed in eolian material on uplands. **ROSEBUD:** Moderately deep, nearly level to gently sloping, well-drained, loamy soils formed in weathered sandstone on uplands.

42 KEITH- ALLIANCE -ROSEBUD ASSOCIATION: 345,300 acres
KEITH: Very deep, nearly level to gently sloping, well-drained, silty, loamy soils formed in loess on uplands. **ALLIANCE:** Deep, nearly level to gently sloping, well-drained, silty soils formed in loess and weathered sandstone on uplands. **ROSEBUD:** Moderately deep, nearly level to gently sloping, well-drained, loamy soils formed in weathered sandstone on uplands.

67 KADOKA-KEITH-MITCHELL ASSOCIATION- 176,300 acres
KADOKA: Deep, nearly level to strongly sloping, well-drained, silty soils formed in loess and weathered siltstone on uplands. **KEITH:** Very deep, nearly level to strongly sloping, well-drained, silty soils formed in loess on uplands. **MITCHELL:** Very deep, nearly level to steep, well-drained, silty soils formed in loess and weathered siltstone on uplands and foot slopes.

69 NUCKOLLS-HOLDREGE-CAMPUS ASSOCIATION - 159,400 acres
NUCKOLLS: Very deep, gently sloping to steep, well-drained, silty soils formed in loess on uplands. **HOLDREGE:** Very deep, gently to strongly sloping, well-drained, silty soils formed in loess on uplands. **CAMPUS:** Moderately deep, gently sloping to steep, well-drained, loamy soils formed in loess and weathered sandstone on uplands.

SOILS FORMED DOMINANTLY IN EOLIAN SANDS AND ALLUVIUM IN SANDHILLS

1 VALENTINE ASSOCIATION - 9,313,600 acres
Deep, gently sloping to moderately steep, excessively drained, sandy soils formed in eolian sand on uplands in sandhills.

3 VALENTINE-ELSMERE-TRYON ASSOCIATION - 2,106,900 acres
VALENTINE: Deep, nearly level to moderately steep, excessively drained, sandy soils formed in eolian sand on uplands in sandhills. **ELSMERE:** Deep, nearly level, somewhat poorly drained, sandy soils formed in alluvium and eolian sand in valleys in sandhills. **TRYON:** Deep, nearly level, poorly drained, sandy soils formed in alluvium and eolian sand in valleys in sandhills.

16 VALENTINE-ELS-WILDHORSE ASSOCIATION - 683,600 acres
VALENTINE: Deep, nearly level to moderately steep, excessively drained, sandy soils formed in eolian sand on uplands in sandhills. **ELS:** Deep, nearly level, somewhat poorly drained, sandy soils formed in alluvium and eolian sand in valleys in sandhills. **WILDHORSE:** Deep, nearly level, somewhat poorly drained, sandy soils formed in alluvium and eolian sand in valleys in sandhills; these soils are saline-alkali.

19 ELS-VALENTINE-IPAGE ASSOCIATION - 637,3000 acres
ELS: Deep, nearly level, somewhat poorly drained, sandy soils formed in alluvium and eolian sand in valleys in sandhills. **VALENTINE:** Deep, nearly level to strongly sloping, excessively drained, sandy soils formed in eolian sand on uplands in sandhills. **IPAGE:** Deep, nearly level to very gently sloping, moderately well-drained, sandy soils formed in eolian sand and alluvium in valleys in sandhills.

26 ELSMERE-IPAGE-LOUP ASSOCIATION - 495,400 acres
ELSMERE: Deep, nearly level, somewhat poorly drained, sandy soils formed in alluvium and eolian sand in valleys in sandhills. **IPAGE:** Deep, nearly level and very gently sloping, moderately well-drained, sandy soils formed in eolian sand and alluvium in valleys in sandhills. **LOUP:** Deep, nearly level, poorly drained, sandy soils formed in alluvium and eolian sand in valleys in sandhills.

52 VALENT-SARBEN-OTERO ASSOCIATION - 244,800 acres
VALENT: Deep, nearly level to steep, excessively drained, sandy soils formed in eolian sand on uplands.**SARBEN:** Deep, nearly level to steep, well-to somewhat excessively drained, loamy soils formed in eolian material on uplands.**OTERO:** Deep, nearly level to steep, well-to somewhat excessively drained, loamy soils formed in eolian material on uplands and foot slopes.

55 VALENTINE-TASSEL ASSOCIATION - 228,000 acres
VALENTINE: Deep, gently sloping to steep, excessively drained, sandy soils formed in eolian sand. **TASSEL:** Shallow, gently sloping to steep, excessively drained, loamy soils formed in eolian material and weathered sandstone on uplands.

57 VALENTINE-THURMAN ASSOCIATION - 223,300 acres
VALENTINE: Deep, nearly level to moderately steep, excessively drained, sandy soils formed in eolian sands on uplands. **THURMAN:** Deep, nearly level to moderately steep, somewhat excessively drained, sandy soils formed in eolian sands on uplands.

63 VALENT ASSOCIATION - 197,000 acres
Deep, gently sloping to moderately steep, excessively drained, sandy soils formed in eolian sands on uplands.

68 VALENTINE-HENNINGS-RONSON ASSOCIATION - 168,300 acres
VALENTINE: Deep, gently sloping to strongly sloping, excessively drained, sandy soils formed in eolian sand on uplands. **HENNINGS:** Deep, gently to strongly sloping, well-drained, loamy soils formed in eolian material on uplands. **RONSON:** Moderately deep, gently sloping to rolling, well-drained, loamy soils formed in eolian material and weathered sandstone on uplands.