



NATURAL
RESOURCES
CONSERVATION
SERVICE

SOIL SURVEY LEGEND OF MINNESOTA

Minnesota Cooperative Soil Survey

August 2002

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SOIL SURVEY MAPPING LEGEND MINNESOTA

SOIL SURVEY MAPPING LEGENDS FOR MINNESOTA

CURRENT MAP UNIT SYMBOLS BY MLRA (Since January, 2000)

MAP UNIT SYMBOLS BY THE HISTORIC STATE LEGEND

(June 1975 to January 2000 - included for information only as this legend is frozen)

MLRA MAP UNIT SYMBOLS

The map unit symbols currently used in Minnesota are based on the MLRA the map unit is correlated. The first letter of the map unit symbol is a letter that is connotative of the MLRA. The current legend has symbols for MLRA-56 (I), MLRA-88 (B), MLRA-91 (D), MLRA-92 (E), MLRA-93 (F), MLRA-102A (J), and MLRA-103 (L). Other MLRA's not yet included in this legend are MLRA-90 (C), MLRA-104 (M) and MLRA-105 (N). The number after the letter is a sequential number as MLRA legends are built. The last letter is the traditional slope class (A through G). A number 2 may occur as the last digit if the unit is eroded. Examples:

B37B Cantlin-Hiwood complex, 0 to 4 percent slopes

L37B Angus loam, morainic, 2 to 5 percent slopes

J44C2 Esmond-Heimdal complex, 6 to 12 percent slopes, eroded

D1B Anoka and Zimmerman soils, terrace, 2 to 6 percent slopes

A5A Roscommon muck, depressionnal, 0 to 1 percent slopes

There are several miscellaneous map units that can occur in any MLRA and are not specific to any one region. They include map units such as:

GP Pits, gravel-Udipsamments complex

M-W Water, miscellaneous

U3 Udorthents, loam (cut and fill)

IP Pits, Iron Mine

The suggestion is to have one data mapunit for these units that any subset could link to without developing their own unique data mapunit.

MLRA numbers will only be assigned by the appropriate Region 10 correlator to avoid duplication and overlap. Map unit symbols will normally be assigned during a formal progress review and documented in the review report.

HISTORIC STATE LEGEND

This legend was in affect from June, 1975 until January, 2000. It is provided for information about past map unit symbols. It is now considered inactive and frozen.

1. Map Units and Their Symbols

ALPHABETICAL LISTS

- a. MLRA 56
 - I1 AUGSBURG LOAM
 - I2 AUGSBURG VERY FINE SANDY LOAM
 - I3 BERNER MUCK
 - I4 BERNER, ROSEWOOD AND STRATHCONA SOILS, SEEPY
 - I5 BORUP LOAM
 - I6 BORUP VERY FINE SANDY LOAM
 - I7 BOWSTRING-FLUVAQUENTS COMPLEX, FREQUENTLY FLOODED
 - I8 CATHRO MUCK
 - I9 CLEARWATER CLAY
 - I10 CLEARWATER MUCKY LOAM, DEPRESSIONAL
 - I11 DEERWOOD MUCK
 - I12 ECKVOLL LOAMY FINE SAND
 - I13 ESPELIE FINE SANDY LOAM
 - I14 FAIRDALE SILT LOAM, OCCASIONALLY FLOODED
 - I15 FLAMING LOAMY FINE SAND
 - I16 FLUVAQUENTS, FREQUENTLY FLOODED-HALUDOLLS COMPLEX
 - I17 FOLDAHL FINE SANDY LOAM
 - I18 FOLDAHL LOAMY FINE SAND
 - I19 FOXHOME SANDY LOAM
 - I20 FOXLAKE LOAM
 - I21 FRAM LOAM
 - I23 GLYNDON VERY FINE SANDY LOAM
 - I22 GLYNDON LOAM
 - I24 GRIMSTAD FINE SANDY LOAM
 - I25 HAMAR LOAMY FINE SAND
 - I26 HAMERLY LOAM
 - I27 HAMRE MUCK
 - I28 HANGAARD SANDY LOAM
 - I29 HATTIE CLAY
 - I30 HEDMAN LOAM
 - I31 HEDMAN-FRAM COMPLEX
 - I32 HILAIRE FINE SANDY LOAM
 - I33 HILAIRE LOAMY FINE SAND
 - I34 HUOT FINE SANDY LOAM
 - I35 KARLSRUDE SANDY LOAM
 - I36 KITTSOON LOAM
 - I37 KRATKA AND STRATHCONA SOILS, DEPRESSIONAL
 - I38 KRATKA FINE SANDY LOAM
 - I39 LINVELDT FINE SANDY LOAM
 - I40 MADDOCK LOAMY FINE SAND
 - I42 MARKEY MUCK, PONDED
 - I41 MARKEY MUCK
 - I43 MAVIE FINE SANDY LOAM
 - I44 NEWFOLDEN LOAM
 - I45 NORTHWOOD MUCK
 - I46 PITS, GRAVEL AND SAND

I47	POPPLETON FINE SAND
I48	RADIUM LOAMY SAND
I49	RAUVILLE SILTY CLAY LOAM
I50	REINER FINE SANDY LOAM
I51	REINER LOAMY FINE SAND
I52	REIS-CLEARWATER COMPLEX
I53	ROLISS LOAM
I54	ROLISS LOAM, DEPRESSIONAL
I55	ROSEWOOD FINE SANDY LOAM
I56	ROSEWOOD-VENLO COMPLEX
I57	SANDBERG LOAMY SAND
I58	SEELYEVILLE MUCK
I59	SMILEY LOAM
I60	SMILEY MUCKY LOAM, DEPRESSIONAL
I61	STRANDQUIST LOAM
I70	STRATHCONA FINE SANDY LOAM
I62	SYRENE SANDY LOAM
I63	THIEFRIVER FINE SANDY LOAM
I64	ULEN FINE SANDY LOAM
I65	ULEN LOAMY FINE SAND
I66	VALLERS LOAM
I67	WHEATVILLE LOAM
I68	WHEATVILLE VERY FINE SANDY LOAM
I69	WYANDOTTE CLAY LOAM

b.	MLRA 57
A16	ASHLAKE-SUOMI-EFFIE COMPLEX
A14	BALKAN, DEPRESSIONAL-BALKAN COMPLEX, STONY
A25	BELTRAMI-TALMOON COMPLEX
A12	DAYBROOK SANDY LOAM
A15	EFFIE-ASHLAKE COMPLEX
A18	EFFIE-HAMRE, DEPRESSIONAL COMPLEX
A1	GRAYCALM-MENAHGA COMPLEX
A2	GRAYCLAM-MENAHGA-LEANDER COMPLEX, PITTED
A9	GREATSCOTT LOAM
A10	GREATSCOTT-GREATSCOTT SANDY SUBSTRATUM COMPLEX, STONY
A8	GREATSCOTT-NASHWAUK-BALKAN, DEPRESSIONAL, STONY
A6	KEEWATIN LOAM
A11	KEEWATIN-BALKAN COMPLEX
A7	KEEWATIN-NASHWAUK COMPLEX, STONY
A20	KELLIHER-BELTRAIM COMPLEX
A4	MEEHAN LOAMY SAND
A5	ROSCOMMON MUCK, DEPRESSIONAL
A13	SHENANGO SANDY LOAM
A17	SUOMI-ASHLAKE COMPLEX
A22	TALMOON-BELTRAMI COMPLEX
A19	TALMOON-HAMRE, DEPRESSIONAL COMPLEX
A3	WURTSMITH-FRIENDSHIP COMPLEX

c. MLRA 88

B3 ALANGO-INDUS COMPLEX

B5 ALANGO-TAYLOR-WOODSLAKE, DEPRESSIONAL, COMPLEX

B134 ALDENLAKE SANDY LOAM

B133 ALDENLAKE-PEQUAYWAN LOAM

B24 ASHLAKE-SUOMI-EFFIE COMPLEX

B107 BADEN MUCKY SILT LOAM

B8 BEARVILLE LOAMY SAND

B211 BERNER AND CATHRO SOILS, PONDED

B205 BERNER MUCK, DEPRESSIONAL

B123 BLACKHOOF MUCK

B51 BLOMFORD-NORTHWOOD, DEPRESSIONAL COMPLEX

B109 BOWSTRING AND FLUVAQUENTS SOILS, FREQUENTLY
FLOODED

B22 BRICKTON-AQUEPTS, RUBBLY-HASSMAN, DEPRESSIONAL
COMPLEX

B20 BRICKTON-BABBITT COMPLEX

B19 BRICKTON-DALBO-HASSMAN, DEPRESSIONAL COMPLEX

B18 BRICKTON-DORA, DEPRESSIONAL COMPLEX

B21 BRICKTON-EAGLESNEST COMPLEX

B28 BUHL LOAM

B37 CANTLIN-HIWOOD COMPLEX

B36 CANTLIN-SARTELL COMPLEX

B108 CATHRO MUCK

B202 CATHRO MUCK, DEPRESSIONAL, MLRA-88

B201 CHILGREN FINE SANDY LOAM

B13 CONIC-INSULA-ROCK OUTCROP COMPLEX

B38 CORMANT LOAMY FINE SAND, DEPRESSIONAL

B44 CUTAWAY-ECKVOLL COMPLEX

B26 DAISYBAY-GREENWOOD COMPLEX

B76 DEFORD-LEAFRIVER, DEPRESSIONAL COMPLEX

B150 DINHAM-DULUTH COMPLEX

B130 DULUTH AND DULUTH, SANDY SUBSTRATUM AND ELLSBURG
SOILS

B131 DULUTH AND DULUTH, SANDY SUBSTRATUM SOILS

B126 DULUTH SILT LOAM

B125 DULUTH SILT LOAM, MODERATELY WET

B129 DULUTH, MODERATELY WET AND DULUTH, SANDY
SUBSTRATUM AND ELLSBURG SOILS

B127 DULUTH, MODERATELY WET-DUSLER-ELLSBURG COMPLEX

B128 DULUTH-DULUTH, MODERATELY WET COMPLEX

B124 DUSLER-ELLSBURG COMPLEX

B145 DUSLER-UNNAMED (CULVER)-UNNAMED (DUSLER, RAINY
SUB.) COMPLEX

B210 ECKVOLL LOAMY FINE SAND

B70 ECKVOLL-BLOMFORD COMPLEX

B60 ECKVOLL-CUTAWAY COMPLEX

B23 EFFIE-ASHLAKE COMPLEX

B104 ELLSBURG-BADEN COMPLEX

B144 ELLSBURG-DUSLER COMPLEX

B10 EMMERT GRAVELLY LOAMY COARSE SAND

B41 FRIENDSHIP LOAMY SAND

B200 GARNES FINE SANDY LOAM

B78	GRAYCALM-GRETTUM COMPLEX
B9	GREANEY AND DORA SOILS, FREQUENTLY FLOODED
B14	GREENWOOD PEAT
B75	GRETTUM-MEEHAN COMPLEX
B208	GRYGLA LOAMY FINE SAND
B208	GRYGLA LOAMY FINE SAND
B106	GRYTAL SANDY LOAM
B206	HAMRE MUCK, DEPRESSIONAL, MLRA-88
B42	HAYSTORE-KOOCH COMPLEX
B102	HELLWIG-ELLSBURG-BADEN COMPLEX
B31	HIBBING LOAM
B30	HIBBING-BUHL COMPLEX, 1 TO 18 PERCENT SLOPES
B29	HIBBING-BUHL COMPLEX, 1 TO 8 PERCENT SLOPES
B35	HIBBING-UDORTHENTS COMPLEX
B4	INDUS-DORA, DEPRESSIONAL COMPLEX
B2	INDUS-WOODSLAKE, DEPRESSIONAL, COMPLEX
B150	KAB-KOOCH COMPLEX
B146	KAB-RATROOT COMPLEX
B49	KOOCH-BIONDITCH COMPLEX
B55	KOOCH-KAB-RATROOT COMPLEX
B71	LEAFRIVER-DEFORD-MARKEY, DEPRESSIONAL COMPLEX
B122	LOBO PEAT
B111	MARKEY MUCK
B27	MCQUADE-BUHL COMPLEX
B32	MCQUADE-DAISYBAY, DEPRESSIONAL-FAYAL, DEPRESSIONAL COMPLEX
B33	MCQUADE-FAYAL, DEPRESSIONAL COMPLEX
B39	MEEHAN LOAMY SAND
B77	MEEHAN-DEFORD COMPLEX
B103	MELRUDE-SCHISLER-BADEN COMPLEX
B115	MENAHGA LOAMY SAND
B121	MERWIN PEAT
B120	MOOSELAKE MUCKY PEAT
B110	MOQUAH AND FLUVAQUENTS SOILS, OCCASIONALLY FLOODED
B6	MORCOM-THISTLEDEW COMPLEX
B203	NORTHWOOD MUCK, DEPRESSIONAL
B43	NORTHWOOD-BERNER COMPLEX, DEPRESSIONAL
B207	PELAN SANDY LOAM
B112	PITS, GRAVEL-UDORTHENTS COMPLEX
B50	RATROOT-DORA COMPLEX
B118	RIFLE PEAT
B204	ROLISS LOAM, MLRA-88
B132	ROLLINS SANDY LOAM
B40	SARTELL LOAMY FINE SAND
B101	SCHISLER-ELLSBURG-BADEN COMPLEX
B209	SEDGEVILLE MUCK, DEPRESSIONAL
B116	SEELYEVILLE AND CATHRO SOILS, PONDED
B209	SEELYEVILLE MUCK, DEPRESSIONAL
B105	SPIDERCREEK SANDY LOAM
B79	SUGARBUSH-GRAYCALM COMPLEX
B25	SUOMI-ASHLAKE COMPLEX
B119	TACOOSH MUCKY PEAT
B1	TAYLOR SILTY CLAY LOAM

B12	TAYLOR-GREANEY, FREQUENTLY FLOODED COMPLEX
B11	TAYLOR-TAYLOR, SANDY SUBSTRATUM COMPLEX
B114	UDORTHENTS, SHALLOW (SANITARY LANDFILL) (will correlate to U7)
B7	UDORTHENTS-TAYLOR-THISTLEDEW COMPLEX
B143	UNNAMED (DINHAM)-DUSLER COMPLEX
B34	UNNAMED (MAJESTIC)-HIBBING COMPLEX
B117	USKABWANKA PEAT
B113	WATER, MISCELLANEOUS (WILL CORRELATE TO M-W)

d. MLRA 90

C2	ADOLPH MUCKY SILTY CLAY LOAM, DEPRESSIONAL
C25	ALSTAD LOAM
C49	ANTIGO SILT LOAM
C23	ANTIGO-CHETEK COMPLEX
C24	BILLYBOY-OSSMER COMPLEX
C13	BLUFFTON LOAM, DEPRESSIONAL
C10	BRENNYVILLE COMPLEX, STONY
C12	BRENNYVILLE-CEBANA COMPLEX, STONY
C8	BRENNYVILLE-CEBANA COMPLEX, STONY
C15	BRENNYVILLE-MORA COMPLEX, STONY
C14	CATHRO, TWIG AND ADOLPH SOILS, PONDED
C28	CATHRO-TWIG COMPLEX, DEPRESSIONAL
C4	CEBANA SILT LOAM, STONY
C6	CEBANA SILT LOAM, STONY
C50	CULVER-DUSLER COMPLEX
C41	CULVER-SANBURN-CATHRO COMPLEX, PITTED
C20	CUSHING LOAM
C18	CUSHING LOAM, MODERATELY WET
C29	DEBS SILT LOAM
C43	DULUTH LOAM
C45	DULUTH-SANBURN-CATHRO COMPLEX, PITTED
C34	DUSLER-CULVER COMPLEX
C32	ELLSBURG SILT LOAM
C26	FOGLAKE SILT LOAM
C31	GRASSTON SILT LOAM
C19	LONGSIDING-GRASSTON COMPLEX
C16	MAHTOMEDI-CHETEK COMPLEX
C22	MAHTOMEDI-SANBURN COMPLEX
C5	MILACA FINE SANDY LOAM, STONY
C1	MILACA-BRENNYVILLE COMPLEX, STONY
C3	MORA FINE SANDY LOAM, STONY
C11	MORA-BRENNYVILLE COMPLEX, STONY
C9	MORA-CEBANA COMPLEX, STONY
C27	OESTERLE-SCOTT LAKE COMPLEX
C35	OSSMER-BILLYBOY COMPLEX
C7	PARENT FINE SANDY LOAM
C21	QUAM MUCK, DEPRESSIONAL
C17	ROSHOLT-CHETEK COMPLEX
C40	SCOTT LAKE FINE SANDY LOAM
C33	SEELYEVILLE-CATHRO COMPLEX, SEEPLAND
C30	TALMOON LOAM

C44 WURTSMITH-GRETTUM COMPLEX, SUPERIOR PHASE

e. MLRA 91

D1	ANOKA AND ZIMMERMAN SOILS
D18	BRAHAM LOAMY FINE SAND
D12	BYGLAND SILT LOAM
D38	CANTLIN LOAMY FINE SAND
D4	DORSET SANDY LOAM
D27	DORSET SANDY LOAM, LOAMY SUBSTRATUM
D37	DORSET, BEDROCK SUBSTRATUM-ROCK OUTCROP COMPLEX
D5	DORSET-TWO INLETS COMPLEX
D17	DUELM LOAMY SAND
D3	ELKRIVER FINE SANDY LOAM, OCCASIONALLY FLOODED
D35	ELKRIVER-FORDUM COMPLEX, OCCASIONALLY FLOODED
D26	FOLDAHL LOAMY SAND
D10	FORADA SANDY LOAM
D19	FORDUM-WINTERFIELD COMPLEX, FREQUENTLY FLOODED
D43	GONVICK LOAM
D7	HUBBARD LOAMY SAND
D20	ISAN SANDY LOAM
D21	ISAN SANDY LOAM, DEPRESSIONAL
D50	ISANTI FINE SANDY LOAM, DEPRESSIONAL
D44	ISANTI LOAMY FINE SAND
D40	KRATKA LOAMY FINE SAND, THICK SOLUM
D13	LANGOLA LOAMY FINE SAND
D11	LINDAAS SILT LOAM
D46	LINO LOAMY FINE SAND
D8	SANDBERG LOAMY COARSE SAND
D24	SEDGEVILLE LOAM, OCCASIONALLY FLOODED
D42	SEELYEVILLE AND BOWSTRING SOILS, FREQUENTLY FLOODED
D30	SEELYEVILLE AND MARKEY SOILS, DEPRESSIONAL
D16	SEELYEVILLE AND MARKEY SOILS, PONDED
D15	SEELYEVILLE-MARKEY COMPLEX, DEPRESSIONAL
D25	SODERVILLE LOAMY FINE SAND, TERRACE
D45	SODERVILLE LOAMY FINE SAND
D23	SOUTHHAVEN LOAM
D28	URBAN LAND-BYGLAND, COMPLEX
D33	URBAN LAND-DORSET COMPLEX
D31	URBAN LAND-DUELM COMPLEX
D34	URBAN LAND-HUBBARD COMPLEX
D29	URBAN LAND-HUBBARD, BEDROCK SUBSTRATUM, COMPLEX
D41	URBAN LAND-WAUKON COMPLEX
D6	VERNDALE SANDY LOAM, ACID SUBSTRATUM
D60	ZIMMERMAN FINE SAND

f. MLRA 92

E6	AMNICON-CUTTRE COMPLEX
E7	AMNICON-CUTTRE COMPLEX
E2	AMNICON-CUTTRE-FLUVAQUENTS, FREQUENTLY FLOODED
E8	AMNICON-FLUVAQUENTS, FREQUENTLY FLOODED COMPLEX

E10	AMNICON-UDIFLUVENTS, FREQUENTLY FLOODED COMPLEX
E5	BERGLAND-UNNAMED (POORLY DRAINED) COMPLEX
E3	CUTTRE-UNNAMED (POORLY DRAINED) COMPLEX
E1	FLUVAQUENTS, FREQUENTLY FLOODED
E11	MISKOAKI-BEDROCK, FREQUENTLY FLOODED COMPLEX
E9	MISKOAKI-FLUVAQUENTS COMPLEX, FREQUENTLY FLOODED
E12	UDIFLUVENTS, FREQUENTLY FLOODED
E13	UDIFLUVENTS, OCCASIONALLY FLOODED-ROLLINS COMPLEX
E4	UNNAMED (HAPLUDALFS)-CUTTRE-UNNAMED (POORLY DRAINED) COMPLEX

g. MLRA 93A

F145	AHMEEK-ALDENLAKE COMPLEX
F144	AHMEEK-ALDENLAKE-CANOSIA COMPLEX
F139	AHMEEK-GIESE, DEPRESSIONAL COMPLEX
F138	AHMEEK-NORMANNA-CANOSIA COMPLEX
F141	AHMEEK-NORMANNA-GIESE, DEPRESSIONAL COMPLEX
F121	ALDENLAKE SANDY LOAM
F118	ALDENLAKE-PEQUAYWAN COMPLEX
F122	ALDENLAKE-PEQUAYWAN COMPLEX, PITTED
F17	AQUENTS, RUBBLY
F18	BABBITT STONY LOAM, BOULDERY
F13	BABBITT, BOULDERY-AQUENTS, RUBBLY COMPLEX
F5	BABBITT-WAHLSTEN-AQUEPTS COMPLEX, BOULDERY
F20	BARRONETT-BARRONETT, DEPRESSIONAL COMPLEX
F7	BIWABIK-GRAYCALM COMPLEX
F109	BOWSTRING AND FLUVAQUENTS SOILS, FREQUENTLY FLOODED
F103	BRIMSON STONY FINE SANDY LOAM, VERY STONY
F108	BRIMSON-BUGCREEK-NEVENS COMPLEX, VERY STONY
F101	BUGCREEK EXTREMELY STONY SANDY LOAM, RUBBLY
F142	CANOSIA FINE SANDY LOAM
F119	CLOQUET FINE SANDY LOAM
F8	CLOQUET LOAM, RAINY LOBE
F10	CLOQUET-PEQUAYWAN COMPLEX, RAINY LOBE, PITTED
F11	EAGLESNEST STONY LOAM
F1	EAGLESNEST STONY LOAM, VERY BOULDERY
F12	EAGLESNEST-BABBITT COMPLEX, BOULDERY
F2	EAGLESNEST-WAHLSTEN COMPLEX, BOULDERY
F15	EMMERT GRAVELLY LOAMY SAND, VERY COBBLY
F14	EVELETH STONY LOAM, BOULDERY
F3	EVELETH-EAGLESNEST-CONIC COMPLEX, BOULDERY
F4	EVELETH-ROCK OUTCROP COMPLEX, VERY BOULDERY
F134	GIESE MUCKY LOAM, DEPRESSIONAL
F114	GREENWOOD PEAT
F126	GRYTAL SANDY LOAM
F136	HEMANTOWN SILT LOAM
F135	HERMANTOWN-CANOSIA-GIESE, DEPRESSIONAL COMPLEX
F128	HULLIGAN FINE SANDY LOAM
F127	HULLIGAN MUCKY FINE SANDY LOAM, DEPRESSIONAL
F130	MARKEY MUCK
F115	MERWIN PEAT

F116	MOOSELAKE MUCKY PEAT
F102	NEVENS STONY LOAM, VERY STONY
F143	NORMANIA-ALDENLAKE-CANOSIA COMPLEX
F137	NORMANNA-CANOSIA-HERMANTOWN COMPLEX
F125	PEQUAYWAN LOAM
F19	PEQUAYWAN LOAM, RAINY LOBE
F131	PITS, GRAVEL-UDORTHENTS COMPLEX (WILL CORRELATE TO GP2)
F112	RIFLE PEAT
F117	ROLLINS SANDY LOAM
F124	ROLLINS-PEQUAYWAN COMPLEX, PITTED
F110	SEELYEVILLE AND CATHRO SOILS, PONDED
F16	SHAWANO LOAMY FINE SAND, 1 TO 8 PERCENT SLOPES
F6	SOUDAN-EAGLESNEST-BABBITT COMPLEX, BOULDERY
F113	TACOOSH MUCKY PEAT
F129	TACOOSH MUCKY PEAT
F104	TOIMI STONY LOAM, VERY STONY
F105	TOIMI-BRIMSON-ROCK OUTCROP COMPLEX
F107	TOIMI-NEVENS COMPLEX
F106	TOIMI-NEVENS-BRIMSON COMPLEX, VERY STONY
F132	UDORTHENTS, SHALLOW (SANITARY LANDFILL)
F111	USKABWANKA PEAT
F120	VILLAS-CROMWELL COMPLEX
F123	VILLAS-CROMWELL-GRYTAL COMPLEX, PITTED
F133	WATER, MISCELLANEOUS (WILL CORRELATE TO M-W)

h.	MLRA 102A
J3	ARVESON SANDY LOAM
J31	ARVILLA-SANDBERG COMPLEX
J57	BALATON LOAM
J50	BALATON-TARA COMPLEX
J35	BARNES-BUSE COMPLEX
J51	BEARDEN-QUAM, DEPRESSIONAL, COMPLEX
J48	BIGSTONE AND PARNELL SOILS, PONDED
J32	BIGSTONE SILTY CLAY LOAM, DEPRESSIONAL
J24	BUSE LOAM
J36	BUSE-BARNES COMPLEX
J62	BUSE-BARNES COMPLEX, VERY BOULDERY
J29	CATHRO MUCK, DEPRESSIONAL
J20	CLONTARF SANDY LOAM
J26	DARNEN LOAM
J46	DOLAND SILT LOAM, MODERATELY WET
J34	DOLAND-BUSE COMPLEX
J8	EGELAND SANDY LOAM
J66	EMRICK LOAM
J14	ESMOND LOAM
J44	ESMOND-HEIMDAL COMPLEX
J44	ESMOND-HEIMDAL COMPLEX
J9	ESTELLINE SILT LOAM
J67	FORDTOWN LOAM
J5	FOSSUM SANDY LOAM
J40	FOXLAKE SILTY CLAY

J16	FRIBERG, DEPRESSIONAL
J21	HAMAR LOAMY FINE SAND
J27	HANTHO SILT LOAM
J60	HATTIE-AUDUBON COMPLEX
J19	HECLA LOAMY FINE SAND
J68	KERKHOVEN-FRIBERG, DEPRESSIONAL COMPLEX
J2	LA PRAIRIE LOAM, OCCASIONALLY FLOODED
J49	LAKEPARK-PARNELL, DEPRESSIONAL, COMPLEX
J23	LAMOURE SILTY CLAY LOAM, OCCASIONALLY FLOODED
J37	LANGHEI-BARNES COMPLEX
J18	MALACHY SANDY LOAM
J12	MARYSLAND LOAM
J54	MARYSLAND LOAM, DEPRESSIONAL
J6	MCDONALDSVILLE SILTY CLAY
J13	OLDHAM SILTY CLAY LOAM, DEPRESSIONAL
J53	ORTONVILLE LOAM
J63	ORTONVILLE-VALLERS-PARNELL, DEPRESSIONAL COMPLEX
J1	PARNELL SILTY CLAY LOAM, DEPRESSIONAL
J64	QUAM SILTY CLAY LOAM
J17	QUAM SILTY CLAY LOAM, DEPRESSIONAL
J43	QUAM, CATHRO, AND URNESS SOILS, PONDED
J25	RAUVILLE SILTY CLAY LOAM, FREQUENTLY FLOODED
J22	RENSHAW LOAM
J4	ROCKWELL LOAM
J52	RONDELL SILTY CLAY LOAM
J15	ROTHSAY SILT LOAM
J45	SANDBERG SANDY LOAM
J42	SANDBERG-ARVILLA COMPLEX
J55	SEDGEVILLE LOAM, CHANNELED, OCCASIONALLY FLOODED
J65	SHAKOPEE SILTY CLAY
J10	SINAI SILTY CLAY
J33	SISSETON-HEIMDAL COMPLEX
J61	SVEA LOAM, BOULDERY
J7	SVERDRUP SANDY LOAM
J47	SWENODA SANDY LOAM, MODERATELY WET
J30	TARA SILT LOAM
J58	TORNING-EGELAND COMPLEX
J39	UDORTHENTS, SHALLOW (SANITARY LANDFILL)
J41	URNES MUCKY SILTY CLAY LOAM, DEPRESSIONAL
J59	URNES MUCKY SILTY CLAY LOAM, SANDY SUBSTRATUM, PONDED
J11	VALLERS CLAY LOAM
J28	VALLERS CLAY LOAM, BOULDERY
J56	WINGER-BALATON-PARNELL, DEPRESSIONAL, COMPLEX
J38	ZELL-ROTHSAY COMPLEX

i.	MLRA 103
L119	ANGUS LOAM
L37	ANGUS LOAM, MORAINIC
L40	ANGUS-KILKENNY COMPLEX
L17	ANGUS-MALARDI COMPLEX
L60	ANGUS-MOON COMPLEX

L75	BARRINGTON SILT LOAM
L123	BELLVILLE SANDY LOAM
L6	BISCAY LOAM
L7	BISCAY LOAM, DEPRESSIONAL
L73	BLUE EARTH MUCKY SILTY CLAY LOAM, DEPRESSIONAL
L43	BROUILLETT LOAM, OCCASSIONALLY FLOODED
L77	BROWNTON SILTY CLAY LOAM
L115	BROWNTON-LURA, DEPRESSIONAL, COMPLEX
L78	CANISTEO CLAY LOAM
L21	CANISTEO LOAM
L107	CANISTEO-GLENCOE, DEPRESSIONAL COMPLEX
L121	CLARION CLAY LOAM
L79	CLARION LOAM
L134	CLARION-CROOKSFORD COMPLEX
L100	CLARION-ESTHERVILLE COMPLEX
L99	CLARION-SWANLAKE COMPLEX
L127	COLAND SILTY CLAY LOAM, CHANNELED, FREQUENTLY FLOODED
L126	COLAND SILTY CLAY LOAM, OCCASIONALLY FLOODED
L81	CORDOVA CLAY LOAM
L23	CORDOVA LOAM
L108	CORDOVA-ROLFE, DEPRESSIONAL, COMPLEX
L34	COSMOS SILTY CLAY
L98	CRIPPIN-NICOLLET COMPLEX
L136	CROOKSFORD SILTY CLAY LOAM
L4	CROWFORK LOAMY SAND
L137	CYLINDER LOAM
L92	DARFUR LOAM
L8	DARFUR SANDY LOAM
L5	DELFT, OVERWASH-DELFT COMPLEX
L48	DERRYNANE, OVERWASH-DERRYNANE COMPLEX
L76	DICKINSON FINE SANDY LOAM
L45	DUNDAS-CORDOVA COMPLEX
L47	EDEN PRAIRIE SANDY LOAM
L138	ESTHERVILLE LOAM
L74	ESTHERVILLE SANDY LOAM, TERRACE
L96	ESTHERVILLE-HAWICK COMPLEX
L20	FEDJI LOAMY FINE SAND, SILTY SUBSTRATUM
L103	FIELDON-CANISTEO COMPLEX
L59	FORESTCITY-LUNDLAKE DEPRESSIONAL COMPLEX
L51	GLADEK SILT LOAM
L84	GLENCOE CLAY LOAM, DEPRESSIONAL
L24	GLENCOE LOAM, DEPRESSIONAL
L124	GLENCOE MUCKY CLAY LOAM, DEPRESSIONAL
L120	GOOD THUNDER SILTY CLAY LOAM
L11	GRAYS VERY FINE SANDY LOAM
L89	GUCKEEN SILTY CLAY LOAM
L36	HAMEL OVERWASH-HAMEL COMPLEX
L132	HAMEL-GLENCOE, DEPRESSIONAL COMPLEX
L29	HANLON FINE SANDY LOAM, OCCASIONALLY FLOODED
L114	HANLON FINE SANDY LOAM, RARELY FLOODED
L125	HANLON, RARELY FLOODED-COLAND, OCCASIONALLY FLOODED, COMPLEX
L95	HAWICK GRAVELLY COARSE SANDY LOAM

L32	HAWICK LOAMY SAND
L97	HAWICK-ESTHERVILLE COMPLEX
L50	HOUGHTON AND MUSKEGO SOILS, DEPRESSIONAL
L14	HOUGHTON MUCK, DEPRESSIONAL
L33	KANDIYOHI CLAY
L10	KASOTA SILTY CLAY LOAM
L42	KINGSLEY-GOTHAM COMPLEX
L87	KINGSTON SILTY CLAY LOAM
L13	KLOSSNER MUCK, DEPRESSIONAL
L63	KLOSSNER MUCK, LAKE PLAIN, DEPRESSIONAL
L49	KLOSSNER SOILS, DEPRESSIONAL
L15	KLOSSNER, OKOBOJI AND GLENCOE SOILS, PONDED
L58	KORONIS-KINGSLEY COMPLEX
L62	KORONIS-KINGSLEY-MALARDI COMPLEX
L90	LE SUEUR CLAY LOAM
L116	LE SUEUR-LERDAL COMPLEX
L35	LERDAL LOAM
L80	LESTER LOAM
L22	LESTER LOAM, MORAINIC
L105	LESTER-HAWICK COMPLEX
L41	LESTER-KILKENNY COMPLEX
L70	LESTER-MALARDI COMPLEX
L61	LESTER-METEA COMPLEX
L110	LESTER-RIDGETON COMPLEX
L110	LESTER-RIDGETON COMPLEX
L106	LESTER-STORDEN COMPLEX
L25	LESUEUR LOAM
L131	LITCHFIELD LOAMY FINE SAND
L94	LOWLEIN FINE SANDY LOAM, TERRACE
L72	LUNDLAKE LOAM, DEPRESSIONAL
L88	LURA SILTY CLAY, DEPRESSIONAL
L86	MADELIA SILTY CLAY LOAM
L2	MALARDI-HAWICK COMPLEX
L82	MARNA SILTY CLAY LOAM
L109	MARNA-BARBERT, DEPRESSIONAL, COMPLEX
L91	MAZASKA SILTY CLAY LOAM
L128	MAZASKA-ROLFE, DEPRESSIONAL, COMPLEX
L57	MEDO MUCK, DEPRESSIONAL
L30	MEDO SOILS, DEPRESSIONAL
L31	MEDO, DASSEL AND BISCAY SOILS, PONDED
L71	METEA LOAMY FINE SAND
L39	MINNEISKA FINE SANDY LOAM, OCCASIONALLY FLOODED
L9	MINNETONKA SILTY CLAY LOAM
L19	MOON LOAMY FINE SAND
L56	MUSKEGO AND KLOSSNER SOILS, FREQUENTLY FLOODED
L93	MUSKEGO MUCK, DEPRESSIONAL
L16	MUSKEGO, BLUE EARTH AND HOUGHTON SOILS, PONDED
L12	MUSKEGO, BLUE EARTH AND HOUGHTON SOILS, PONDED, FREQUENTLY FLOODED
L44	NESSSEL LOAM
L85	NICOLLET CLAY LOAM
L111	NICOLLET SILTY CLAY LOAM
L135	OKABENA SILTY CLAY LOAM
L130	OKOBOJI MUCKY SILTY CLAY LOAM, DEPRESSIONAL

L117	OMSRUD LOAM
L101	OMSRUD-HAWICK-STORDEN COMPLEX
L102	OMSRUD-STORDEN COMPLEX
L3	RASSET SANDY LOAM
L113	REEDSLAKE LOAM
L122	REEDSLAKE-ESTHERVILLE COMPLEX
L118	RUSHRIVER FINE SANDY LOAM, FREQUENTLY FLOODED
L38	RUSHRIVER VERY FINE SANDY LOAM, OCCASIONALLY FLOODED
L18	SHIELDS SILTY CLAY LOAM
L26	SHOREWOOD SILTY CLAY LOAM
L28	SUCKERCREEK FINE SANDY LOAM, OCCASIONALLY FLOODED
L27	SUCKERCREEK LOAM, FREQUENTLY FLOODED
L64	TADKEE-TADKEE, DEPRESSIONAL COMPLEX
L129	TERRIL LOAM
L46	TOMALL LOAM
L54	URBAN LAND-DUNDAS COMPLEX
L52	URBAN LAND-LESTER COMPLEX
L55	URBAN LAND-MALARDI COMPLEX
L53	URBAN LAND-MOON COMPLEX
L139	WADENA LOAM
L133	WALDORF SILTY CLAY LOAM
L83	WEBSTER CLAY LOAM
L112	WEBSTER SILTY CLAY LOAM

j.	MLRA 107
P48	ALLENDORF SILTY CLAY LOAM
P1	ANNIEVILLE SILTY CLAY LOAM
P3	BISCAY SILTY CLAY LOAM, OCCASIONALLY FLOODED
P40	BLUEMOUND SILT LOAM, 0 TO 3 PERCENT SLOPES
P4	CALCO SILTY CLAY LOAM, FREQUENTLY FLOODED
P5	CALCO SILTY CLAY LOAM, OCCASIONALLY FLOODED
P6	COLO SILTY CLAY LOAM, OCCASIONALLY FLOODED
P7	COMFREY CLAY LOAM, OCCASIONALLY FLOODED
P8	CYLINDER LOAM, OCCASIONALLY FLOODED
P11	DEMPSTER SILT LOAM
P12	EVERLY SILTY CLAY LOAM
P13	FAIRHAVEN SILT LOAM
P14	FLANDREAU SILT LOAM
P15	GALVA SILTY CLAY LOAM
P9	GILLETGROVE SILTY CLAY LOAM
P16	GRACEVILLE SILTY CLAY LOAM
P22	HAVELOCK CLAY LOAM, FREQUENTLY FLOODED
P23	HAVELOCK CLAY LOAM, OCCASIONALLY FLOODED
P17	IHLEN SILTY CLAY LOAM
P18	IHLEN-ROCK OUTCROP COMPLEX
P20	JUDSON SILT LOAM
P19	JUDSON SILTY CLAY LOAM
P56	KANARANZI SILT LOAM
P55	KATO SILTY CLAY LOAM
P21	MARCUS SILTY CLAY LOAM
P2	MCCREATH SILTY CLAY LOAM

P45	MONETA CLAY LOAM
P24	MOODY SILTY CLAY LOAM
P25	NORA SILT LOAM, ERODED
P26	NORA-CROFTON COMPLEX, ERODED
P27	PRIMGHAR SILTY CLAY LOAM
P28	RANSOM SILTY CLAY LOAM
P41	ROSEDELL SILTY CLAY LOAM
P29	RUSHMORE SILTY CLAY LOAM
P30	SAC SILTY CLAY LOAM
P44	SHINDLER CLAY LOAM
P31	SPICER SILTY CLAY LOAM
P32	SPILLCO SILT LOAM, FREQUENTLY FLOODED
P33	SPILLCO SILT LOAM, OCCASIONALLY FLOODED
P34	SPLITROCK SILTY CLAY LOAM
P36	TALCOT SILTY CLAY LOAM, OCCASIONALLY FLOODED
P37	TALMO GRAVELLY SANDY LOAM
P38	THURMAN SANDY LOAM
P42	WHITEWOOD SILTY CLAY LOAM
P47	WHITEWOOD SILTY CLAY LOAM, OVERWASH
P43	WILMONTON SILTY CLAY LOAM

k.	Miscellaneous MLRA Map Units
U11A	FORDUM-WINTERFIELD COMPLEX, FREQUENTLY FLOODED
IP	PITS, IRON MINE
GP	PITS, GRAVEL-UDIPSAMMENTS COMPLEX
GP1	PITS, GRAVEL-UDIPSAMMENTS COMPLEX
GP3	PITS, GRAVEL-UDORTHENTS COMPLEX
U10	PITS, QUARRY
GP2	PITS, SAND AND GRAVEL
U20A	SEELYEVILLE AND BOWSTRING SOILS, FREQUENTLY FLOODED
IT	TAILINGS BASIN
U8	UDIPSAMMENTS (CUT AND FILL LAND)
U3	UDORTHENTS, LOAMY (CUT AND FILL LAND)
U9	UDORTHENTS, RUBBLY (BEACH RIDGE)
U7	UDORTHENTS, SHALLOW (SANITARY LANDFILL)
U2	UDORTHENTS, WET SUBSTRATUM
U4	URBAN LAND-UDIPSAMMENTS (CUT AND FILL LAND) COMPLEX
U6	URBAN LAND-UDORTHENTS (CUT AND FILL LAND) COMPLEX
U1	URBAN LAND-UDORTHENTS, WET SUBSTRATUM COMPLEX
U5	URBAN LAND-UDORTHENTS, WET SUBSTRATUM COMPLEX, RARELY FLOODED
W	WATER
M-W	WATER, MISCELLANEOUS

NUMERICAL LISTS

a.	MLRA 56
I1	AUGSBURG LOAM

I2	AUGSBURG VERY FINE SANDY LOAM
I3	BERNER MUCK
I4	BERNER, ROSEWOOD AND STRATHCONA SOILS, SEEPY
I5	BORUP LOAM
I6	BORUP VERY FINE SANDY LOAM
I7	BOWSTRING-FLUVAQUENTS COMPLEX, FREQUENTLY FLOODED
I8	CATHRO MUCK
I9	CLEARWATER CLAY
I10	CLEARWATER MUCKY LOAM, DEPRESSIONAL
I11	DEERWOOD MUCK
I12	ECKVOLL LOAMY FINE SAND
I13	ESPELIE FINE SANDY LOAM
I14	FAIRDALE SILT LOAM, OCCASIONALLY FLOODED
I15	FLAMING LOAMY FINE SAND
I16	FLUVAQUENTS, FREQUENTLY FLOODED-HALUDOLLS COMPLEX
I17	FOLDAHL FINE SANDY LOAM
I18	FOLDAHL LOAMY FINE SAND
I19	FOXHOME SANDY LOAM
I20	FOXLAKE LOAM
I21	FRAM LOAM
I22	GLYNDON LOAM
I23	GLYNDON VERY FINE SANDY LOAM
I24	GRIMSTAD FINE SANDY LOAM
I25	HAMAR LOAMY FINE SAND
I26	HAMERLY LOAM
I27	HAMRE MUCK
I28	HANGAARD SANDY LOAM
I29	HATTIE CLAY
I30	HEDMAN LOAM
I31	HEDMAN-FRAM COMPLEX
I32	HILAIRE FINE SANDY LOAM
I33	HILAIRE LOAMY FINE SAND
I34	HUOT FINE SANDY LOAM
I35	KARLSRUDE SANDY LOAM
I36	KITTSOON LOAM
I37	KRATKA AND STRATHCONA SOILS, DEPRESSIONAL
I38	KRATKA FINE SANDY LOAM
I39	LINVELDT FINE SANDY LOAM
I40	MADDOCK LOAMY FINE SAND
I41	MARKEY MUCK
I42	MARKEY MUCK, PONDED
I43	MAVIE FINE SANDY LOAM
I44	NEWFOLDEN LOAM
I45	NORTHWOOD MUCK
I46	PITS, GRAVEL AND SAND
I47	POPPLETON FINE SAND
I48	RADIUM LOAMY SAND
I49	RAUVILLE SILTY CLAY LOAM
I50	REINER FINE SANDY LOAM
I51	REINER LOAMY FINE SAND
I52	REIS-CLEARWATER COMPLEX
I53	ROLISS LOAM

I54	ROLISS LOAM, DEPRESSIONAL
I55	ROSEWOOD FINE SANDY LOAM
I56	ROSEWOOD-VENLO COMPLEX
I57	SANDBERG LOAMY SAND
I58	SEELYEVILLE MUCK
I59	SMILEY LOAM
I60	SMILEY MUCKY LOAM, DEPRESSIONAL
I61	STRANDQUIST LOAM
I62	SYRENE SANDY LOAM
I63	THIEFRIVER FINE SANDY LOAM
I64	ULEN FINE SANDY LOAM
I65	ULEN LOAMY FINE SAND
I66	VALLERS LOAM
I67	WHEATVILLE LOAM
I68	WHEATVILLE VERY FINE SANDY LOAM
I69	WYANDOTTE CLAY LOAM
I70	STRATHCONA FINE SANDY LOAM

b. MLRA 57

A1	GRAYCALM-MENAHGA COMPLEX
A2	GRAYCLAM-MENAHGA-LEANDER COMPLEX, PITTED
A3	WURTSMITH-FRIENDSHIP COMPLEX
A4	MEEHAN LOAMY SAND
A5	ROSCOMMON MUCK, DEPRESSIONAL
A6	KEEWATIN LOAM
A7	KEEWATIN-NASHWAUK COMPLEX, STONY
A8	GREATSCOTT-NASHWAUK-BALKAN, DEPRESSIONAL, STONY
A9	GREATSCOTT LOAM
A10	GREATSCOTT-GREATSCOTT SANDY SUBSTRATUM COMPLEX, STONY
A11	KEEWATIN-BALKAN COMPLEX
A12	DAYBROOK SANDY LOAM
A13	SHENANGO SANDY LOAM
A14	BALKAN, DEPRESSIONAL-BALKAN COMPLEX, STONY
A15	EFFIE-ASHLAKE COMPLEX
A16	ASHLAKE-SUOMI-EFFIE COMPLEX
A17	SUOMI-ASHLAKE COMPLEX
A18	EFFIE-HAMRE, DEPRESSIONAL COMPLEX
A19	TALMOON-HAMRE, DEPRESSIONAL COMPLEX
A20	KELLIHER-BELTRAM COMPLEX
A21	NUMBERS AVAILABLE
A22	TALMOON-BELTRAMI COMPLEX
A23-24	NUMBERS AVAILABLE
A25	BELTRAMI-TALMOON COMPLEX

c. MLRA 88

B1	TAYLOR SILTY CLAY LOAM
B2	INDUS-WOODSLAKE, DEPRESSIONAL, COMPLEX
B3	ALANGO-INDUS COMPLEX
B4	INDUS-DORA, DEPRESSIONAL COMPLEX
B5	ALANGO-TAYLOR-WOODSLAKE, DEPRESSIONAL, COMPLEX

B6 MORCOM-THISTLEDEW COMPLEX
 B7 UDORTHENTS-TAYLOR-THISTLEDEW COMPLEX
 B8 BEARVILLE LOAMY SAND
 B9 GREANEY AND DORA SOILS, FREQUENTLY FLOODED
 B10 EMMERT GRAVELLY LOAMY COARSE SAND
 B11 TAYLOR-TAYLOR, SANDY SUBSTRATUM COMPLEX
 B12 TAYLOR-GREANEY, FREQUENTLY FLOODED COMPLEX
 B13 CONIC-INSULA-ROCK OUTCROP COMPLEX
 B14 GREENWOOD PEAT
B15-17 NUMBERS AVAILABLE
 B18 BRICKTON-DORA, DEPRESSIONAL COMPLEX
 B19 BRICKTON-DALBO-HASSMAN, DEPRESSIONAL COMPLEX
 B20 BRICKTON-BABBITT COMPLEX
 B21 BRICKTON-EAGLESNEST COMPLEX
 B22 BRICKTON-AQUEPTS, RUBBLY-HASSMAN, DEPRESSIONAL COMPLEX
 B23 EFFIE-ASHLAKE COMPLEX
 B24 ASHLAKE-SUOMI-EFFIE COMPLEX
 B25 SUOMI-ASHLAKE COMPLEX
 B26 DAISYBAY-GREENWOOD COMPLEX
 B27 MCQUADE-BUHL COMPLEX
 B28 BUHL LOAM
 B29 HIBBING-BUHL COMPLEX, 1 TO 8 PERCENT SLOPES
 B30 HIBBING-BUHL COMPLEX, 1 TO 18 PERCENT SLOPES
 B31 HIBBING LOAM
 B32 MCQUADE-DAISYBAY, DEPRESSIONAL-FAYAL, DEPRESSIONAL COMPLEX
 B33 MCQUADE-FAYAL, DEPRESSIONAL COMPLEX
 B34 UNNAMED (MAJESTIC)-HIBBING COMPLEX
 B35 HIBBING-UDORTHENTS COMPLEX
 B36 CANTLIN-SARTELL COMPLEX
 B37 CANTLIN-HIWOOD COMPLEX
 B38 CORMANT LOAMY FINE SAND, DEPRESSIONAL
 B39 MEEHAN LOAMY SAND
 B40 SARTELL LOAMY FINE SAND
 B41 FRIENDSHIP LOAMY SAND
 B42 HAYSTORE-KOOCH COMPLEX
 B43 NORTHWOOD-BERNER COMPLEX, DEPRESSIONAL
 B44 CUTAWAY-ECKVOLL COMPLEX
B45-48 NUMBERS AVAILABLE
 B49 KOOCH-BIONDITCH COMPLEX
 B50 RATROOT-DORA COMPLEX
 B51 BLOMFORD-NORTHWOOD, DEPRESSIONAL COMPLEX
B52-54 NUMBERS AVAILABLE
 B55 KOOCH-KAB-RATROOT COMPLEX
B56-59 NUMBERS AVAILABLE
 B60 ECKVOLL-CUTAWAY COMPLEX
B61-69 NUMBERS AVAILABLE
 B70 ECKVOLL-BLOMFORD COMPLEX
 B71 LEAFRIVER-DEFORD-MARKEY, DEPRESSIONAL COMPLEX
B72-74 NUMBERS AVAILABLE
 B75 GRETTUM-MEEHAN COMPLEX
 B76 DEFORD-LEAFRIVER, DEPRESSIONAL COMPLEX
 B77 MEEHAN-DEFORD COMPLEX

B78 GRAYCALM-GRETTUM COMPLEX
B79 SUGARBUSH-GRAYCALM COMPLEX

B80-100 NUMBERS AVAILABLE

B101 SCHISLER-ELLSBURG-BADEN COMPLEX
B102 HELLWIG-ELLSBURG-BADEN COMPLEX
B103 MELRUDE-SCHISLER-BADEN COMPLEX
B104 ELLSBURG-BADEN COMPLEX
B105 SPIDERCREEK SANDY LOAM
B106 GRYTAL SANDY LOAM
B107 BADEN MUCKY SILT LOAM
B108 CATHRO MUCK
B109 BOWSTRING AND FLUVAQUENTS SOILS, FREQUENTLY
FLOODED
B110 MOQUAH AND FLUVAQUENTS SOILS, OCCASIONALLY
FLOODED
B111 MARKEY MUCK
B112 PITS, GRAVEL-UDORTHENTS COMPLEX
B113 WATER, MISCELLANEOUS (WILL CORRELATE TO M-W)
B114 UDORTHENTS, SHALLOW (SANITARY LANDFILL) (will correlate
to U7)
B115 MENAHGA LOAMY SAND
B116 SEELYEVILLE AND CATHRO SOILS, PONDED
B117 USKABWANKA PEAT
B118 RIFLE PEAT
B119 TACOOSH MUCKY PEAT
B120 MOOSELAKE MUCKY PEAT
B121 MERWIN PEAT
B122 LOBO PEAT
B123 BLACKHOOF MUCK
B124 DUSLER-ELLSBURG COMPLEX
B125 DULUTH SILT LOAM, MODERATELY WET
B126 DULUTH SILT LOAM
B127 DULUTH, MODERATELY WET-DUSLER-ELLSBURG COMPLEX
B128 DULUTH-DULUTH, MODERATELY WET COMPLEX
B129 DULUTH, MODERATELY WET AND DULUTH, SANDY
SUBSTRATUM AND ELLSBURG SOILS
B130 DULUTH AND DULUTH, SANDY SUBSTRATUM AND ELLSBURG
SOILS
B131 DULUTH AND DULUTH, SANDY SUBSTRATUM SOILS
B132 ROLLINS SANDY LOAM
B133 ALDENLAKE-PEQUAYWAN LOAM
B134 ALDENLAKE SANDY LOAM
B143 UNNAMED (DINHAM)-DUSLER COMPLEX
B144 ELLSBURG-DUSLER COMPLEX
B145 DUSLER-UNNAMED (CULVER)-UNNAMED (DUSLER, RAINY
SUB.) COMPLEX
B146 KAB-RATROOT COMPLEX
B147-B149 NUMBERS AVAILABLE
B150 DINHAM-DULUTH COMPLEX
B151 KAB-KOOCH COMPLEX
B151-B199 NUMBERS AVAILABLE
B200 GARNES FINE SANDY LOAM
B201 CHILGREN FINE SANDY LOAM

B202 CATHRO MUCK, DEPRESSIONAL, MLRA-88
 B203 NORTHWOOD MUCK, DEPRESSIONAL
 B204 ROLISS LOAM, MLRA-88
 B205 BERNER MUCK, DEPRESSIONAL
 B206 HAMRE MUCK, DEPRESSIONAL, MLRA-88
 B207 PELAN SANDY LOAM
 B208 GRYGLA LOAMY FINE SAND
 B208 GRYGLA LOAMY FINE SAND
 B209 SEDGEVILLE MUCK, DEPRESSIONAL
 B209 SEELYEVILLE MUCK, DEPRESSIONAL
 B210 ECKVOLL LOAMY FINE SAND
 B211 BERNER AND CATHRO SOILS, PONDED

d. MLRA 90

C1 MILACA-BRENNYVILLE COMPLEX, STONY
 C2 ADOLPH MUCKY SILTY CLAY LOAM, DEPRESSIONAL
 C3 MORA FINE SANDY LOAM, STONY
 C4 CEBANA SILT LOAM, STONY
 C5 MILACA FINE SANDY LOAM, STONY
 C6 CEBANA SILT LOAM, STONY
 C7 PARENT FINE SANDY LOAM
 C8 BRENNYVILLE-CEBANA COMPLEX, STONY
 C9 MORA-CEBANA COMPLEX, STONY
 C10 BRENNYVILLE COMPLEX, STONY
 C11 MORA-BRENNYVILLE COMPLEX, STONY
 C12 BRENNYVILLE-CEBANA COMPLEX, STONY
 C13 BLUFFTON LOAM, DEPRESSIONAL
 C14 CATHRO, TWIG AND ADOLPH SOILS, PONDED
 C15 BRENNYVILLE-MORA COMPLEX, STONY
 C16 MAHTOMEDI-CHETEK COMPLEX
 C17 ROSHOLT-CHETEK COMPLEX
 C18 CUSHING LOAM, MODERATELY WET
 C19 LONGSIDING-GRASSTON COMPLEX
 C20 CUSHING LOAM
 C21 QUAM MUCK, DEPRESSIONAL
 C22 MAHTOMEDI-SANBURN COMPLEX
 C23 ANTIGO-CHETEK COMPLEX
 C24 BILLYBOY-OSSMER COMPLEX
 C25 ALSTAD LOAM
 C26 FOGLAKE SILT LOAM
 C27 OESTERLE-SCOTT LAKE COMPLEX
 C28 CATHRO-TWIG COMPLEX, DEPRESSIONAL
 C29 DEBS SILT LOAM
 C30 TALMOON LOAM
 C31 GRASSTON SILT LOAM
 C32 ELLSBURG SILT LOAM
 C33 SEELYEVILLE-CATHRO COMPLEX, SEEPLAND
 C34 DUSLER-CULVER COMPLEX
 C35 OSSMER-BILLYBOY COMPLEX
C36-C39 NUMBERS AVAILABLE
 C40 SCOTT LAKE FINE SANDY LOAM
 C41 CULVER-SANBURN-CATHRO COMPLEX, PITTED

C43 DULUTH LOAM
 C44 WURTSMITH-GRETTUM COMPLEX, SUPERIOR PHASE
 C45 DULUTH-SANBURN-CATHRO COMPLEX, PITTED
 C49 ANTIGO SILT LOAM
 C50 CULVER-DUSLER COMPLEX

e. MLRA 91

D1 ANOKA AND ZIMMERMAN SOILS
 D3 ELKRIVER FINE SANDY LOAM, OCCASIONALLY FLOODED
 D4 DORSET SANDY LOAM
 D5 DORSET-TWO INLETS COMPLEX
 D6 VERNDAL SANDY LOAM, ACID SUBSTRATUM
 D7 HUBBARD LOAMY SAND
 D8 SANDBERG LOAMY COARSE SAND

D9 NUMBERS AVAILABLE

D10 FORADA SANDY LOAM
 D11 LINDAAS SILT LOAM
 D12 BYGLAND SILT LOAM
 D13 LANGOLA LOAMY FINE SAND

D14 NUMBERS AVAILABLE

D15 SEELYEVILLE-MARKEY COMPLEX, DEPRESSIONAL
 D16 SEELYEVILLE AND MARKEY SOILS, PONDED
 D17 DUELM LOAMY SAND
 D18 BRAHAM LOAMY FINE SAND
 D19 FORDUM-WINTERFIELD COMPLEX, FREQUENTLY FLOODED
 D20 ISAN SANDY LOAM
 D21 ISAN SANDY LOAM, DEPRESSIONAL

D22 NUMBERS AVAILABLE

D23 SOUTHAVEN LOAM
 D24 SEDGEVILLE LOAM, OCCASIONALLY FLOODED
 D25 SODERVILLE LOAMY FINE SAND, TERRACE
 D26 FOLDAHL LOAMY SAND
 D27 DORSET SANDY LOAM, LOAMY SUBSTRATUM
 D28 URBAN LAND-BYGLAND, COMPLEX
 D29 URBAN LAND-HUBBARD, BEDROCK SUBSTRATUM, COMPLEX
 D30 SEELYEVILLE AND MARKEY SOILS, DEPRESSIONAL
 D31 URBAN LAND-DUELM COMPLEX

D32 NUMBERS AVAILABLE

D33 URBAN LAND-DORSET COMPLEX
 D34 URBAN LAND-HUBBARD COMPLEX
 D35 ELKRIVER-FORDUM COMPLEX, OCCASIONALLY FLOODED

D36 NUMBERS AVAILABLE

D37 DORSET, BEDROCK SUBSTRATUM-ROCK OUTCROP COMPLEX
 D38 CANTLIN LOAMY FINE SAND

D39 NUMBERS AVAILABLE

D40 KRATKA LOAMY FINE SAND, THICK SOLUM
 D41 URBAN LAND-WAUKON COMPLEX
 D42 SEELYEVILLE AND BOWSTRING SOILS, FREQUENTLY FLOODED
 D43 GONVICK LOAM
 D44 ISANTI LOAMY FINE SAND
 D45 SODERVILLE LOAMY FINE SAND

D46 LINO LOAMY FINE SAND
D47-49 NUMBERS AVAILABLE
D50 ISANTI FINE SANDY LOAM, DEPRESSIONAL
D51-59 NUMBERS AVAILABLE
D60 ZIMMERMAN FINE SAND

f. MLRA 92

E1 FLUVAQUENTS, FREQUENTLY FLOODED
E2 AMNICON-CUTTRE-FLUVAQUENTS, FREQUENTLY FLOODED
E3 CUTTRE-UNNAMED (POORLY DRAINED) COMPLEX
E4 UNNAMED (HAPLUDALFS)-CUTTRE-UNNAMED (POORLY DRAINED) COMPLEX
E5 BERGLAND-UNNAMED (POORLY DRAINED) COMPLEX
E6 AMNICON-CUTTRE COMPLEX
E7 AMNICON-CUTTRE COMPLEX
E8 AMNICON-FLUVAQUENTS, FREQUENTLY FLOODED COMPLEX
E9 MISKOAKI-FLUVAQUENTS COMPLEX, FREQUENTLY FLOODED
E10 AMNICON-UDIFLUVENTS, FREQUENTLY FLOODED COMPLEX
E11 MISKOAKI-BEDROCK, FREQUENTLY FLOODED COMPLEX
E12 UDIFLUVENTS, FREQUENTLY FLOODED
E13 UDIFLUVENTS, OCCASIONALLY FLOODED-ROLLINS COMPLEX

g. MLRA 93A

F1 EAGLESNEST STONY LOAM, VERY BOULDERY
F2 EAGLESNEST-WAHLSTEN COMPLEX, BOULDERY
F3 EVELETH-EAGLESNEST-CONIC COMPLEX, BOULDERY
F4 EVELETH-ROCK OUTCROP COMPLEX, VERY BOULDERY
F5 BABBITT-WAHLSTEN-AQUEPTS COMPLEX, BOULDERY
F6 SOUDAN-EAGLESNEST-BABBITT COMPLEX, BOULDERY
F7 BIWABIK-GRAYCALM COMPLEX
F8 CLOQUET LOAM, RAINY LOBE
F9 NUMBERS AVAILABLE
F10 CLOQUET-PEQUAYWAN COMPLEX, RAINY LOBE, PITTED
F11 EAGLESNEST STONY LOAM
F12 EAGLESNEST-BABBITT COMPLEX, BOULDERY
F13 BABBITT, BOULDERY-AQUENTS, RUBBLY COMPLEX
F14 EVELETH STONY LOAM, BOULDERY
F15 EMMERT GRAVELLY LOAMY SAND, VERY COBBLY
F16 SHAWANO LOAMY FINE SAND, 1 TO 8 PERCENT SLOPES
F17 AQUENTS, RUBBLY
F18 BABBITT STONY LOAM, BOULDERY
F19 PEQUAYWAN LOAM, RAINY LOBE
F20 BARRONETT-BARRONETT, DEPRESSIONAL COMPLEX
F21-F100 NUMBERS AVAILABLE
F101 BUGCREEK EXTREMELY STONY SANDY LOAM, RUBBLY
F102 NEVENS STONY LOAM, VERY STONY
F103 BRIMSON STONY FINE SANDY LOAM, VERY STONY
F104 TOIMI STONY LOAM, VERY STONY
F105 TOIMI-BRIMSON-ROCK OUTCROP COMPLEX
F106 TOIMI-NEVENS-BRIMSON COMPLEX, VERY STONY
F107 TOIMI-NEVENS COMPLEX

F108 BRIMSON-BUGCREEK-NEVENS COMPLEX, VERY STONY
 F109 BOWSTRING AND FLUVAQUENTS SOILS, FREQUENTLY
 FLOODED
 F110 SEELYEVILLE AND CATHRO SOILS, PONDED
 F111 USKABWANKA PEAT
 F112 RIFLE PEAT
 F113 TACOOSH MUCKY PEAT
 F114 GREENWOOD PEAT
 F115 MERWIN PEAT
 F116 MOOSELAKE MUCKY PEAT
 F117 ROLLINS SANDY LOAM
 F118 ALDENLAKE-PEQUAYWAN COMPLEX
 F119 CLOQUET FINE SANDY LOAM
 F120 VILLAS-CROMWELL COMPLEX
 F121 ALDENLAKE SANDY LOAM
 F122 ALDENLAKE-PEQUAYWAN COMPLEX, PITTED
 F123 VILLAS-CROMWELL-GRYTAL COMPLEX, PITTED
 F124 ROLLINS-PEQUAYWAN COMPLEX, PITTED
 F125 PEQUAYWAN LOAM
 F126 GRYTAL SANDY LOAM
 F127 HULLIGAN MUCKY FINE SANDY LOAM, DEPRESSIONAL
 F128 HULLIGAN FINE SANDY LOAM
 F129 TACOOSH MUCKY PEAT
 F130 MARKEY MUCK
 F131 PITS, GRAVEL-UDORTHENTS COMPLEX (WILL CORRELATE TO
 GP2)
 F132 UDORTHENTS, SHALLOW (SANITARY LANDFILL)
 F133 WATER, MISCELLANEOUS (WILL CORRELATE TO M-W)
 F134 GIESE MUCKY LOAM, DEPRESSIONAL
 F135 HERMANTOWN-CANOSIA-GIESE, DEPRESSIONAL COMPLEX
 F136 HEMANTOWN SILT LOAM
 F137 NORMANNA-CANOSIA-HERMANTOWN COMPLEX
 F138 AHMEEK-NORMANNA-CANOSIA COMPLEX
 F139 AHMEEK-GIESE, DEPRESSIONAL COMPLEX
F140 NUMBERS AVAILABLE
 F141 AHMEEK-NORMANNA-GIESE, DEPRESSIONAL COMPLEX
 F142 CANOSIA FINE SANDY LOAM
 F143 NORMANIA-ALDENLAKE-CANOSIA COMPLEX
 F144 AHMEEK-ALDENLAKE-CANOSIA COMPLEX
 F145 AHMEEK-ALDENLAKE COMPLEX

h. MLRA 102A
 J1 PARNELL SILTY CLAY LOAM, DEPRESSIONAL
 J2 LA PRAIRIE LOAM, OCCASIONALLY FLOODED
 J3 ARVESON SANDY LOAM
 J4 ROCKWELL LOAM
 J5 FOSSUM SANDY LOAM
 J6 MCDONALDSVILLE SILTY CLAY
 J7 SVERDRUP SANDY LOAM
 J8 EGELAND SANDY LOAM
 J9 ESTELLINE SILT LOAM
 J10 SINAI SILTY CLAY

J11	VALLERS CLAY LOAM
J12	MARYSLAND LOAM
J13	OLDHAM SILTY CLAY LOAM, DEPRESSIONAL
J14	ESMOND LOAM
J15	ROTHSAY SILT LOAM
J16	FRIBERG, DEPRESSIONAL
J17	QUAM SILTY CLAY LOAM, DEPRESSIONAL
J18	MALACHY SANDY LOAM
J19	HECLA LOAMY FINE SAND
J20	CLONTARF SANDY LOAM
J21	HAMAR LOAMY FINE SAND
J22	RENSHAW LOAM
J23	LAMOURE SILTY CLAY LOAM, OCCASIONALLY FLOODED
J24	BUSE LOAM
J25	RAUVILLE SILTY CLAY LOAM, FREQUENTLY FLOODED
J26	DARNEN LOAM
J27	HANTHO SILT LOAM
J28	VALLERS CLAY LOAM, BOULDERY
J29	CATHRO MUCK, DEPRESSIONAL
J30	TARA SILT LOAM
J31	ARVILLA-SANDBERG COMPLEX
J32	BIGSTONE SILTY CLAY LOAM, DEPRESSIONAL
J33	SISSETON-HEIMDAL COMPLEX
J34	DOLAND-BUSE COMPLEX
J35	BARNES-BUSE COMPLEX
J36	BUSE-BARNES COMPLEX
J37	LANGHEI-BARNES COMPLEX
J38	ZELL-ROTHSAY COMPLEX
J39	UDORTHENTS, SHALLOW (SANITARY LANDFILL)
J40	FOXLAKE SILTY CLAY
J41	URNESS MUCKY SILTY CLAY LOAM, DEPRESSIONAL
J42	SANDBERG-ARVILLA COMPLEX
J43	QUAM, CATHRO, AND URNESS SOILS, PONDED
J44	ESMOND-HEIMDAL COMPLEX
J44	ESMOND-HEIMDAL COMPLEX
J45	SANDBERG SANDY LOAM
J46	DOLAND SILT LOAM, MODERATELY WET
J47	SWENODA SANDY LOAM, MODERATELY WET
J48	BIGSTONE AND PARNELL SOILS, PONDED
J49	LAKEPARK-PARNELL, DEPRESSIONAL, COMPLEX
J50	BALATON-TARA COMPLEX
J51	BEARDEN-QUAM, DEPRESSIONAL, COMPLEX
J52	RONDELL SILTY CLAY LOAM
J53	ORTONVILLE LOAM
J54	MARYSLAND LOAM, DEPRESSIONAL
J55	SEDGEVILLE LOAM, CHANNELED, OCCASIONALLY FLOODED
J56	WINGER-BALATON-PARNELL, DEPRESSIONAL, COMPLEX
J57	BALATON LOAM
J58	TORNING-EGELAND COMPLEX
J59	URNESS MUCKY SILTY CLAY LOAM, SANDY SUBSTRATUM, PONDED
J60	HATTIE-AUDUBON COMPLEX
J61	SVEA LOAM, BOULDERY
J62	BUSE-BARNES COMPLEX, VERY BOULDERY

J63 ORTONVILLE-VALLERS-PARNELL, DEPRESSIONAL COMPLEX
 J64 QUAM SILTY CLAY LOAM
 J65 SHAKOPEE SILTY CLAY
 J66 EMRICK LOAM
 J67 FORDTOWN LOAM
 J68 KERKHOVEN-FRIBERG, DEPRESSIONAL COMPLEX

i. MLRA 103
 L2 MALARDI-HAWICK COMPLEX
 L3 RASSET SANDY LOAM
 L4 CROWFORK LOAMY SAND
 L5 DELFT, OVERWASH-DELFT COMPLEX
 L6 BISCAY LOAM
 L7 BISCAY LOAM, DEPRESSIONAL
 L8 DARFUR SANDY LOAM
 L9 MINNETONKA SILTY CLAY LOAM
 L10 KASOTA SILTY CLAY LOAM
 L11 GRAYS VERY FINE SANDY LOAM
 L12 MUSKEGO, BLUE EARTH AND HOUGHTON SOILS, PONDED,
 FREQUENTLY FLOODED
 L13 KLOSSNER MUCK, DEPRESSIONAL
 L14 HOUGHTON MUCK, DEPRESSIONAL
 L15 KLOSSNER, OKOBOJI AND GLENCOE SOILS, PONDED
 L16 MUSKEGO, BLUE EARTH AND HOUGHTON SOILS, PONDED
 L17 ANGUS-MALARDI COMPLEX
 L18 SHIELDS SILTY CLAY LOAM
 L19 MOON LOAMY FINE SAND
 L20 FEDJI LOAMY FINE SAND, SILTY SUBSTRATUM
 L21 CANISTEO LOAM
 L22 LESTER LOAM, MORAINIC
 L23 CORDOVA LOAM
 L24 GLENCOE LOAM, DEPRESSIONAL
 L25 LESUEUR LOAM
 L26 SHOREWOOD SILTY CLAY LOAM
 L27 SUCKERCREEK LOAM, FREQUENTLY FLOODED
 L28 SUCKERCREEK FINE SANDY LOAM, OCCASIONALLY FLOODED
 L29 HANLON FINE SANDY LOAM, OCCASIONALLY FLOODED
 L30 MEDO SOILS, DEPRESSIONAL
 L31 MEDO, DASSEL AND BISCAY SOILS, PONDED
 L32 HAWICK LOAMY SAND
 L33 KANDIYOHI CLAY
 L34 COSMOS SILTY CLAY
 L35 LERDAL LOAM
 L36 HAMEL OVERWASH-HAMEL COMPLEX
 L37 ANGUS LOAM, MORAINIC
 L38 RUSHRIVER VERY FINE SANDY LOAM, OCCASIONALLY
 FLOODED
 L39 MINNEISKA FINE SANDY LOAM, OCCASIONALLY FLOODED
 L40 ANGUS-KILKENNY COMPLEX
 L41 LESTER-KILKENNY COMPLEX
 L42 KINGSLEY-GOTHAM COMPLEX
 L43 BROUILLETT LOAM, OCCASSIONALLY FLOODED

L44	NESSEL LOAM
L45	DUNDAS-CORDOVA COMPLEX
L46	TOMALL LOAM
L47	EDEN PRAIRIE SANDY LOAM
L48	DERRYNANE, OVERWASH-DERRYNANE COMPLEX
L49	KLOSSNER SOILS, DEPRESSIONAL
L50	HOUGHTON AND MUSKEGO SOILS, DEPRESSIONAL
L51	GLADEK SILT LOAM
L52	URBAN LAND-LESTER COMPLEX
L53	URBAN LAND-MOON COMPLEX
L54	URBAN LAND-DUNDAS COMPLEX
L55	URBAN LAND-MALARDI COMPLEX
L56	MUSKEGO AND KLOSSNER SOILS, FREQUENTLY FLOODED
L57	MEDO MUCK, DEPRESSIONAL
L58	KORONIS-KINGSLEY COMPLEX
L59	FORESTCITY-LUNDLAKE DEPRESSIONAL COMPLEX
L60	ANGUS-MOON COMPLEX
L61	LESTER-METEA COMPLEX
L62	KORONIS-KINGSLEY-MALARDI COMPLEX
L63	KLOSSNER MUCK, LAKE PLAIN, DEPRESSIONAL
L64	TADKEE-TADKEE, DEPRESSIONAL COMPLEX
L70	LESTER-MALARDI COMPLEX
L71	METEA LOAMY FINE SAND
L72	LUNDLAKE LOAM, DEPRESSIONAL
L73	BLUE EARTH MUCKY SILTY CLAY LOAM, DEPRESSIONAL
L74	ESTHERVILLE SANDY LOAM, TERRACE
L75	BARRINGTON SILT LOAM
L76	DICKINSON FINE SANDY LOAM
L77	BROWNTON SILTY CLAY LOAM
L78	CANISTEO CLAY LOAM
L79	CLARION LOAM
L80	LESTER LOAM
L81	CORDOVA CLAY LOAM
L82	MARNA SILTY CLAY LOAM
L83	WEBSTER CLAY LOAM
L84	GLENCOE CLAY LOAM, DEPRESSIONAL
L85	NICOLLET CLAY LOAM
L86	MADELIA SILTY CLAY LOAM
L87	KINGSTON SILTY CLAY LOAM
L88	LURA SILTY CLAY, DEPRESSIONAL
L89	GUCKEEN SILTY CLAY LOAM
L90	LE SUEUR CLAY LOAM
L91	MAZASKA SILTY CLAY LOAM
L92	DARFUR LOAM
L93	MUSKEGO MUCK, DEPRESSIONAL
L94	LOWLEIN FINE SANDY LOAM, TERRACE
L95	HAWICK GRAVELLY COARSE SANDY LOAM
L96	ESTHERVILLE-HAWICK COMPLEX
L97	HAWICK-ESTHERVILLE COMPLEX
L98	CRIPPIN-NICOLLET COMPLEX
L99	CLARION-SWANLAKE COMPLEX
L100	CLARION-ESTHERVILLE COMPLEX
L101	OMSRUD-HAWICK-STORDEN COMPLEX
L102	OMSRUD-STORDEN COMPLEX

L103 FIELDON-CANISTEO COMPLEX
 L105 LESTER-HAWICK COMPLEX
 L106 LESTER-STORDEN COMPLEX
 L107 CANISTEO-GLENCOE, DEPRESSIONAL COMPLEX
 L108 CORDOVA-ROLFE, DEPRESSIONAL, COMPLEX
 L109 MARNA-BARBERT, DEPRESSIONAL, COMPLEX
 L110 LESTER-RIDGETON COMPLEX
 L111 NICOLLET SILTY CLAY LOAM
 L112 WEBSTER SILTY CLAY LOAM
 L113 REEDSLAKE LOAM
 L114 HANLON FINE SANDY LOAM, RARELY FLOODED
 L115 BROWNTON-LURA, DEPRESSIONAL, COMPLEX
 L116 LE SUEUR-LERDAL COMPLEX
 L117 OMSRUD LOAM
 L117 OMSRUD LOAM
 L118 RUSHRIVER FINE SANDY LOAM, FREQUENTLY FLOODED
 L119 ANGUS LOAM
 L120 GOOD THUNDER SILTY CLAY LOAM
 L121 CLARION CLAY LOAM
 L122 REEDSLAKE-ESTHERVILLE COMPLEX
 L123 BELLVILLE SANDY LOAM
 L124 GLENCOE MUCKY CLAY LOAM, DEPRESSIONAL
 L125 HANLON, RARELY FLOODED-COLAND, OCCASIONALLY
 FLOODED, COMPLEX
 L126 COLAND SILTY CLAY LOAM, OCCASIONALLY FLOODED
 L127 COLAND SILTY CLAY LOAM, CHANNELED, FREQUENTLY
 FLOODED
 L128 MAZASKA-ROLFE, DEPRESSIONAL, COMPLEX
 L129 TERRIL LOAM
 L130 OKOBOJI MUCKY SILTY CLAY LOAM, DEPRESSIONAL
 L131 LITCHFIELD LOAMY FINE SAND
 L132 HAMEL-GLENCOE, DEPRESSIONAL COMPLEX
 L133 WALDORF SILTY CLAY LOAM
 L134 CLARION-CROOKSFORD COMPLEX
 L135 OKABENA SILTY CLAY LOAM
 L136 CROOKSFORD SILTY CLAY LOAM
 L137 CYLINDER LOAM
 L138 ESTHERVILLE LOAM
 L139 WADENA LOAM

j. MLRA 107
 P1 ANNIEVILLE SILTY CLAY LOAM
 P2 MCCREATH SILTY CLAY LOAM
 P3 BISCAY SILTY CLAY LOAM, OCCASIONALLY FLOODED
 P4 CALCO SILTY CLAY LOAM, FREQUENTLY FLOODED
 P5 CALCO SILTY CLAY LOAM, OCCASIONALLY FLOODED
 P6 COLO SILTY CLAY LOAM, OCCASIONALLY FLOODED
 P7 COMFREY CLAY LOAM, OCCASIONALLY FLOODED
 P8 CYLINDER LOAM, OCCASIONALLY FLOODED
 P9 GILLETGROVE SILTY CLAY LOAM
P10 NUMBERS AVAILABLE
 P11 DEMPSTER SILT LOAM

P12	EVERLY SILTY CLAY LOAM
P13	FAIRHAVEN SILT LOAM
P14	FLANDREAU SILT LOAM
P15	GALVA SILTY CLAY LOAM
P16	GRACEVILLE SILTY CLAY LOAM
P17	IHLEN SILTY CLAY LOAM
P18	IHLEN-ROCK OUTCROP COMPLEX
P19	JUDSON SILTY CLAY LOAM
P20	JUDSON SILT LOAM
P21	MARCUS SILTY CLAY LOAM
P22	HAVELOCK CLAY LOAM, FREQUENTLY FLOODED
P23	HAVELOCK CLAY LOAM, OCCASIONALLY FLOODED
P24	MOODY SILTY CLAY LOAM
P25	NORA SILT LOAM, ERODED
P26	NORA-CROFTON COMPLEX, ERODED
P27	PRIMGHAR SILTY CLAY LOAM
P28	RANSOM SILTY CLAY LOAM
P29	RUSHMORE SILTY CLAY LOAM
P30	SAC SILTY CLAY LOAM
P31	SPICER SILTY CLAY LOAM
P32	SPILLCO SILT LOAM, FREQUENTLY FLOODED
P33	SPILLCO SILT LOAM, OCCASIONALLY FLOODED
P34	SPLITROCK SILTY CLAY LOAM
P35 NUMBERS AVAILABLE	
P36	TALCOT SILTY CLAY LOAM, OCCASIONALLY FLOODED
P37	TALMO GRAVELLY SANDY LOAM
P38	THURMAN SANDY LOAM
P39 NUMBERS AVAILABLE	
P40	BLUEMOUND SILT LOAM, 0 TO 3 PERCENT SLOPES
P41	ROSEDELL SILTY CLAY LOAM
P42	WHITEWOOD SILTY CLAY LOAM
P43	WILMONTON SILTY CLAY LOAM
P44	SHINDLER CLAY LOAM
P45	MONETA CLAY LOAM
P46 NUMBERS AVAILABLE	
P47	WHITEWOOD SILTY CLAY LOAM, OVERWASH
P48	ALLENDORF SILTY CLAY LOAM
P49-54 NUMBERS AVAILABLE	
P55	KATO SILTY CLAY LOAM
P56	KANARANZI SILT LOAM
k.	Miscellaneous MLRA Map Units
GP	PITS, GRAVEL-UDIPSAMMENTS COMPLEX
GP2	PITS, SAND AND GRAVEL
IP	PITS, IRON MINE
IT	TAILINGS BASIN
M-W	WATER, MISCELLANEOUS
U1	URBAN LAND-UDORTHENTS, WET SUBSTRATUM COMPLEX
U2	UDORTHENTS, WET SUBSTRATUM
U3	UDORTHENTS, LOAMY (CUT AND FILL LAND)
U4	URBAN LAND-UDIPSAMMENTS (CUT AND FILL LAND) COMPLEX

U5	URBAN LAND-UDORTHENTS, WET SUBSTRATUM COMPLEX, RARELY FLOODED
U6	URBAN LAND-UDORTHENTS (CUT AND FILL LAND) COMPLEX
U7	UDORTHENTS, SHALLOW (SANITARY LANDFILL)
U8	UDIPSAMMENTS (CUT AND FILL)
U9	UDORTHENTS, RUBBLY (BEACH RIDGE)
U10	PITS, QUARRY
W	WATER

Historical Listing of Map Units for Minnesotas Soil Surveys Prior to 2000

a. Alphabetical

6	Aastad
26	Aazdahl
900	Aazdahl-Hamerly-Parnell complex
753	Abbeylake
1250	Abbeylake-Verndale complex
1822	Abscota Variant (Houston County)
1885	Abscota, occasionally flooded
13	Adolph
14	Adolph, depressional
521	Adrian
1818	Adrian, deep
1354	Aftad fine sandy loam
21	Ahmeek
1972	Ahmeek-Cloquet complex
975	Ahmeek-Omega complex
831	Akeley-Debs complex
1375	Alban fine sandy loam
28	Alcester
1821	Algansee, occasionally flooded
22	Allendale
1004	Alluvial land, mixed, sloping
1003	Alluvial land, sandy (Fluvaquents, sandy)
1018	Alluvial land, sandy, occasionally flooded (Udifluvents, sandy)
441	Almora
292	Alstad
V292	Alstad Variant
29	Alvin
512	Amasa
223	Ames
1370	Amiret loam
1355	Amiret-Swanlake complex
1386	Amiret-Swanlake-Hawick complex
496	Andrusia
1036	Angus fine sandy loam
1362*	Angus loam
1094	Angus-Cordova complex
1408	Angus-Kilkenny complex
1087	Angus-Malardi complex
44	Ankeny
159	Anoka
49	Antigo
1032	Aquents-Udorthents (Lake beaches)
1053	Aquolls and Aquents, ponded
1055	Aquolls and Histosols, ponded
16	Arenzville
806	Arkton-Guckeen
61	Arveson
993	Arveson and Cormant soils, depressional
68	Arveson, depressional
513	Arveson, moist climate

341	Arvilla
1000	Arvilla, MAP>25
904	Arvilla-Barnes-Buse complex
904	Arvilla-Buse-Barnes complex
711	Arvilla-Sandberg complex
953	Arvilla-Storden-Ves complex
410	Athelwold
489	Atkinson
1844	Atkinson, soft substratum
189	Auburndale
747	Audubon
780	Audubon-Boyerlake complex
767	Auganaush
1326	Augsburg and Wabanica soils, depressional
52	Augsburg loam
1297	Augsburg very fine sandy loam
424	Augsburg, depressional
43	Automba
475	Backbone
1423	Balaton loam
1407	Balaton-Tara complex
503	Balmlake
319	Barbert
33	Barnes
901	Barnes, complex
1864	Barnes, stony
902	Barnes-Buse complex
904	Barnes-Buse-Arvilla complex
905	Barnes-Buse-Renshaw complex
903	Barnes-Langhei complex
906	Barnes-Langhei-Sioux complex
907	Barnes-Svea complex
316	Baroda
62	Barrington
456	Barronett
1847	Barronett, sandy substratum
1161	Barry loam
555	Barto
890	Barto-Mesaba complex
167	Baudette
1982	Baudette-Spooner complex
460	Baytown
1809	Bearden complex
67	Bearden silt loam
93	Bearden silty clay loam
1963	Bearden-Colvin complex
908	Bearden-Fargo complex
1933	Bearden-Lindaas complex
1412	Bearden-Quam complex
655	Bearville
310	Beauford
996	Beauford-Barbert complex
1893	Beavercreek Variant (Houston County)
598	Beavercreek-Arenzville complex

1261	Bechyn
488	Becida fine sandy loam, morainic
25	Becker
73	Bellechester
1443	Bellville
125	Beltrami
678	Beltrami, thick solum
1447	Beltrami, very fine sandy loam
1503	Beltrami-Talmoon complex
272	Bemidji
1397	Bemidji, moderately permeable
431	Beotia
1995	Bergkeller
684	Bergkeller, moderately wet
305	Bergland
733	Berner
1404	Berner muck, wooded
1143	Berner-Markey complex
76	Bertrand
531	Beseman
724	Bigstone
1335	Bigstone, Parnell and Cathro soils, ponded
706	Bigstone, ponded
79	Billet
1137	Birchlake silty clay loam
1014	Biscay clay loam
392	Biscay loam
399	Biscay, depressional
1098	Biscay-Biscay, depressional complex
1908	Biscay-Klossner complex
405	Bixby
826	Blackhammer-Gale complex
580	Blackhammer-Southridge complex
614	Blackhoof
980	Blackhoof and Mahtowa
170	Blomford
722	Blomford, lacustrine substratum
382	Blooming
720	Blowers
1336	Blowers fine sandy loam, morainic, stony
1320	Blowers sandy loam, stony
1151	Blowers, acid substratum
1011	Blown-out land
154	Blue Earth muck
1805	Blue Earth Variant
1090	Blue Earth, dredged
35	Blue Earth, loamy
1851	Blue Earth, sloping
715	Bluffcreek-Clearriver complex
1340	Bluffcreek-Epoufette complex
1345	Bluffcreek-Rosy complex
75	Bluffton
1351	Bluffton loam, moderately permeable
644	Boash

80	Bold
909	Bold-Truman complex
81	Boone
1252	Bootlake-Eagleview complex
1127	Bootlake-Graycalm complex
522	Boots
1073	Borofolists
1006	Borolls-Aquolls or Fluvaquents or Haploborolls (Breaks and Alluvial Land)
995	Borosaprists
1074	Borosaprists
1002	Borosaprists and Fluvaquents soils
1012	Borrow pits
46	Borup loam
1339	Borup mucky silt loam, depressional
1298	Borup silt loam
1299	Borup very fine sandy loam
348	Borup, depressional
1134	Borup-Glyndon complex
1934	Bowstring
1076	Bowstring and Fordum soils, frequently flooded
1926	Bowstring-Aquents complex
1325	Bowstring-Fluvaquents complex, frequently flooded
169	Braham loamy fine sand
1438	Braham loamy fine sand, moderately wet
445	Braham, lacustrine substratum
163	Brainerd
1976	Brainerd, stony or very stony
835	Brainerd-Rock outcrop
681	Brandsvold
1290	Brandsvold fine sandy loam, thick solum phase
1350	Brandsvold loam, thick solum
464	Brennyville
728	Brennyville, very stony or stony
124	Brickton
1961	Brickton, loamy substratum
120	Brill
407	Brimson
898	Brodale-Bellechester complex
1898	Brodale-Etter complex or Etter-Brodale complex
1116	Brodale-Eyota complex
880	Brodale-Rock outcrop complex
973	Brodale-Sogn complex
416	Brookings
554	Brophy
1905	Brownsdale
84	Brownton
811	Brownton-Canisteo
1282	Brownton-Lura complex
714	Buhl
561	Bullwinkle
702	Bullwinkle-Cathro
151	Burkhardt
78	Burnsville

1870	Burr-Calco complex
437	Buse
910	Buse complex
1865	Buse, stony
911	Buse-Arvilla complex
913	Buse-Barnes complex
1454	Buse-Barnes complex, extremely bouldery
1309	Buse-Doland complex
915	Buse-Formdale complex
916	Buse-Renshaw complex
917	Buse-Sioux complex
918	Buse-Vienna complex
732	Bushville
1380	Bygland silt loam, MAP>25
422	Bygland silty clay loam
1287	Calco silty clay loam, ponded, frequently flooded
610	Calco, frequently flooded
85	Calco, occasionally flooded
349	Calco, very wet
878	Calco-Du Page complex
1802	Calcousta-Okobojo complex
367	Campia
976	Campia-Ontonagon complex
981	Canisteo and Harps soils
982	Canisteo and Webster soils
444	Canisteo silt loam or silty clay loam
221	Canisteo silt loam or silty clay loam, depressional
1868	Canisteo, stony
919	Canisteo-Fieldon complex or Canisteo-Lemond complex
956	Canisteo-Glencoe complex
919	Canisteo-Mayer complex
817	Canisteo-Seaforth complex
86	Canisteoloam or clay loam
350	Canisteoloam or clay loam, depressional
1256	Cantlin loamy fine sand
553	Carlos
1895	Carmi
524	Caron
1800	Caron, seepy
1057	Caron-Blue Earth-Klossner, ponded
1068	Caryville
50	Cashel, occasionally flooded
1913	Cashel-Wahpeton
544	Cathro
1128	Cathro muck, frequently flooded
1439	Cathro muck, MAP 22-30
1118	Cathro, calcareous
1807	Cathro, ponded
1983	Cathro, stratified substratum
788	Cathro-Seelyeville complex
1267	Cedarrock silty clay loam
472	Channahon
20	Chapett fine sandy loam
1232	Chapett loam

1112	Chapett-Corliss complex
1102	Chapett-Dorset complex
760	Chapett-Sisseton complex
19	Chaseburg
1861	Chaseburg, channeled
329	Chaska
874	Chaska-Seelyeville complex
87	Chelsea
155	Chetek
683	Chetek loamy sand
949	Chetek-Milaca complex
1285	Chetomba silty clay loam
404	Chilgren
1922	Chilgren, stony
1395	Clarion clay loam
920	Clarion complex
102	Clarion loam
588	Clarion Variant
920	Clarion-Estherville complex
920	Clarion-Estherville-Storden complex
920	Clarion-Hawick complex
920	Clarion-Hawick-Estherville complex
921	Clarion-Storden complex
887	Clarion-Swanlake complex
1919	Clarion-Terril complex
794	Clearriver
641	Clearwater clay
642	Clearwater loam (now Foxlake)
1189	Clearwater mucky loam, depressional
1300	Clearwater sandy clay loam
1427	Clearwater-Hattie complex
936	Clearwater-Reis complex
1103	Clitherall
1341	Clitherall-Wykeham complex
371	Clontarf
355	Cloquet
1972	Cloquet-Ahmeek complex
977	Cloquet-Emmert complex
1927	Clotho
1349	Clotho loam, moderate permeability
88	Clyde
478	Coggon
1163	Cohoctah fine sandy loam, frequently flooded (Suckercreek)
1197	Cohoctah, occasionally flooded (Suckercreek)
1213	Cokato-Storden complex
1229	Cokato-Storden-Estherville complex
1220	Cokato-Storden-Hawick complex
1834	Coland, frequently flooded
1833	Coland, occasionally flooded
1915	Coland, sandy substratum
1974	Coland-Spillville complex
96	Collinwood
1387	Collinwood silty clay loam, moderately wet
98	Colo

1838	Colo, calcareous overwash
1831	Colo, channeled
47	Colvin
1810	Colvin, complex
351	Colvin, depressional
749	Colvin, occasionally flooded
1963	Colvin-Bearden complex
1964	Colvin-Fargo complex
847	Colvin-Spicer complex
1860	Comfrey, channeled
353	Comfrey, frequently flooded
18	Comfrey, occasionally flooded
452	Comstock
557	Conic
1988	Conic-Insula complex
100	Copaston
440	Copaston, very shallow
923	Copaston-Rock outcrop complex
1881	Cordova and Webster
109	Cordova clay loam
1156	Cordova loam
925	Cordova-Barbert complex
978	Cordova-Rolfe complex
571	Coriff
810	Coriff-Fieldon complex
721	Corliss
1247	Corliss-Dorset complex
1277	Corliss-Sverdrup complex
117	Cormant
993	Cormant and Arveson soils, depressional
734	Cormant, stratified substratum
1206	Cormant-Redby complex
459	Corunna
1184	Corvuso silty clay loam
1169	Corvuso-Lura complex
668	Corwith
1193	Cosmos silty clay
601	Council fine sandy loam
600	Council loam
615	Cowhorn
118	Crippin
657	Crofton
924	Crofton-Moody complex
1918	Croke
268	Cromwell
1996	Cromwell, moderately wet
1369	Crooksford
1371	Crooksford-Swanlake complex
1035	Crowfork loamy sand
1183	Crowriver loam
1192	Crowriver-Lundlake complex
449	Crystal Lake
204	Cushing
1842	Cushing and Flak soils

1843	Cushing-DeMontreville complex
928	Cushing-DeMontreville complex or Cushing-Mahtomedi
620	Cutaway
1353	Cutaway loamy fine sand, moderately wet
129	Cylinder
5	Dakota
784	Dakota and Rasset
133	Dalbo
1273	Dalbo loamy fine sand
1174	Danielson clay loam
1958	Danube silty clay
281	Darfur
926	Darfur-Webster complex
1318	Darnen loam, well drained
494	Darnen, moderately wet
183	Dassel loam
300	Dassel mucky loam
536	Dawson
505	Debs
744	Debs-Akeley
547	Deerwood
336	Delft
453	DeMontreville
658	Dempster
1105	Dent
1367	Derrynane
609	Dickey
74	Dickinson fine sandy loam
27	Dickinson loam
1855	Dickinson, loamy substratum
327	Dickman
1930	Dickman, moderately wet
790	Dickman-Grogan complex
480	Dinsdale
1971	Divide
1876	Divide, loamy substratum
9	Dodgeville
591	Doland
1295	Doland, moderately wet
891	Doland-Langhei complex
891	Doland-Swanlake complex (Doland-Buse)
425	Doraldson
135	Donnan
550	Dora
1187	Dora muck, ponded
1333	Dora muck, wooded
698	Doran
1947	Doran, loamy substratum
821	Doran-Lindaas complex
451	Dorchester, frequently flooded
354	Dorchester, occasionally flooded
473	Dorerton
1819	Dorerton-Rock outcrop complex
406	Dorset

1379	Dorset-Almora complex
778	Dorset-Corliss complex
800	Dorset-Kandota complex
824	Dorset-Sioux complex
1377	Dorset-Two Inlets complex
137	Dovray silty clay
516	Dowagiac
201	Downs
57	Du Page, occasionally flooded
169	Du Page-McIntosh Variant complex
10	Dubuque
260	Duelm loamy sand
504	Duluth
1022	Dumps (not iron mine)
1042	Dumps, iron mine (mostly rock fragments)
95	Dunbarton
123	Dundas
1363	Dundas silt loam, moderately coarse substratum
1025	Dune land
502	Dusler
937	Eaglepoint-Northcote complex
1236	Eagleview loamy sand
1263	Eagleview-Bootlake complex
602	Eckman
877	Eckman-Zell complex
565	Eckvoll
1037	Eckvoll loamy fine sand, MAP>25
1925	Eckvoll, stony
500	Edmund
616	Effie
141	Egeland
1200	Egglake
1211	Egglake-Cathro complex
1216	Egglake-Wykeham complex
1857	Eitzen, channeled
1830	Eitzen, occasionally flooded
593	Elbaville
815	Elbaville-Seaton complex
143	Eleva
830	Eleva-Seaton complex
771	Elkriver fine sandy loam
1255	Elkriver fine sandy loam, occasionally flooded
1257	Elkriver-Mosford complex
510	Elmville
1994	Embden
12	Emmert
974	Emmert complex
974	Emmert-Mahtomedi complex
1461	Emrick loam
1948	Enloe-Fargo complex
145	Enstrom
191	Epoufette
1935	Epoufette, depressional
761	Epsom silty clay loam

237	Erin
288	Esmond
1817	Esmond, bouldery
1233	Esmond-Heimdal complex
645	Espelie
1931	Essexville sandy loam
192	Estelline
1845	Estherville loam
41	Estherville sandy loam
875	Estherville-Hawick complex
409	Etter
1898	Etter-Brodale complex or Brodale-Etter complex
1941	Evart, frequently flooded
1968	Evart, occasionally flooded
1969	Evart-Isan
674	Eveleth
149	Everly
484	Eyota
1148	Fairdale and Lamoure soils, occasionally flooded
667	Fairdale, occasionally flooded
156	Fairhaven
1069	Fairport-Rock outcrop complex
57	Fargo silty clay
56	Fargo silty clay loam
55	Fargo, depressional
1872	Fargo, silty substratum
1873	Fargo, silty substratum, swales
1871	Fargo, swales
1964	Fargo-Colvin complex
1948	Fargo-Lindaas complex or Enloe
37	Farrar
570	Faunce
408	Faxon
1891	Faxon Variant
3	Fayette
356	Fayette, valleys
69	Fedji
455	Festina
160	Fieldon
929	Fieldon-Canisteo complex
1096	Fieldon-Dassel, depressional complex
695	Finland
1951	Flagler, bedrock substratum
144	Flak
742	Flak, stony or very stony
930	Flak-Chetek complex
66	Flaming
92	Flandreau
36	Flom
983	Flom and Roliss soils
984	Flom and Vallers soils
1875	Flom, depressional
1863	Flom, stony
825	Flom-Gonvick complex

479	Floyd
1056	Fluvaquentic Haplaquolls
1005	Fluvaquents (Alluvial land, loamy, frequently flooded)
1002	Fluvaquents (Alluvial land, mixed, frequently flooded)
1003	Fluvaquents (Alluvial land, sandy)
1034	Fluvaquents, loamy (Lake beaches, loamy)
1009	Fluvaquents, loamy, frequently flooded
1002	Fluvaquents-Aquolls-Histosols complex, frequently flooded
1006	Fluvaquents-Udorthents or Borolls-Aquolls (break-alluvial land)
1425	Foglake silt loam
1302	Foldahl fine sandy loam
426	Foldahl loamy fine sand
1301	Foldahl sandy loam
1921	Foldahl very fine sandy loam
375	Forada
1077	Forada and Leafriver soils, depressional
1942	Forada, depressional
751	Fordum
1378	Fordum loam, occasionally flooded
1985	Fordum silt loam, occasionally flooded
1147	Fordum, Fairdale and Lamoure soils, frequently flooded
792	Fordum, frequently flooded
1946	Fordum-Winterfield complex
339	Fordville
1186	Forestcity-Lundlake complex
168	Forman
915	Forman-Buse or Forman-Langhei complex
171	Formdale
912	Formdale-Aazdahl-Flom complex
1234	Formdale-Buse complex
1235	Formdale-Buse-Sandberg complex
931	Formdale-Langhei or Formdale-Buse complex
570	Formdale-Langhei-Lohnes complex
71	Fossum
1877	Fostoria
65	Foxhome
1135	Foxlake
296	Fram
427	Fram, noncalcareous surface
1965	Fram-Percy complex
787	Fram-Vallers-Parnell complex
476	Frankville
264	Freeon
266	Freer
723	Freer, very stony or stony
1534	Friberg, depressional
710	Friberg-Weetown complex
564	Friendship
1957	Friendship, till substratum
834	Friendship-Meehan
173	Frontenac
210	Fulda
640	Galchutt
174	Gale

826	Gale-Blackhammer complex
829	Gale-Seaton complex
175	Galva
1949	Gardena
1801	Gardencity loamy fine sand
1185	Gardencity very fine sandy loam, moderately wet
1177	Gardencity-Bold complex
77	Garnes fine sandy loam
1923	Garnes, stony
1331	Garnes, very stony
176	Garwin
357	Garwin, swales
1835	Germantown
1836	Germantown-Rock outcrop complex
1051	Glencoe and Bigstone soils, ponded
114	Glencoe clay loam
1051	Glencoe, marshy or ponded
1828	Glencoe muck
1505	Glencoe mucky silty clay loam
743	Glencoe, stratified substratum
932	Glencoe-Dassel complex
60	Glyndon loam
1840	Glyndon saline-Glyndon complex
1303	Glyndon silt loam
1819	Glyndon silty clay loam
1304	Glyndon very fine sandy loam
881	Glyndon-Quam complex
180	Gonvick
825	Gonvick-Flom complex
1383	Good Thunder
617	Goodland
870	Goodland in Itasca-Goodland complex only
177	Gotham
659	Graceville
178	Granby fine sandy loam
1099	Granby loamy fine sand
1448	Grano clay
1449	Grano loam
756	Grasston (formerly Dalbo, silty substratum)
126	Graycalm
868	Graycalm and Mahtomedi
867	Graycalm and Menahga
1132	Graycalm-Balmlake complex
1249	Graycalm-Bootlake complex
1021	Graycalm-Sanburn complex
1140	Graycalm-Snellman complex
259	Grays
530	Greenwood muck or mucky peat
549	Greenwood peat
59	Grimstad fine sandy loam
914	Grimstad-Towner complex
128	Grogan
1392	Grogan silt loam, moderately wet
790	Grogan-Dickman complex

789	Grogan-Lasa Variant complex
613	Grovecity
233	Growton
482	Grygla
994	Grygla and Rockwell soils, depressional
1401	Grygla mucky loamy fine sand, depressional
1924	Grygla, stony
1987	Grygla-Spooner complex
230	Guckeen
806	Guckeen-Arkton complex
1280	Gunclub silty clay loam
182	Halder
735	Halverson loamy fine sand
372	Hamar
1966	Hamar and Rosewood soils
414	Hamel loam
740	Hamel-Glencoe complex
1149	Hamerly cl, moderately slow permeability
184	Hamerly loam, moderate permeability
933	Hamerly-Aazdahl complex
814	Hamerly-Lindaas complex
1259	Hamerly-Mustinka complex
922	Hamerly-Parnell complex
1967	Hamerly-Vallers complex
1998	Hamerly-Vallers-Winger complex
785	Hamerly-Winger complex
786	Hamerly-Winger-Colvin complex
58B	Hamlet
748	Hamlet
1878	Hamre
1804	Hamre, ponded
111	Hangaard
1114	Hangaard loamy sand, lake beaches
823	Hangaard-Sioux or Lohnes complex
603	Hanlon fine sandy loam
1268	Hanlon loam, rarely flooded
1981	Hanlon-Kalmarville complex
1084	Hanlon-Kalmarville complex, frequently flooded
1535	Hanlon, rarely flooded-Coland, occasionally flooded complex
282	Hanska
499	Hanska, depressional
1928	Hanska, gravelly substratum
497	Hantho
1001	Haplaquolls-Udifluvents (Alluvial land, occasionally flooded)
112	Harps
1092	Harps-Glencoe complex
1108	Harps-Glencoe-Seaforth complex
899	Harps-Okoboji complex
927	Harps-Seaforth-Okoboji complex
447	Harpster
746	Haslie
1230	Haslie and Nidaros soils, ponded
1113	Haslie, Seelyeville, and Cathro soils, ponded
428	Hassman

185	Hattie
1452	Hattie-Audubon complex
1311	Hattie-Nutley complex
187	Haug
380	Havanna
1374	Havelock clay loam, occasionally flooded
1385	Havelock loam, frequently flooded
1389	Havelock silt loam, frequently flooded
474	Haverhill
1960	Haverhill Variant
611	Hawick
132	Hayden fine sandy loam or sandy loam
104	Hayden loam or silt loam
934	Hayden-Burnsville complex
190	Hayfield
1841	Hayfield, loamy substratum
366	Hecla
1117	Hedman
1121	Hedman, depressional
1142	Hedman-Fram complex
1312	Hegne clay
1124	Hegne, silty substratum-Fargo, silty substratum complex
935	Hegne-Fargo complex
1281	Hegne-Viking complex
352	Heimdal
827	Heimdal-Esmond complex
1324	Heimdal-Sisseton complex
696	Hermantown
232	Heyder
938	Heyder-Kingsley-Burnsville complex
254	Hibbing
436	Hidewood
1305	Hilaire fine sandy loam
647	Hilaire loamy fine sand
469	Hillcity
326	Hillet
1365	Hillview fine sandy loam
1031	Histosols, ponded
995	Histosols, undifferentiated
48	Hiwood
1989	Hiwood-Redby-Leafriver complex
193	Hixton
200	Holdingford
487	Hoopeston
1436	Hoopeston, sandstone substratum
1228	Hoopeston-Le Sueur complex
523	Houghton
1071	Houghton and Muskego soils
1058	Houghton and Muskego soils, ponded
7	Hubbard
1231	Hubbard-Mosford complex
1224	Hubbard-Verndale complex
139	Huntersville loamy fine sand
1334	Huntersville loamy sand

1153	Huntersville, acid substratum
358	Huntsville, frequently flooded
194	Huntsville, occasionally flooded
604	Huntsville-Beavercreek complex, channeled
643	Huot
54	Ihlen
443	Ihlen, shallow
939	Ihlen-Rock outcrop complex
172	Indus
871	Indus and Brickton soils
1394	Indus-Dora complex
1403	Indus-Taylor-Woodslake complex
1400	Indus-Woodslake complex
556	Insula
1988	Insula-Conic complex
1110	Isan
261	Isan, depressional
1973	Isan-Meehan complex
1109	Isanti
161	Isanti, depressional
618	Itasca
870	Itasca-Goodland complex
594	Jeffers
1150	Jevne fine sandy loam
1902	Jewett
196	Joliet
203	Joy
15	Judson
1847	Kalmarville, channeled
465	Kalmarville, frequently flooded
518	Kalmarville, occasionally flooded
1999	Kalmarville-Minneiska complex
105	Kamrar
415	Kanaranzi
1162	Kandiyohi silty clay loam
53	Kandota
1347	Kandota loam
800	Kandota-Dorset complex
1275	Kandota-Egglake complex
1428	Karlsruhe sandy loam
205	Karlstad loamy sand
1306	Karlstad sandy loam
1327	Karlstad-Marquette complex
206	Kasota loam or silt loam
693	Kasota sandy loam
24	Kasson
208	Kato
1846	Kato, depressional
619	Keewatin
209	Kegonsa
1502	Kelliher-Beltrami complex
1952	Keltner
250	Kennebec
1816	Kennebec Variant

632	Kensett Variant
30	Kenyon
1409	Kenyon, moderately wet
1511	Kerkhoven-Friberg, depressional
552	Kerston
238	Kilkenny
342	Kingsley
888	Kingsley-Lester complex
896	Kingsley-Mahtomedi complex (Kingsley-Gotham)
895	Kingsley-Mahtomedi-Spencer complex
197	Kingston
941	Kingston-Nicollet complex
1308	Kittson fine sandy loam
58	Kittson loam
V58	Kittson Variant, grayish subsoil
213	Klinger
1079	Klinger-Maxfield complex
539	Klossner (formerly Palms)
1075	Klossner and Muskego soils, ponded
1080	Klossner and Okoboji soils, ponded
528	Klossner, 1 to 6 percent slopes
519	Klossner, calcareous (formerly Palms)
527	Klossner, deep (formerly Palms)
764	Klossner, flooded
1501	Klossner muck, overwash
1091	Klossner, sandy substratum-Harps-Mayer complex
1199	Klossner-Lundlake complex, ponded
562	Knoke
670	Knute
1289	Knute fine sandy loam, thick solum phase
1348	Knute loam, thick solum
1276	Knute-Brandsvold complex, thick solum phase
461	Koronis
804	Koronis-Hawick complex
807	Koronis-Sunburg complex
676	Kost
91	Kranzburg
481	Kratka
725	Kratka, stratified substratum
766	Kratka, stratified substratum, depressional
726	Kratka, thick solum
422	La Prairie, frequently flooded
51	La Prairie, occasionally flooded
457	Lacrescent
832	Lacrescent-Rock outcrop complex
1323	LaDelle
605	LaFarge
1907	Lakefield
1938	Lakepark
1237	Lakepark loam
1352	Lakepark-Parnell complex
1405	Lallie mucky silt loam
584	Lamoille complex and Lamoille-Dorerton complex
592	Lamoille-Elbaville complex

216	Lamont
1811	Lamont-Racine complex
985	Lamoure and La Prairie soils
1251	Lamoure silt loam, channeled, frequently flooded
359	Lamoure silty clay loam, frequently flooded
418	Lamoure silty clay loam, occasionally flooded
986	Lamoure-La Prairie complex, frequently flooded
220	Langhei
942	Langhei-Barnes complex
943	Langhei-Formdale complex
579	Langhei-Formdale-Lohnes complex
979	Langhei-Waukon complex
179	Langola
222	Lasa
789	Lasa Variant-Grogan complex
360	Lasa, rock substratum
485	Lawler
1937	Lawler, sandstone substratum
226	Lawson
239	Le Sueur clay loam
1361	Le Sueur, moderately coarse substratum
1284	Le Sueur-Lerdal complex
716	Leaflake-Eagleview complex
1984	Leafriver
1402	Leafriver muck, wooded
1986	Leafriver, acid phase
1390	Leen
227	Lemond
1909	Lemond, depressional
1929	Lemond, gravelly substratum
818	Lemond-Linder-Estherville complex
559	Lena
709	Lengby
138	Lerdal silty clay loam
1806	Lerdal, silty substratum
944	Lester complex
231	Lester fine sandy loam
106	Lester loam
944	Lester-Estherville complex
783	Lester-Kilkenny complex
1901	Lester-Le Sueur complex
1023C	Lester-Malardi complex
945	Lester-Storden complex
944	Lester-Storden-Estherville complex
1919	Lester-Terril complex
241	Letri
1344	Lida-Almora-Dent complex
1343	Lida-Almora-Lizzie complex
1196	Lida-Two Inlets complex
244	Lilah
1329	Lindaas clay loam
1381	Lindaas silt loam, morainic
1916	Lindaas silty clay loam
1129	Lindaas silty clay loam, morainic

247	Linder loam
301	Lindstrom
1906	Lindstrom loam (Houston County, tax.)
162	Lino
1813	Lino Variant, moderately well drained
713	Linveltd
470	Lismore
181	Litchfield loamy fine sand
946	Litchfield or Dickman moderately well-Nicollet complex
1176	Litchfield sandy loam
477	Littleton
1413	Littleton, till substratum
707	Lizzie
1026	Lizzie silty loam, moderately wet
537	Lobo
560	Lobo and Greenwood
869	Lobo and Waskish soils
245	Lohnes
893	Lohnes-Waukon complex
248	Lomax
1424	Longsiding silt loam
1500	Lourdes silt loam
1382	Louris
572	Lowlein
1269	Lowlein silt loam
809	Lowlein-Estherville complex
533	Loxley
1950	Ludden
1165	Lundlake silty clay loam, depressional
546	Lupton
211	Lura
1914	Lura, nearly level
813	Lura-Spicer
45	Maddock
136	Madelia
947	Madelia-Webster complex
737	Mahkonce
1212	Mahkonce clay loam
454	Mahtomedi
1820	Mahtomedi Variant-Rock outcrop complex
896	Mahtomedi-Kingsley complex
347	Malachy
1066	Malardi-Hawick complex
511	Marcellon loam, MAP<30
249	Marcus
1839	Marcus Variant
543	Markey
1445	Markey muck, MAP 22-30
1808	Markey, ponded
251	Marlean
110	Marna
997	Marna-Barbert complex
812	Marna-Webster complex
242	Marquette

252	Marshan
486	Marshan, depressional
1953	Marshan, loamy substratum
1880	Martisco
246	Marysland
V246	Marysland complex
1418	Marysland loam, depressional
1139	Marysland, occasionally flooded
131	Massbach
412	Mavie
253	Maxcreek
83	Maxcreek, swales
940	Maxcreek-Barbert complex
378	Maxfield
361	Maxfield, swales
255	Mayer loam
318	Mayer, swales (or depressional)
1097	Mayer-Biscay, depressional
256	Mazaska silty clay loam
1962	Mazaska-Rolfe complex
89	McDoraldsville
108	McIntosh
948	McIntosh-Lindaas complex
257	McPaul
262	Medary
1859	Medary complex
548	Medo muck, depressional
1406	Medo, Dassel and Biscay soils, ponded
202	Meehan
834	Meehan-Friendship complex
1973	Meehan-Isan complex
769	Mehurin
458	Menahga
679	Menahga, friable substratum
665	Menahga, moraine
1970	Menahga, till substratum
867	Menahga-Graycalm complex
866	Menahga-Itasca complex
263	Meridian
377	Merton
535	Merwin
558	Mesaba
1823	Mesaba Variant, deep
152	Milaca
1270	Milaca fine sandy loam, moderately wet
682	Milaca stony or very stony
727	Milaca very fine sandy loam
738	Milaca-Cromwell complex
551	Millerville
362	Millington, frequently flooded
269	Millington, occasionally flooded
1887	Millington, sandy substratum
1886	Minneiska Variant
271	Minneiska, frequently flooded

463	Minneiska, occasionally flooded
1081	Minneiska-Algansee complex
1999	Minneiska-Kalmarville complex
1384	Minneopa
363	Minneopa, occasionally flooded
17	Minneopa, rarely flooded
287	Minnetonka
364	Minnetonka, silty substratum
998	Minnetonka-Barbert complex
590	Moines
376	Moland
90	Moody
660	Moody, loamy
950	Moody-Crofton complex
1166	Moosecreek
534	Mooselake
797	Mooselake and Lupton soils
164	Mora
1977	Mora, stony
V166	Mora, wet
1179*	Moranville
621	Morph
768	Mosford sandy loam
228	Mottland
1889	Moundprairie, depressional
1888	Moundprairie, occasionally flooded
365	Mt. Carrol, benches
401	Mt. Carroll
273	Muscatine
1203	Muskego, Blue Earth and Houghton soils, ponded
1173	Muskego and Klossner soils, commonly flooded
525	Muskego muck, depressional
1803	Muskego, calcareous
520	Muskego, mucky peat
1214	Mustinka clay loam
1959	Nary cobbly fine sandy loam
1294	Nary fine sandy loam
622	Nashwauk
1883	Nashwauk-Bedrock outcrop complex
1826	Nashwauk-Menahga
492	Nasset
718	Naytahwaush
1209	Naytahwaush clay loam
1208	Naytahwaush-Mahkonc complex
40	Nebish loam or silt loam
32	Nebish sandy loam or fine sandy loam
1460	Nebish very fine sandy loam
951	Nebish-Marquette complex or Mahtomedi complex
186	Nemadji
583	Nereson
1414	Nereson fine sandy loam, very cobbly
757*	Nerwoods loam
235	Nessel loam or silt loam
225	Nessel sandy loam or fine sandy loam

576	Newalbin
577	Newalbin, channeled
578	Newalbin, depressional
879	Newalbin-Klossner complex
515	Newfound
501	Newglarus
585	Newhouse-Valton complex
1171	Newlondon-Strout complex
381	Newry
648	Newsolum
1115	Newson
274	Newson, depressional
130	Nicollet
1100	Nicollet silty clay loam
886	Nicollet-Crippin complex
946	Nicollet-Linder complex
1136	Nidaros
1346	Nidaros muck, calcareous
1111	Nidaros, frequently flooded
1119	Nielsville silty clay loam
1122	Nielsville-Perella complex
575	Nishna
1917	Nishna, ponded
705	Nitche-Kandota-Lida complex
586	Nodine in Rollingstone-Nodine complex only
217	Nokasippi
142	Nokay
1978	Nokay, stony or very stony
661	Nora
662	Nora-Crofton-Alcester
599	Norden
633	Nordness Variant
446	Normania
1265	Normania, bedrock substratum
429	Northcote
991	Northcote and Wahpeton soils
438	Northcote, depressional
563	Northwood
1328	Northwood muck, wooded
1422	Northwood, marl substratum
1146	Northwood, ponded
1939	Northwood, stony
717	Novak
224	Nowen
430	Noyes
270	Nutley
1310	Nutley clay, silty substratum
1313	Nutley-Hattie complex
876	Nutley-Sinai complex
207	Nymore
1248	Nymore-Verndale complex
1338	Oakcreek loam
275	Ocheyedan
685	Oesterle

466	Ogilvie
386	Okoboji mucky silty clay loam
134	Okoboji silty clay loam
1900	Okoboji-Canisteo complex
1052	Okoboji-Klossner, ponded or marshy
276	Oldham
1940	Oldham and Quam, ponded
188	Omega
1358	Omsrud clay loam
1357	Omsrud loam
1376	Omsrud-Storden complex
1373	Omsrud-Storden-Hawick complex
277	Onamia
671	Onstad
303	Ontonagon
631	Oran
278	Orion
493	Oronoco
1417	Ortonville loam
1455	Ortonville-Vallers-Parnell complex
413	Osakis
317	Oshawa
1850	Oshawa Variant, stony
2	Ostrander
1896	Ostrander-Carmi complex
1832	Ostrander-Dowagiac complex
468	Otter
1990	Otter, very wet
279	Otterholt
506	Overly
1975	Oylen sandy loam
703	Paddock
1321	Paddock fine sandy loam, stony
1157	Paddock, acid substratum
1202	Paddock, depressional
793	Paddock-Becida complex (stony)
1210	Paddock-Epoufette complex
587	Palsgrove
165	Parent
1979	Parent, stony
1222	Parle loam
680	Parnell
1292	Parnell and Flom soils
34	Parnell, depressional
646	Peever
779	Peever-Doran complex
822	Peever-Langhei or Buse complex
280	Pelan
607	Pengilly
872	Pengilly and Winterfield soils
1190	Pengilly-Fluvaquents, frequently flooded
581	Percy fine sandy loam
383	Percy loam
379	Percy, bouldery or very stony

384	Percy, depressional
1965	Percy-Fram complex
434	Perella silt loam or silty clay loam
370	Perella, depressional
1944	Perella, moderately wet
1866	Perella-Colvin complex
623	Pierz
1215	Pinelake sandy loam
1342	Pinelake, loamy substratum-Brandsvold complex
1029	Pits, gravel
1030	Pits, gravel-Udipsamments complex
1041	Pits, iron mine (open pit)
1013	Pits, quarry
1070	Plainbo-Emmert Variant-Rock outcrop complex
283	Plainfield
1856	Plainfield, loamy subsoil
284	Poinsett
741	Poinsett-Buse complex
119	Pomroy
750	Pomroy, stony or very stony
1194	Pomroy-Bushville complex
148	Poppleton
285	Port Byron
385	Port Byron, benches
507	Poskin
820	Potatolake very fine sandy loam
325	Prebish
1892	Prebish (non-ponded)
754	Prebish, very stony or stony
1054	Prebish-Histosols, ponded (beaver ponds)
873	Prebish-Nokay complex
397	Primghar
1286	Prinsburg silty clay loam
634	Protivin
1015	Psamments or Udipsamments (cut and fill land)
344	Quam
1940	Quam and Oldham, ponded
1239	Quam silt loam
1456	Quam silty clay loam (non-depressional)
1227	Quam, Cathro and Urness soils, ponded
1824	Quam, ponded
952	Quetico-Rock outcrop complex
99	Racine
1410	Racine, moderately wet
289	Radford
1874	Radium
291	Ransom
294	Rasset sandy loam
781	Rasset-Lester complex
782	Rasset-Lester-Kilkenny complex
450	Rauville
608	Rawles, occasionally flooded
295	Readlyn
116	Redby

795	Redby, stratified substratum
1274	Redby-Hiwood-Leafriver complex
82	Redeye
1440	Redeye loamy sand, morainic
1160	Redeye, acid substratum
1204	Reedslake loam
1442	Reedslake-Estherville complex
1207	Reedslake-Le Sueur complex
566	Regal
650	Reiner fine sandy loam
649	Reiner loamy fine sand
1283	Reis-Clearwater complex
4	Renova
1416	Renova loam, moderately wet
1437	Renova silty loam, moderately wet
373	Renshaw
654	Revere
1254	Ricelake fine sandy loam
635	Riceville
298	Richwood
639	Ridgeport
1829	Ridgeport Variant (Brown County)
1911	Ridgeport-Storden complex
541	Rifle
542	Rifle, woody
529	Ripon
1010	Riverwash
1060	Rock outcrop
835	Rock outcrop-Brainerd complex
992	Rock outcrop-Copaston complex
955	Rock outcrop-Ihlen complex
1064	Rock outcrop-Lithic Eutrocrept complex
1061	Rock outcrop-Lithic Udorthents, steep (rough rocky land)
1364	Rock outcrop-Udipsamments complex
299	Rockton
994	Rockwell and Grygla soils, depressional
987	Rockwell and Kratka soils, depressional
63	Rockwell loam
987	Rockwell, depressional
970	Rockwell-Vallers complex
374	Rockwood
1332	Rockwood fine sandy loam, morainic, stony
1319	Rockwood sandy loam, stony
1421	Rockwood-Two Inlets, morainic complex
1198	Rohrbeck-Koronis complex
219	Rolfe
582	Roliss
1240	Roliss clay loam
387	Roliss, depressional
971	Roliss-Lindaas complex
972	Roliss-Vallers complex
198	Rollingstone
586	Rollingstone-Nodine complex
589	Romnell

545	Rondeau
719	Rondeau muck, seepland
1415	Rondell silty clay loam
166	Ronneby
1980	Ronneby, stony
736	Ronneby-Mora complex
471	Root
798	Roscommon and Sago soils
1943	Roscommon loamy sand
1271	Roscommon loamy sand, depressional
636	Roseville
712	Rosewood
1966	Rosewood and Hamar
1882	Rosewood, seepy
1181	Rosewood-Ulen complex (Roseau County)
1278	Rosewood-Venlo complex
302	Rosholt
699	Rossfield
624	Rosy
290	Rothsay
957	Rothsay-Zell complex
1932	Runeberg
1141	Runeberg loam, acid substratum
701	Runeberg, depressional
1138	Rushlake and Hangaard soils, lake beaches
708	Rushlake coarse sand
1307	Rushlake sand
1120	Rushlake-Hangaard complex, lake beaches
304	Rushmore
1360	Rushriver fine sandy loam
816	Ryan-Fargo complex
306	Sac
532	Sago
798	Sago and Roscommon soils
1191	Sahkahtay (Area 1)
42	Salida
730	Sanburn
731	Sanburn loamy sand
1450	Sanburn very stony loam, bouldery
844	Sanburn-Graycalm complex
776	Sanburn-Milaca complex
258	Sandberg loamy sand
1241	Sandberg sandy loam
1223	Sandberg-Arvilla complex
1219	Sandberg-Sverdrup complex
625	Sandwick
153	Santiago
307	Sargeant
1992	Sargeant Variant (Mower County)
328	Sartell
308	Sattre
467	Sawmill
1154	Sax
309	Schapville

958	Schapville-Sogn complex
637	Schley
423	Seaforth
1262	Seaforth silt loam
817	Seaforth-Canisteo
897	Seaforth-Swanlake complex
1897	Seaforth-Wilmonton complex
103	Seaton
959	Seaton complex
389	Seaton, benches
988	Seaton, Timula and Bold soils
388	Seaton, valleys
1293	Sedgeville fine sandy loam, rarely flooded
1419	Sedgeville loam, channeled, occasionally flooded
1291	Sedgeville loam, frequently flooded
1396	Sedgeville, Nidaros and Aquolls soils, channeled
799	Seelyeville and Bowstring soils, frequently flooded
540	Seelyeville muck, depressional
1879	Seelyeville, calcareous
1031	Seelyeville, ponded
1825	Seelyeville, sloping
788	Seelyeville-Cathro complex
1288	Seelyeville-Markey complex, ponded
1065	Seep areas
573	Serden
1459	Shakopee silty clay
517	Shandep
1910	Shandep, calcareous
323	Shields
606	Shiloh
72	Shooker
311	Shorewood silty clay
286	Shorewood silty clay loam
1383	Shorewood silty clay loam, moderately wet
448	Shorewood silty clay loam, silty substratum
312	Shullsburg
212	Sinai
402	Sioux
824	Sioux-Dorset complex
823	Sioux-Hangaard complex
892	Sioux-Sverdrup complex
677	Siren (T)
396	Sisseton
777	Sisseton-Heimdal complex
1107	Sisseton-Sioux-Heimdal complex
1158	Skagen (Aeric Calciaquoll, coarse-loamy, frigid)
1170	Skagen loam, very cobbly (Marshall & Roseau Co.)
1133	Skime
23	Skyberg
1044	Slickens (settling basins, iron mines)
765	Smiley
653	Smiley, depressional
267	Snellman
1218	Snellman-Lida complex

1993	Snellman-Wykeham complex
265	Soderville
11	Sogn
989	Sogn and Copaston soils
199	Sol cobbly fine sandy loam
1272	Sol sandy loam
1243	Sol sandy loam, very stony
1226	Sol-Sugarbush complex
1244	Sol-Sugarbush complex, very stony
1368*	Southhaven
215	Southridge
580	Southridge-Blackhammer complex
8	Sparta loamy sand
1848	Sparta, bedrock substratum
1172	Sparta-Gardencity complex
150	Spencer
140	Spicer
391	Spicer, depressional
813	Spicer-Lura
663	Spillco
1920	Spillco, channeled
390	Spillville, frequently flooded
313	Spillville, occasionally flooded
1974	Spillville-Coland complex
1954	Spinks
833	Spinks complex
147	Spooner
1982	Spooner-Baudette complex
1987	Spooner-Grygla complex
314	Spottswood
1956	Staples
1155	Staples, acid substratum
1884	Stateline
574	Steamboat-Two Inlets, pitted
526	Steamboat-Two Inlets-Seeleyville, pitted
596	Steinauer
1260	Stonelake-Nebish complex
1253	Stonelake-Sanburn complex
1062	Stony land
1063	Stony land, wet
31	Storden
961	Storden complex
1849	Storden, stony
960	Storden-Clarion complex
920	Storden-Clarion-Estherville complex
920	Storden-Estherville complex
894	Storden-Everly complex
1106	Storden-Hawick-Ves complex
1911	Storden-Ridgeport Variant
920	Storden-Salida complex
1393	Storden-Ves complex
999	Storden-Ves-Estherville complex
432	Strandquist
439	Strathcona (formerly Rockwell fine sandy loam)

1144	Strathcona and Kratka soils, depressional
1123	Strathcona-Kratka, depressional complex
1159	Strout-Arkton complex
243	Stuntz
1991	Stuntz loam (taxadjunct-Beltrami County)
1152	Sugarbush loamy sand
332	Sugarbush sandy loam
315	Sugarbush, sandy substratum
1201	Sugarbush-Corliss-Snellman complex
775	Sugarbush-Two Inlets complex
462	Sunburg
805	Sunburg-Wadenill complex
626	Suomi
70	Svea
774	Svea, stony
1453	Svea, very bouldery
962	Svea-Hamerly complex
127	Sverdrup
1125	Sverdrup-Abbeylake complex
1221	Sverdrup-Sandberg complex
595	Swanlake
772	Swanlake-Lasa complex
885	Swanlake-Salida complex
1242	Swanlake-Terril complex
1175	Swedegrove loam
1168	Swedegrove-Lundlake complex
293	Swenoda
1296	Swenoda, moderately wet
1195	Sybil-Eagleview complex
435	Syrene
433	Syrene, depressional
514	Tacoosh muck
1314	Tacoosh mucky peat
1366	Talcot
214	Talcot, depressional (ponded)
320	Tallula
346	Talmoon
628	Talmoon, depressional
1426	Talmoon-Beltrami complex
1	Tama
638	Taopi
597	Tara
627	Tawas
122	Taylor
801	Taylor and Dalbo soils
195	Taylor loamy fine sand
1398	Taylor-Greaney, frequently flooded complex
94	Terril
1388	Terril loam, moderately wet
1812	Terril, sandy substratum
1852	Terril-Swanlake complex
651	Thiefriver
656	Thistledew
321	Tilfer

1912	Tilfer Variant
322	Timula
963	Timula-Bond complex
1858	Timula-Lamont complex
697	Toimi
234	Tonka
324	Torning
1441	Torning-Egeland complex
330	Towner
97	Trent
331	Tripoli
368	Trosky
101	Truman
420	Twig
990	Twig and Parent soils
1399	Two Inlets, noncalcareous substratum
675	Two Inlets-Eagleview-Steamboat, pitted
1238	Two Inlets-Sugarbush complex
1062	Udic Haploborolls, stony (stony land)
1008	Udifluvents, loam occasionally flooded
1018	Udifluvents, sandy (alluvial land, sandy, occasionally flooded)
1033	Udifluvents, sandy (lake beaches, sandy)
1019	Udifluvents-Fluvaquents complex
1033	Udipsamments (lake beaches, sandy)
393	Udolpho
1904	Udolpho, loamy substratum
1903	Udolpho, loamy substratum, swales
1020	Udorthents
1078	Udorthents
1040	Udorthents (made land)
1017	Udorthents, clayey (cut and fill land)
1016	Udorthents, loamy (cut and fill land)
1043	Udorthents, nearly level to very steep (mine, iron, spoil, mostly loamy glacial drift)
1072	Udorthents, shallow (sanitary land fill)
1027	Udorthents, wet substratum (fill lands)
1028	Udorthents-Pits, gravel complex
64	Ulen
1264	Ulen loamy fine sand
1178	Uniongrove loam
1145	Unnamed(Roseau Co.) Typic Haplaquolls, co-si/clayey
1180*	Unnamed clay Aquic Argiboroll, fine (Roseau Co.)
762*	Unnamed muck (Rice Co.: euic, Typic Medisaprist)
796	Unnamed series-coarse-loamy, mixed, frigid, Typic Haplumbrepts (Area 3)
1167*	Unnamed silt loam (Jadis) (Roseau Co.)
758*	Unnamed silt loam (Rice Co.: fi-si, mixed (calcareous), mesic, Typic Haplaquoll)
763*	Unnamed silt loam (Rice Co.: fi-silt loam, mixed, mesic, Cumulic Haplaquoll)
1039	Urban land
1045	Urban land, loamy substratum
1046	Urban land, sandy substratum
1047	Urban land, wet substratum

1007	Urban land-Alluvial land complex
1050	Urban land-Aquents complex
836	Urban land-Braham complex
851	Urban land-Chaska complex
858	Urban land-Chetek complex
852	Urban land-Copaston complex
853	Urban land-Copaston complex, bouldery
854	Urban land-Cordova complex
1086	Urban land-Cormant complex
850	Urban land-Dassel complex
845	Urban land-Dickman complex
855	Urban land-Dorchester complex
846	Urban land-Duelm complex
862	Urban land-Dundas complex
849	Urban land-Estherville complex
841	Urban land-Fargo complex
840	Urban land-Finchford complex
1082	Urban land-Finland complex
1085	Urban land-Graycalm complex
860	Urban land-Hayden or Lester complex
1411	Urban land-Hayden-Estherville complex
1088	Urban land-Hibbing complex
865	Urban land-Hubbard complex
838	Urban land-Hubbard complex, rock substratum
837	Urban land-Kasota complex
861	Urban land-Kingsley complex
1083	Urban land-Le Sueur complex
863	Urban land-Lino complex
839	Urban land-Minneopa complex
1089	Urban land-Ontonagon complex
848	Urban land-Osakis complex
864	Urban land-Plainfield complex
856	Urban land-Terril complex
842	Urban land-Udorthents complex
1048	Urban land-Udorthents complex, loamy
1049	Urban land-Udorthents complex, sandy
843	Urban land-Udorthents complex, wet substratum
857	Urban land-Waukegan-Dakota complex
859	Urban land-Zimmerman complex
335	Urness
1451	Urness mucky silty clay loam, sandy substratum, ponded
1504	Uskabwanka
1245	Vallers clay loam
236	Vallers loam
1317	Vallers silty clay loam
509	Vallers, bouldery
419	Vallers, firm subsoil
787	Vallers-Fram-Parnell complex
1279	Vallers-Hamerly complex
1998	Vallers-Hamerly-Winger complex
333	Vasa
417	Venlo
567	Verndale
1038	Verndale sandy loam, acid substratum

1131	Verndale-Abbeylake complex or Abbeylake-Verndale complex
1126	Verndale-Nymore complex or Nymore-Verndale complex
421	Ves
954	Ves-Storden complex
999	Ves-Storden-Estherville complex
770	Ves-Terril complex
297	Vienna
964	Vienna-Buse complex
965	Vienna-Buse-Renshaw complex
403	Viking
334	Vlasaty
569	Wabanica
146	Wabedo
739	Wabedo, stony or very stony
400	Wacouta
39	Wadena
1853	Wadena Variant (Redwood County)
498	Wadena-Hawick
612	Wadenill
1391	Wadenill-Sunburg complex
157	Wahpeton
1913	Wahpeton-Cashel
229	Waldorf silty clay loam
1890	Walford
240	Warba
802	Warba-Cathro complex
773	Warba-Cromwell complex
803	Warba-Menahga complex
729	Warman
V337	Warman fine sandy loam, somewhat poorly drained (Carlton County)
1998	Warman Variant (Morrison County)
337	Warman, depressional
1182*	Warroad
538	Waskish
218	Watab
1330	Water NOT USED - use capital W (for SSURGO)
1356	Water, miscellaneous (for sewage lagoons, waste ponds, etc.)
338	Waubay
369	Waubeeek
491	Waucoma
1814	Waucoma, soft substratum (Mower County)
483	Waukee
1955	Waukee, bedrock substratum
411	Waukegan
1827	Waukegan Variant, bedrock substratum (Washington & Ramsey Counties)
759*	Waukenabo fine sandy loam
38	Waukon
394	Waukon, heavy
1104	Waukon-Dorset complex
967	Waukon-Langhei complex
1217	Waukon-Lida complex
966	Waukon-Sioux complex

1067	Waupaca-Eutroboralfs complex
629	Wawina
1372	Wealthwood loamy fine sand
113	Webster clay loam
1101	Webster silty clay loam
1837	Webster Variant, bedrock substratum (Cottonwood County)
1093	Webster-Biscay complex
968	Webster-Darfur-Granby complex or Webster-Hanska (Brown County)
884	Webster-Delft complex
1059	Wega
340	Whalan
395	Whalan, moderately shallow
1316	Wheatville loam
343	Wheatville silt loam
1315	Wheatville very fine sandy loam
490	Whitewood
630	Wildwood
1188	Wildwood muck, ponded
672	Willossippi
345	Wilmonton
1899	Wilmonton Variant (Redwood County)
107	Winger silt loam
1246	Winger silty clay loam
398	Winger, depressional
1420	Winger-Balaton-Parnell complex
785	Winger-Hamerly complex
786	Winger-Hamerly-Colvin
1205	Winger-Quam complex
1998	Winger-Vallers-Hamerly complex
1894	Winnebago
791	Winterfield
872	Winterfield and Pengilly
1946	Winterfield-Fordum complex
1130	Wolverton fine sandy loam
1322	Wolverton very fine sandy loam
755	Woodslake
673	Workman
1337	Workman silt loam, depressional
1444	Wurtsmith loamy sand, MAP 22-30
652	Wyandotte
121	Wykeham
1225	Wykeham-Karlstad complex
808	Wykeham-Runeberg complex
1993	Wykeham-Snellman complex
508	Wyndmere
1854	Wyndmere complex
704	Wyrene
1266	Yellowbank loam
694	Zell
969	Zell-Rothsay complex
1164	Zerkel
158	Zimmerman
1258	Zimmerman fine sand, thick solum

568	Zippel
1095	Zook, frequently flooded
664	Zook, occasionally flooded
495	Zumbro
1815	Zumbro, nonflooded
1867	Zumbro-Calco complex
883	Zumbro-Du Page complex
882	Zumbro-Millington complex
115	Zwingle
1852	Zwingle Variant (Houston County)
669	(Do not use. Can be confused with 699 upside down)

b. Numerical

1	Tama
2	Ostrander
3	Fayette
4	Renova
5	Dakota
6	Aastad
7	Hubbard
8	Sparta loamy sand
9	Dodgeville
10	Dubuque
11	Sogn
12	Emmert
13	Adolph
14	Adolph, depressional
15	Judson
16	Arenzville
17	Minneopa, rarely flooded
18	Comfrey, occasionally flooded
19	Chaseburg
20	Chapett fine sandy loam
21	Ahmeek
22	Allendale
23	Skyberg
24	Kasson
25	Becker
26	Aazdahl
27	Dickinson loam
28	Alcester
29	Alvin
30	Kenyon
31	Storden
32	Nebish sandy loam or fine sandy loam
33	Barnes
34	Parnell, depressional
35	Blue Earth, loamy
36	Flom
37	Farrar
38	Waukon
39	Wadena
40	Nebish loam or silt loam
41	Estherville sandy loam
42	Salida
43	Automba
44	Ankeny
45	Maddock
46	Borup loam
47	Colvin
48	Hiwood
49	Antigo
50	Cashel, occasionally flooded
51	La Prairie, occasionally flooded

52	Augsburg loam
53	Kandota
54	Ihlen
55	Fargo, depressional
56	Fargo silty clay loam
57	Du Page, occasionally flooded
57	Fargo silty clay
58B	Hamlet
58	Kittson loam
V58	Kittson Variant, grayish subsoil
59	Grimstad fine sandy loam
60	Glyndon loam
61	Arveson
62	Barrington
63	Rockwell loam
64	Ulen
65	Foxhome
66	Flaming
67	Bearden silt loam
68	Arveson, depressional
69	Fedji
70	Svea
71	Fossum
72	Shooker
73	Bellechester
74	Dickinson fine sandy loam
75	Bluffton
76	Bertrand
77	Garnes fine sandy loam
78	Burnsville
79	Billet
80	Bold
81	Boone
82	Redeye
83	Maxcreek, swales
84	Brownton
85	Calco, occasionally flooded
86	Canisteo loam or clay loam
87	Chelsea
88	Clyde
89	McDoraldsville
90	Moody
91	Kranzburg
92	Flandreau
93	Bearden silty clay loam
94	Terril
95	Dunbarton
96	Collinwood
97	Trent
98	Colo
99	Racine
100	Copaston
101	Truman
102	Clarion loam

103	Seaton
104	Hayden loam or silt loam
105	Kamrar
106	Lester loam
107	Winger silt loam
108	McIntosh
109	Cordova clay loam
110	Marna
111	Hangaard
112	Harps
113	Webster clay loam
114	Glencoe clay loam
115	Zwingle
116	Redby
117	Cormant
118	Crippin
119	Pomroy
120	Brill
121	Wykeham
122	Taylor
123	Dundas
124	Brickton
125	Beltrami
126	Graycalm
127	Sverdrup
128	Grogan
129	Cylinder
130	Nicollet
131	Massbach
132	Hayden fine sandy loam or sandy loam
133	Dalbo
134	Okoboji silty clay loam
135	Donnan
136	Madelia
137	Dovray silty clay
138	Lerdal silty clay loam
139	Huntersville loamy fine sand
140	Spicer
141	Egeland
142	Nokay
143	Eleva
144	Flak
145	Enstrom
146	Wabedo
147	Spooner
148	Poppleton
149	Everly
150	Spencer
151	Burkhardt
152	Milaca
153	Santiago
154	Blue Earth muck
155	Chetek
156	Fairhaven

157	Wahpeton
158	Zimmerman
159	Anoka
160	Fieldon
161	Isanti, depressional
162	Lino
163	Brainerd
164	Mora
165	Parent
166	Ronneby
V166	Mora, wet
167	Baudette
168	Forman
169	Braham loamy fine sand
169	Du Page-McIntosh Variant complex
170	Blomford
171	Formdale
172	Indus
173	Frontenac
174	Gale
175	Galva
176	Garwin
177	Gotham
178	Granby fine sandy loam
179	Langola
180	Gonvick
181	Litchfield loamy fine sand
182	Halder
183	Dassel loam
184	Hamerly loam, moderate permeability
185	Hattie
186	Nemadji
187	Haug
188	Omega
189	Auburndale
190	Hayfield
191	Epoufette
192	Estelline
193	Hixton
194	Huntsville, occasionally flooded
195	Taylor loamy fine sand
196	Joliet
197	Kingston
198	Rollingstone
199	Sol cobbly fine sandy loam
200	Holdingford
201	Downs
202	Meehan
203	Joy
204	Cushing
205	Karlstad loamy sand
206	Kasota loam or silt loam
207	Nymore
208	Kato

209	Kegonsa
210	Fulda
211	Lura
212	Sinai
213	Klinger
214	Talcot, depressional (ponded)
215	Southridge
216	Lamont
217	Nokasippi
218	Watab
219	Rolfe
220	Langhei
221	Canisteo silt loam or silty clay loam, depressional
222	Lasa
223	Ames
224	Nowen
225	Nessel sandy loam or fine sandy loam
226	Lawson
227	Lemond
228	Mottland
229	Waldorf silty clay loam
230	Guckeen
231	Lester fine sandy loam
232	Heyder
233	Growton
234	Tonka
235	Nessel loam or silt loam
236	Vallers loam
237	Erin
238	Kilkenny
239	Le Sueur clay loam
240	Warba
241	Letri
242	Marquette
243	Stuntz
244	Lilah
245	Lohnes
246	Marysland
V246	Marysland complex
247	Linder loam
248	Lomax
249	Marcus
250	Kennebec
251	Marlean
252	Marshan
253	Maxcreek
254	Hibbing
255	Mayer loam
256	Mazaska silty clay loam
257	McPaul
258	Sandberg loamy sand
259	Grays
260	Duelm loamy sand
261	Isan, depressional

262	Medary
263	Meridian
264	Freeon
265	Soderville
266	Freer
267	Snellman
268	Cromwell
269	Millington, occasionally flooded
270	Nutley
271	Minneiska, frequently flooded
272	Bemidji
273	Muscatine
274	Newson, depressional
275	Ocheyedan
276	Oldham
277	Onamia
278	Orion
279	Otterholt
280	Pelan
281	Darfur
282	Hanska
283	Plainfield
284	Poinsett
285	Port Byron
286	Shorewood silty clay loam
287	Minnetonka
288	Esmond
289	Radford
290	Rothsay
291	Ransom
292	Alstad
V292	Alstad Variant
293	Swenoda
294	Rasset sandy loam
295	Readlyn
296	Fram
297	Vienna
298	Richwood
299	Rockton
300	Dassel mucky loam
301	Lindstrom
302	Rosholt
303	Ontonagon
304	Rushmore
305	Bergland
306	Sac
307	Sargeant
308	Sattre
309	Schapville
310	Beauford
311	Shorewood silty clay
312	Shullsburg
313	Spillville, occasionally flooded
314	Spottswood

315	Sugarbush, sandy substratum
316	Baroda
317	Oshawa
318	Mayer, swales (or depressional)
319	Barbert
320	Tallula
321	Tilfer
322	Timula
323	Shields
324	Torning
325	Prebish
326	Hillet
327	Dickman
328	Sartell
329	Chaska
330	Towner
331	Tripoli
332	Sugarbush sandy loam
333	Vasa
334	Vlasaty
335	Urness
336	Delft
337	Warman, depressional
V337	Warman fine sandy loam, somewhat poorly drained (Carlton County)
338	Waubay
339	Fordville
340	Whalan
341	Arvilla
342	Kingsley
343	Wheatville silt loam
344	Quam
345	Wilmonton
346	Talmoon
347	Malachy
348	Borup, depressional
349	Calco, very wet
350	Canisteo loam or clay loam, depressional
351	Colvin, depressional
352	Heimdal
353	Comfrey, frequently flooded
354	Dorchester, occasionally flooded
355	Cloquet
356	Fayette, valleys
357	Garwin, swales
358	Huntsville, frequently flooded
359	Lamoure silty clay loam, frequently flooded
360	Lasa, rock substratum
361	Maxfield, swales
362	Millington, frequently flooded
363	Minneopa, occasionally flooded
364	Minnetonka, silty substratum
365	Mt. Carrol, benches
366	Hecla

367	Campia
368	Trosky
369	Waubeeek
370	Perella, depressional
371	Clontarf
372	Hamar
373	Renshaw
374	Rockwood
375	Forada
376	Moland
377	Merton
378	Maxfield
379	Percy, bouldery or very stony
380	Havanna
381	Newry
382	Blooming
383	Percy loam
384	Percy, depressional
385	Port Byron, benches
386	Okoboji mucky silty clay loam
387	Roliss, depressional
388	Seaton, valleys
389	Seaton, benches
390	Spillville, frequently flooded
391	Spicer, depressional
392	Biscay loam
393	Udolpho
394	Waukon, heavy
395	Whalan, moderately shallow
396	Sisseton
397	Primghar
398	Winger, depressional
399	Biscay, depressional
400	Wacouta
401	Mt. Carroll
402	Sioux
403	Viking
404	Chilgren
405	Bixby
406	Dorset
407	Brimson
408	Faxon
409	Etter
410	Athelwold
411	Waukegan
412	Mavie
413	Osakis
414	Hamel loam
415	Kanaranzi
416	Brookings
417	Venlo
418	Lamoure silty clay loam, occasionally flooded
419	Vallers, firm subsoil
420	Twig

421	Ves
422	Bygland silty clay loam
422	La Prairie, frequently flooded
423	Seaforth
424	Augsburg, depressional
425	Doraldson
426	Foldahl loamy fine sand
427	Fram, noncalcareous surface
428	Hassman
429	Northcote
430	Noyes
431	Beotia
432	Strandquist
433	Syrene, depressional
434	Perella silt loam or silty clay loam
435	Syrene
436	Hidewood
437	Buse
438	Northcote, depressional
439	Strathcona (formerly Rockwell fine sandy loam)
440	Copaston, very shallow
441	Almora
443	Ihlen, shallow
444	Canisteo silt loam or silty clay loam
445	Braham, lacustrine substratum
446	Normania
447	Harpster
448	Shorewood silty clay loam, silty substratum
449	Crystal Lake
450	Rauville
451	Dorchester, frequently flooded
452	Comstock
453	DeMontreville
454	Mahtomedi
455	Festina
456	Barronett
457	Lacrescent
458	Menahga
459	Corunna
460	Baytown
461	Koronis
462	Sunburg
463	Minneiska, occasionally flooded
464	Brennyville
465	Kalmarville, frequently flooded
466	Ogilvie
467	Sawmill
468	Otter
469	Hillcity
470	Lismore
471	Root
472	Channahon
473	Dorerton
474	Haverhill

475	Backbone
476	Frankville
477	Littleton
478	Coggon
479	Floyd
480	Dinsdale
481	Kratka
482	Grygla
483	Waukee
484	Eyota
485	Lawler
486	Marshan, depressional
487	Hoopeston
488	Becida fine sandy loam, morainic
489	Atkinson
490	Whitewood
491	Waucoma
492	Nasset
493	Oronoco
494	Darnen, moderately wet
495	Zumbro
496	Andrusia
497	Hantho
498	Wadena-Hawick
499	Hanska, depressional
500	Edmund
501	Newglarus
502	Dusler
503	Balmlake
504	Duluth
505	Debs
506	Overly
507	Poskin
508	Wyndmere
509	Vallers, bouldery
510	Elmville
511	Marcellon loam, MAP<30
512	Amasa
513	Arveson, moist climate
514	Tacoosh muck
515	Newfound
516	Dowagiac
517	Shandep
518	Kalmarville, occasionally flooded
519	Klossner, calcareous (formerly Palms)
520	Muskego, mucky peat
521	Adrian
522	Boots
523	Houghton
524	Caron
525	Muskego muck, depressional
526	Steamboat-Two Inlets-Seeleyville, pitted
527	Klossner, deep (formerly Palms)
528	Klossner, 1 to 6 percent slopes

529	Ripon
530	Greenwood muck or mucky peat
531	Beseman
532	Sago
533	Loxley
534	Mooselake
535	Merwin
536	Dawson
537	Lobo
538	Waskish
539	Klossner (formerly Palms)
540	Seelyeville muck, depressional
541	Rifle
542	Rifle, woody
543	Markey
544	Cathro
545	Rondeau
546	Lupton
547	Deerwood
548	Medo muck, depressional
549	Greenwood peat
550	Dora
551	Millerville
552	Kerston
553	Carlos
554	Brophy
555	Barto
556	Insula
557	Conic
558	Mesaba
559	Lena
560	Lobo and Greenwood
561	Bullwinkle
562	Knoke
563	Northwood
564	Friendship
565	Eckvoll
566	Regal
567	Verndale
568	Zippel
569	Wabanica
570	Faunce
570	Formdale-Langhei-Lohnes complex
571	Coriff
572	Lowlein
573	Serden
574	Steamboat-Two Inlets, pitted
575	Nishna
576	Newalbin
577	Newalbin, channeled
578	Newalbin, depressional
579	Langhei-Formdale-Lohnes complex
580	Blackhammer-Southridge complex
580	Southridge-Blackhammer complex

581	Percy fine sandy loam
582	Roliss
583	Nereson
584	Lamoille complex and Lamoille-Dorerton complex
585	Newhouse-Valton complex
586	Nodine in Rollingstone-Nodine complex only
586	Rollingstone-Nodine complex
587	Palsgrove
588	Clarion Variant
589	Romnell
590	Moines
591	Doland
592	Lamoille-Elbaville complex
593	Elbaville
594	Jeffers
595	Swanlake
596	Steinauer
597	Tara
598	Beavercreek-Arenzville complex
599	Norden
600	Council loam
601	Council fine sandy loam
602	Eckman
603	Hanlon fine sandy loam
604	Huntsville-Beavercreek complex, channeled
605	LaFarge
606	Shiloh
607	Pengilly
608	Rawles, occasionally flooded
609	Dickey
610	Calco, frequently flooded
611	Hawick
612	Wadenill
613	Grovecity
614	Blackhoof
615	Cowhorn
616	Effie
617	Goodland
618	Itasca
619	Keewatin
620	Cutaway
621	Morph
622	Nashwauk
623	Pierz
624	Rosy
625	Sandwick
626	Suomi
627	Tawas
628	Talmoon, depressional
629	Wawina
630	Wildwood
631	Oran
632	Kensett Variant
633	Nordness Variant

634	Protivin
635	Riceville
636	Roseville
637	Schley
638	Taopi
639	Ridgeport
640	Galchutt
641	Clearwater clay
642	Clearwater loam (now Foxlake)
643	Huot
644	Boash
645	Espelie
646	Peever
647	Hilaire loamy fine sand
648	Newsolum
649	Reiner loamy fine sand
650	Reiner fine sandy loam
651	Thiefriver
652	Wyandotte
653	Smiley, depressional
654	Revere
655	Bearville
656	Thistledew
657	Crofton
658	Dempster
659	Graceville
660	Moody, loamy
661	Nora
662	Nora-Crofton-Alcester
663	Spillco
664	Zook, occasionally flooded
665	Menahga, moraine
667	Fairdale, occasionally flooded
668	Corwith
669	(Do not use. Can be confused with 699 upside down)
670	Knute
671	Onstad
672	Willossippi
673	Workman
674	Eveleth
675	Two Inlets-Eagleview-Steamboat, pitted
676	Kost
677	Siren (T)
678	Beltrami, thick solum
679	Menahga, friable substratum
680	Parnell
681	Brandsvold
682	Milaca stony or very stony
683	Chetek loamy sand
684	Bergkeller, moderately wet
685	Oesterle
693	Kasota sandy loam
694	Zell
695	Finland

696	Hermantown
697	Toimi
698	Doran
699	Rossfield
701	Runeberg, depressional
702	Bullwinkle-Cathro
703	Paddock
704	Wyrene
705	Nitche-Kandota-Lida complex
706	Bigstone, ponded
707	Lizzie
708	Rushlake coarse sand
709	Lengby
710	Friberg-Weetown complex
711	Arvilla-Sandberg complex
712	Rosewood
713	Linveltd
714	Buhl
715	Bluffcreek-Clearriver complex
716	Leaflake-Eagleview complex
717	Novak
718	Naytahwaush
719	Rondeau muck, seepland
720	Blowers
721	Corliss
722	Blomford, lacustrine substratum
723	Freer, very stony or stony
724	Bigstone
725	Kratka, stratified substratum
726	Kratka, thick solum
727	Milaca very fine sandy loam
728	Brennyville, very stony or stony
729	Warman
730	Sanburn
731	Sanburn loamy sand
732	Bushville
733	Berner
734	Cormant, stratified substratum
735	Halverson loamy fine sand
736	Ronneby-Mora complex
737	Mahkonce
738	Milaca-Cromwell complex
739	Wabedo, stony or very stony
740	Hamel-Glencoe complex
741	Poinsett-Buse complex
742	Flak, stony or very stony
743	Glencoe, stratified substratum
744	Debs-Akeley
746	Haslie
747	Audubon
748	Hamlet
749	Colvin, occasionally flooded
750	Pomroy, stony or very stony
751	Fordum

753	Abbeylake
754	Prebish, very stony or stony
755	Woodslake
756	Grasston (formerly Dalbo, silty substratum)
757*	Nerwoods loam
758*	Unnamed silt loam (Rice Co.: fi-si, mixed (calcareous), mesic, Typic Haplaquoll)
759*	Waukenabo fine sandy loam
760	Chapett-Sisseton complex
761	Epsom silty clay loam
762*	Unnamed muck (Rice Co.: euic, Typic Medisaprist)
763*	Unnamed silt loam (Rice Co.: fi-silt loam, mixed, mesic, Cumulic Haplaquoll)
764	Klossner, flooded
765	Smiley
766	Kratka, stratified substratum, depressional
767	Auganaush
768	Mosford sandy loam
769	Mehurin
770	Ves-Terril complex
771	Elkriver fine sandy loam
772	Swanlake-Lasa complex
773	Warba-Cromwell complex
774	Svea, stony
775	Sugarbush-Two Inlets complex
776	Sanburn-Milaca complex
777	Sisseton-Heimdal complex
778	Dorset-Corliss complex
779	Peever-Doran complex
780	Audubon-Boyerlake complex
781	Rasset-Lester complex
782	Rasset-Lester-Kilkenny complex
783	Lester-Kilkenny complex
784	Dakota and Rasset
785	Hamerly-Winger complex
785	Winger-Hamerly complex
786	Hamerly-Winger-Colvin complex
786	Winger-Hamerly-Colvin
787	Fram-Vallers-Parnell complex
787	Vallers-Fram-Parnell complex
788	Cathro-Seelyeville complex
788	Seelyeville-Cathro complex
789	Grogan-Lasa Variant complex
789	Lasa Variant-Grogan complex
790	Dickman-Grogan complex
790	Grogan-Dickman complex
791	Winterfield
792	Fordum, frequently flooded
793	Paddock-Becida complex (stony)
794	Clearriver
795	Redby, stratified substratum
796	Unnamed series-coarse-loamy, mixed, frigid, Typic Haplumbrepts (Area 3)
797	Mooselake and Lupton soils

798	Roscommon and Sago soils
798	Sago and Roscommon soils
799	Seelyeville and Bowstring soils, frequently flooded
800	Dorset-Kandota complex
800	Kandota-Dorset complex
801	Taylor and Dalbo soils
802	Warba-Cathro complex
803	Warba-Menahga complex
804	Koronis-Hawick complex
805	Sunburg-Wadenill complex
806	Arkton-Guckeen
806	Guckeen-Arkton complex
807	Koronis-Sunburg complex
808	Wykeham-Runeberg complex
809	Lowlein-Estherville complex
810	Coriff-Fieldon complex
811	Brownton-Canisteo
812	Marna-Webster complex
813	Lura-Spicer
813	Spicer-Lura
814	Hamerly-Lindaas complex
815	Elbaville-Seaton complex
816	Ryan-Fargo complex
817	Canisteo-Seaforth complex
817	Seaforth-Canisteo
818	Lemond-Linder-Estherville complex
820	Potatolake very fine sandy loam
821	Doran-Lindaas complex
822	Peever-Langhei or Buse complex
823	Hangaard-Sioux or Lohnes complex
823	Sioux-Hangaard complex
824	Dorset-Sioux complex
824	Sioux-Dorset complex
825	Flom-Gonvick complex
825	Gonvick-Flom complex
826	Blackhammer-Gale complex
826	Gale-Blackhammer complex
827	Heimdal-Esmond complex
829	Gale-Seaton complex
830	Eleva-Seaton complex
831	Akeley-Debs complex
832	Lacrescent-Rock outcrop complex
833	Spinks complex
834	Friendship-Meehan
834	Meehan-Friendship complex
835	Brainerd-Rock outcrop
835	Rock outcrop-Brainerd complex
836	Urban land-Braham complex
837	Urban land-Kasota complex
838	Urban land-Hubbard complex, rock substratum
839	Urban land-Minneopa complex
840	Urban land-Finchford complex
841	Urban land-Fargo complex
842	Urban land-Udorthents complex

843	Urban land-Udorthents complex, wet substratum
844	Sanburn-Graycalm complex
845	Urban land-Dickman complex
846	Urban land-Duelm complex
847	Colvin-Spicer complex
848	Urban land-Osakis complex
849	Urban land-Estherville complex
850	Urban land-Dassel complex
851	Urban land-Chaska complex
852	Urban land-Copaston complex
853	Urban land-Copaston complex, bouldery
854	Urban land-Cordova complex
855	Urban land-Dorchester complex
856	Urban land-Terril complex
857	Urban land-Waukegan-Dakota complex
858	Urban land-Chetek complex
859	Urban land-Zimmerman complex
860	Urban land-Hayden or Lester complex
861	Urban land-Kingsley complex
862	Urban land-Dundas complex
863	Urban land-Lino complex
864	Urban land-Plainfield complex
865	Urban land-Hubbard complex
866	Menahga-Itasca complex
867	Graycalm and Menahga
867	Menahga-Graycalm complex
868	Graycalm and Mahtomedi
869	Lobo and Waskish soils
870	Goodland in Itasca-Goodland complex only
870	Itasca-Goodland complex
871	Indus and Brickton soils
872	Pengilly and Winterfield soils
872	Winterfield and Pengilly
873	Prebish-Nokay complex
874	Chaska-Seelyeville complex
875	Estherville-Hawick complex
876	Nutley-Sinai complex
877	Eckman-Zell complex
878	Calco-Du Page complex
879	Newalbin-Klossner complex
880	Brodale-Rock outcrop complex
881	Glyndon-Quam complex
882	Zumbro-Millington complex
883	Zumbro-Du Page complex
884	Webster-Delft complex
885	Swanlake-Salida complex
886	Nicollet-Crippin complex
887	Clarion-Swanlake complex
888	Kingsley-Lester complex
890	Barto-Mesaba complex
891	Doland-Langhei complex
891	Doland-Swanlake complex (Doland-Buse)
892	Sioux-Sverdrup complex
893	Lohnes-Waukon complex

894	Storden-Everly complex
895	Kingsley-Mahtomedi-Spencer complex
896	Kingsley-Mahtomedi complex (Kingsley-Gotham)
896	Mahtomedi-Kingsley complex
897	Seaforth-Swanlake complex
898	Brodale-Bellechester complex
899	Harps-Okoboji complex
900	Aazdahl-Hamerly-Parnell complex
901	Barnes, complex
902	Barnes-Buse complex
903	Barnes-Langhei complex
904	Arvilla-Barnes-Buse complex
904	Arvilla-Buse-Barnes complex
904	Barnes-Buse-Arvilla complex
905	Barnes-Buse-Renshaw complex
906	Barnes-Langhei-Sioux complex
907	Barnes-Svea complex
908	Bearden-Fargo complex
909	Bold-Truman complex
910	Buse complex
911	Buse-Arvilla complex
912	Formdale-Aazdahl-Flom complex
913	Buse-Barnes complex
914	Grimstad-Towner complex
915	Buse-Formdale complex
915	Forman-Buse or Forman-Langhei complex
916	Buse-Renshaw complex
917	Buse-Sioux complex
918	Buse-Vienna complex
919	Canisteo-Fieldon complex or Canisteo-Lemond complex
919	Canisteo-Mayer complex
920	Clarion complex
920	Clarion-Estherville complex
920	Clarion-Estherville-Storden complex
920	Clarion-Hawick complex
920	Clarion-Hawick-Estherville complex
920	Storden-Clarion-Estherville complex
920	Storden-Estherville complex
920	Storden-Salida complex
921	Clarion-Storden complex
922	Hamerly-Parnell complex
923	Copaston-Rock outcrop complex
924	Crofton-Moody complex
925	Cordova-Barbert complex
926	Darfur-Webster complex
927	Harps-Seaforth-Okoboji complex
928	Cushing-DeMontreville complex or Cushing-Mahtomedi
929	Fieldon-Canisteo complex
930	Flak-Chetek complex
931	Formdale-Langhei or Formdale-Buse complex
932	Glencoe-Dassel complex
933	Hamerly-Aazdahl complex
934	Hayden-Burnsville complex
935	Hegne-Fargo complex

936	Clearwater-Reis complex
937	Eaglepoint-Northcote complex
938	Heyder-Kingsley-Burnsville complex
939	Ihlen-Rock outcrop complex
940	Maxcreek-Barbert complex
941	Kingston-Nicollet complex
942	Langhei-Barnes complex
943	Langhei-Formdale complex
944	Lester complex
944	Lester-Estherville complex
944	Lester-Storden-Estherville complex
945	Lester-Storden complex
946	Litchfield or Dickman moderately well-Nicollet complex
946	Nicollet-Linder complex
947	Madelia-Webster complex
948	McIntosh-Lindaas complex
949	Chetek-Milaca complex
950	Moody-Crofton complex
951	Nebish-Marquette complex or Mahtomedi complex
952	Quetico-Rock outcrop complex
953	Arvilla-Storden-Ves complex
954	Ves-Storden complex
955	Rock outcrop-Ihlen complex
956	Canisteo-Glencoe complex
957	Rothsay-Zell complex
958	Schapville-Sogn complex
959	Seaton complex
960	Storden-Clarion complex
961	Storden complex
962	Svea-Hamerly complex
963	Timula-Bond complex
964	Vienna-Buse complex
965	Vienna-Buse-Renshaw complex
966	Waukon-Sioux complex
967	Waukon-Langhei complex
968	Webster-Darfur-Granby complex or Webster-Hanska (Brown County)
969	Zell-Rothsay complex
970	Rockwell-Vallers complex
971	Roliss-Lindaas complex
972	Roliss-Vallers complex
973	Brodale-Sogn complex
974	Emmert complex
974	Emmert-Mahtomedi complex
975	Ahmeek-Omega complex
976	Campia-Ontonagon complex
977	Cloquet-Emmert complex
978	Cordova-Rolfe complex
979	Langhei-Waukon complex
980	Blackhoof and Mahtowa
981	Canisteo and Harps soils
982	Canisteo and Webster soils
983	Flom and Roliss soils
984	Flom and Vallers soils

985	Lamoure and La Prairie soils
986	Lamoure-La Prairie complex, frequently flooded
987	Rockwell and Kratka soils, depressional
987	Rockwell, depressional
988	Seaton, Timula and Bold soils
989	Sogn and Copaston soils
990	Twig and Parent soils
991	Northcote and Wahpeton soils
992	Rock outcrop-Copaston complex
993	Arveson and Cormant soils, depressional
993	Cormant and Arveson soils, depressional
994	Grygla and Rockwell soils, depressional
994	Rockwell and Grygla soils, depressional
995	Borosaprists
995	Histosols, undifferentiated
996	Beauford-Barbert complex
997	Marna-Barbert complex
998	Minnetonka-Barbert complex
999	Storden-Ves-Estherville complex
999	Ves-Storden-Estherville complex
1000	Arvilla, MAP>25
1001	Haplaquolls-Udifluvents (Alluvial land, occasionally flooded)
1002	Borosaprists and Fluvaquents soils
1002	Fluvaquents (Alluvial land, mixed, frequently flooded)
1002	Fluvaquents-Aquolls-Histosols complex, frequently flooded
1003	Alluvial land, sandy (Fluvaquents, sandy)
1003	Fluvaquents (Alluvial land, sandy)
1004	Alluvial land, mixed, sloping
1005	Fluvaquents (Alluvial land, loamy, frequently flooded)
1006	Borolls-Aquolls or Fluvaquents or Haploborolls (Breaks and Alluvial Land)
1006	Fluvaquents-Udorthents or Borolls-Aquolls (break-alluvial land)
1007	Urban land-Alluvial land complex
1008	Udifluvents, loam occasionally flooded
1009	Fluvaquents, loamy, frequently flooded
1010	Riverwash
1011	Blown-out land
1012	Borrow pits
1013	Pits, quarry
1014	Biscay clay loam
1015	Psamments or Udipsamments (cut and fill land)
1016	Udorthents, loamy (cut and fill land)
1017	Udorthents, clayey (cut and fill land)
1018	Alluvial land, sandy, occasionally flooded (Udifluvents, sandy)
1018	Udifluvents, sandy (alluvial land, sandy, occasionally flooded)
1019	Udifluvents-Fluvaquents complex
1020	Udorthents
1021	Graycalm-Sanburn complex
1022	Dumps (not iron mine)
1023C	Lester-Malardi complex
1025	Dune land
1026	Lizzie silty loam, moderately wet
1027	Udorthents, wet substratum (fill lands)
1028	Udorthents-Pits, gravel complex

1029 Pits, gravel
1030 Pits, gravel-Udipsamments complex
1031 Histosols, ponded
1031 Seelyeville, ponded
1032 Aquents-Udorthents (Lake beaches)
1033 Udifluvents, sandy (lake beaches, sandy)
1033 Udipsamments (lake beaches, sandy)
1034 Fluvaquents, loamy (Lake beaches, loamy)
1035 Crowfork loamy sand
1036 Angus fine sandy loam
1037 Eckvoll loamy fine sand, MAP>25
1038 Verndale sandy loam, acid substratum
1039 Urban land
1040 Udorthents (made land)
1041 Pits, iron mine (open pit)
1042 Dumps, iron mine (mostly rock fragments)
1043 Udorthents, nearly level to very steep (mine, iron, spoil, mostly loamy glacial drift)
1044 Slickens (settling basins, iron mines)
1045 Urban land, loamy substratum
1046 Urban land, sandy substratum
1047 Urban land, wet substratum
1048 Urban land-Udorthents complex, loamy
1049 Urban land-Udorthents complex, sandy
1050 Urban land-Aquents complex
1051 Glencoe and Bigstone soils, ponded
1051 Glencoe, marshy or ponded
1052 Okoboji-Klossner, ponded or marshy
1053 Aquolls and Aquents, ponded
1054 Prebish-Histosols, ponded (beaver ponds)
1055 Aquolls and Histosols, ponded
1056 Fluvaquentic Haplaquolls
1057 Caron-Blue Earth-Klossner, ponded
1058 Houghton and Muskego soils, ponded
1059 Wega
1060 Rock outcrop
1061 Rock outcrop-Lithic Udorthents, steep (rough rocky land)
1062 Stony land
1062 Udic Haploborolls, stony (stony land)
1063 Stony land, wet
1064 Rock outcrop-Lithic Eutrocrept complex
1065 Seep areas
1066 Malardi-Hawick complex
1067 Waupaca-Eutroboralfs complex
1068 Caryville
1069 Fairport-Rock outcrop complex
1070 Plainbo-Emmert Variant-Rock outcrop complex
1071 Houghton and Muskego soils
1072 Udorthents, shallow (sanitary land fill)
1073 Borofolists
1074 Borosaprists
1075 Klossner and Muskego soils, ponded
1076 Bowstring and Fordum soils, frequently flooded
1077 Forada and Leafriver soils, depressional

1078	Udorthents
1079	Klinger-Maxfield complex
1080	Klossner and Okobojo soils, ponded
1081	Minneiska-Algansee complex
1082	Urban land-Finland complex
1083	Urban land-Le Sueur complex
1084	Hanlon-Kalmarville complex, frequently flooded
1085	Urban land-Graycalm complex
1086	Urban land-Cormant complex
1087	Angus-Malardi complex
1088	Urban land-Hibbing complex
1089	Urban land-Ontonagon complex
1090	Blue Earth, dredged
1091	Klossner, sandy substratum-Harps-Mayer complex
1092	Harps-Glencoe complex
1093	Webster-Biscay complex
1094	Angus-Cordova complex
1095	Zook, frequently flooded
1096	Fieldon-Dassel, depressional complex
1097	Mayer-Biscay, depressional
1098	Biscay-Biscay, depressional complex
1099	Granby loamy fine sand
1100	Nicollet silty clay loam
1101	Webster silty clay loam
1102	Chapett-Dorset complex
1103	Clitherall
1104	Waukon-Dorset complex
1105	Dent
1106	Storden-Hawick-Ves complex
1107	Sisseton-Sioux-Heimdal complex
1108	Harps-Glencoe-Seaforth complex
1109	Isanti
1110	Isan
1111	Nidaros, frequently flooded
1112	Chapett-Corliss complex
1113	Haslie, Seelyeville, and Cathro soils, ponded
1114	Hangaard loamy sand, lake beaches
1115	Newson
1116	Brodale-Eyota complex
1117	Hedman
1118	Cathro, calcareous
1119	Nielsville silty clay loam
1120	Rushlake-Hangaard complex, lake beaches
1121	Hedman, depressional
1122	Nielsville-Perella complex
1123	Strathcona-Kratka, depressional complex
1124	Hegne, silty substratum-Fargo, silty substratum complex
1125	Sverdrup-Abbeylake complex
1126	Verndale-Nymore complex or Nymore-Verndale complex
1127	Bootlake-Graycalm complex
1128	Cathro muck, frequently flooded
1129	Lindaas silty clay loam, morainic
1130	Wolverton fine sandy loam
1131	Verndale-Abbeylake complex or Abbeylake-Verndale complex

1132	Graycalm-Balmlake complex
1133	Skime
1134	Borup-Glyndon complex
1135	Foxlake
1136	Nidaros
1137	Birchlake silty clay loam
1138	Rushlake and Hangaard soils, lake beaches
1139	Marysland, occasionally flooded
1140	Graycalm-Snellman complex
1141	Runeberg loam, acid substratum
1142	Hedman-Fram complex
1143	Berner-Markey complex
1144	Strathcona and Kratka soils, depressional
1145	Unnamed(Roseau Co.) Typic Haplaquolls, co-si/clayey
1146	Northwood, ponded
1147	Fordum, Fairdale and Lamoure soils, frequently flooded
1148	Fairdale and Lamoure soils, occasionally flooded
1149	Hamerly cl, moderately slow permeability
1150	Jevne fine sandy loam
1151	Blowers, acid substratum
1152	Sugarbush loamy sand
1153	Huntersville, acid substratum
1154	Sax
1155	Staples, acid substratum
1156	Cordova loam
1157	Paddock, acid substratum
1158	Skagen (Aeric Calciaquoll, coarse-loamy, frigid)
1159	Strout-Arkton complex
1160	Redeye, acid substratum
1161	Barry loam
1162	Kandiyohi silty clay loam
1163	Cohoctah fine sandy loam, frequently flooded (Suckercreek)
1164	Zerkel
1165	Lundlake silty clay loam, depressional
1166	Moosecreek
1167*	Unnamed silt loam (Jadis) (Roseau Co.)
1168	Swedegrove-Lundlake complex
1169	Corvuso-Lura complex
1170	Skagen loam, very cobbly (Marshall & Roseau Co.)
1171	Newlondon-Strout complex
1172	Sparta-Gardencity complex
1173	Muskego and Klossner soils, commonly flooded
1174	Danielson clay loam
1175	Swedegrove loam
1176	Litchfield sandy loam
1177	Gardencity-Bold complex
1178	Uniongrove loam
1179*	Moranville
1180*	Unnamed clay Aquic Argiboroll, fine (Roseau Co.)
1181	Rosewood-Ulen complex (Roseau County)
1182*	Warroad
1183	Crowriver loam
1184	Corvuso silty clay loam
1185	Gardencity very fine sandy loam, moderately wet

1186	Forestcity-Lundlake complex
1187	Dora muck, ponded
1188	Wildwood muck, ponded
1189	Clearwater mucky loam, depressional
1190	Pengilly-Fluvaquents, frequently flooded
1191	Sahkahtay (Area 1)
1192	Crowriver-Lundlake complex
1193	Cosmos silty clay
1194	Pomroy-Bushville complex
1195	Sybil-Eagleview complex
1196	Lida-Two Inlets complex
1197	Cohoctah, occasionally flooded (Suckercreek)
1198	Rohrbeck-Koronis complex
1199	Klossner-Lundlake complex, ponded
1200	Egglake
1201	Sugarbush-Corliss-Snellman complex
1202	Paddock, depressional
1203	Muskego, Blue Earth and Houghton soils, ponded
1204	Reedslake loam
1205	Winger-Quam complex
1206	Cormant-Redby complex
1207	Reedslake-Le Sueur complex
1208	Naytahwaush-Mahkonc complex
1209	Naytahwaush clay loam
1210	Paddock-Epoufette complex
1211	Egglake-Cathro complex
1212	Mahkonc clay loam
1213	Cokato-Storden complex
1214	Mustinka clay loam
1215	Pinelake sandy loam
1216	Egglake-Wykeham complex
1217	Waukon-Lida complex
1218	Snellman-Lida complex
1219	Sandberg-Sverdrup complex
1220	Cokato-Storden-Hawick complex
1221	Sverdrup-Sandberg complex
1222	Parle loam
1223	Sandberg-Arvilla complex
1224	Hubbard-Verndale complex
1225	Wykeham-Karlstad complex
1226	Sol-Sugarbush complex
1227	Quam, Cathro and Urness soils, ponded
1228	Hoopeston-Le Sueur complex
1229	Cokato-Storden-Estherville complex
1230	Haslie and Nidaros soils, ponded
1231	Hubbard-Mosford complex
1232	Chapett loam
1233	Esmond-Heimdal complex
1234	Formdale-Buse complex
1235	Formdale-Buse-Sandberg complex
1236	Eagleview loamy sand
1237	Lakepark loam
1238	Two Inlets-Sugarbush complex
1239	Quam silt loam

1240	Roliss clay loam
1241	Sandberg sandy loam
1242	Swanlake-Terril complex
1243	Sol sandy loam, very stony
1244	Sol-Sugarbush complex, very stony
1245	Vallers clay loam
1246	Winger silty clay loam
1247	Corliss-Dorset complex
1248	Nymore-Verndale complex
1249	Graycalm-Bootlake complex
1250	Abbeylake-Verndale complex
1251	Lamoure silt loam, channeled, frequently flooded
1252	Bootlake-Eagleview complex
1253	Stonelake-Sanburn complex
1254	Ricelake fine sandy loam
1255	Elkriver fine sandy loam, occasionally flooded
1256	Cantlin loamy fine sand
1257	Elkriver-Mosford complex
1258	Zimmerman fine sand, thick solum
1259	Hamerly-Mustinka complex
1260	Stonelake-Nebish complex
1261	Bechyn
1262	Seaforth silt loam
1263	Eagleview-Bootlake complex
1264	Ulen loamy fine sand
1265	Normania, bedrock substratum
1266	Yellowbank loam
1267	Cedarrock silty clay loam
1268	Hanlon loam, rarely flooded
1269	Lowlein silt loam
1270	Milaca fine sandy loam, moderately wet
1271	Roscommon loamy sand, depressional
1272	Sol sandy loam
1273	Dalbo loamy fine sand
1274	Redby-Hiwood-Leafriver complex
1275	Kandota-Egglake complex
1276	Knute-Brandsvold complex, thick solum phase
1277	Corliss-Sverdrup complex
1278	Rosewood-Venlo complex
1279	Vallers-Hamerly complex
1280	Gunclub silty clay loam
1281	Hegne-Viking complex
1282	Brownton-Lura complex
1283	Reis-Clearwater complex
1284	Le Sueur-Lerdal complex
1285	Chetomba silty clay loam
1286	Prinsburg silty clay loam
1287	Calco silty clay loam, ponded, frequently flooded
1288	Seelyeville-Markey complex, ponded
1289	Knute fine sandy loam, thick solum phase
1290	Brandsvold fine sandy loam, thick solum phase
1291	Sedgeville loam, frequently flooded
1292	Parnell and Flom soils
1293	Sedgeville fine sandy loam, rarely flooded

1294	Nary fine sandy loam
1295	Doland, moderately wet
1296	Swenoda, moderately wet
1297	Augsburg very fine sandy loam
1298	Borup silt loam
1299	Borup very fine sandy loam
1300	Clearwater sandy clay loam
1301	Foldahl sandy loam
1302	Foldahl fine sandy loam
1303	Glyndon silt loam
1304	Glyndon very fine sandy loam
1305	Hilaire fine sandy loam
1306	Karlstad sandy loam
1307	Rushlake sand
1308	Kittson fine sandy loam
1309	Buse-Doland complex
1310	Nutley clay, silty substratum
1311	Hattie-Nutley complex
1312	Hegne clay
1313	Nutley-Hattie complex
1314	Tacoosh mucky peat
1315	Wheatville very fine sandy loam
1316	Wheatville loam
1317	Vallers silty clay loam
1318	Darnen loam, well drained
1319	Rockwood sandy loam, stony
1320	Blowers sandy loam, stony
1321	Paddock fine sandy loam, stony
1322	Wolverton very fine sandy loam
1323	LaDelle
1324	Heimdal-Sisseton complex
1325	Bowstring-Fluvaquents complex, frequently flooded
1326	Augsburg and Wabanica soils, depressional
1327	Karlstad-Marquette complex
1328	Northwood muck, wooded
1329	Lindaas clay loam
1330	Water NOT USED - use capital W (for SSURGO)
1331	Garnes, very stony
1332	Rockwood fine sandy loam, morainic, stony
1333	Dora muck, wooded
1334	Huntersville loamy sand
1335	Bigstone, Parnell and Cathro soils, ponded
1336	Blowers fine sandy loam, morainic, stony
1337	Workman silt loam, depressional
1338	Oakcreek loam
1339	Borup mucky silt loam, depressional
1340	Bluffcreek-Epoufette complex
1341	Clitherall-Wykeham complex
1342	Pinelake, loamy substratum-Brandsvold complex
1343	Lida-Almora-Lizzie complex
1344	Lida-Almora-Dent complex
1345	Bluffcreek-Rosy complex
1346	Nidaros muck, calcareous
1347	Kandota loam

1348	Knute loam, thick solum
1349	Clotho loam, moderate permeability
1350	Brandsvold loam, thick solum
1351	Bluffton loam, moderately permeable
1352	Lakepark-Parnell complex
1353	Cutaway loamy fine sand, moderately wet
1354	Aftad fine sandy loam
1355	Amiret-Swanlake complex
1356	Water, miscellaneous (for sewage lagoons, waste ponds, etc.)
1357	Omsrud loam
1358	Omsrud clay loam
1360	Rushriver fine sandy loam
1361	Le Sueur, moderately coarse substratum
1362*	Angus loam
1363	Dundas silt loam, moderately coarse substratum
1364	Rock outcrop-Udipsamments complex
1365	Hillview fine sandy loam
1366	Talcot
1367	Derrynane
1368*	Southhaven
1369	Crooksford
1370	Amiret loam
1371	Crooksford-Swanlake complex
1372	Wealthwood loamy fine sand
1373	Omsrud-Storden-Hawick complex
1374	Havelock clay loam, occasionally flooded
1375	Alban fine sandy loam
1376	Omsrud-Storden complex
1377	Dorset-Two Inlets complex
1378	Fordum loam, occasionally flooded
1379	Dorset-Almora complex
1380	Bygland silt loam, MAP>25
1381	Lindaas silt loam, morainic
1382	Louris
1383	Good Thunder
1383	Shorewood silty clay loam, moderately wet
1384	Minneopa
1385	Havelock loam, frequently flooded
1386	Amiret-Swanlake-Hawick complex
1387	Collinwood silty clay loam, moderately wet
1388	Terril loam, moderately wet
1389	Havelock silt loam, frequently flooded
1390	Leen
1391	Wadenill-Sunburg complex
1392	Grogan silt loam, moderately wet
1393	Storden-Ves complex
1394	Indus-Dora complex
1395	Clarion clay loam
1396	Sedgeville, Nidaros and Aquolls soils, channeled
1397	Bemidji, moderately permeable
1398	Taylor-Greaney, frequently flooded complex
1399	Two Inlets, noncalcareous substratum
1400	Indus-Woodslake complex
1401	Grygla mucky loamy fine sand, depressional

1402	Leafriver muck, wooded
1403	Indus-Taylor-Woodslake complex
1404	Berner muck, wooded
1405	Lallie mucky silt loam
1406	Medo, Dassel and Biscay soils, ponded
1407	Balaton-Tara complex
1408	Angus-Kilkenny complex
1409	Kenyon, moderately wet
1410	Racine, moderately wet
1411	Urban land-Hayden-Estherville complex
1412	Bearden-Quam complex
1413	Littleton, till substratum
1414	Nereson fine sandy loam, very cobbly
1415	Rondell silty clay loam
1416	Renova loam, moderately wet
1417	Ortonville loam
1418	Marysland loam, depressional
1419	Sedgeville loam, channeled, occasionally flooded
1420	Winger-Balaton-Parnell complex
1421	Rockwood-Two Inlets, morainic complex
1422	Northwood, marl substratum
1423	Balaton loam
1424	Longsiding silt loam
1425	Foglake silt loam
1426	Talmoon-Beltrami complex
1427	Clearwater-Hattie complex
1428	Karlsruhe sandy loam
1436	Hoopeston, sandstone substratum
1437	Renova silty loam, moderately wet
1438	Braham loamy fine sand, moderately wet
1439	Cathro muck, MAP 22-30
1440	Redeye loamy sand, morainic
1441	Torning-Egeland complex
1442	Reedslake-Estherville complex
1443	Bellville
1444	Wurtsmith loamy sand, MAP 22-30
1445	Markey muck, MAP 22-30
1447	Beltrami, very fine sandy loam
1448	Grano clay
1449	Grano loam
1450	Sanburn very stony loam, bouldery
1451	Urness mucky silty clay loam, sandy substratum, ponded
1452	Hattie-Audubon complex
1453	Svea, very bouldery
1454	Buse-Barnes complex, extremely bouldery
1455	Ortonville-Vallers-Parnell complex
1456	Quam silty clay loam (non-depressional)
1459	Shakopee silty clay
1460	Nebish very fine sandy loam
1461	Emrick loam
1500	Lourdes silt loam
1501	Klossner muck, overwash
1502	Kelliher-Beltrami complex
1503	Beltrami-Talmoon complex

1504	Uskabwanka
1505	Glencoe mucky silty clay loam
1511	Kerkhoven-Friberg, depressional
1534	Friberg, depressional
1535	Hanlon, rarely flooded-Coland, occasionally flooded complex
1800	Caron, seepy
1801	Gardencity loamy fine sand
1802	Calcousta-Okoboji complex
1803	Muskego, calcareous
1804	Hamre, ponded
1805	Blue Earth Variant
1806	Lerdal, silty substratum
1807	Cathro, ponded
1808	Markey, ponded
1809	Bearden complex
1810	Colvin, complex
1811	Lamont-Racine complex
1812	Terril, sandy substratum
1813	Lino Variant, moderately well drained
1814	Waucoma, soft substratum (Mower County)
1815	Zumbro, nonflooded
1816	Kennebec Variant
1817	Esmond, bouldery
1818	Adrian, deep
1819	Dorerton-Rock outcrop complex
1819	Glyndon silty clay loam
1820	Mahtomedi Variant-Rock outcrop complex
1821	Alganssee, occasionally flooded
1822	Abscota Variant (Houston County)
1823	Mesaba Variant, deep
1824	Quam, ponded
1825	Seelyeville, sloping
1826	Nashwauk-Menahga
1827	Waukegan Variant, bedrock substratum (Washington & Ramsey Counties)
1828	Glencoe muck
1829	Ridgeport Variant (Brown County)
1830	Eitzen, occasionally flooded
1831	Colo, channeled
1832	Ostrander-Dowagiac complex
1833	Coland, occasionally flooded
1834	Coland, frequently flooded
1835	Germantown
1836	Germantown-Rock outcrop complex
1837	Webster Variant, bedrock substratum (Cottonwood County)
1838	Colo, calcareous overwash
1839	Marcus Variant
1840	Glyndon saline-Glyndon complex
1841	Hayfield, loamy substratum
1842	Cushing and Flak soils
1843	Cushing-DeMontreville complex
1844	Atkinson, soft substratum
1845	Estherville loam
1846	Kato, depressional

1847	Barronett, sandy substratum
1847	Kalmarville, channeled
1848	Sparta, bedrock substratum
1849	Storden, stony
1850	Oshawa Variant, stony
1851	Blue Earth, sloping
1852	Terril-Swanlake complex
1852	Zwingle Variant (Houston County)
1853	Wadena Variant (Redwood County)
1854	Wyndmere complex
1855	Dickinson, loamy substratum
1856	Plainfield, loamy subsoil
1857	Eitzen, channeled
1858	Timula-Lamont complex
1859	Medary complex
1860	Comfrey, channeled
1861	Chaseburg, channeled
1863	Flom, stony
1864	Barnes, stony
1865	Buse, stony
1866	Perella-Colvin complex
1867	Zumbro-Calco complex
1868	Canisteo, stony
1870	Burr-Calco complex
1871	Fargo, swales
1872	Fargo, silty substratum
1873	Fargo, silty substratum, swales
1874	Radium
1875	Flom, depressional
1876	Divide, loamy substratum
1877	Fostoria
1878	Hamre
1879	Seelyeville, calcareous
1880	Martisco
1881	Cordova and Webster
1882	Rosewood, seepy
1883	Nashwauk-Bedrock outcrop complex
1884	Stateline
1885	Abscota, occasionally flooded
1886	Minneiska Variant
1887	Millington, sandy substratum
1888	Moundprairie, occasionally flooded
1889	Moundprairie, depressional
1890	Walford
1891	Faxon Variant
1892	Prebish (non-ponded)
1893	Beavercreek Variant (Houston County)
1894	Winnebago
1895	Carmi
1896	Ostrander-Carmi complex
1897	Seaforth-Wilmonton complex
1898	Brodale-Etter complex or Etter-Brodale complex
1898	Etter-Brodale complex or Brodale-Etter complex
1899	Wilmonton Variant (Redwood County)

1900	Okoboji-Canisteo complex
1901	Lester-Le Sueur complex
1902	Jewett
1903	Udolpho, loamy substratum, swales
1904	Udolpho, loamy substratum
1905	Brownsdale
1906	Lindstrom loam (Houston County, tax.)
1907	Lakefield
1908	Biscay-Klossner complex
1909	Lemond, depressional
1910	Shandep, calcareous
1911	Ridgeport-Storden complex
1911	Storden-Ridgeport Variant
1912	Tilfer Variant
1913	Cashel-Wahpeton
1913	Wahpeton-Cashel
1914	Lura, nearly level
1915	Coland, sandy substratum
1916	Lindaas silty clay loam
1917	Nishna, ponded
1918	Croke
1919	Clarion-Terril complex
1919	Lester-Terril complex
1920	Spillco, channeled
1921	Foldahl very fine sandy loam
1922	Chilgren, stony
1923	Garnes, stony
1924	Grygla, stony
1925	Eckvoll, stony
1926	Bowstring-Aquents complex
1927	Clotho
1928	Hanska, gravelly substratum
1929	Lemond, gravelly substratum
1930	Dickman, moderately wet
1931	Essexville sandy loam
1932	Runeberg
1933	Bearden-Lindaas complex
1934	Bowstring
1935	Epoufette, depressional
1937	Lawler, sandstone substratum
1938	Lakepark
1939	Northwood, stony
1940	Oldham and Quam, ponded
1940	Quam and Oldham, ponded
1941	Evart, frequently flooded
1942	Forada, depressional
1943	Roscommon loamy sand
1944	Perella, moderately wet
1946	Fordum-Winterfield complex
1946	Winterfield-Fordum complex
1947	Doran, loamy substratum
1948	Enloe-Fargo complex
1948	Fargo-Lindaas complex or Enloe
1949	Gardena

1950	Ludden
1951	Flagler, bedrock substratum
1952	Keltner
1953	Marshan, loamy substratum
1954	Spinks
1955	Waukee, bedrock substratum
1956	Staples
1957	Friendship, till substratum
1958	Danube silty clay
1959	Nary cobbly fine sandy loam
1960	Haverhill Variant
1961	Brickton, loamy substratum
1962	Mazaska-Rolfe complex
1963	Bearden-Colvin complex
1963	Colvin-Bearden complex
1964	Colvin-Fargo complex
1964	Fargo-Colvin complex
1965	Fram-Percy complex
1965	Percy-Fram complex
1966	Hamar and Rosewood soils
1966	Rosewood and Hamar
1967	Hamerly-Vallers complex
1968	Evart, occasionally flooded
1969	Evart-Isan
1970	Menahga, till substratum
1971	Divide
1972	Ahmeek-Cloquet complex
1972	Cloquet-Ahmeek complex
1973	Isan-Meehan complex
1973	Meehan-Isan complex
1974	Coland-Spillville complex
1974	Spillville-Coland complex
1975	Oylen sandy loam
1976	Brainerd, stony or very stony
1977	Mora, stony
1978	Nokay, stony or very stony
1979	Parent, stony
1980	Ronneby, stony
1981	Hanlon-Kalmarville complex
1982	Baudette-Spooner complex
1982	Spooner-Baudette complex
1983	Cathro, stratified substratum
1984	Leafriver
1985	Fordum silt loam, occasionally flooded
1986	Leafriver, acid phase
1987	Grygla-Spooner complex
1987	Spooner-Grygla complex
1988	Conic-Insula complex
1988	Insula-Conic complex
1989	Hiwood-Redby-Leafriver complex
1990	Otter, very wet
1991	Stuntz loam (taxadjunct-Beltrami County)
1992	Sargeant Variant (Mower County)
1993	Snellman-Wykeham complex

1993	Wykeham-Snellman complex
1994	Embden
1995	Bergkeller
1996	Cromwell, moderately wet
1998	Hamerly-Vallers-Winger complex
1998	Vallers-Hamerly-Winger complex
1998	Warman Variant (Morrison County)
1998	Winger-Vallers-Hamerly complex
1999	Kalmarville-Minneiska complex
1999	Minneiska-Kalmarville complex

2. Phases

Different Phases of taxonomic units for mapping will be established only where they are significant to use and management.

a. Slope

The standard slope classes for soils ranging widely in slope follow:

<u>Symbol</u>	<u>Range in Percent</u>		<u>Name</u>	
	<u>Standard</u>	<u>Complete</u>	<u>Simple</u>	<u>Complex</u>
None or A	0 to 2	0 to 3	nearly level	nearly level
B	2 to 6	1 to 8	gently sloping	undulating
C	6 to 12	5 to 16	sloping	rolling
D	12 to 18	10 to 20	moderately steep	hilly
E	18 to 25	18 to 30	steep	steep
F	over 25	over 25	very steep	very steep

In developing legends for new surveys, the above standard slope classes will serve only as a guide. The survey party leader will develop slope phases of taxonomic units on the basis of their total slope range, the shape of their landscape, and the interpretive needs of the survey area. For example, for a taxonomic unit with a narrow range in slope of 1 through 4 percent, two slope phases need not be recognized simply because its range crosses the division between two standard slope classes.

b. Erosion

The standard erosion classes follow:

<u>Symbol</u>	<u>Name</u>	<u>Definition</u>
None	None or slightly eroded	No significant recent erosion has occurred.
2	Eroded	Significant recent erosion has occurred.

The definitions of the classes are indeed vague, and party leaders will have to formulate quantitative definitions of erosion classes for taxonomic and mapping units where needed. Perhaps two subclasses of eroded soils may be needed in a few areas. The symbol 3 can be used for severely eroded and 2 for moderately eroded.

c. Others

Important phases of soil series have been given separate numbers, i.e. 132 for Hayden fine sandy loam or sandy loam and 104 for Hayden loam or silt loam. In reality, the range in texture of most taxonomy units is not enough to warrant separate phases on the basis of texture.

CONVENTIONAL AND SPECIAL SYMBOLS

<u>Symbol</u>	<u>Guidelines for Use</u>
Blowout	A small saucer-, cup-, or trough-shaped hollow or depression formed by wind erosion on a preexisting sand deposit. Typically _____ to _____ acres.
Borrow pit	An open excavation from which soil and underlying material have been removed usually for construction purposes. Typically _____ to _____ acres.
Clay spot	A spot where the surface layer is silty clay or clay in areas where the surface layer of the named soils in the surrounding map unit is sandy loam, loam, silt loam, or coarser.
Depression, closed	A shallow, saucer-shaped area that is slightly lower on the landscape than the surrounding area and is without a natural outlet for surface drainage. Typically _____ to _____ acres.
Esarpment, bedrock	A relatively continuous and steep slope or cliff produced by erosion or faulting, which breaks the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock.
Escarpment, other	A relatively continuous and steep slope or cliff that generally is produced by erosion but can be produced by faulting, which breaks the continuity of more gently sloping land surfaces. Exposed earthy material is nonsoil or very shallow soil.
Gravel pit	An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel. Typically _____ to _____ acres.
Gravelly spot	A spot where the surface layer has more than 35 percent, by volume, rock fragments that are mostly less than 3 inches in diameter in an area of surrounding soil with less than 15 percent fragments. Typically _____ to _____ acres.
Gully	A small channel with steep sides cut by running water and through which water ordinarily runs only after a rain or after ice or snow melts. It generally is an obstacle to wheeled vehicles and is too deep to be obliterated by ordinary tillage.
Landfill	An area of accumulated waste products of human habitation that can be above or below natural ground level. Typically _____ to _____ acres.
Levee	An embankment that confines or controls water, especially one built along the banks of a river to prevent overflow on lowlands.
Marsh or swamp	A water-saturated, very poorly drained area, intermittently or permanently covered by water. Marsh areas are dominantly vegetated by sedges, cattails, and rushes. Swamps are dominantly vegetated by trees or

shrubs. Not used in map units where poorly drained or very poorly drained soils are the named components. Typically _____ to _____ acres.

Mine or quarry	An open excavation from which soil and underlying material are removed and bedrock is exposed. Also denotes surface openings to underground mines. Typically _____ to _____ acres.
Miscellaneous water	Small, man-made water area that is used for industrial, sanitary, or mining applications and contains water most of the year. Typically _____ to _____ acres.
Perennial water	Small, natural or man-made lake, pond, or pit that contains water most of the year. Typically _____ to _____ acres.
Rock outcrop	An exposure of bedrock at the surface of the earth. Not used where the named soils of the surrounding map unit are shallow over bedrock or where "bedrock" is a named component of the map unit. Typically _____ to _____ acres.
Saline spot	An area where the surface layer has an electrical conductivity of 8 mmhos cm ⁻¹ more than the surface layer of the named soils in the surrounding map unit, which have an EC of 2 mmhos cm ⁻¹ or less. Typically _____ to _____ acres.
Sandy spot	A spot where the surface layer is loamy fine sand or coarser in areas where the surface layer of the named soils of the surrounding map unit is very fine sandy loam or finer.
Severely eroded spot	An area where on the average 75 percent or more of the original surface layer has been lost because of accelerated erosion. Not used in map units with component phases that are named severely eroded, very severely eroded, or gullied.
Short, steep slope	Narrow soil area that has slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.
Sinkhole	A closed depression formed either by solution of the surficial rock or by collapse of underlying caves. Typically _____ to _____ acres.
Slide or slip	A prominent landform scar or ridge caused by fairly recent mass movement or descent of earthy material resulting from failure of earth or rock under shear stress along one or several surfaces. Typically _____ to _____ acres.
Sodic spot	An area where the surface layer has a sodium adsorption ratio that is at least 10 more than the surface layer of the named soils in the surrounding map unit, which have a sodium adsorption ratio of 5 or less. Typically _____ to _____ acres.
Spoil area	A pile of earthy materials, either smoothed or uneven, resulting from human activity. Typically _____ to _____ acres.
Stony spot	A spot where 0.01 to 0.1 percent of the surface is covered with rock fragments that are greater than 10 inches in diameter in areas where the

surrounding soil has no surface stones. Typically _____to _____acres.

Very stony
spot

A spot where 0.1 to 3 percent of the surface is covered with rock fragments that are greater than 10 inches in diameter in areas where less than 0.01 percent of the surface of the surrounding soil is covered with stones. Typically _____to _____acres.

Wet spot

A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils in the surrounding map unit. Typically _____to _____acres.