



United States Department of Agriculture



Ecological Site Description

2023 Products & Progress

Minnesota State Technical Advisory Committee

January, 10th 2023 – St. Cloud, MN



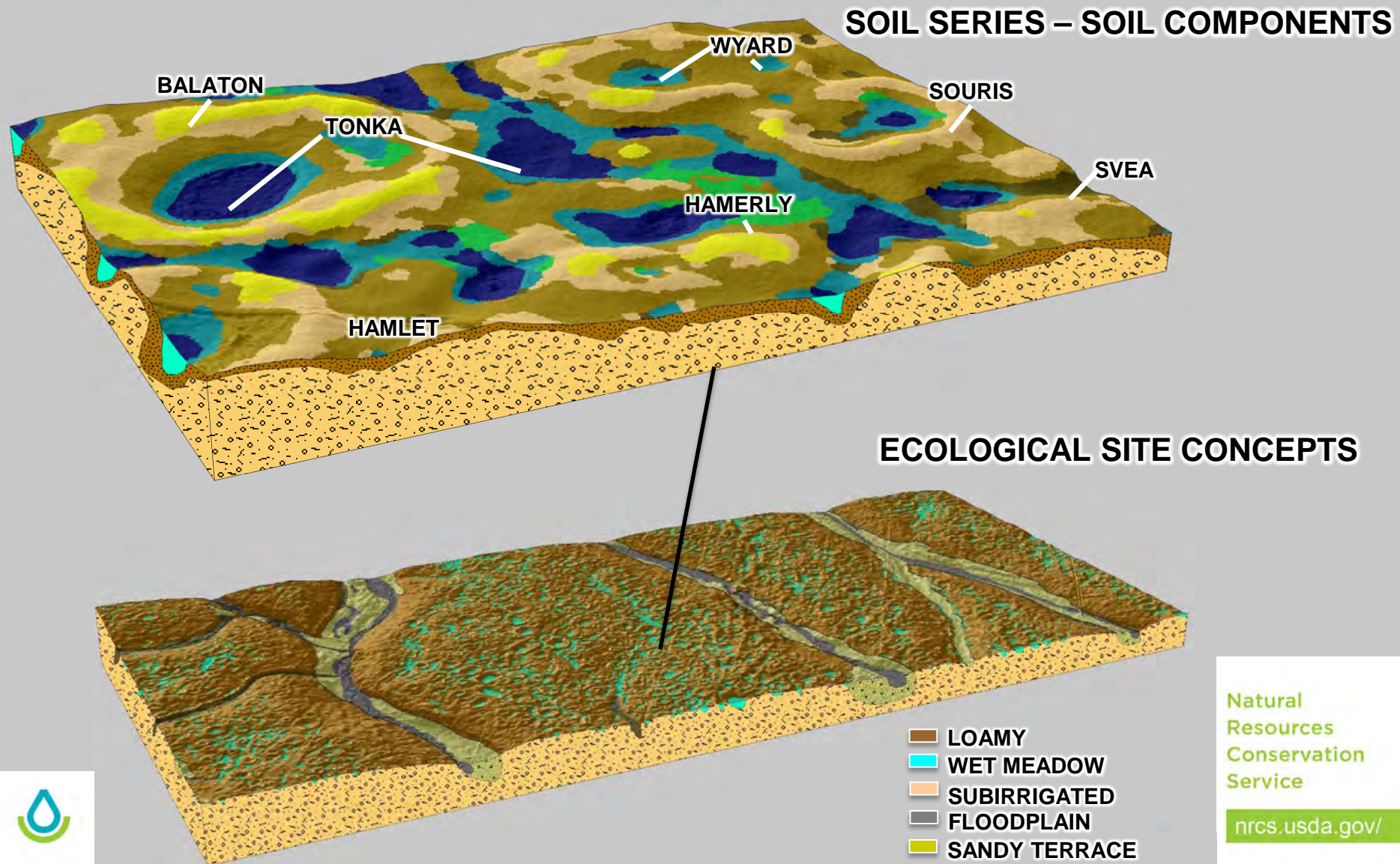
Joe Brennan
State Soil Scientist
NRCS-MN

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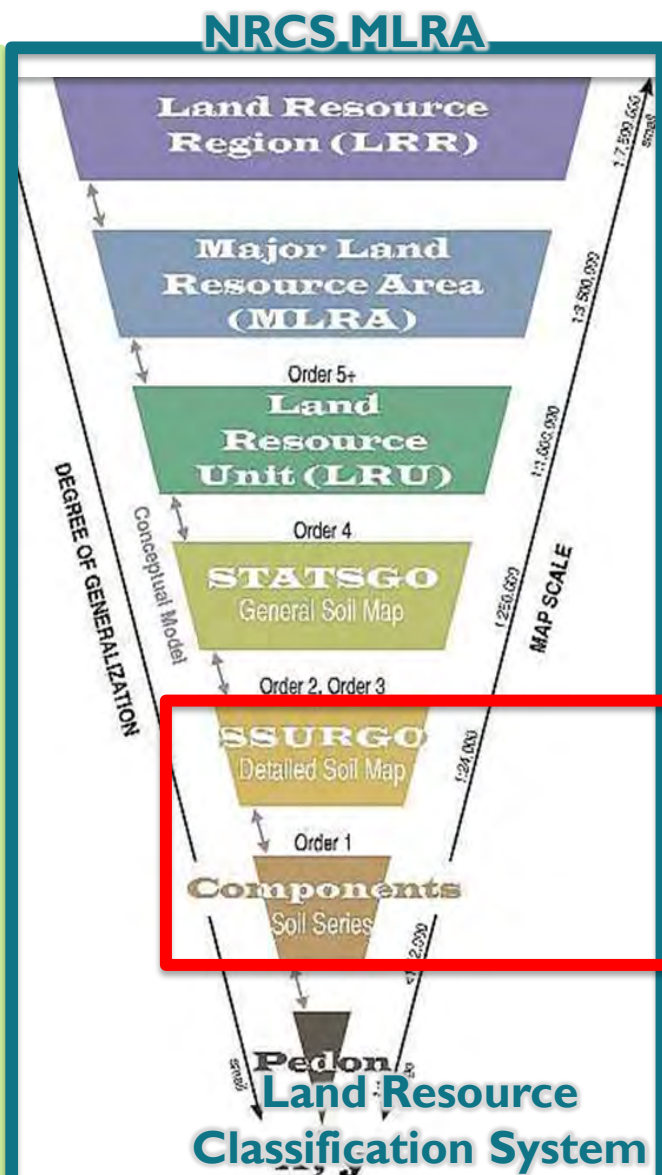
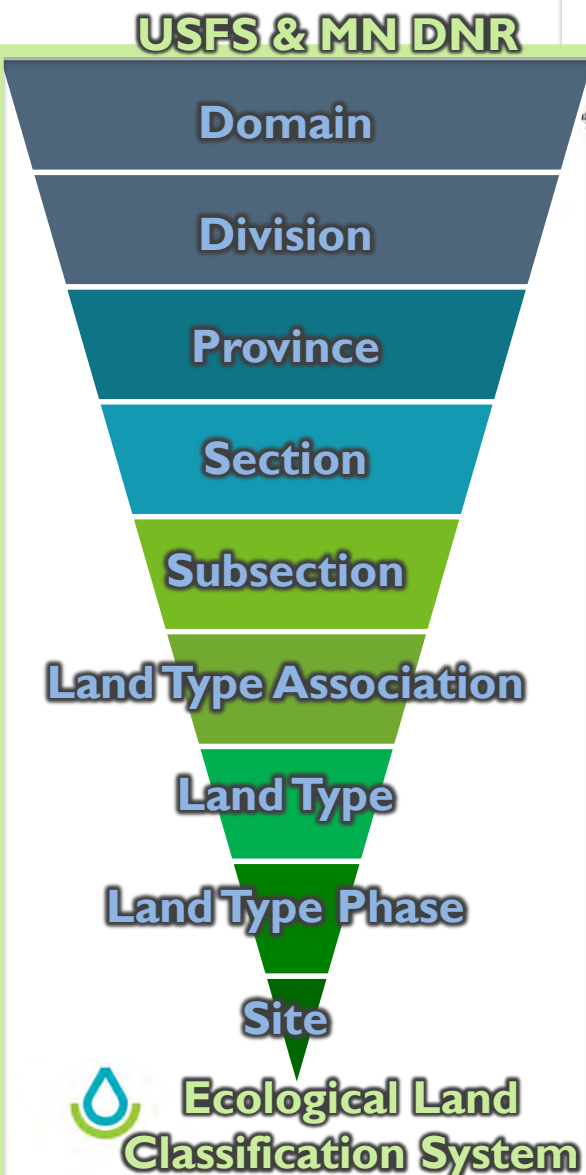


NRCS Ecological Sites





NRCS Hierarchical Classification System



Regional Landscape Divisions

Landscapes/Land Use

Landforms/Resource Concerns

General Soil Associations

Detailed Soil Survey Maps

Ecological Site Descriptions

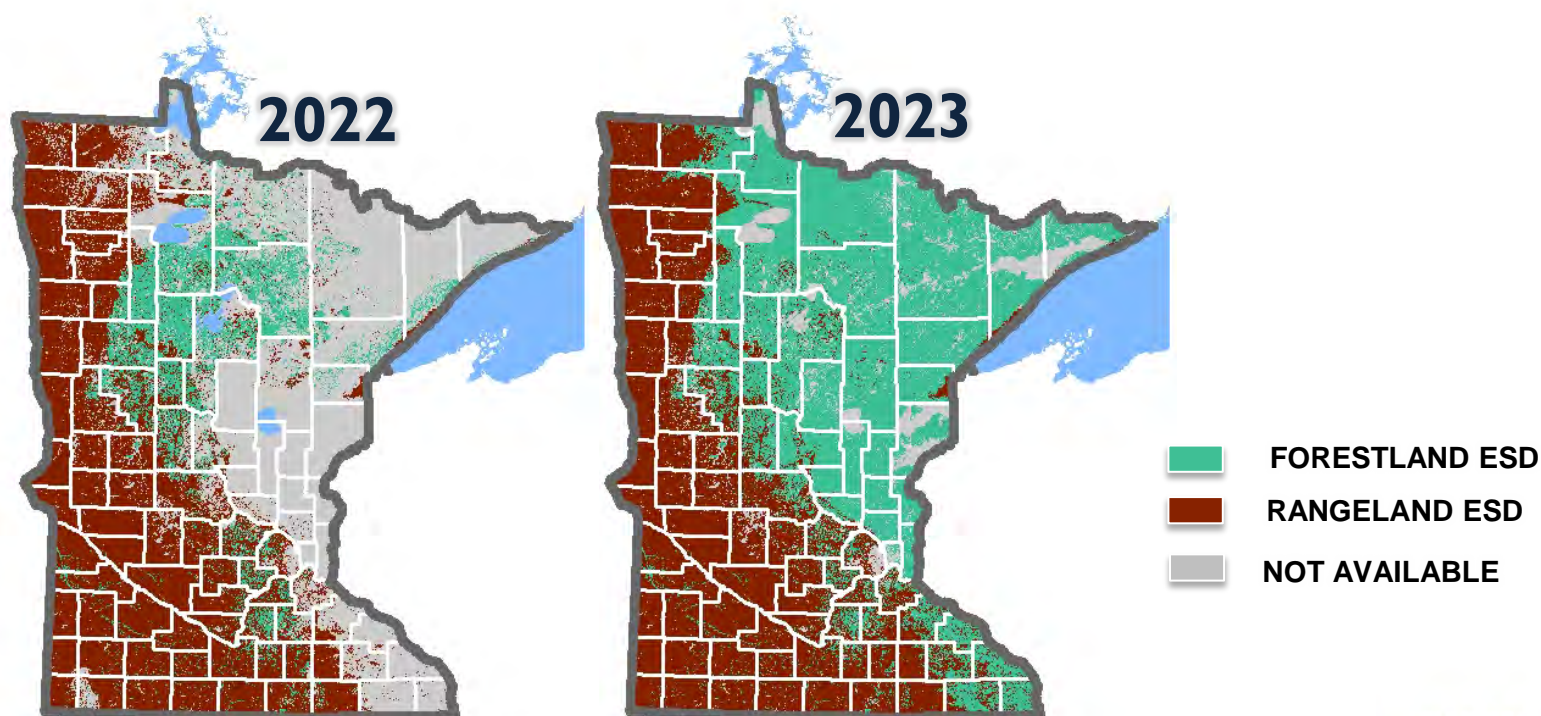
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NRCS Ecological Sites

Ecological Sites Available in Web Soil Survey



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Findin



Web Soil
Survey
(usda.gov)

Minor Components

Quam, frequently ponded

Percent of map unit: 10 percent
Landform: Depressions on moraines
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R102AY001SD - Shallow Marsh
Other vegetative classification: Wet (G102AY900SD)
Hydric soil rating: Yes

Urness, frequently ponded

Percent of map unit: 5 percent
Landform: Depressions on glacial lakes (relict)
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R102AY004SD - Wet Meadow
Other vegetative classification: Not suited (G102AY000SD)
Hydric soil rating: Yes

Vallers

Percent of map unit: 5 percent
Landform: Swales on moraines
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R102AY002SD - Linear Meadow
Other vegetative classification: Wet (G102AY900SD)
Hydric soil rating: Yes

Cathro, frequently ponded

Percent of map unit: 3 percent
Landform: Depressions on moraines
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R102AY037SD - Deep Marsh
Other vegetative classification: Not suited (G102AY000SD)
Hydric soil rating: Yes

Hamerly

Percent of map unit: 2 percent
Landform: Moraines
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R102AY006SD - Limy Subirrigated
Other vegetative classification: Subirrigated (G102AY700SD)
Hydric soil rating: No

Description — Map Unit Description

Printable Version

1 percent slopes

percent

s, and transects of the

es

water (Ksat):

ent
line (0.0 to 2.0

gh (about 13.0 inches)

specified

10SD)

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Area of Interest (AOI)

Soil Map

Soil Data Explorer

Download Soils Data

Shopping Cart (Free)

View Soil Information By Use:

Intro to Soils

Suitabilities and Limitations for Use

Soil Properties and Qualities

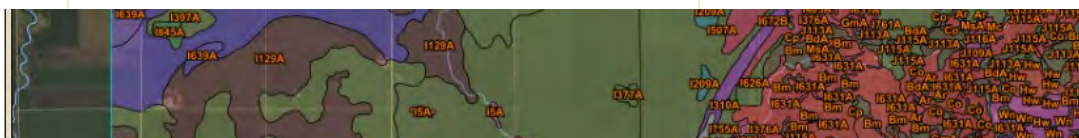
Ecological Sites

Soil Reports

Map — Dominant Ecological Site



344	Quam silty clay loam, occasionally ponded, 0 to 1 percent slopes	Quam, occasionally ponded (75%)	R102AY001SD — Shallow Marsh	86.1	0.1%
		Quam, frequently ponded (10%)	R102AY001SD — Shallow Marsh		
		Urness, frequently ponded (5%)	R102AY004SD — Wet Meadow		
		Vallers (5%)	R102AY002SD — Linear Meadow		
		Cathro, frequently ponded (3%)	R102AY037SD — Deep Marsh		
		Hamerly (2%)	R102AY006SD — Limy Subirrigated		
375	Forada sandy loam, 0 to 2 percent slopes	Forada (75%)	R057XY014MN — Linear Meadow	96.8	0.1%
		Oylen (10%)			
		Leafriver, frequently ponded (7%)			
		Arvilla (5%)			
		Marysland (3%)			
402C	Sandberg sandy loam, 2 to 12 percent slopes	Sandberg (70%)	R102AY012SD — Thin Upland	2.8	0.0%
			R102AY016SD — Very Shallow		
		Arvilla (10%)	R102AY014SD — Shallow Gravel		
		Corliss (5%)	R102AY006SD — Limy Subirrigated		
			R102AY016SD — Very Shallow		



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<https://edit.jornada.nmsu.edu/catalogs/esd/102A/R102AY001SD>

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Ecological Site Descriptions



Limestone Colluvium Bluff Prairie

HOME / ESD CATALOG / MLRA 105X / ECOLOGICAL SITE R105XY021W1

USC

EDIT

Ecosystem Dynamics Interpretive Tool

General information

Physiographic features

Climatic features

Water features

Soil features

Ecological dynamics

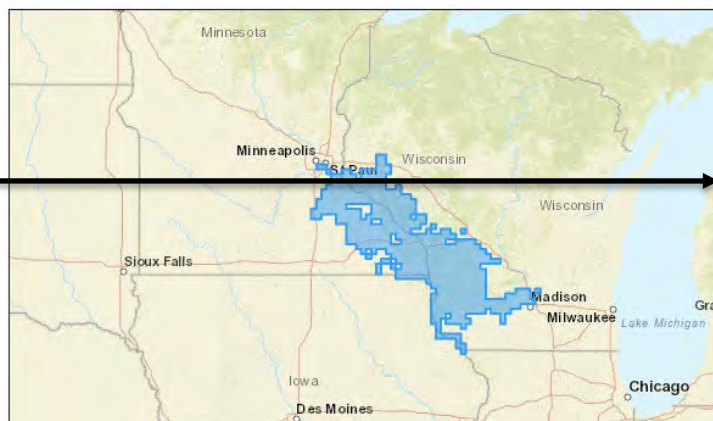
Interpretations

Supporting information

Reference sheet

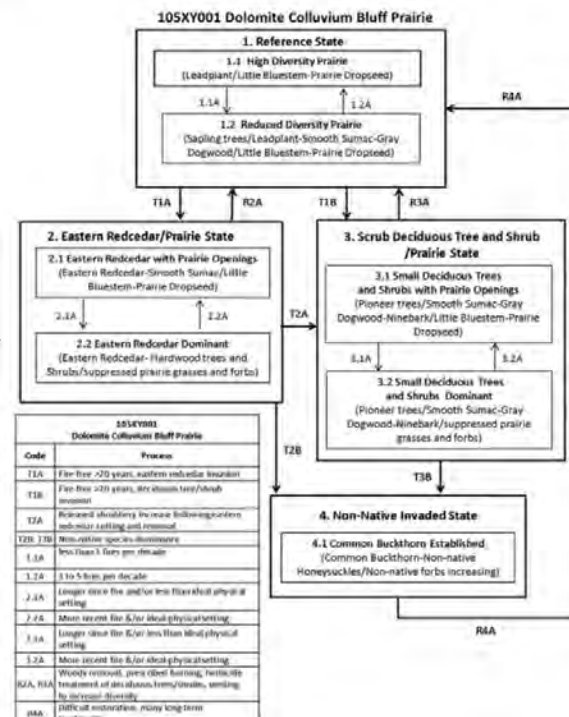
General information

Approved. An approved ecological site description has undergone quality assurance review. It contains a working state and transition model, information to identify the ecological site, and full documentation for all ecological states contained in the state and transition model.



State and transition model

ECOSYSTEM DIAGRAM STANDARD DIAGRAM



Natural Resources Conservation Service

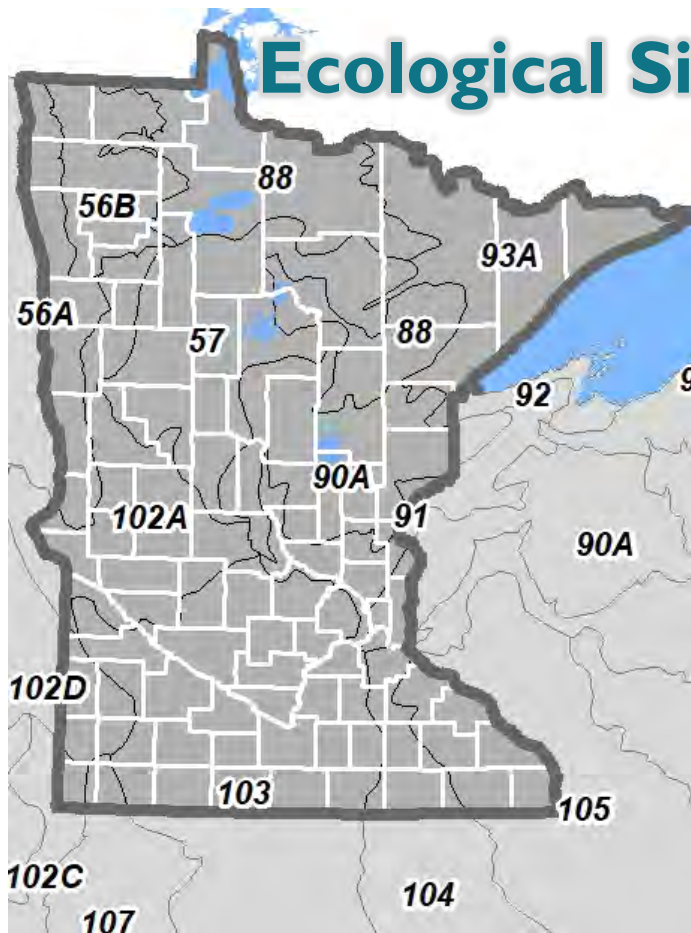
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Ecological Site Descriptions

Ecological Site Description in



MLRA 57: In Review*

MLRA 56A: TBD

MLRA 56A: TBD

MLRA 88: In Review*

MLRA 91: In Review*

MLRA 92: 15 Available*

MLRA 93A: 3 Available (15 In Review*)

MLRA 102A: 17 Available (6 In Review*)

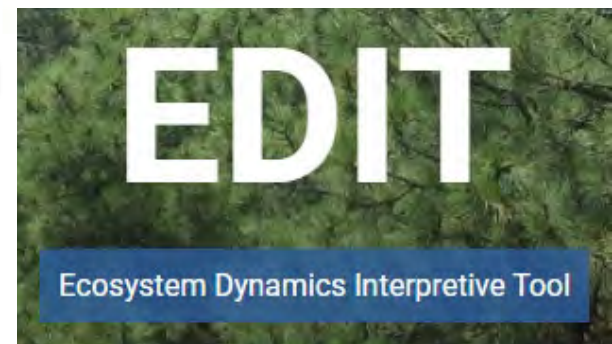
MLRA 102C: 6 Available (13 In Review*)

MLRA 103: 1 Available (36 In Review*)

MLRA 104: 21 Available*

MLRA 105: 2 Available (19 In Review*)

MLRA 107: 42 Available*



*Provisional Ecological Site

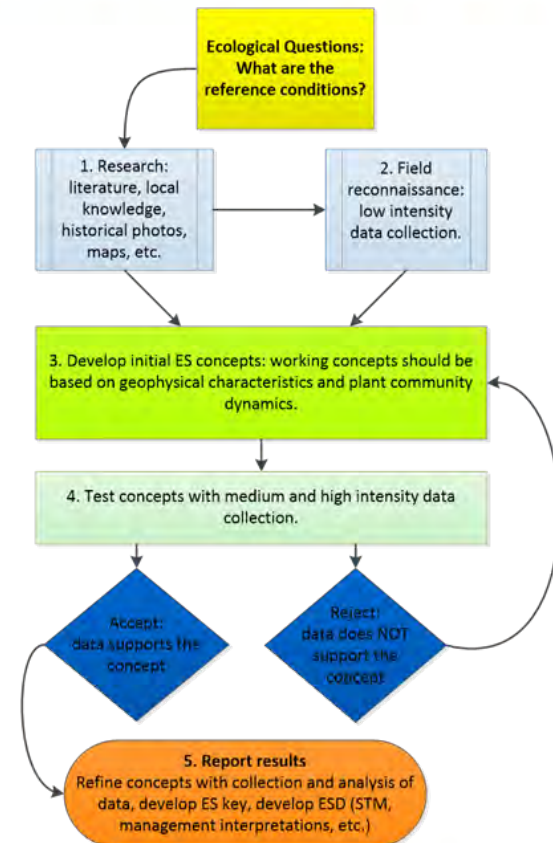




ESD development is a cooperative effort

1. Technical team meetings
2. Quality control review
3. Development of ES interpretations

1. Animal Community.—This section typically contains a narrative description of domestic livestock grazing management strategies affect on plant communities Hydrology Functions.—Include a narrative statement of hydrologic interpretations for the site, if any.
2. Other Products.—Include narratives describing other products or values provided by the site. Noxious weed statements, Native American uses of the site, specific plant species, etc., may be discussed.
3. Other Information.—Include information specific to the ecological process of the site. Including information on rangeland health indicators, if known.



Contacts

Chris Tecklenburg

Soil Survey Regional Director
North Central Region
Soil and Plant Science Division
USDA-NRCS

Phone: (785)201-5099

chris.tecklenburg@usda.gov

Joe Brennan

State Soil Scientist

USDA-NRCS

Minnesota

Phone (cell): (612) 246-0423

joseph.brennan@usda.gov

Ryan Galbreath

State Resource Conservationist

USDA-NRCS

Minnesota

Phone (cell): (651) 357-7518

ryan.galbreath@usda.gov

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