

Hydric Soils

Lincoln County, Minnesota

[This report lists only those map unit components that are rated as hydric. Dashes (---) in any column indicate that the data were not included in the database. Definitions of hydric criteria codes are included at the end of the report]

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
GP:					
Pits, gravel-Udipsammments complex	Pits, gravel	80	Moraines, Outwash plains, Stream terraces		---
	Udipsammments	20	Moraines, Outwash plains, Stream terraces		---
J1A:					
Parnell silty clay loam, depressional, 0 to 1 percent slopes	Parnell, depressional	90	Till plains	Yes	2B3, 3
	Vallers	5	Till plains	Yes	2B3
	Winger	5	Till plains	Yes	2B3
J2A:					
La Prairie loam, 0 to 2 percent slopes, occasionally flooded	La Prairie, occasionally flooded	90	Flood plains	No	---
	Lamoure, occasionally flooded	10	Flood plains	Yes	2B3
J7B:					
Sverdrup sandy loam, 2 to 6 percent slopes	Sverdrup	85	Outwash plains	No	---
	Clontarf	5	Outwash plains	No	---
	Egeland	5	Outwash plains	No	---
	Estelline	5	Outwash plains	No	---
J11A:					
Vallers clay loam, 0 to 2 percent slopes	Vallers	85	Till plains	Yes	2B3
	Parnell, depressional	10	Till plains	Yes	2B3, 3
	Balaton	5	Till plains	No	---
J17A:					
Quam silty clay loam, depressional, 0 to 1 percent slopes	Quam, depressional	90	Lake plains	Yes	2B3, 3
	Vallers	5	Till plains	Yes	2B3
	Winger	5	Lake plains	Yes	2B3

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
J22A:					
Renshaw loam, 0 to 3 percent slopes	Renshaw	85	Outwash plains	No	---
	Fordtown	10	Outwash plains	No	---
	Arvilla	3	Outwash plains	No	---
	Fordville	2	Outwash plains	No	---
J23A:					
Lamoure silty clay loam, 0 to 2 percent slopes, occasionally flooded	Lamoure, occasionally flooded	85	Flood plains	Yes	2B3
	Rauville, frequently flooded	10	Flood plains	Yes	2B3, 4
	La Prairie, occasionally flooded	5	Flood plains	No	---
J25A:					
Rauville silty clay loam, 0 to 1 percent slopes, frequently flooded	Rauville, frequently flooded	90	Flood plains	Yes	2B3, 4
	Lamoure, occasionally flooded	10	Flood plains	Yes	2B3
J26B:					
Darnen loam, 2 to 6 percent slopes	Darnen	90	Moraines	No	---
	Hokans	5	Moraines	No	---
	Lakepark	5	Moraines	Yes	2B3
J31B:					
Arvilla-Sandberg complex, 2 to 6 percent slopes	Arvilla	45	Outwash plains	No	---
	Sandberg	40	Outwash plains	No	---
	Renshaw	10	Outwash plains	No	---
	Fordtown	5	Outwash plains	No	---

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J32A:					
Bigstone silty clay loam, depressional, 0 to 1 percent slopes	Bigstone, depressional	80	Lake plains	Yes	2B3, 3
	Urness, depressional	10	Moraines	Yes	2B3, 3
	Colvin	5	Lake plains	Yes	2B3
	Vallers	5	Till plains	Yes	2B3
J42C:					
Sandberg-Arvilla complex, 6 to 12 percent slopes	Sandberg	60	Outwash plains	No	---
	Arvilla	30	Outwash plains	No	---
	Everts	10	Outwash plains	No	---
J45F:					
Sandberg sandy loam, 12 to 40 percent slopes	Sandberg	80	Outwash plains	No	---
	Everts	10	Outwash plains	No	---
	Arvilla	5	Outwash plains	No	---
	Sioux	5	Outwash plains	No	---
J47A:					
Swenoda sandy loam, 1 to 3 percent slopes	Swenoda, moderately wet	85	Outwash plains	No	---
	Clontarf	10	Outwash plains	No	---
	Egeland	5	Outwash plains	No	---
J48A:					
Bigstone and Parnell soils, ponded, 0 to 1 percent slopes	Bigstone, ponded	40	Moraines	Yes	2B3, 3
	Parnell, ponded	40	Moraines	Yes	2B3, 3
	Colvin	10	Moraines	Yes	2B3
	Vallers	10	Moraines	Yes	2B3

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J57A:					
Balaton loam, 1 to 3 percent slopes	Balaton	85	Till plains	No	---
	Tara	5	Till plains	No	---
	Well drained soils	5	Till plains	No	---
	Vallers	3	Till plains	Yes	2B3
	Hamerly	2	Till plains	No	---
J70A:					
Brandt silty clay loam, 0 to 2 percent slopes	Brandt	85	Outwash plains	No	---
	Estelline	10	Outwash plains	No	---
	Goldsmith	5	Outwash plains	No	---
J71A:					
Brookings silty clay loam, 1 to 3 percent slopes	Brookings	80	Till plains	No	---
	Badger	10	Till plains	No	---
	Kranzburg, occasional saturation	10	Till plains	No	---
J72B:					
Renshaw-Sandberg complex, 2 to 6 percent slopes	Renshaw	75	Outwash plains	No	---
	Sandberg	15	Outwash plains	No	---
	Fordville	10	Outwash plains	No	---
J73D2:					
Buse clay loam, 12 to 18 percent slopes, moderately eroded	Buse, moderately eroded	72	Till plains	No	---
	Soils that have a moderately deep surface	14	Till plains	No	---
	Vienna, moderately eroded	14	Till plains	No	---

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J73E:					
Buse clay loam, 18 to 25 percent slopes	Buse	80	Till plains	No	---
	Barnes	10	Till plains	No	---
	Soils that have a moderately deep surface	10	Till plains	No	---
J73F:					
Buse clay loam, 25 to 40 percent slopes	Buse	80	Till plains	No	---
	Barnes	10	Till plains	No	---
	Soils that have a moderately deep surface	10	Till plains	No	---
J74A:					
Estelline silty clay loam, 0 to 2 percent slopes	Estelline	80	Outwash plains	No	---
	Athelwold	10	Outwash plains	No	---
	Brandt	10	Outwash plains	No	---
J74B:					
Estelline silty clay loam, 2 to 6 percent slopes	Estelline	85	Outwash plains	No	---
	Athelwold	5	Outwash plains	No	---
	Brandt	5	Outwash plains	No	---
	Renshaw	5	Outwash plains	No	---
J75A:					
Fordville loam, 0 to 2 percent slopes	Fordville	85	Outwash plains	No	---
	Renshaw	10	Outwash plains	No	---
	Spottswood	5	Outwash plains	No	---
J75B:					
Fordville loam, 2 to 6 percent slopes	Fordville	85	Outwash plains	No	---
	Renshaw	10	Outwash plains	No	---
	Spottswood	5	Outwash plains	No	---

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J78A:					
Lismore silty clay loam, 1 to 3 percent slopes	Lismore	75	Till plains	No	---
	Brookings	10	Till plains	No	---
	Vienna, occasional saturation	10	Till plains	No	---
	Hidewood	5	Till plains	Yes	2B3
J79B:					
Vienna-Brookings complex, 1 to 4 percent slopes	Vienna, occasional saturation	55	Till plains	No	---
	Brookings	35	Till plains	No	---
	Kranzburg, occasional saturation	5	Till plains	No	---
	Lismore	5	Till plains	No	---
J80A:					
Lamoure-La Prairie complex, channeled, 0 to 2 percent slopes, frequently flooded	Lamoure, channeled, frequently flooded	50	Flood plains	Yes	2B3, 4
	La Prairie, channeled, frequently flooded	40	Flood plains	Yes	4
	Rauville, frequently flooded	10	Flood plains	Yes	2B3, 4
J81C2:					
Renshaw-Barnes complex, 6 to 12 percent slopes, moderately eroded	Renshaw, moderately eroded	70	Outwash plains	No	---
	Barnes, moderately eroded	20	Outwash plains	No	---
	Buse, moderately eroded	5	Outwash plains	No	---
	Sandberg	5	Outwash plains	No	---

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J83F:					
Sandberg-Buse-Everts complex, 12 to 40 percent slopes	Sandberg	55	Outwash plains	No	---
	Buse	25	Outwash plains	No	---
	Everts	15	Outwash plains	No	---
	Sioux	5	Outwash plains	No	---
J84A:					
Strayhoss loam, 0 to 2 percent slopes	Strayhoss	85	Outwash plains	No	---
	Estelline	10	Outwash plains	No	---
	Soils that are moderately well drained	5	Outwash plains	No	---
J84B:					
Strayhoss loam, 2 to 6 percent slopes	Strayhoss	85	Outwash plains	No	---
	Estelline	10	Outwash plains	No	---
	Soils that are moderately well drained	5	Outwash plains	No	---
J85A:					
Trosky silty clay loam, 0 to 2 percent slopes	Trosky	90	Outwash plains	Yes	2B3
	Athelwold	5	Outwash plains	No	---
	Soils that are deep to gravel	5	Outwash plains	Yes	2B3
J86B:					
Vienna silty clay loam, 3 to 6 percent slopes	Vienna, occasional saturation	85	Till plains	No	---
	Brookings	5	Till plains	No	---
	Kranzburg, occasional saturation	5	Till plains	No	---
	Lismore	5	Till plains	No	---

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J88B:					
Kranzburg silty clay loam, 3 to 6 percent slopes	Kranzburg, occasional saturation	85	Till plains	No	---
	Brookings	10	Till plains	No	---
	Vienna, occasional saturation	5	Till plains	No	---
J89B:					
Lanona-Swenoda complex, 2 to 6 percent slopes	Lanona, occasional saturation	50	Outwash plains	No	---
	Swenoda	40	Outwash plains	No	---
	Doburg, occasional saturation	10	Outwash plains	No	---
J90B:					
Kranzburg-Brookings complex, 1 to 4 percent slopes	Kranzburg, occasional saturation	55	Till plains	No	---
	Brookings	35	Till plains	No	---
	Vienna, occasional saturation	5	Till plains	No	---
	Waubay, loess deposit	5	Till plains	No	---
J91B:					
Darnen loam, stratified substratum, 2 to 6 percent slopes	Darnen, stratified substratum	90	Moraines	No	---
	Egeland	4	Outwash plains	No	---
	Embden	3	Outwash plains	No	---
	Fordville	3	Outwash plains	No	---

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J92C2:					
Buse-Vienna complex, 6 to 12 percent slopes, moderately eroded	Buse, moderately eroded	50	Till plains	No	---
	Vienna, moderately eroded	20	Till plains	No	---
	Barnes, moderately eroded	10	Till plains	No	---
	Vienna	10	Till plains	No	---
	Buse	5	Till plains	No	---
	Lismore	5	Till plains	No	---
J93A:					
Hidewood-Badger complex, 0 to 2 percent slopes	Hidewood	50	Till plains	Yes	2B3
	Badger	30	Till plains	No	---
	Hidewood, frequently flooded	10	Till plains	Yes	2B3
	Brookings	5	Till plains	No	---
	McIntosh	5	Till plains	No	---
J95E:					
Buse, stony-Wilno complex, 18 to 25 percent slopes	Buse, stony	75	Moraines	No	---
	Wilno	15	Moraines	No	---
	Barnes	5	Moraines	No	---
	Darnen	5	Moraines	No	---
J95F:					
Buse, stony-Wilno complex, 25 to 40 percent slopes	Buse, stony	75	Moraines	No	---
	Wilno	15	Moraines	No	---
	Barnes	5	Moraines	No	---
	Darnen	5	Moraines	No	---

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J96B:					
Barnes-Buse complex, 3 to 6 percent slopes	Barnes, occasional saturation	65	Till plains	No	---
	Buse	15	Till plains	No	---
	Barnes, moderately eroded, occasional saturation	10	Till plains	No	---
	Svea	9	Till plains	No	---
	Flom	1	Swales	Yes	2B3
J96C2:					
Barnes-Buse complex, 6 to 12 percent slopes, moderately eroded	Barnes, moderately eroded	50	Moraines	No	---
	Buse, moderately eroded	30	Moraines	No	---
	Barnes	10	Moraines	No	---
	Darnen	5	Moraines	No	---
	Svea	5	Moraines	No	---
J97B:					
Singsaas-Oak Lake complex, 1 to 6 percent slopes	Singsaas, occasional saturation	65	Till plains	No	---
	Oak Lake	20	Till plains	No	---
	Parnell	10	Lake plains	Yes	2B3
	McIntosh	5	Till plains	No	---
J98A:					
Parnell silty clay loam, 0 to 2 percent slopes	Parnell	85	Lake plains	Yes	2B3
	Badger	5	Till plains	No	---
	Parnell, depressional	5	Lake plains	Yes	2B3, 3
	Winger	5	Lake plains	Yes	2B3

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
J99A:					
Lakepark clay loam, 0 to 3 percent slopes, overwash	Lakepark, overwash	85	Moraines	No	---
	Lakepark, frequently flooded	10	Moraines	Yes	2B3
	Parnell, depressional	5	Moraines	Yes	2B3, 3
J100D2:					
Buse, eroded-Wilno complex, 12 to 18 percent slopes	Buse, moderately eroded	70	Moraines	No	---
	Wilno	15	Moraines	No	---
	Barnes, moderately eroded	5	Moraines	No	---
	Buse	5	Moraines	No	---
	Darnen	5	Moraines	No	---
J101B:					
Hokans-Svea complex, 1 to 4 percent slopes	Hokans	70	Moraines	No	---
	Svea	20	Moraines	No	---
	Buse	5	Moraines	No	---
	Lakepark	5	Moraines	Yes	2B3
J102A:					
Oak Lake silty clay loam, 1 to 3 percent slopes	Oak Lake	80	Till plains	No	---
	Singsaas, occasional saturation	10	Till plains	No	---
	Badger	5	Till plains	No	---
	Parnell	5	Lake plains	Yes	2B3
J103A:					
Winger silty clay loam, 0 to 2 percent slopes	Winger	80	Lake plains	Yes	2B3
	McIntosh	10	Till plains	No	---
	Parnell, depressional	10	Moraines	Yes	2B3, 3

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J104A:					
Svea loam, 1 to 3 percent slopes	Svea	75	Moraines	No	---
	Hokans	10	Moraines	No	---
	Lakepark	10	Moraines	Yes	2B3
	Balaton	5	Moraines	No	---
J105A:					
Arvilla sandy loam, 0 to 2 percent slopes	Arvilla	85	Outwash plains	No	---
	Fordtown	5	Outwash plains	No	---
	Fordville	5	Outwash plains	No	---
	Renshaw	5	Outwash plains	No	---
J106B:					
Barnes-Buse-Svea complex, 1 to 6 percent slopes	Barnes, occasional saturation	60	Till plains	No	---
	Buse	15	Till plains	No	---
	Svea	15	Till plains	No	---
	Barnes, moderately eroded, occasional saturation	9	Till plains	No	---
	Flom	1	Swales	Yes	2B3
J107A:					
Lakepark-Roliss-Parnell, depressional, complex, 0 to 3 percent slopes	Lakepark	35	Moraines	Yes	2B3
	Roliss	25	Moraines	Yes	2B3
	Parnell, depressional	15	Moraines	Yes	2B3, 3
	Svea	10	Moraines	No	---
	Vallers	10	Moraines	Yes	2B3
	Balaton	5	Moraines	No	---

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J195B:					
Poinsett silty clay loam, 2 to 6 percent slopes	Poinsett, occasional saturation	80	Lake plains	No	---
	Highpoint Lake	5	Moraines	No	---
	Lake Benton, occasional saturation	5	Moraines	No	---
	Rusklyn	5	Lake plains	No	---
	Waubay	5	Lake plains	No	---
J197B:					
Lake Benton sandy loam, 2 to 6 percent slopes	Lake Benton, occasional saturation	75	Moraines	No	---
	Egeland	10	Moraines	No	---
	Moderately deep to lacustrine, occasional saturation	10	Moraines	No	---
	Moderately well drained soil	5	Outwash plains	No	---
J197C:					
Lake Benton sandy loam, 6 to 12 percent slopes	Lake Benton	75	Moraines	No	---
	Egeland	10	Moraines	No	---
	Moderately deep to lacustrine	10	Moraines	No	---
	Moderately well drained soil	5	Outwash plains	No	---
J198C2:					
Rusklyn-Poinsett complex, 6 to 12 percent slopes, moderately eroded	Rusklyn, moderately eroded	45	Lake plains	No	---
	Poinsett, moderately eroded	40	Lake plains	No	---
	Waubay	10	Lake plains	No	---
	Lake Benton	5	Moraines	No	---

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J199A:					
Fulda silty clay, 0 to 2 percent slopes	Fulda	85	Moraines	Yes	2B3
	Highpoint Lake	10	Moraines	No	---
	Somewhat poorly drained soil	5	Moraines	No	---
J227D2:					
Buse, moderately eroded-Sandberg complex, 12 to 18 percent slopes	Buse, moderately eroded	50	Moraines	No	---
	Sandberg	30	Moraines	No	---
	Wilno	10	Moraines	No	---
	Arvilla	5	Moraines	No	---
	Everts	5	Moraines	No	---
J227F:					
Buse-Sandberg complex, 18 to 40 percent slopes	Buse	50	Moraines	No	---
	Sandberg	30	Moraines	No	---
	Wilno	10	Moraines	No	---
	Arvilla	5	Moraines	No	---
	Everts	5	Moraines	No	---
J232B:					
Barnes-Buse-Arvilla complex, 2 to 6 percent slopes	Barnes, occasional saturation	35	Till plains	No	---
	Buse	30	Till plains	No	---
	Arvilla	25	Moraines	No	---
	Svea	10	Till plains	No	---

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Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
J235C2:					
Buse-Barnes-Arvilla complex, 6 to 12 percent slopes, moderately eroded	Buse, moderately eroded	35	Moraines	No	---
	Barnes, moderately eroded	30	Moraines	No	---
	Arvilla	25	Moraines	No	---
	Sandberg	5	Moraines	No	---
	Svea	5	Till plains	No	---
J236A:					
Highpoint Lake silty clay, 0 to 2 percent slopes	Highpoint Lake	90	Moraines	No	---
	Fulda	10	Moraines	Yes	2B3
J237A:					
Brensall-Tress complex, 0 to 2 percent slopes	Brensall	70	Till plains	No	---
	Tress	20	Till plains	No	---
	Parnell	9	Till plains	Yes	2B3
	Parnell, depressional	1	Till plains	Yes	2B3, 3
J237B:					
Brensall-Tress complex, 1 to 4 percent slopes	Brensall	60	Till plains	No	---
	Tress	25	Till plains	No	---
	Parnell	10	Till plains	Yes	2B3
	Forman, occasional saturation	5	Till plains	No	---
J238D2:					
Buse, firm till-Wilno complex, 12 to 18 percent slopes	Buse, firm till, moderately eroded	60	Till plains	No	---
	Wilno	20	Till plains	No	---
	Forman	10	Till plains	No	---
	Darnen	5	Till plains	No	---
	Lamoure, frequently flooded	5	Flood plains	Yes	2B3, 4

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J238E:					
Buse, firm till-Wilno complex, 18 to 25 percent slopes	Buse, firm till	75	Till plains	No	---
	Wilno	15	Till plains	No	---
	Darnen	5	Till plains	No	---
	Lamoure, frequently flooded	5	Flood plains	Yes	2B3, 4
J238F:					
Buse, firm till-Wilno complex, 25 to 40 percent slopes	Buse, firm till	75	Till plains	No	---
	Wilno	15	Moraines	No	---
	Darnen	5	Till plains	No	---
	Lamoure, frequently flooded	5	Flood plains	Yes	2B3, 4
J240B:					
Forman-Aastad complex, 3 to 6 percent slopes	Forman, occasional saturation	50	Till plains	No	---
	Aastad	20	Till plains	No	---
	Buse, firm till	10	Till plains	No	---
	Tress	10	Till plains	No	---
	Brensall	5	Till plains	No	---
	Parnell	5	Till plains	Yes	2B3
J242F:					
Buse, firm till-Wilno-Lamoure, frequently flooded complex, 0 to 40 percent slopes	Buse, firm till	65	Till plains	No	---
	Lamoure, frequently flooded	15	Flood plains	Yes	2B3, 4
	Wilno	15	Moraines	No	---
	Darnen	5	Till plains	No	---

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J243A:					
Balaton clay loam, 1 to 3 percent slopes	Balaton	90	Till plains	No	---
	Brensall	5	Till plains	No	---
	Vallers	5	Till plains	Yes	2B3
J250C2:					
Forman-Buse complex, 6 to 12 percent slopes, moderately eroded	Forman, moderately eroded	45	Till plains	No	---
	Buse, moderately eroded, firm till	40	Till plains	No	---
	Aastad	10	Till plains	No	---
	Darnen	5	Till plains	No	---
J251A:					
Parnell silty clay loam, firm till, 0 to 2 percent slopes	Parnell, firm till	75	Till plains	Yes	2B3
	Tress	10	Till plains	No	---
	Badger	5	Till plains	No	---
	Lakepark, overwash	5	Till plains	No	---
	Lakepark, frequently flooded	4	Moraines	Yes	2B3
	Parnell, depressional	1	Till plains	Yes	2B3, 3
L73A:					
Blue Earth mucky silty clay loam, depressional, 0 to 1 percent slopes	Blue Earth, depressional	80	Depressions, Lake plains, Moraines	Yes	2B3
	Canisteo	10	Depressions, Flats, Moraines, Rims	Yes	2B3
	Belleville	5	Beaches, Moraines	Yes	2B3
	Essexville	5	Depressions, Flats, Moraines, Rims	Yes	2B3

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L78A:					
Canisteo clay loam, 0 to 2 percent slopes	Canisteo	65	Depressions, Flats, Moraines, Rims	Yes	2B3
	Glencoe, depressional	10	Depressions, Moraines	Yes	2B3, 3
	Crippin	8	Flats, Moraines, Rises	No	---
	Canisteo, depressional	5	Depressions, Moraines	Yes	2B3
	Harps	5	Depressions, Moraines, Rims	Yes	2B3
	Webster	5	Flats, Moraines, Swales	Yes	2B3
	Jeffers, friable till	2	Depressions, Flats, Moraines, Rims	Yes	2B3
L83A:					
Webster clay loam, 0 to 2 percent slopes	Webster	65	Moraines	Yes	2B3
	Glencoe, depressional	14	Moraines	Yes	2B3, 3
	Canisteo	8	Depressions, Flats, Moraines, Rims	Yes	2B3
	Nicollet	8	Moraines	No	---
	Poorly drained soils	5	Moraines	Yes	2B3
L84A:					
Glencoe clay loam, depressional, 0 to 1 percent slopes	Glencoe, depressional	80	Depressions, Moraines	Yes	2B3, 3
	Very poorly drained muck	10	Depressions, Moraines	Yes	2B3
	Canisteo	5	Depressions, Flats, Moraines, Rims	Yes	2B3
	Harps	5	Depressions, Rims	Yes	2B3

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L96B:					
Estherville-Hawick complex, 2 to 6 percent slopes	Estherville	55	Hills, Hills, Outwash plains, Stream terraces	No	---
	Hawick	35	Hills, Hills, Outwash plains, Stream terraces	No	---
	Tomall	8	Outwash plains, Stream terraces, Swales	No	---
	Biscay	2	Flats, Outwash plains, Swales	Yes	2B3
L129B:					
Terril loam, 2 to 6 percent slopes	Terril	90	Hills, Moraines	No	---
	Clarion	5	Hills, Moraines	No	---
	Delft	5	Moraines	Yes	2B3
L139A:					
Wadena loam, 0 to 2 percent slopes	Wadena	85	Outwash plains, Stream terraces	No	---
	Estherville	5	Outwash plains, Stream terraces	No	---
	Kanaranzi	5	Outwash plains, Stream terraces	No	---
	Cylinder	3	Outwash plains, Stream terraces	No	---
	Dickinson	2	Outwash plains, Stream terraces	No	---

Hydric Soils

Lincoln County, Minnesota

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
L139B:					
Wadena loam, 2 to 6 percent slopes	Wadena	85	Hills, Hills, Outwash plains, Terraces	No	---
	Estherville	7	Hills, Hills, Outwash plains, Terraces	No	---
	Cylinder	3	Outwash plains, Stream terraces	No	---
	Dickinson	3	Hills, Hills, Outwash plains, Stream terraces	No	---
	Biscay	2	Flats, Outwash plains, Swales	Yes	2B3
L201A:					
Normania loam, 0 to 3 percent slopes	Normania	85	Flats, Moraines, Rises	No	---
	Amiret	7	Hills, Moraines	No	---
	Seaforth	3	Flats, Moraines, Rises	No	---
	Webster	3	Flats, Moraines, Swales	Yes	2B3
	Canisteo	2	Depressions, Flats, Moraines, Rims	Yes	2B3
L211B:					
Amiret-Round Lake-Swanlake complex, 2 to 6 percent slopes	Amiret	35	Hills, Moraines	No	---
	Round Lake	30	Hills, Moraines	No	---
	Swanlake	20	Hills, Moraines	No	---
	Terril	8	Hills, Moraines	No	---
	Webster	5	Flats, Moraines, Swales	Yes	2B3
	Hawick	2	Hills, Moraines	No	---

Hydric Soils

Lincoln County, Minnesota

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
L212A:					
Burr-Nishna complex, 0 to 2 percent slopes, occasionally flooded	Burr, occasionally flooded	60	Flats, Lake plains	Yes	2B3
	Nishna, occasionally flooded	28	Flats, Lake plains	Yes	2B3
	Du Page, occasionally flooded	4	Flats, Flood plains, Rises	No	---
	Wergeland	4	Flats, Lake plains, Rises	No	---
	Harcot	2	Flats, Flood plains, Swales	Yes	2B3
	Yellow Medicine	2	Flats, Lake plains, Rises	No	---
L213A:					
Calco silty clay loam, 0 to 2 percent slopes, frequently flooded	Calco, frequently flooded	85	Flats, Flood plains	Yes	2B3, 4
	Oshawa, frequently flooded	5	Flood plains, Oxbows	Yes	2B3, 3, 4
	Burr, frequently flooded	4	Flats, Flood plains	Yes	2B3
	Du Page, occasionally flooded	2	Flats, Flood plains, Rises	No	---
	Rushriver, frequently flooded	2	Flats, Flood plains	Yes	2B3, 4
	Spillville, occasionally flooded	2	Flats, Flood plains, Rises	No	---
L214A:					
Calco-Du Page complex, 0 to 2 percent slopes, frequently flooded	Calco, frequently flooded	50	Flats, Flood plains	Yes	2B3, 4
	Du Page, frequently flooded	44	Flats, Flood plains, Rises	Yes	4
	Oshawa, frequently flooded	3	Flood plains, Oxbows	Yes	2B3, 3, 4
	Spillville, occasionally flooded	2	Flats, Flood plains, Rises	No	---
	Minneopa, occasionally flooded	1	Flats, Flood plains, Rises	No	---

Hydric Soils

Lincoln County, Minnesota

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
L215B:					
Dickman sandy loam, 2 to 6 percent slopes	Dickman	85	Hills, Outwash plains	No	---
	Linder	5	Flats, Outwash plains, Swales	No	---
	Minneopa	5	Flats, Outwash plains	No	---
	Biscay	3	Flats, Outwash plains, Stream terraces, Swales	Yes	2B3
	Dickinson	2	Hills, Stream terraces	No	---
L216A:					
Du Page, rarely flooded-Wergeland complex, 0 to 3 percent slopes	Du Page, rarely flooded	55	Flats, Flood plains, Rises	No	---
	Wergeland	35	Flats, Lake plains, Rises	No	---
	Burr, occasionally flooded	5	Lake plains	Yes	2B3
	Calco, occasionally flooded	3	Flats, Flood plains	Yes	2B3
	Yellow Medicine	2	Flats, Lake plains, Rises	No	---
L217C2:					
Ves-Storden complex, 6 to 12 percent slopes, moderately eroded	Ves, moderately eroded	55	Hills, Moraines	No	---
	Storden, moderately eroded	37	Hills, Moraines	No	---
	Amiret	3	Hills, Moraines	No	---
	Terril	3	Hills, Moraines	No	---
	Delft	1	Drainageways, Moraines, Swales	Yes	2B3
	Normania	1	Flats, Moraines	No	---

Hydric Soils

Lincoln County, Minnesota

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
L218B:					
Amiret loam, 2 to 5 percent slopes	Amiret	85	Hills, Moraines	No	---
	Normania	10	Flats, Moraines, Rises	No	---
	Swanlake	2	Hills, Moraines	No	---
	Webster	2	Flats, Moraines, Swales	Yes	2B3
	Seaforth	1	Flats, Moraines, Rises	No	---
L220A:					
Calco silty clay loam, 0 to 2 percent slopes, occasionally flooded	Calco, occasionally flooded	85	Flats, Flood plains	Yes	2B3
	Du Page, occasionally flooded	5	Flats, Flood plains, Rises	No	---
	Burr, occasionally flooded	3	Flats, Lake plains	Yes	2B3
	Oshawa, frequently flooded	3	Flood plains, Oxbows	Yes	2B3, 3, 4
	Minneopa, occasionally flooded	2	Flats, Flood plains, Rises	No	---
	Spillville, occasionally flooded	2	Flats, Flood plains, Rises	No	---
L221A:					
Du Page loam, 0 to 2 percent slopes, occasionally flooded	Du Page, occasionally flooded	85	Flats, Flood plains, Rises	No	---
	Calco, occasionally flooded	5	Flats, Flood plains	Yes	2B3
	Havelock, occasionally flooded	3	Flood plains	Yes	2B3
	Nishna, occasionally flooded	3	Flats, Flood plains	Yes	2B3
	Minneopa, occasionally flooded	2	Flats, Flood plains, Rises	No	---
	Spillville, occasionally flooded	2	Flats, Flood plains, Rises	No	---

Hydric Soils

Lincoln County, Minnesota

Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric rating	Hydric criteria
L222C2:					
Ves-Storden-Pilot Grove complex, 6 to 12 percent slopes, moderately eroded	Ves, moderately eroded	35	Hills, Moraines	No	---
	Storden, moderately eroded	30	Hills, Moraines	No	---
	Pilot Grove	25	Hills, Moraines	No	---
	Terril	6	Hills, Moraines	No	---
	Delft	2	Drainageways, Moraines, Swales	Yes	2B3
	Hawick	2	Hills, Moraines	No	---
L223B:					
Amiret-Swanlake complex, 2 to 6 percent slopes	Amiret	50	Hills, Moraines	No	---
	Swanlake	35	Hills, Moraines	No	---
	Webster	5	Moraines	Yes	2B3
	Normania	4	Moraines	No	---
	Delft	2	Drainageways, Moraines, Swales	Yes	2B3
	Seaforth	2	Flats, Moraines, Rises	No	---
	Terril	2	Hills, Moraines	No	---
M-W:					
Water, miscellaneous	Water, miscellaneous	100	---		---
W:					
Water	Water	100	---		---

Hydric Soils

This table lists the map unit components that are rated as hydric soils in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of ecological wetland plant species. Hydric soils that have been converted to other uses should be capable of being restored to wetlands.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). These soils, under natural conditions, are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2003) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and others, 2002).

Hydric soils are identified by examining and describing the soil to a depth of about 20 inches. This depth may be greater if determination of an appropriate indicator so requires. It is always recommended that soils be excavated and described to the depth necessary for an understanding of the redoximorphic processes. Then, using the completed soil descriptions, soil scientists can compare the soil features required by each indicator and specify which indicators have been matched with the conditions observed in the soil. The soil can be identified as a hydric soil if at least one of the approved indicators is present.

Map units that are dominantly made up of hydric soils may have small areas, or inclusions, of nonhydric soils in the higher positions on the landform, and map units dominantly made up of nonhydric soils may have inclusions of hydric soils in the lower positions on the landform.

The criteria for hydric soils are represented by codes in the table (for example, 2B3). Definitions for the codes are as follows:

1. All Histels except for Folistels, and Histosols except for Folist.
2. Soils in Aquic suborders, great groups, or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that:
 - A. are somewhat poorly drained and have a water table at the surface (0.0 feet) during the growing season, or
 - B. are poorly drained or very poorly drained and have either:
 - 1) a water table at the surface (0.0 feet) during the growing season if textures are coarse sand, sand, or fine sand in all layers within a depth of 20 inches, or
 - 2) a water table at a depth of 0.5 foot or less during the growing season if permeability is equal to or greater than 6.0 in/hr in all layers within a depth of 20 inches, or
 - 3) a water table at a depth of 1.0 foot or less during the growing season if permeability is less than 6.0 in/hr in any layer within a depth of 20 inches.
3. Soils that are frequently ponded for long or very long duration during the growing season.
4. Soils that are frequently flooded for long or very long duration during the growing season.

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