WETLAND DETERMINATION DATA FORM Great Plains Region

| Project/Site: | | L3R | | | | | | | | Date: 09/23/14 |
|--|--|--|--|--|--|---|--|-----------------------------|---|--|
| Applicant: | | Enbridge | | | | | | | | County: Marshall |
| Investigators Soil Unit: | : I24A | BEH/NTT | I | | _Subregior | • | or LRR): I Classification: | MLRA 56 | | State: MN |
| Landform: | Depression | | | _ Lo | cal Relief: | | | | | Sample Point: w-155n45w34-e5 |
| Slope (%): | 0 - 2% | | Latitude: 48.20 | | Longitude: | | 07759 | Datum: | | |
| | | nditions on the sit | | | | | | ☑ Yes | □ No | Section: |
| Are Vegetation | | □, or Hydrology | | | | Are | e normal circum | - | esent? | Township: |
| | | □, or Hydrology | aturally pro | blematic? | | | ⊠ Yes | □ No | | Range: Dir: |
| SUMMARY C | | | | | | | | | | |
| Hydrophytic V | • | | Yes Yes | | _ | | | | Is Present? | Yes nt Within A Wetland? Yes |
| Wetland Hyd Remarks: | | | | Im areen as | h and box | elder. T | he herbaceous | | | ue to seasonal inundation. |
| Romania. | | | by American c | in, groon ac | | | | | y opuroe at | |
| HYDROLOG | Y | | | | | | | | | |
| | | icators (Check al | ll that apply; Mi | nimum of on | e primary | or two se | econdarv requir | ed): | | |
| Primary: | | · | | | | | | 00,1 | Secondary: | |
| | A1 - Surface | | | | B11 - Salt (| | | | | B6 - Surface Soil Cracks |
| マ マ | A2 - High Wa A3 - Saturatio | | | | B13 - Aqua C1 - Hydrog | | | | | B8 - Sparsely Vegetated Concave Surface B10 - Drainage Patterns |
| | B1 - Water M | arks | | | C2 - Dry Se | eason Wa | iter Table | | | C3 - Oxidized Rhizospheres on Living Roots (tilled) |
| | B2 - Sedimen B3 - Drift Dep | • | | | C3 - Oxidiz C4 - Prese | | spheres on Living duced Iron | Roots (not till | | C8 - Crayfish Burrows C9 - Saturation Visible on Aerial Imagery |
| | B4 - Algal Ma | t or Crust | | | C7 - Thin M | | | | \checkmark | D2 - Geomorphic Position |
| | B5 - Iron Dep | | · · | | Other (Expl | lain) | | | | D5 - FAC-Neutral Test |
| | | on Visible on Aerial Ir tained Leaves | nagery | | | | | | | D7 - Frost-Heaved Hummocks (LRR F) |
| _ | | | | | | | | | | |
| Field Observ | vations: | | | | | | | | | |
| Surface Wate | | Yes 🗆 | Depth | | (in.) | | | Wetland H | lydrology | Present? Y |
| Water Table | | Yes 🗹 | Depth | | (in.) | | | Wettand | Tyurology | |
| Saturation Pr | resent? | Yes 🗹 | Depth | 6 | _ (in.) | | | | | |
| Describe Reco | • | stream gauge, mor | | · · | - | ections), | if available: | | | |
| Remarks: | The water ta | able was observe | d 8 inches belc | ow the soil su | urface. | | | | | |
| SOILS | | | | | | | | | | |
| | ntion (Descri | ibe to the depth n | eeded to docur | ment the indi | cator or co | onfirm the | e absence of in | dicators.) | | |
| | | etion, RM=Reduced M | | | | | | | | |
| | 1 | | | | | | oro <u>Linig</u> , in main | | | |
| | | | | | | | - | | | |
| Dopth (In) | | Matrix | | Color (| Maiat) | Mottle | es | Location | Toyturo | Bomorko |
| Depth (In.) | | Color (Moist) | % | Color (| Moist) | | - | Location | | Remarks |
| 0-6 | Hue_10YR | Color (Moist) 2/1 | 100 | Color (| Moist) | Mottle | es | Location | MMI | Remarks |
| 0-6 6-12 | Hue_10YR | Color (Moist) 2/1 2/1 | 100 100 | Color (| Moist) | Mottle | es | Location | MMI SICL | Remarks |
| 0-6 | | Color (Moist) 2/1 2/1 | 100 | Color (Hue_2.5Y | | Mottle | es | Location | MMI | Remarks |
| 0-6 6-12 12-16 | Hue_10YR Hue_10YR | Color (Moist) 2/1 2/1 3/1 | 100 100 100 | , | | Mottle % | es Type | | MMI SICL SL | Remarks |
| 0-6 6-12 12-16 | Hue_10YR Hue_10YR | Color (Moist) 2/1 2/1 3/1 | 100 100 100 | , | | Mottle % | es Type | | MMI SICL SL | Remarks |
| 0-6 6-12 12-16 | Hue_10YR Hue_10YR Hue_2.5Y | Color (Moist) 2/1 2/1 3/1 6/2 | 100 100 100 | Hue_2.5Y | 7/6 | Mottle % | es Type | | MMI SICL SL SL | |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y | Color (Moist) 2/1 2/1 3/1 6/2 | 100 100 100 97 | Hue_2.5Y | 7/6 not present | Mottle % | es Type C | M | MMI SICL SL SL | for Problematic Soils ¹ |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl | 100 100 100 97 | Hue_2.5Y dicators are r | 7/6 not present | Mottle % | es Type C | M | MMI SICL SL SL <u>Indicators f</u> A9 - 1 cm M | for Problematic Soils ¹ //uck (LRR I, J) |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl | 100 100 100 97 | Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy N | 7/6 7/6 not present Redox Matrix Jucky Minera | Mottle % 3 t): | es Type C | M | MMI SICL SL SL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl stic n Sulfide | 100 100 97 heck here if inc | Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy M F2 - Loamy G | 7/6 7/6 not present edox Matrix Jucky Minera | Mottle % 3 t): | es Type C | M | MMI SICL SL SL Indicators f A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F | for Problematic Soils ¹ Auck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl stic n Sulfide Layers (LRR F) | 100 100 97 heck here if inc | Hue_2.5Y Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted | 7/6 7/6 not present Redox Matrix Mucky Minera Gleyed Matrix | Mottle % 3 t): | es Type C | M | MMI SICL SL SL A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl stic n Sulfide | 100 100 97 heck here if inc | Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy M F2 - Loamy G | 7/6 7/6 not present edox Matrix Mucky Minera Gleyed Matrix d Matrix Dark Surface | Mottle % 3 t): | es Type C | M | MMI SICL SL SL Minimized SL SL Minimized SL Minimized SL Minimized | for Problematic Soils ¹ Auck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl stic n Sulfide Layers (LRR F) ck (LRR FGH) ed Below Dark Surfac Park Surface | 100 100 97 heck here if inc | Hue_2.5Y Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D | 7/6 7/6 not present Redox Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surface Depressions | Mottle % 3 t): | es Type C | M | MMI SICL SL SL SL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl stic n Sulfide Layers (LRR F) ck (LRR FGH) ed Below Dark Surface ucky Mineral | 100 100 97 heck here if inc | Hue_2.5Y Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D | 7/6 7/6 not present Redox Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surface Depressions | Mottle % 3 t): | es Type C | M | MMI SICL SL SL SL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material y Shallow Dark Surface |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl stic n Sulfide Layers (LRR F) ck (LRR FGH) ed Below Dark Surfac Park Surface | 100 100 97 heck here if inc | Hue_2.5Y Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D | 7/6 7/6 not present Redox Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surface Depressions | Mottle % 3 t): | es Type C | M | MMI SICL SL SL SL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material y Shallow Dark Surface |
| 0-6 6-12 12-16 16-24 ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm M | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl bipedon stic n Sulfide Layers (LRR F) ck (LRR FGH) ed Below Dark Surface ucky Mineral Mucky Peat or Peat (LR | 100 100 97 heck here if inc | Hue_2.5Y Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D | 7/6 7/6 not present Redox Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surface Depressions | Mottle % 3 t): | es Type C | M | MMI SICL SL SL SL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material y Shallow Dark Surface ain in Remarks) |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm Mu | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl bipedon stic n Sulfide Layers (LRR F) ck (LRR FGH) ed Below Dark Surface ucky Mineral Mucky Peat or Peat (LR | 100 100 97 heck here if inc | Hue_2.5Y Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D | 7/6 7/6 not present Redox Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surface Depressions | Mottle % 3 t): | es Type C | M | MMI SICL SL SL SL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material / Shallow Dark Surface ain in Remarks) |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroger A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm Mu S3 - 5 cm Mu S4 - Sandy G | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl bipedon stic n Sulfide Layers (LRR F) ck (LRR FGH) ed Below Dark Surface ucky Mineral Mucky Peat or Peat (LR leyed Matrix | 100 100 97 heck here if inc | Hue_2.5Y Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D | 7/6 7/6 not present Redox Matrix Mucky Minera Gleyed Matrix Dark Surface d Dark Surface d Dark Surfa Depressions lains Depres | Mottle % 3 t): | es Type C C RA 72, 73 of LRR | M | MMI SICL SL SL SL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material / Shallow Dark Surface ain in Remarks) |
| 0-6 6-12 12-16 16-24 NRCS Hydr | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm Mu S3 - 5 cm Mu S4 - Sandy G | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl stic n Sulfide Layers (LRR F) ck (LRR FGH) ed Below Dark Surface ucky Mineral Aucky Peat or Peat (LR ky Peat or Peat (LR leyed Matrix | 100 100 97 heck here if inc | Hue_2.5Y Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy N F2 - Loamy G F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D F16 - High Pl Depth: | 7/6 7/6 not present edox Matrix Mucky Minera Jeyed Matrix Matrix Dark Surface Dark Surface Dark Surface Dark Surface | Mottle % 3 t): | es Type C C RA 72, 73 of LRR | M M H) | MMI SICL SL SL SL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material / Shallow Dark Surface ain in Remarks) hydrophytic vegetation and wetland hydrology must be present. |
| 0-6 6-12 12-16 16-24 ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ | Hue_10YR Hue_10YR Hue_2.5Y ic Soil Field A1- Histosol A2 - Histic Ep A3 - Black His A4 - Hydroge A5 - Stratified A9 - 1 cm Mu A11 - Deplete A12 - Thick D S1 - Sandy M S2 - 2.5 cm Mu S3 - 5 cm Mu S3 - 5 cm Mu S4 - Sandy G | Color (Moist) 2/1 2/1 3/1 6/2 Indicators (cl stic n Sulfide Layers (LRR F) ck (LRR FGH) ed Below Dark Surface ucky Mineral Aucky Peat or Peat (LR ky Peat or Peat (LR leyed Matrix | 100 100 97 heck here if inc beck here if inc ce | Hue_2.5Y Hue_2.5Y dicators are r S5 - Sandy R S6 - Stripped F1 - Loamy R F2 - Loamy G F3 - Depleted F6 - Redox D F7 - Depleted F8 - Redox D F16 - High Pl Depth: | 7/6 7/6 not present Redox Matrix Jucky Minera Gleyed Matrix Dark Surface d Matrix Dark Surface d Dark Surfa Depressions lains Depres | Mottle % 3 t): al x sice sions (ML | es Type C C RA 72, 73 of LRR | M M H) il Present? | MMI SICL SL SL SL <u>Indicators f</u> A9 - 1 cm M A16 - Coast S7 - Dark S F16 - High F F18 - Reduc TF2 - Red F TF12 - Very Other (Expla | for Problematic Soils ¹ Muck (LRR I, J) t Prairie Redox (LRR F, G, H) Surface (LRR G) Plains Depressions (LRR H, outside MLRA 72, 73) ced Vertic Parent Material / Shallow Dark Surface ain in Remarks) |

WETLAND DETERMINATION DATA FORM Great Plains Region

| Species Name 1. Ulmus americar 2. Acer negundo 3. Fraxinus pennsy 4. 5. 6. 7. 8. 9. 10. 9. 10. 9. 11. Ulmus americar 2. Acer negundo 3. Fraxinus pennsy 4. 7. 8. 9. 10. 9. 10. 9. 11. Ulmus americar 2. Acer negundo 3. Fraxinus penns 4. Rhamnus cathe 5. Ribes hudsonia 6. 7. 8. 9. 10. 11. 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 9. 10. 11. 12. 13. 14. | | | | | Sample Point: w-155n45w34-e5 | | | |
|---|--|----------------|-------------|-------------|--|--|--|--|
| Species Name 1. Ulmus americar 2. Acer negundo 3. Fraxinus pennsy 4. 5. 6. 7. 8. 9. 10. 9. 10. 7. 8. 9. 10. 7. 8. 9. 10. 7. 8. 9. 10. 7. 8. 9. 10. 7. 8. 9. 10. 7. 8. 9. 10. 7. 8. 9. 10. 7. 8. 9. 10. 7. 8. 9. 10. 7. 8. 9. 9. 10. 11. 7. 8. 9. 9. 10. 11. 7. 8. 9. <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | | | | |
| Species Name 1. Ulmus americar 2. Acer negundo 3. Fraxinus pennsy 4. 5. 6. 7. 8. 9. 10. 9. 10. 9. 10. 9. 10. 9. 10. 9. 10. 9. 10. 9. 10. 9. 11. Ulmus america 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. 7. 8. 9. 10. 10. 11. Epilobium ciliat 2. 7. 8. 9. 10. 11. 12. 13. 14. 15. 5. 6 7. 8. 9. 10. 11. 1 | (Species identified in all uppercase and the regime) | re non-native | species.) | | | | | |
| 1. Ulmus americar 2. Acer negundo 3. Fraxinus pennsy 4. 5. 6. 7. 8. 9. 9. 10. pling/Shrub Stratum (Plot siz 1. Ulmus america 2. Acer negundo 3. Fraxinus penns 4. Winus america 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. 7. 8. 9. 10. 10. 11. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 0. 14. 15. 14. 16. 14. | · · · · · · · · · · · · · · · · · · · | <u>% Cover</u> | Dominant | Ind.Status | Dominance Test Worksheet | | | |
| 2. Acer negundo 3. Fraxinus pennsy 4. 5. 6. 7. 8. 9. 10. 10. pling/Shrub Stratum (Plot siz 2. Acer negundo 3. Fraxinus penns 4. Ulmus america 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. 7. 8. 9. 10. 11. 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 5. 1. 2. 3. 3. 7. 3. 7. 4. 15. 5. 1. 2. 3. 3. 5. 4. 1. | | <u>45</u> | Y | FAC | Dominance rest worksheet | | | |
| 3. Fraxinus pennsy 4. 5. 6. 7. 8. 9. 10. 10. pling/Shrub Stratum (Plot siz 1. Ulmus america 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. 7. 8. 9. 10. 10. rb Stratum (Plot size: 5 ft. r 1. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 5. 1. 2. 3. 3. 5. 4. 15. | | 20 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC: 4 (A) | | | |
| 4. 5. 6. 7. 8. 9. 10. pling/Shrub Stratum (Plot size) 1. Ulmus americal 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. 7. 8. 9. 10. 10. rtb Stratum (Plot size: 5 ft. r 1. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 5. 1. 2. 3. 5. 4. | | 10 | N | FAC | | | | |
| 5. 6. 7. 8. 9. 10. 110. 110. 110. 110. 110. 110. 110. 110. 110. 110. 110. 111. 112. 113. 110. 111. 112. 113. 114. 115. 111. 12. 13. 14. 15. 14. 15. | innsylvanica | 10 | IN | FAC | Total Number of Dominant Species Across All Strata: 6 (B) | | | |
| 6. 7. 8. 9. 10. 110. 110. 110. 110. 110. 110. 110. 110. 110. 110. 111. 111. 111. 111. 111. 111. 111. 111. 111. 112. 113. 114. 115. 111. 112. 113. 114. 115. | | | | | Total Number of Dominant Species Across All Strata: 6 (B) | | | |
| 7. 8. 9. 10. 10. 10. 110. 10. 110. 10. 110. 10. 110. 11. 110. 11. 110. 11. 110. 11. 110. 11. 110. 11. 110. 11. 110. 11. 110. 11. 110. 11. 110. 11. 111. 11. 112. 11. 113. 11. 114. 11. 125. 11. 13. 14. 14. 15. 15. 11. 14. 11. 15. 11. 14. 11. 15. 11. 14. 11. 15. 11. 14. 11. 15. 11. 14. 11. 15. 11. 15.< | | | | | $\frac{1}{2}$ | | | |
| 8. 9. 10. 10. 111. 12. 13. 14. 15. 11. 12. 13. 14. 15. 14. 15. 14. 15. 14. 15. 14. 15. 14. 15. 16. 17. 18. 19. 11. 12. 13. 14. 15. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66.7%</u> (A/B) | | | |
| 9. 10. 110. 110. 110. 110. 110. 110. 110. 110. 110. 110. 110. 110. 110. 110. 110. 111. 111. 12. 13. 14. 15. 111. 12. 13. 14. 15. 16. 17. 18. 19. 110. 111. 12. 13. 14. 15. 15. 16. 17. 17. 18. 19. 11. 12. 13. 14. 15. 17. 17. 17. 17. | | | | | Prevalence Index Worksheet | | | |
| 10. pling/Shrub Stratum (Plot siz 1. Ulmus america 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. | | | | | | | | |
| pling/Shrub Stratum (Plot siz 1. Ulmus america 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. | | | | | Total % Cover of: Multiply by: | | | |
| 1. Ulmus america 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. 7. 8. 9. 9. 10. 10. 10. rb Stratum (Plot size: 5 ft. r 1. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 5. 1. 2. 3. 3. 4. | Tatal Cavar | 75 | | | OBL spp. 1 	 X 	 1 = 	 1 | | | |
| 1. Ulmus america 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. | Total Cover = | 75 | | | FACW spp. 3 $x 2 = 6$ | | | |
| 1. Ulmus america 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. | | | | | FACW spp. 3 x 2 = 6 FAC spp. 120 x 3 = 360 FACU spp. 5 x 4 = 20 UPL spp. 0 x 5 = 0 | | | |
| 2. Acer negundo 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. | · | | V | | FACU spp. 5 X 4 = 20 | | | |
| 3. Fraxinus penns 4. Rhamnus catha 5. Ribes hudsonia 6. | | 35 | Y | FAC | 0 UPL spp. 0 X S = 0 | | | |
| 4. Rhamnus catha 5. Ribes hudsonia 6. | | 5 | <u>N</u> | FAC | | | | |
| 5. Ribes hudsonia 6. 7. 7. 8. 9. 10. 10. 10. 11. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 13. 14. 15. 5. 00dy Vine Stratum (Plot size 1. 2. 3. 5. 4. 4. | | 5 | <u>N</u> | FAC | Total <u>129</u> (A) <u>387</u> (B) | | | |
| 6. 7. 8. 9. 10. 11. 11. 11. 11. 11. 12. 13. 14. 15. 15. 16. 17. 18. 19. 10. 11. 12. 13. 14. 15. 15. 14. 15. 14. 15. 14. 15. 14. 15. | | 3 | <u>N</u> | FACU | | | | |
| 7. 8. 9. 10. 10. 10. 11. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 0ody Vine Stratum (Plot size 1. 2. 3. 5. 4. 4. | sonianum | 1 | N | OBL | $Prevalence Index = B/A = \underline{3.000}$ | | | |
| 8. 9. 10. 10. 11. Epilobium ciliat 2. 7. 8. 9. 10. 7. 8. 9. 10. 11. 12. 13. 14. 15. 0 14. 15. 14. 15. 14. 15. 14. 15. 14. 15. 14. 15. | | | | | | | | |
| 9. 10. rb Stratum (Plot size: 5 ft. r 1. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 13. 14. 15. 9. 2. 3. 5. 9. 13. 14. 15. 9. 14. 15. 14. 14. 15. 9. 14. 14. 15. 9. 14. 14. 15. 9. 14. 14. 15. 9. 14. 14. 15. 9. 14. 10. 14. 10. 15. 10. 14. 10. 15. 10. 14. 10. 15. 10. 14. 10. | | | | | | | | |
| 10. rb Stratum (Plot size: 5 ft. r 1. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 | | | | | Hydrophytic Vegetation Indicators: | | | |
| rb Stratum (Plot size: 5 ft. r 1. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. | | | | | Rapid Test for Hydrophytic Vegetation | | | |
| 1. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. oody Vine Stratum (Plot size 1. 2. 3. 5. 4. 4. | | | | | X Dominance Test is > 50% | | | |
| 1. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. oody Vine Stratum (Plot size 1. 2. 3. 5. 4. 4. | Total Cover = | r = <u>49</u> | | | X Prevalence Index is ≤ 3.0 * | | | |
| 1. Epilobium ciliat 2. Taraxacum offic 3. Arctium minus 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. oody Vine Stratum (Plot size 1. 2. 3. 5. 4. 4. | | | | | Morphological Adaptations (Explain) * | | | |
| 2. Taraxacum offic 3. Arctium minus 4. 5. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 5. pody Vine Stratum (Plot size 1. 2. 3. 5. 4. 4. | ft. radius) | | | | Problem Hydrophytic Vegetation (Explain) * | | | |
| 3. Arctium minus 4. 5. 5. 6 7. 8. 9. 10. 10. 11. 12. 13. 13. 14. 15. 5. 3. 5. 4. 4. | ciliatum | 3 | Y | FACW | | | | |
| 4. 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. pody Vine Stratum (Plot size 1. 2. 3. 5. 4. | officinale | 1 | Y | FACU | * Indicators of hydric soil and wetland hydrology must be | | | |
| 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. pody Vine Stratum (Plot size) 1. 2. 3. 5. 4. | านร | 1 | Y | FACU | present, unless disturbed or problematic. | | | |
| 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 0ody Vine Stratum (Plot size 1. 2. 3. 5. 4. | | | | | Definitions of Vegetation Strata: | | | |
| 7. 8. 9. 10. 11. 12. 13. 14. 15. pody Vine Stratum (Plot size 1. 2. 3. 5. 4. | | | | | | | | |
| 8. 9. 10. 11. 12. 13. 14. 15. Dody Vine Stratum (Plot size 1. 2. 3. 5. 4. | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast | | | |
| 9. 10. 11. 12. 13. 14. 15. body Vine Stratum (Plot size) 1. 2. 3. 5. 4. | | | | | height (DBH), regardless of height. | | | |
| 9. 10. 11. 12. 13. 14. 15. body Vine Stratum (Plot size) 1. 2. 3. 5. 4. | | | | | | | | |
| 10. 11. 12. 13. 14. 15. body Vine Stratum (Plot size) 1. 2. 3. 5. 4. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH, regardless of height. | | | |
| 11. 12. 13. 14. 15. Dody Vine Stratum (Plot size) 1. 2. 3. 5. 4. | | | | | | | | |
| 12. 13. 14. 15. body Vine Stratum (Plot size) 1. 2. 3. 5. 4. | | | | | 1 | | | |
| 13. 14. 15. body Vine Stratum (Plot size) 1. 2. 3. 5. 4. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size. | | | |
| 14. 15. body Vine Stratum (Plot size) 1. 2. 3. 5. 4. | | | | | | | | |
| 15. Dody Vine Stratum (Plot size 1. 2. 3. 5. 4. | | | | | 1 | | | |
| body Vine Stratum (Plot size 1. 2. 3. 5. 4. | | | | | Woody Vines - All woody vines, regardless of height. | | | |
| 1. 2. 3. 5. 4. | Total Cover = | = 5 | | | | | | |
| 1. 2. 3. 5. 4. | | - <u> </u> | | | | | | |
| 1. 2. 3. 5. 4. | | | | | | | | |
| 3. 5. 4. | 5120. 50 IL. 180105) | | | | - | | | |
| 3. 5. 4. | | | | | | | | |
| 5. 4. | | | | | Hydrophytic Verstation Breeset2 | | | |
| 4. | | | | | Hydrophytic Vegetation Present? Y | | | |
| ρ | | | | | | | | |
| marks: The canony | T-4-1 0 | | | | | | | |
| marke Iba canony | Total Cover = | | | Alege 1 | | | | |
| | ppy is dominated by American elm a | and boxelde | er with sca | ittered gre | een ash. The shrub layer is almost entirely American elm. Ground cover is very | | | |
| sparse. | | | | | | | | |
| | | | | | | | | |
| ditional Remarks: | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |