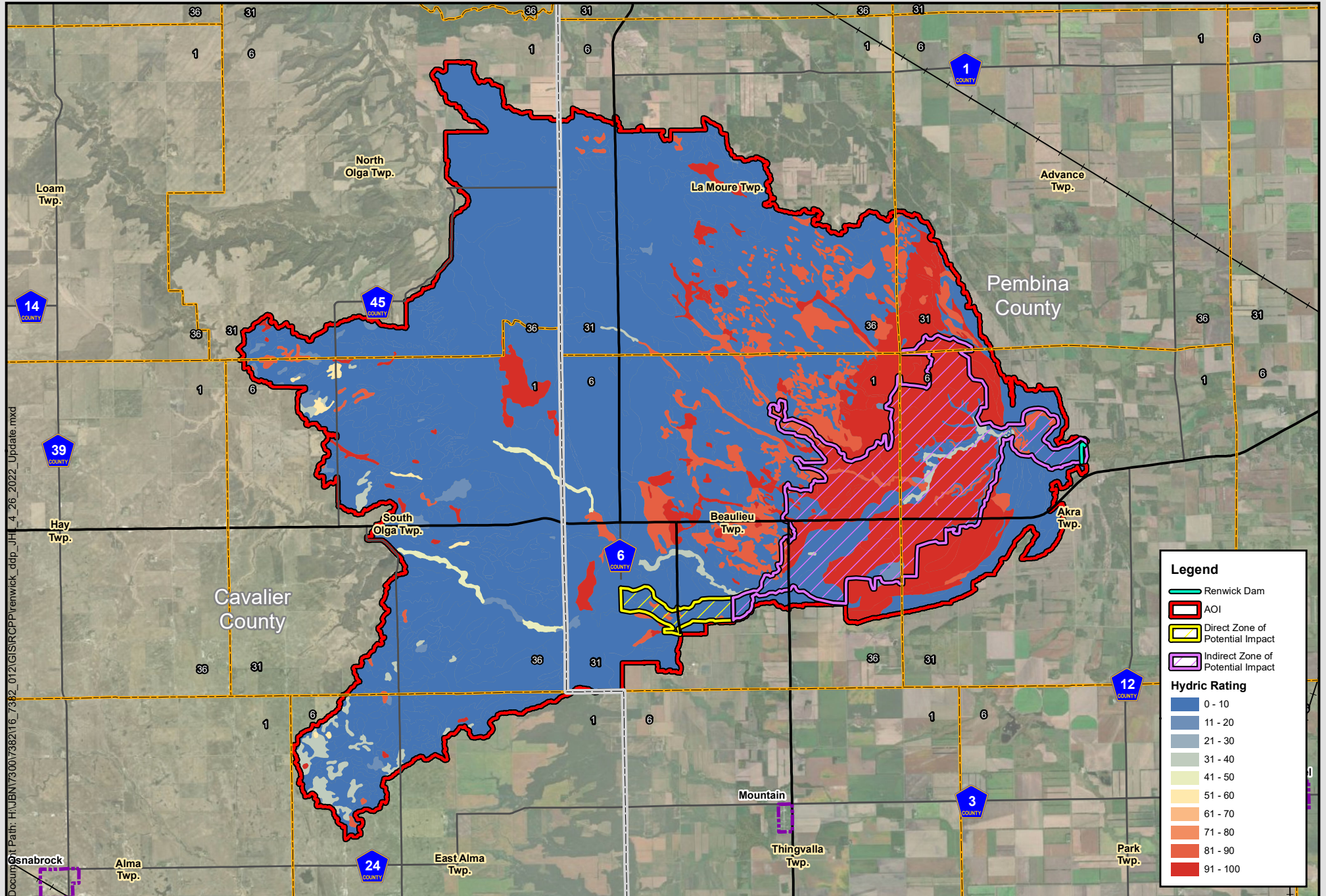


APPENDIX C

Support Maps

C-1	Hydric Soils - AOI >	Pg C-2
C-2	Soil Erodibility - AOI	C-3
C-3	Farmland Classification - AOI	C-4
C-4	Surface Water Features - AOI	C-5
C-5	National Wetland Inventory - AOI	C-6
C-6	FEMA Floodplain - AOI	C-7
C-7	Natural Areas - AOI	C-8
C-8	Land Use - National Land Cover Database - AOI	C-9
C-9	Agricultural Products - Cropland Data - AOI	C-10
C-10	Soil Units – Direct APE	C-11
C-11	Hydric Soils – Both APEs	C-12
C-12	Soil Erodibility – Both APEs	C-13
C-13	Farmland Classification – Both APEs	C-14
C-14	Aquatic Resources Delineation – Direct APE	C-15
C-15	National Wetland Inventory – Indirect APE	C-16
C-16	FEMA Flood Zones – both APEs	C-17
C-17	Natural Areas – Indirect APE	C-18
C-18	Land Use - National Land Cover Database-both	C-19
C-19	APE Agricultural Products - Cropland Data – both APE	C-20

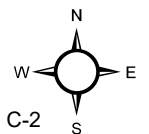


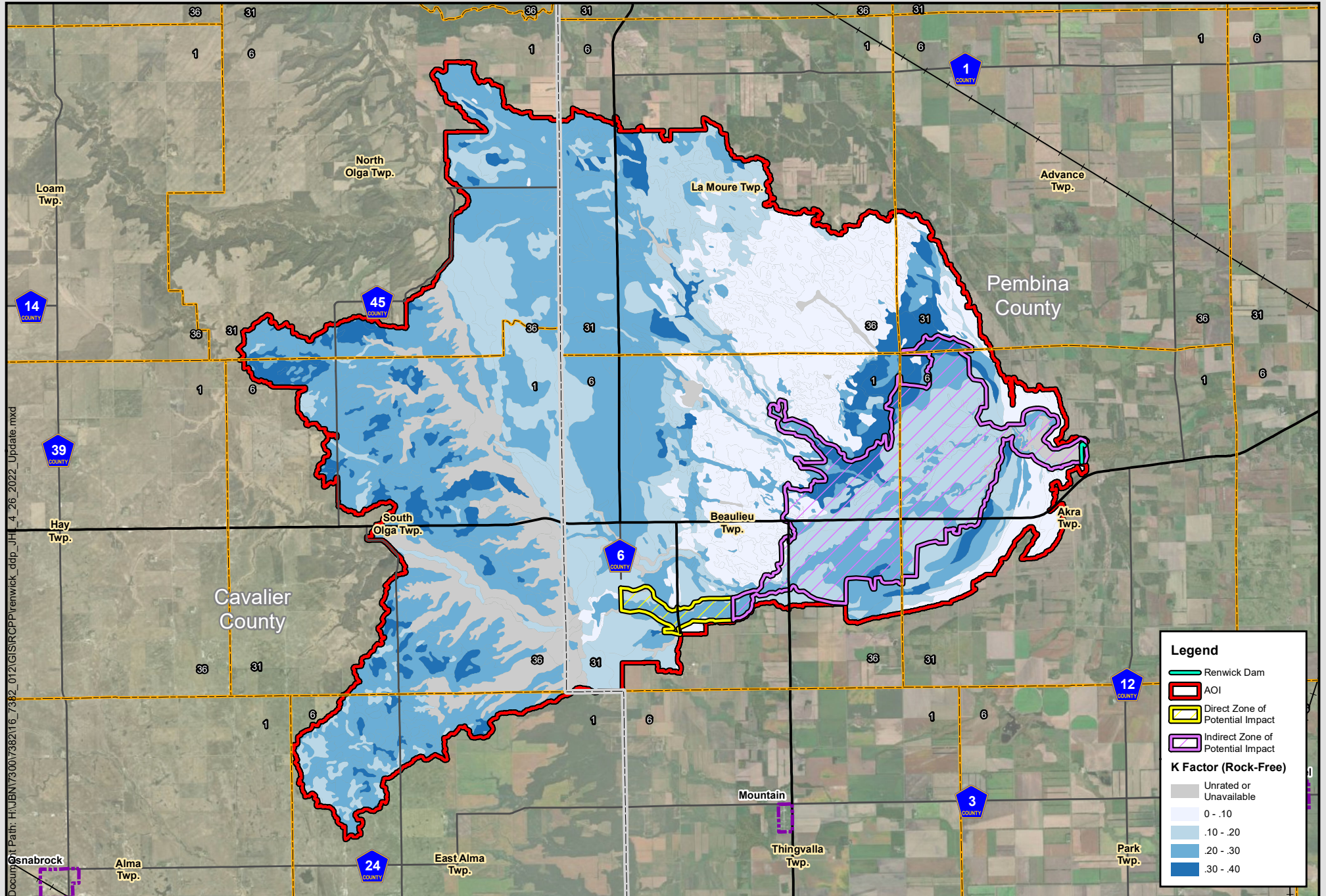
C1 - Hydric Rating - Area of Interest

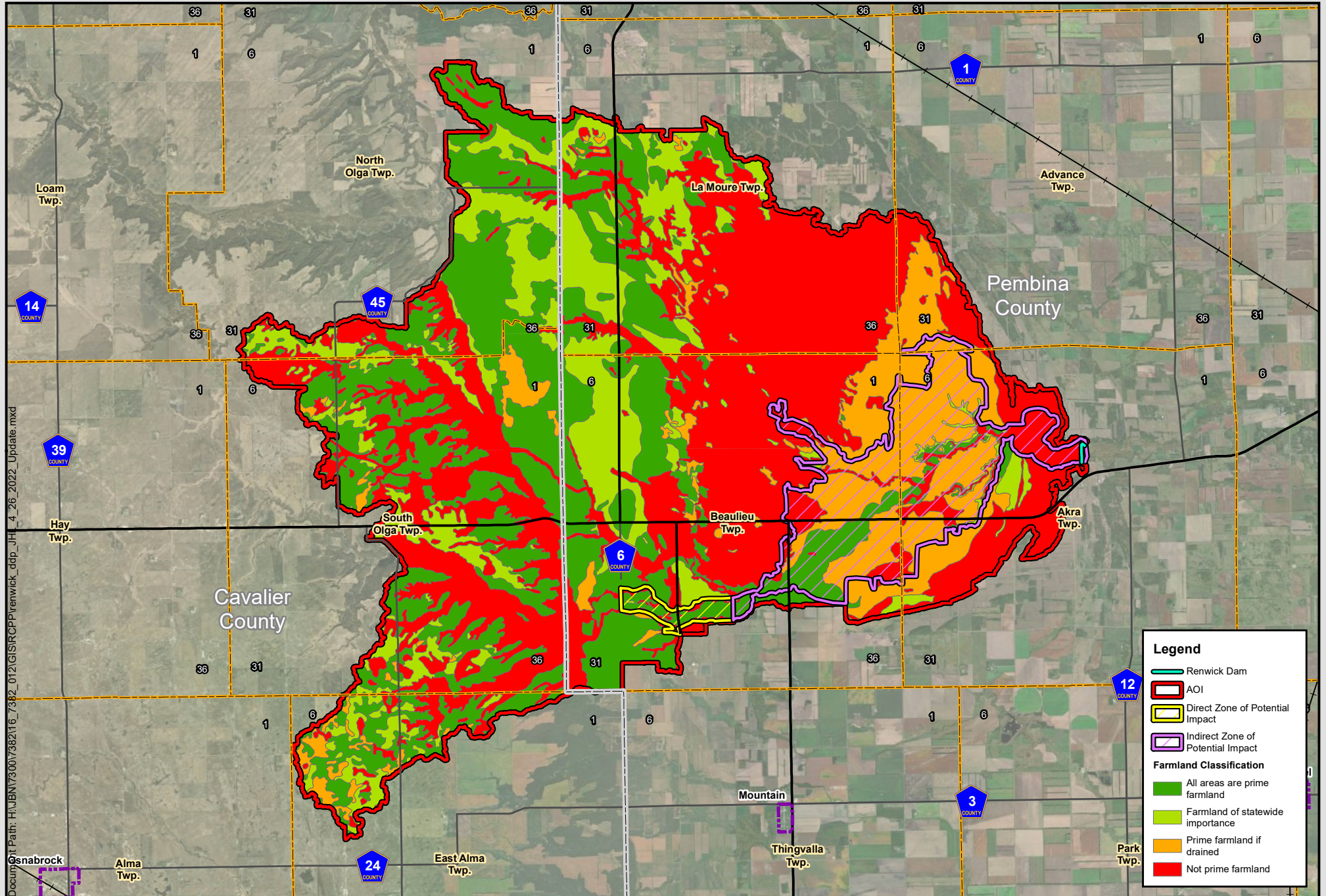
Tongue River Sub-Watershed Plan
Watershed Plan and Environmental Assessment
Pembina Water Resource District

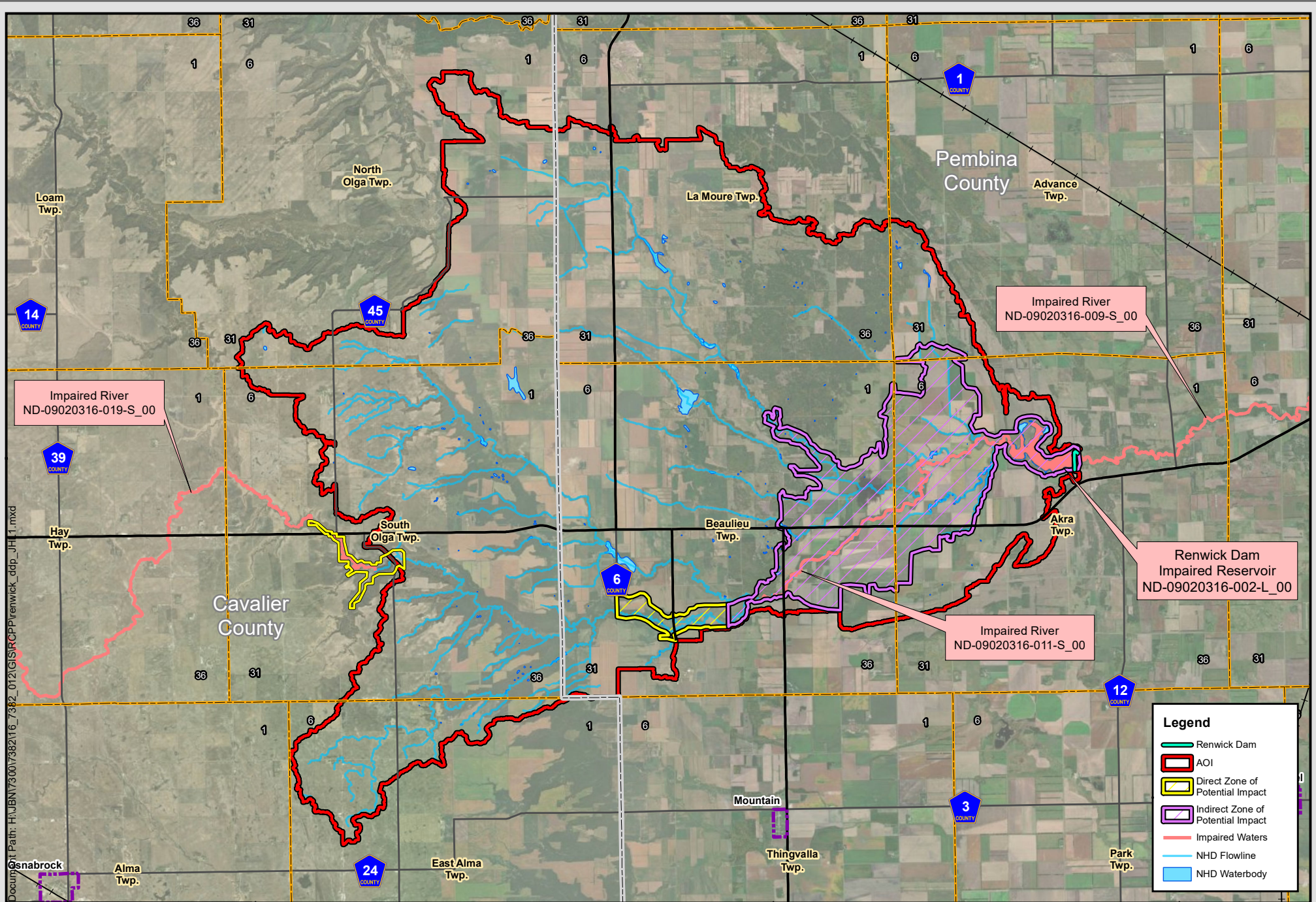
1 inch = 2 miles

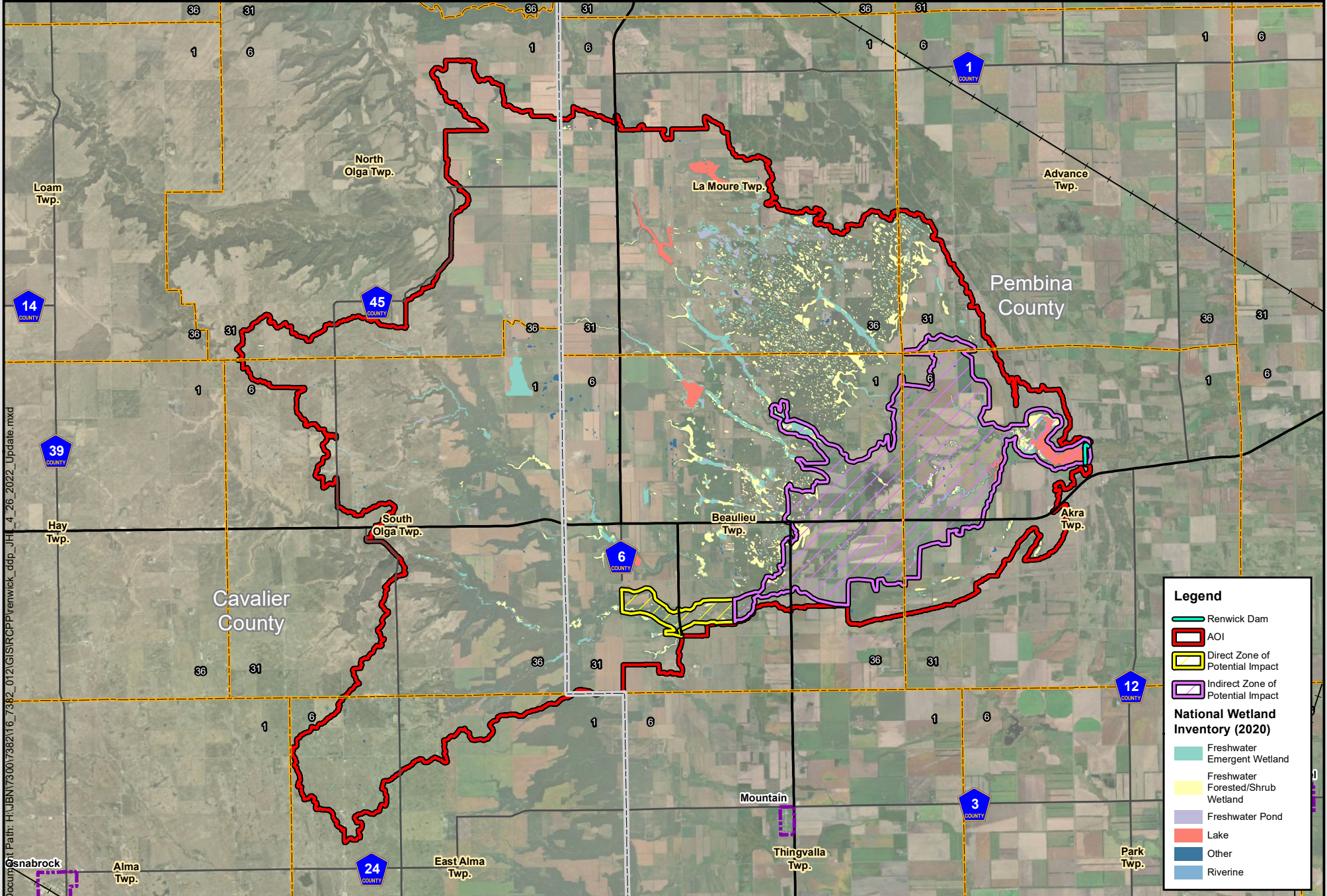
0 2 4 Miles











Legend

- Renwick Dam
- AOI
- Direct Zone of Potential Impact
- Indirect Zone of Potential Impact

National Wetland Inventory (2020)

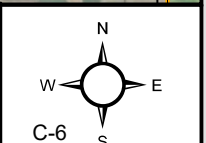
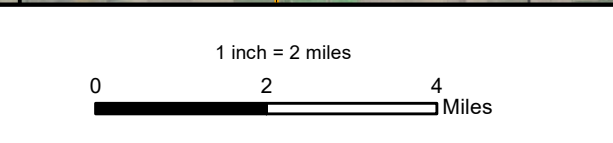
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

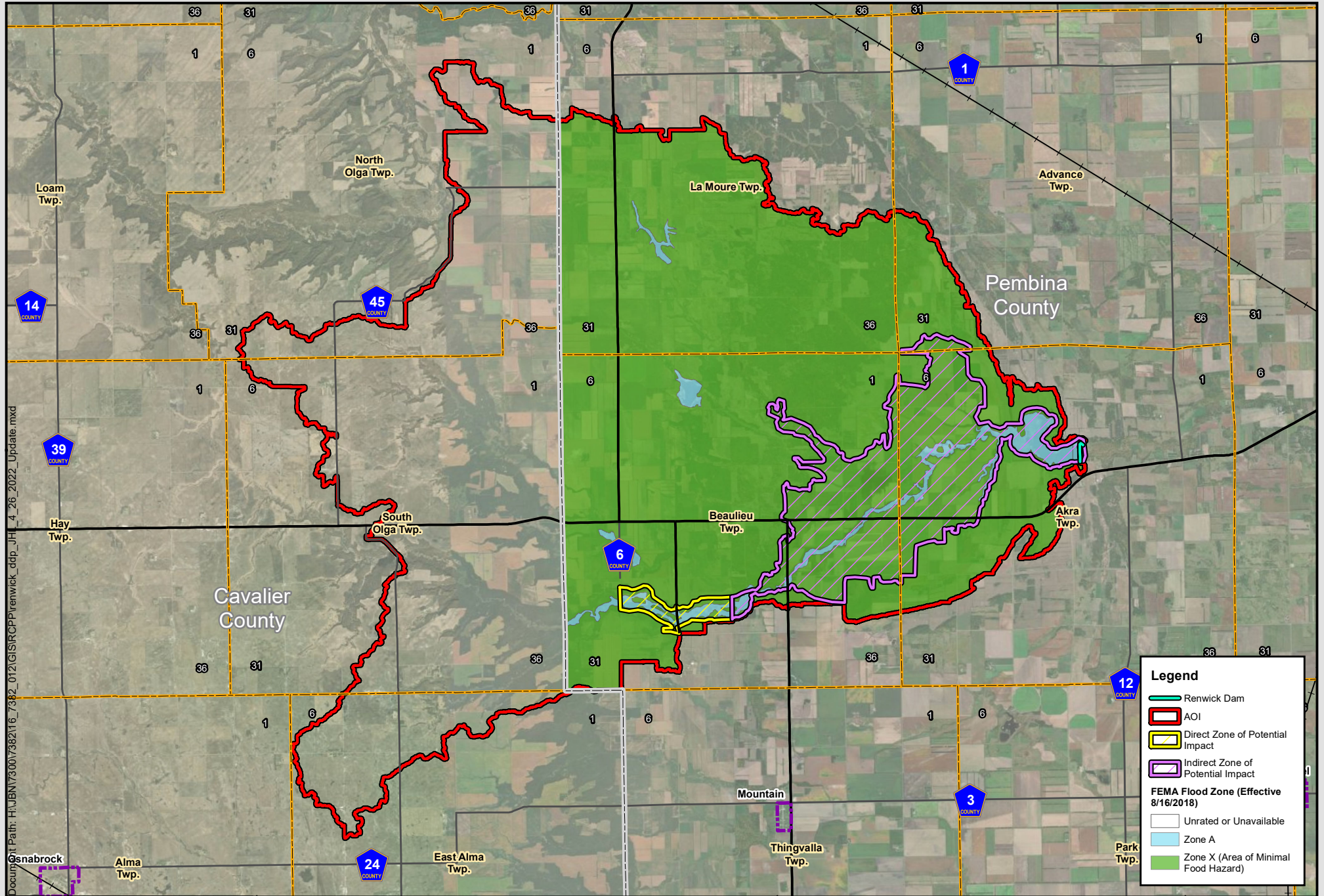
Scale: AS SHOWN
 Drawn by: JHL
 Checked by: DJ
 Project No.: 7135-0037
 Date: 4/26/2022
 Sheet: 1 of 1

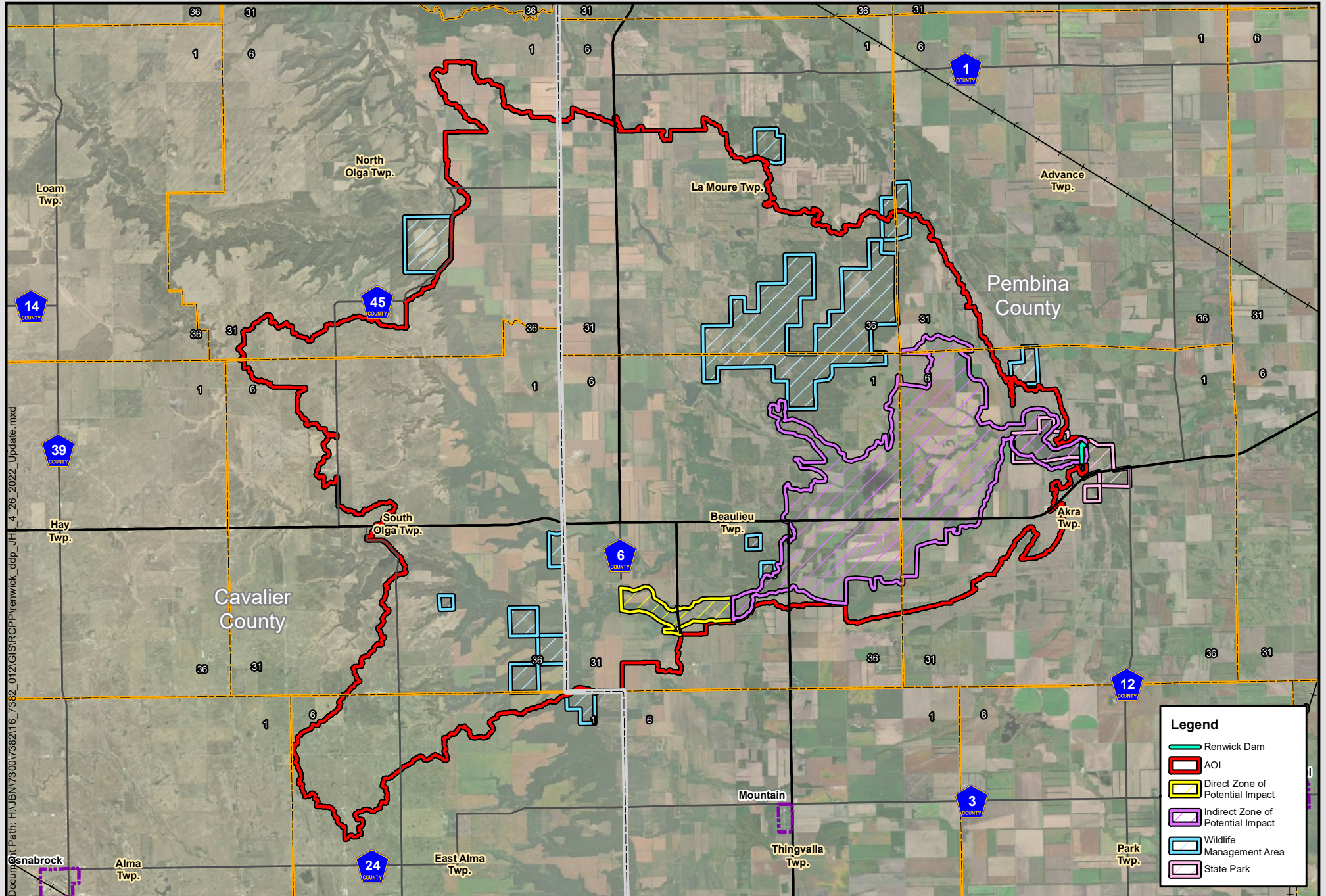
HOUSTON
 engineering, inc.

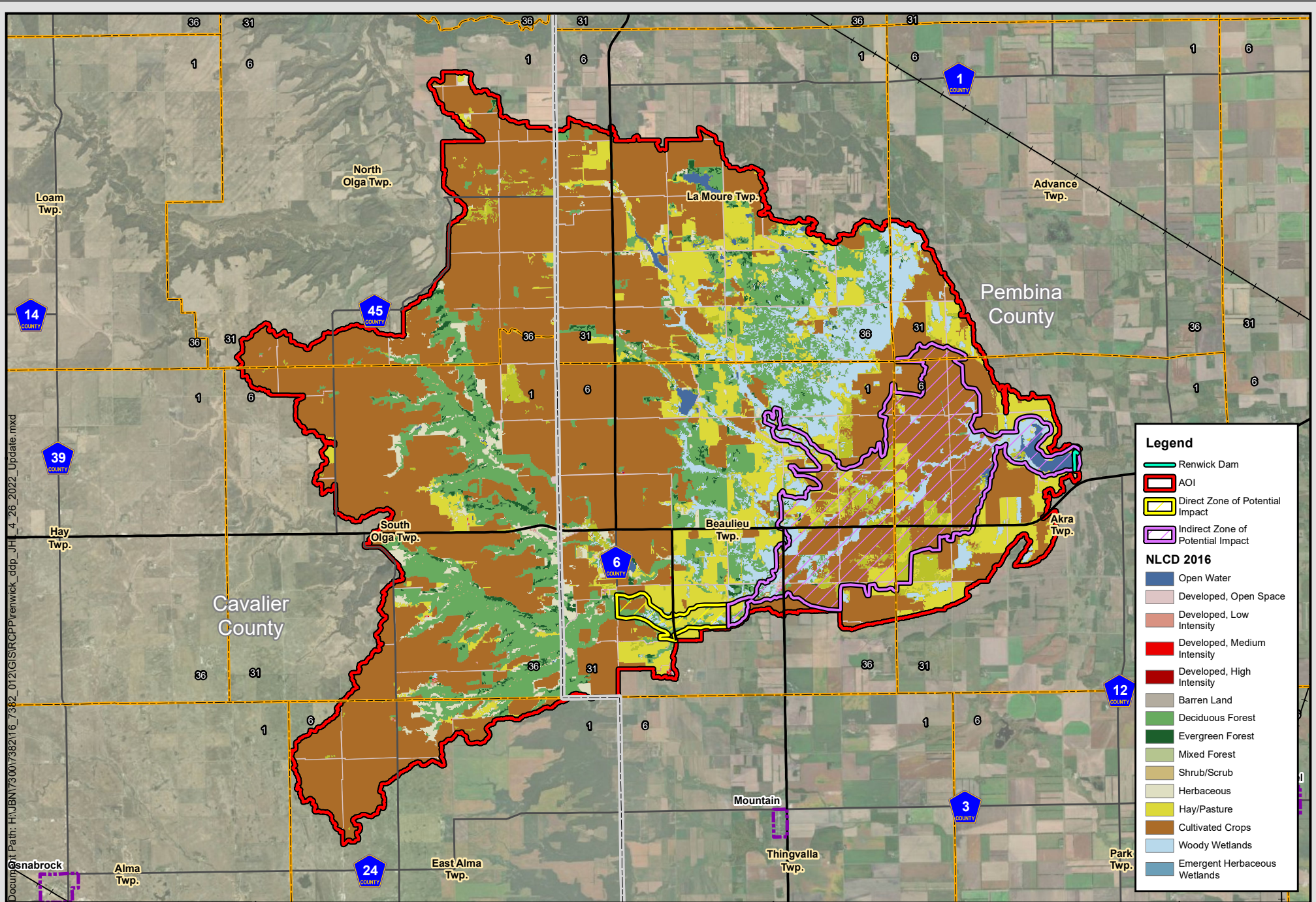
C5 - National Wetlands Inventory - Area of Interest

Tongue River Sub-Watershed Plan
 Watershed Plan and Environmental Assessment
 Pembina Water Resource District









Document Path: H:\BUN7300\738216_7382_012\GIS\RCP\Penwick_ddp_JH_4_26_2022_Update.mxd

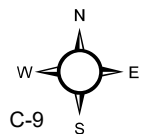
Scale: AS SHOWN Drawn by: JHL Checked by: DJ Project No.: 7135-0037 Date: 4/26/2022 Sheet: 1 of 1

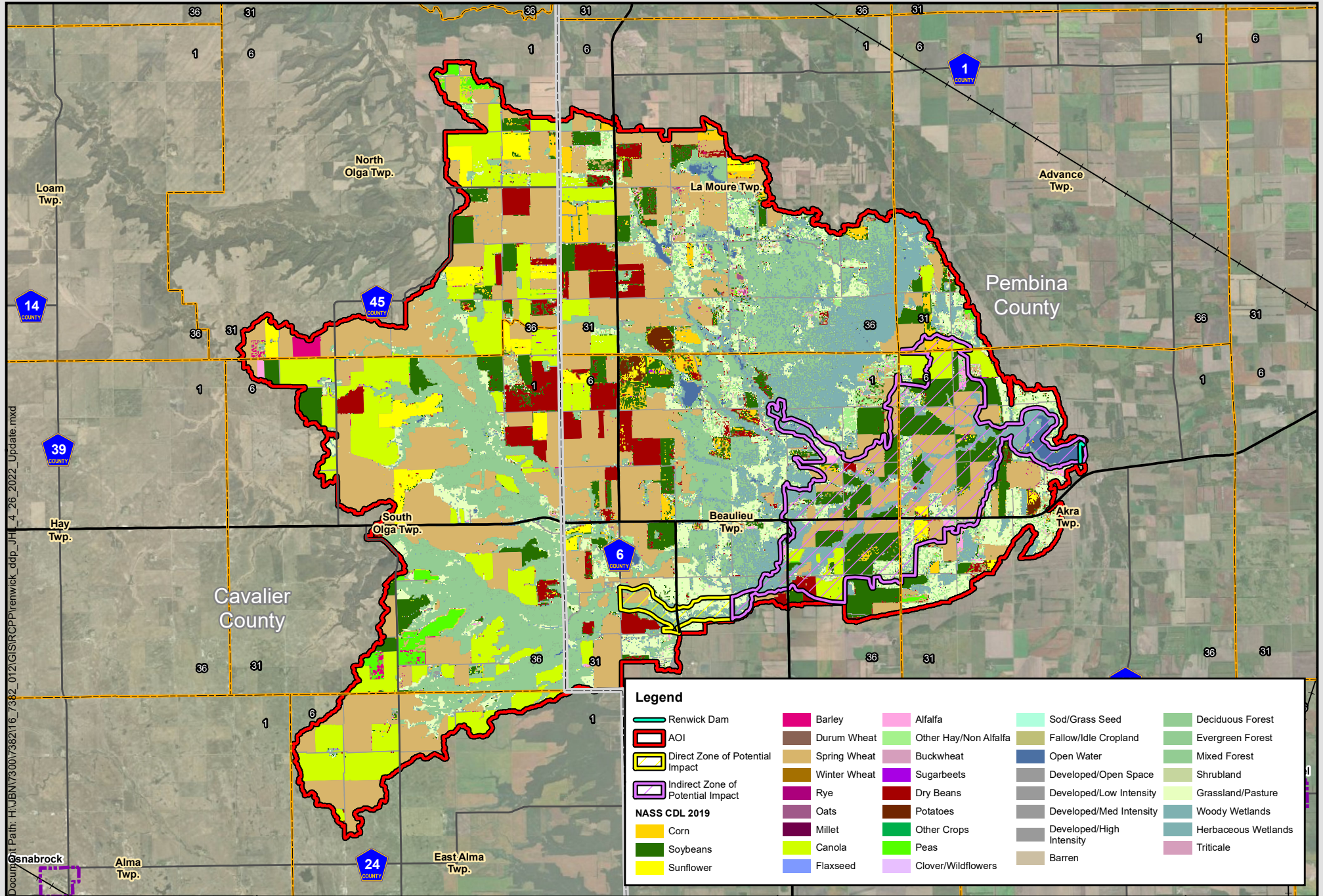
C8 - Land Use - Area of Interest



Tongue River Sub-Watershed Plan
Watershed Plan and Environmental Assessment
Pembina Water Resource District

1 inch = 2 miles
0 2 4 Miles





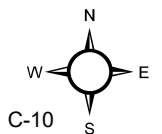
Scale: AS SHOWN Drawn by: JHL Checked by: DJ Project No.: 7135-0037 Date: 4/26/2022 Sheet: 1 of 1

C9 - Agricultural Products - Area of Interest

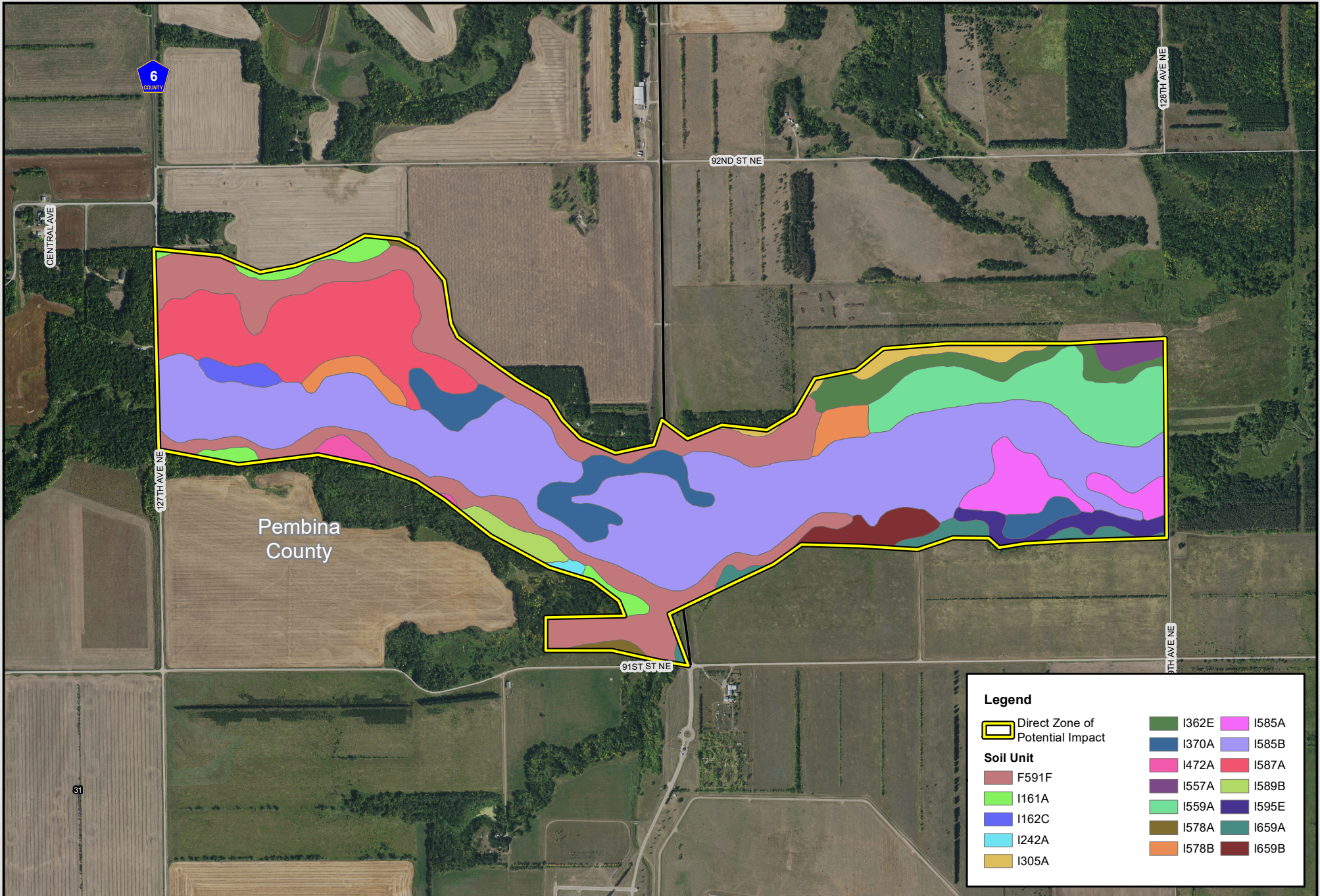


Tongue River Sub-Watershed Plan
Watershed Plan and Environmental Assessment
Pembina Water Resource District

1 inch = 2 miles
0 2 4 Miles



C-10

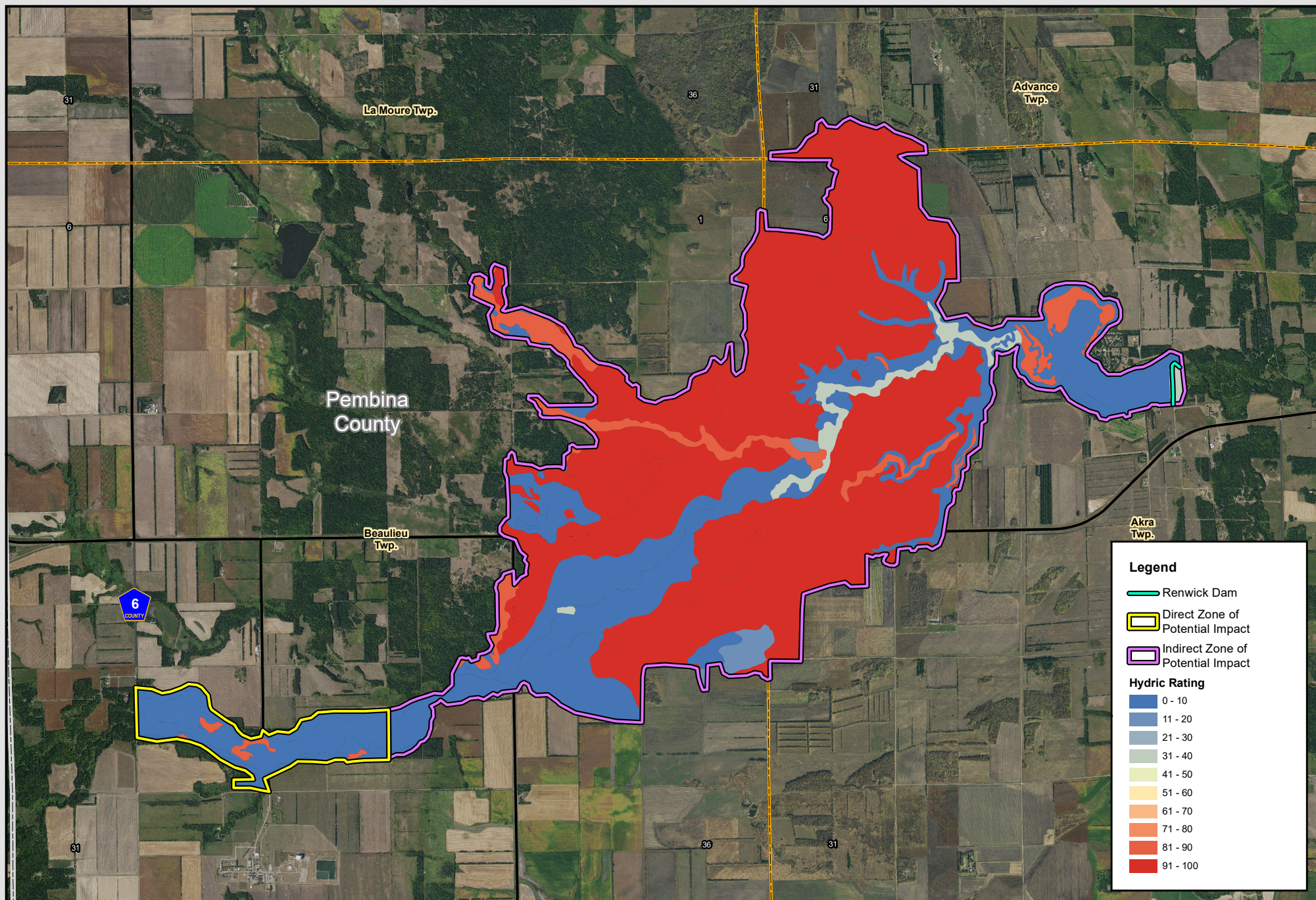


Legend

Direct Zone of Potential Impact

Soil Unit

F591F	I472A	I585A
I161A	I557A	I585B
I162C	I559A	I587A
I242A	I578A	I589B
I305A	I578B	I595E
		I362E
		I370A
		I659A
		I659B



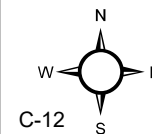
Scale: AS SHOWN Drawn by: JHL Checked by: DJ Project No.: 7135-0037 Date: 4/26/2022 Sheet: 1 of 1



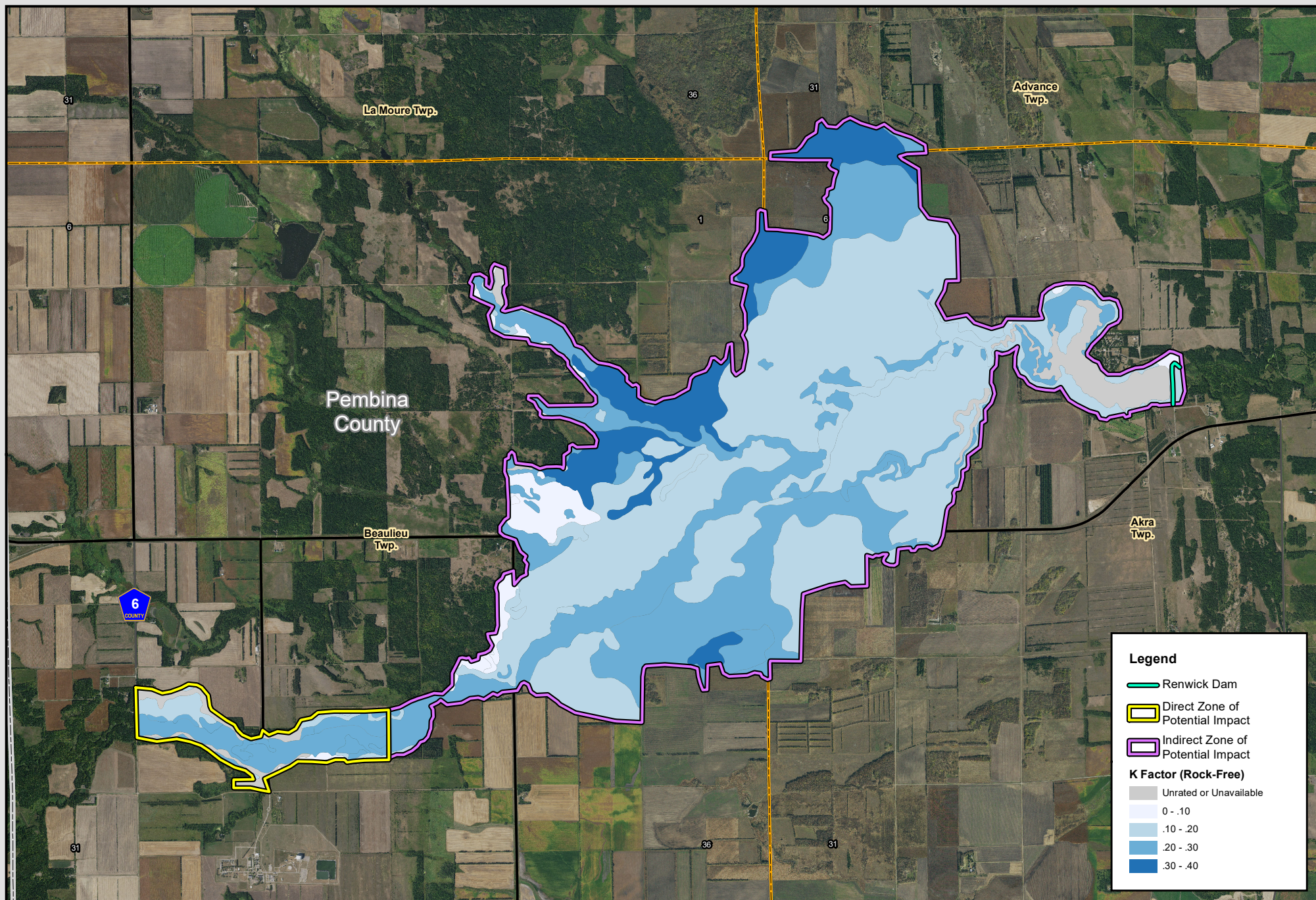
C-11- Hydric Soils-Direct and Indirect Zones of Potential Impact

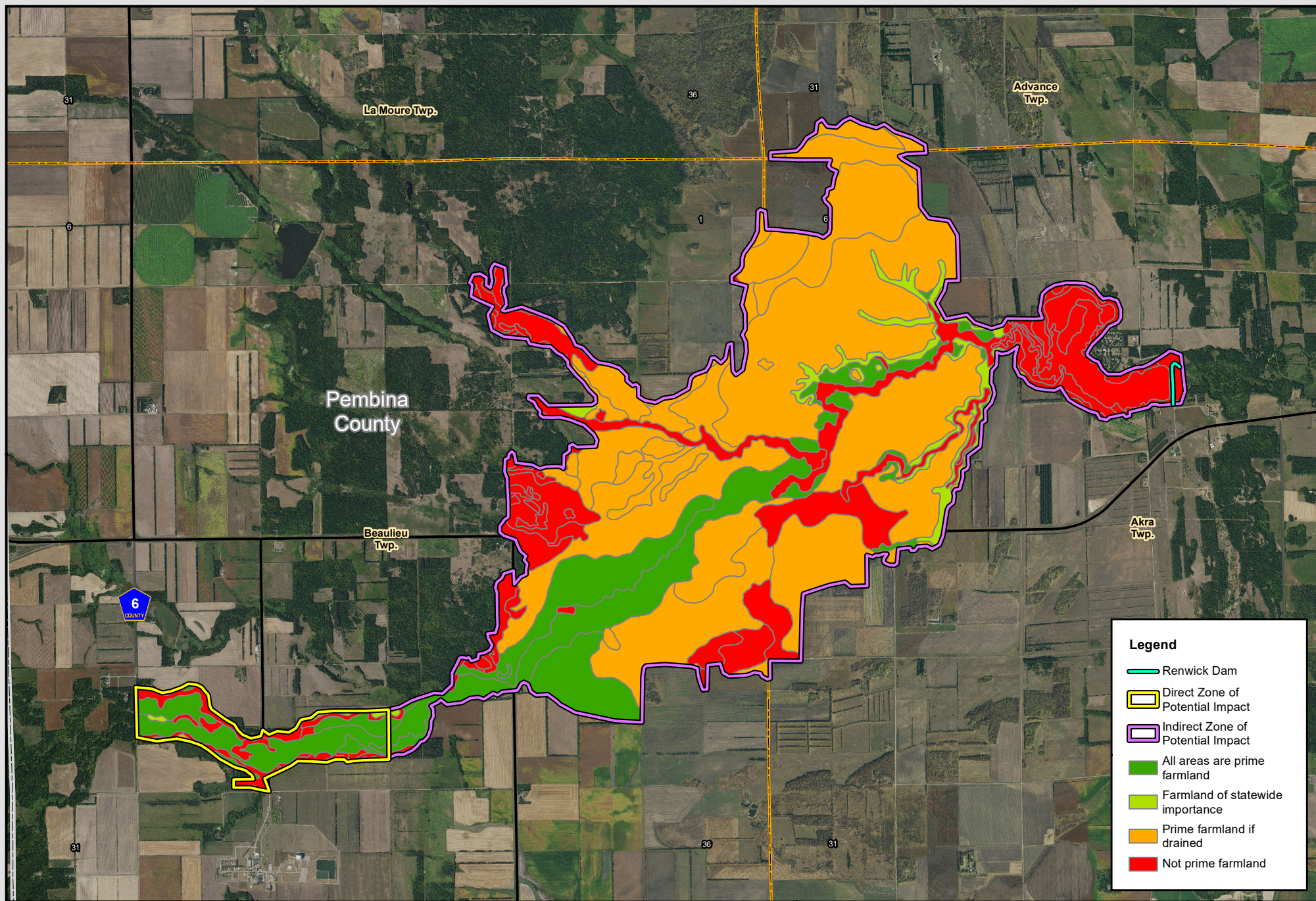
Tongue River Sub-Watershed Plan
Watershed Plan and Environmental Assessment
Pembina Water Resource District

1 inch = 1 miles
0 1 2 Miles



C-12





Legend

- Renwick Dam
- Direct Zone of Potential Impact
- Indirect Zone of Potential Impact
- All areas are prime farmland
- Farmland of statewide importance
- Prime farmland if drained
- Not prime farmland

Scale: AS SHOWN
 Drawn by: JHL
 Checked by: DJ
 Project No.: 7135-0037
 Date: 4/26/2022
 Sheet: 1 of 1

HOUSTON
 engineering, inc.

C-13- Farmland Classification - Direct and Indirect Zones of Potential Impact

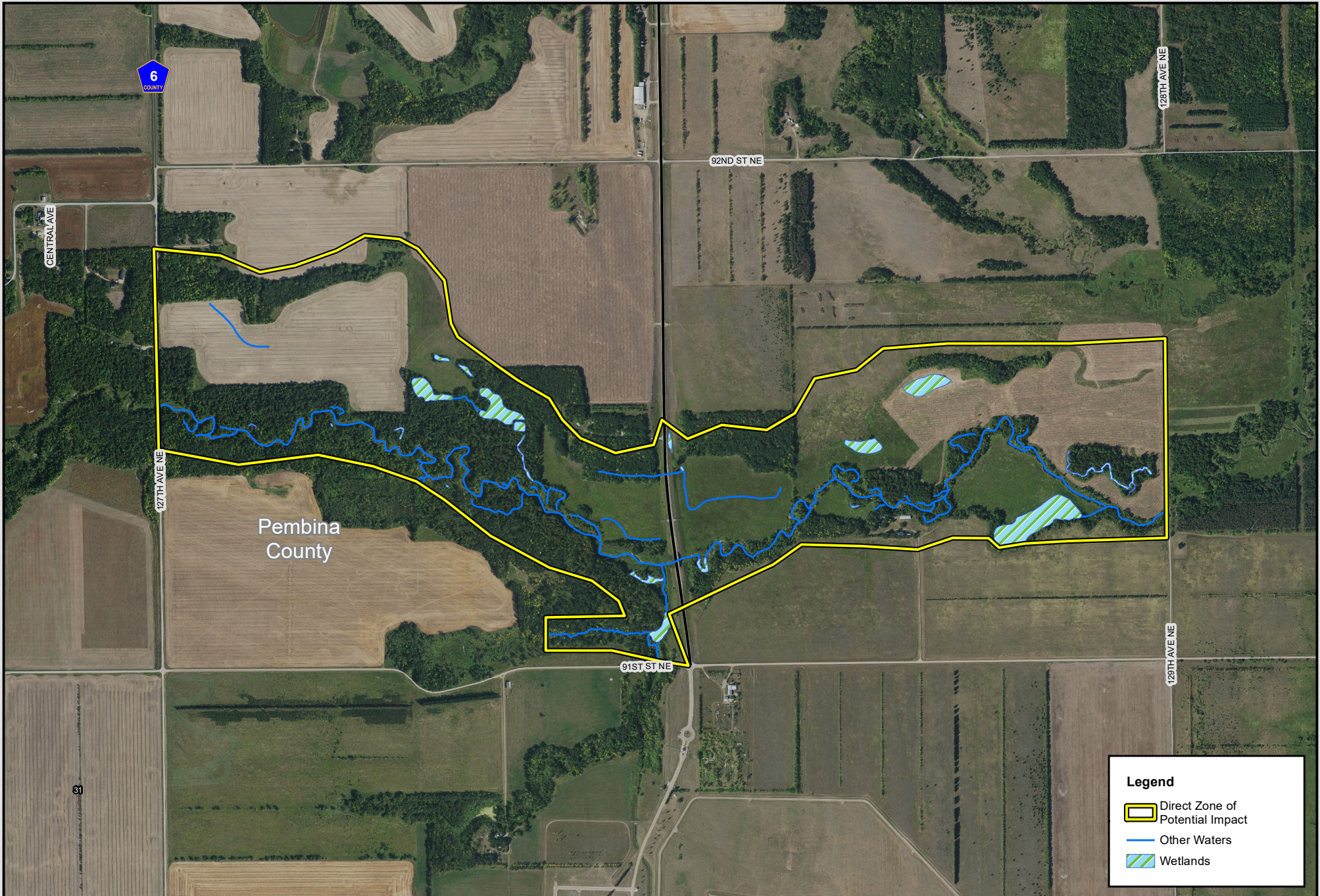
Tongue River Sub-Watershed Plan
 Watershed Plan and Environmental Assessment
 Pembina Water Resource District

1 inch = 1 miles

0 1 2 Miles

N
 W E
 S

C-14



Legend

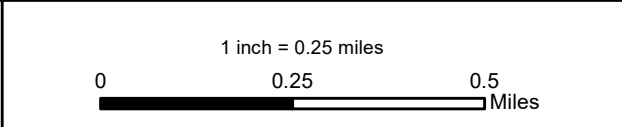
- Direct Zone of Potential Impact
- Other Waters
- Wetlands

Scale: AS SHOWN
Drawn by: JHL
Checked by: DJ
Project No.: 7135-0037
Date: 4/26/2022
Sheet: 1 of 1

HOUSTON
engineering, inc.

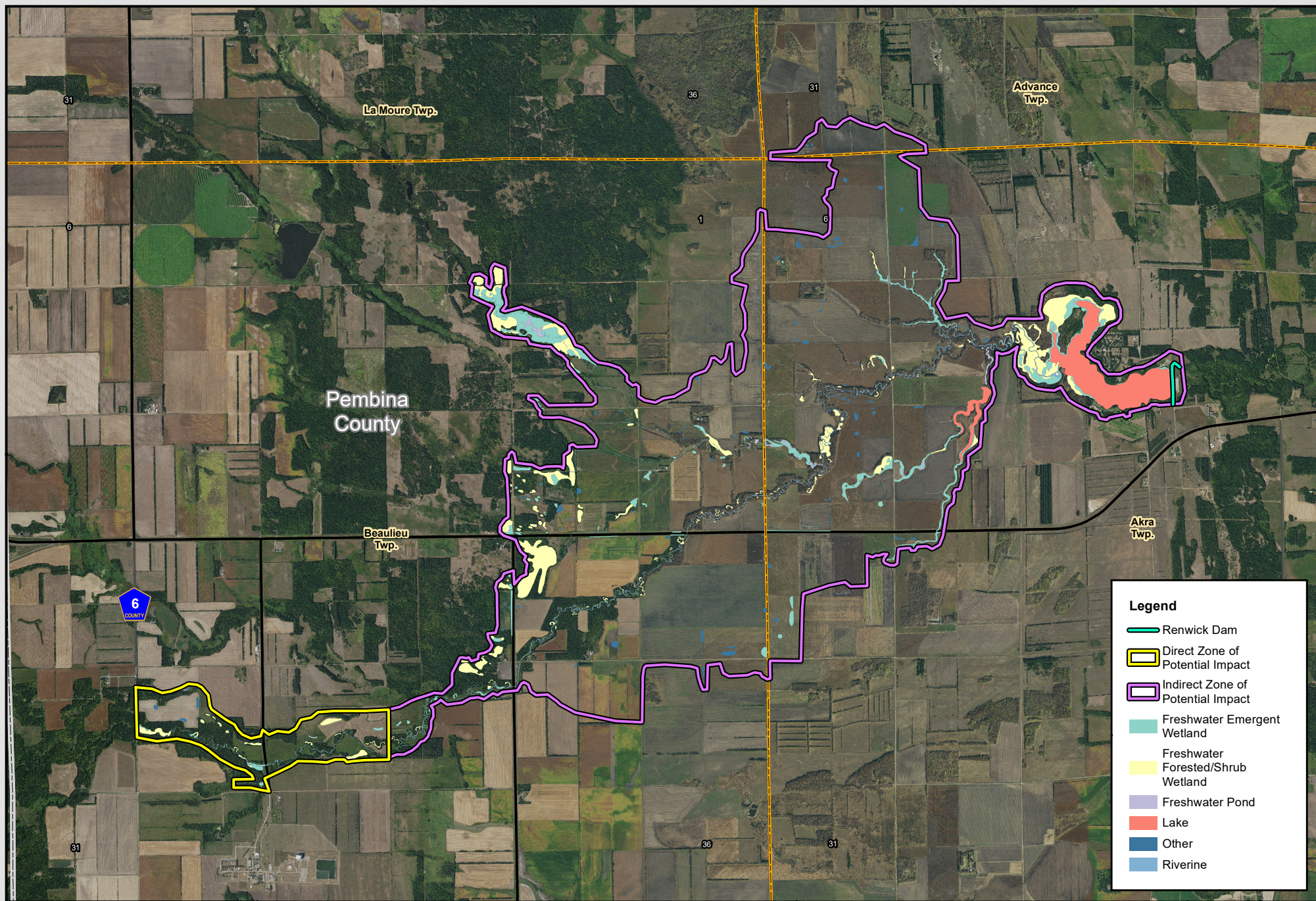
C-14- Aquatic Resources Delineation - Direct Zone of Potential Impact

Tongue River Sub-Watershed Plan
Watershed Plan and Environmental Assessment
Pembina Water Resource District



N
W E
S

C-15

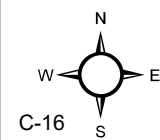
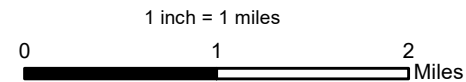


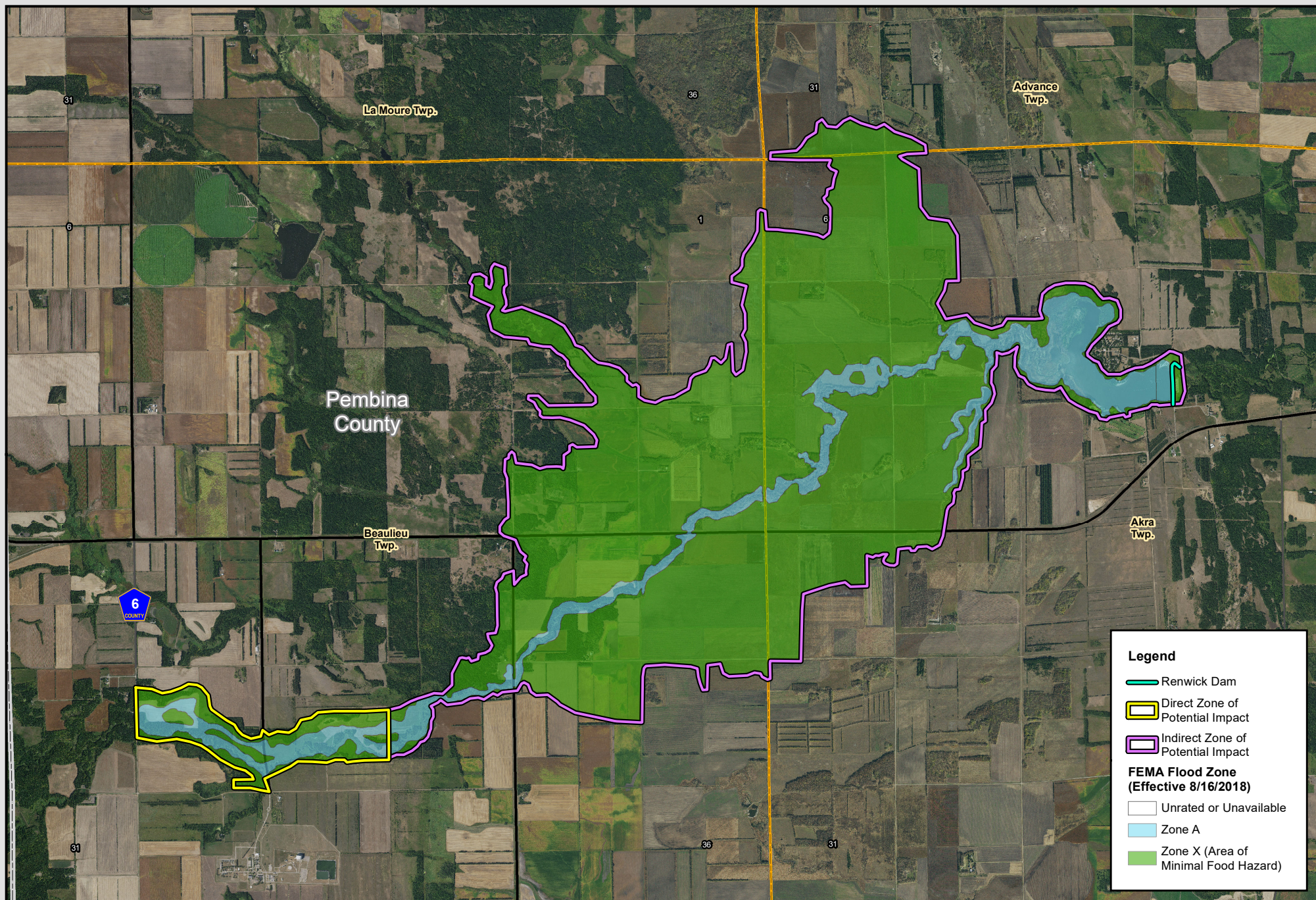
Scale: AS SHOWN
Drawn by: JHL
Checked by: DJ
Project No.: 7135-0037
Date: 4/26/2022
Sheet: 1 of 1



C-15- National Wetlands Inventory-Direct and Indirect Zones of Potential Impact

Tongue River Sub-Watershed Plan
Watershed Plan and Environmental Assessment
Pembina Water Resource District





Legend

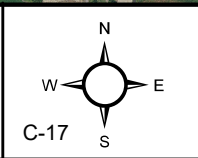
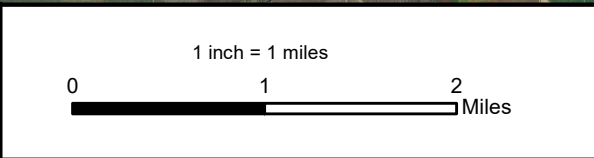
- Renwick Dam
- Direct Zone of Potential Impact
- Indirect Zone of Potential Impact
- FEMA Flood Zone (Effective 8/16/2018)**
 - Unrated or Unavailable
 - Zone A
 - Zone X (Area of Minimal Flood Hazard)

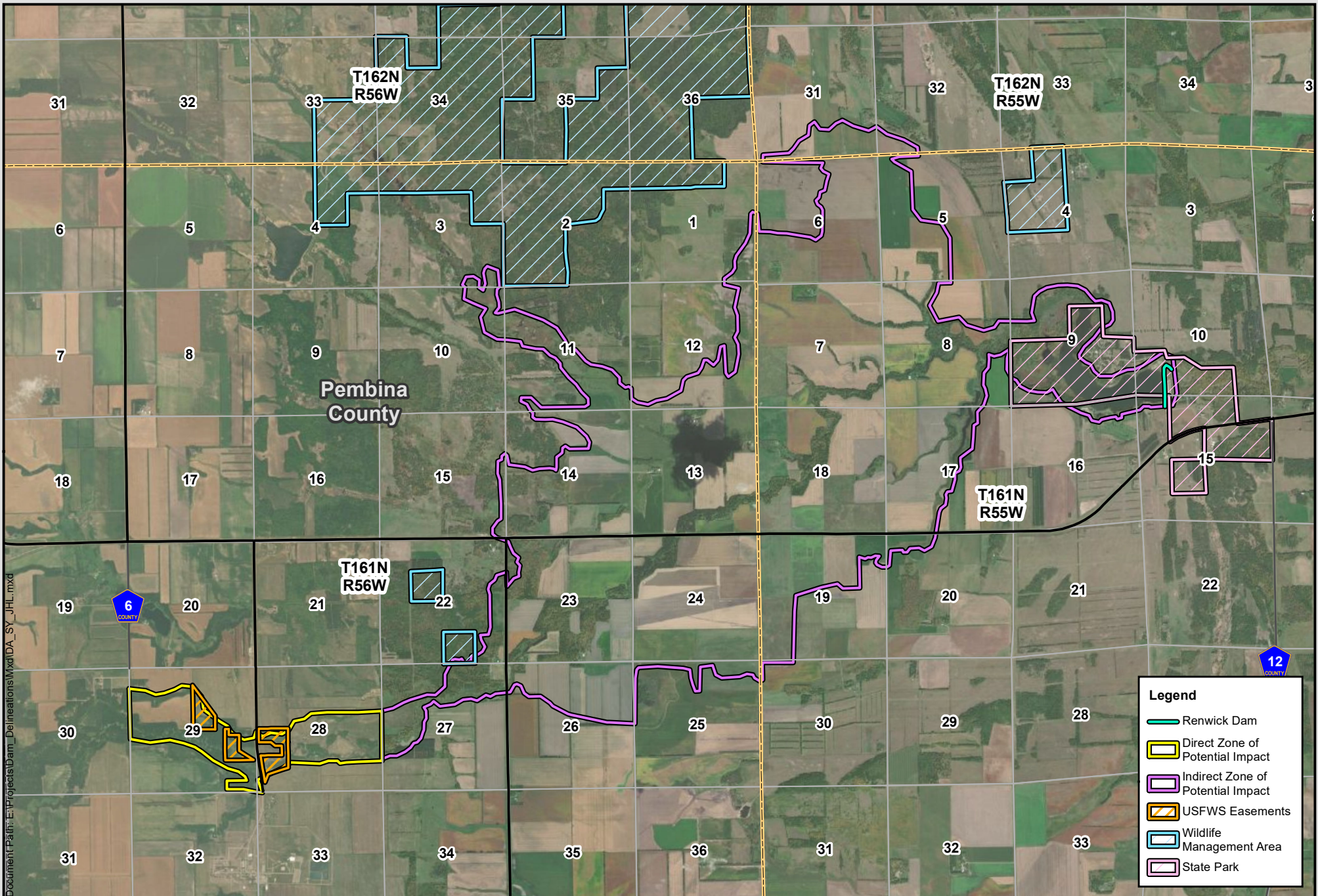
Scale: AS SHOWN
Drawn by: JHL
Checked by: DJ
Project No.: 7135-0037
Date: 4/26/2022
Sheet: 1 of 1

HOUSTON
engineering, inc.

C-16- FEMA Flood Zones- Direct and Indirect Zones of Potential Impact

Tongue River Sub-Watershed Plan
Watershed Plan and Environmental Assessment
Pembina Water Resource District

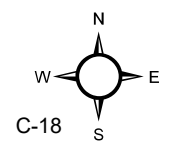
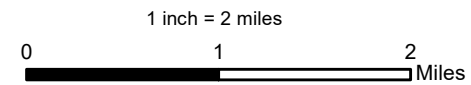




Scale: AS SHOWN
 Drawn by: JHL
 Checked by: DJ
 Project No.: 7135-0037
 Date: 4/28/2022
 Sheet: 1 of 1

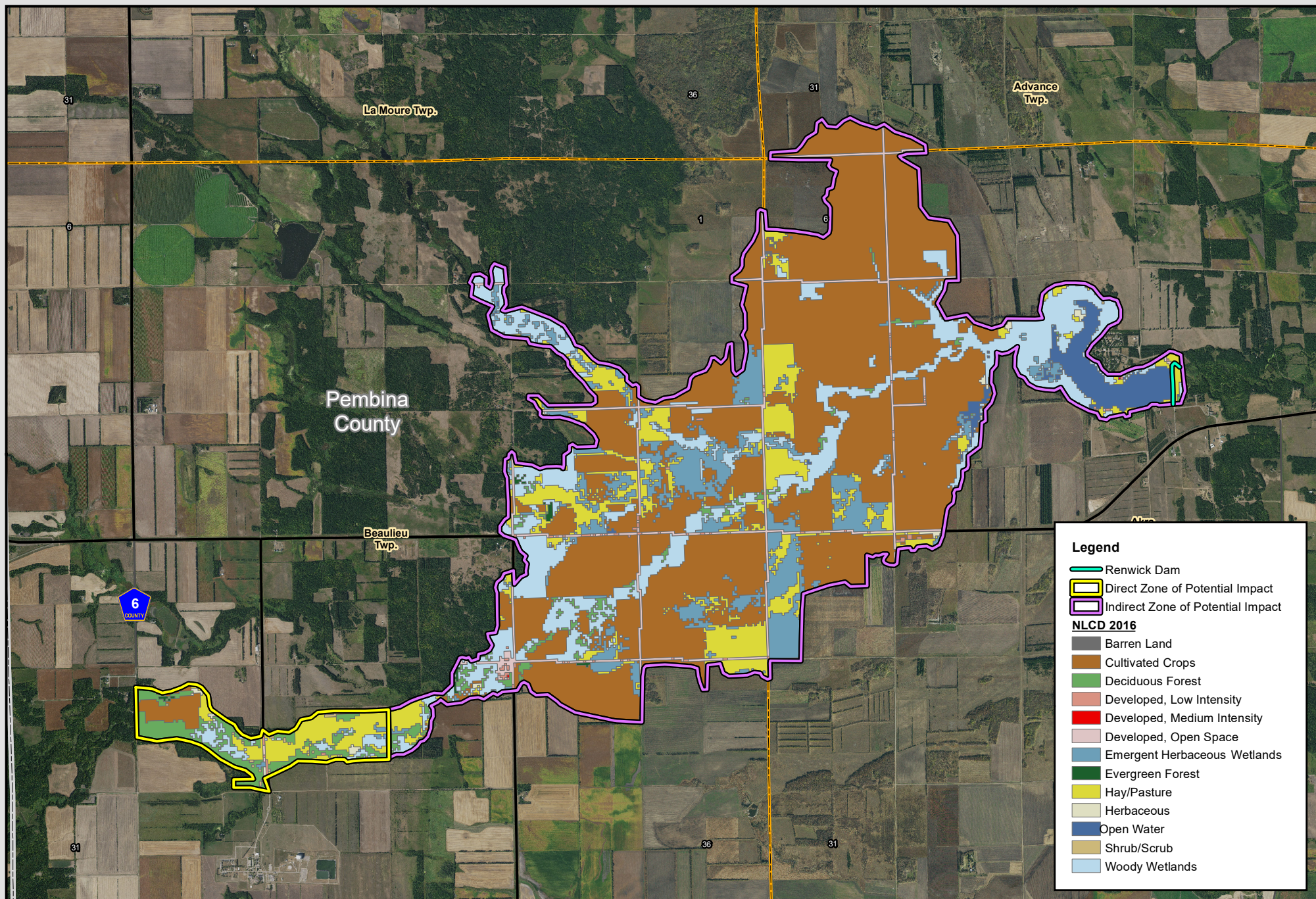
C - 17 - Natural Areas - Direct and Indirect Zones of Potential Impact

Tongue River Sub-Watershed Plan
 Watershed Plan and Environmental Assessment
 Pembina Water Resource District



C-18

Document Path: E:\Projects\Dam_Delineations\Wxd\DA_SY_JHL.mxd



Legend

- Renwick Dam
- Direct Zone of Potential Impact
- Indirect Zone of Potential Impact

NLCD 2016

- Barren Land
- Cultivated Crops
- Deciduous Forest
- Developed, Low Intensity
- Developed, Medium Intensity
- Developed, Open Space
- Emergent Herbaceous Wetlands
- Evergreen Forest
- Hay/Pasture
- Herbaceous
- Open Water
- Shrub/Scrub
- Woody Wetlands

Scale: AS SHOWN
 Drawn by: JHL
 Checked by: DJ
 Project No.: 7135-0037
 Date: 4/26/2022
 Sheet: 1 of 1

HOUSTON
 engineering, inc.

C-18 - Land Use - National Land Cover Database -
Direct and Indirect Zones of Potential Impact

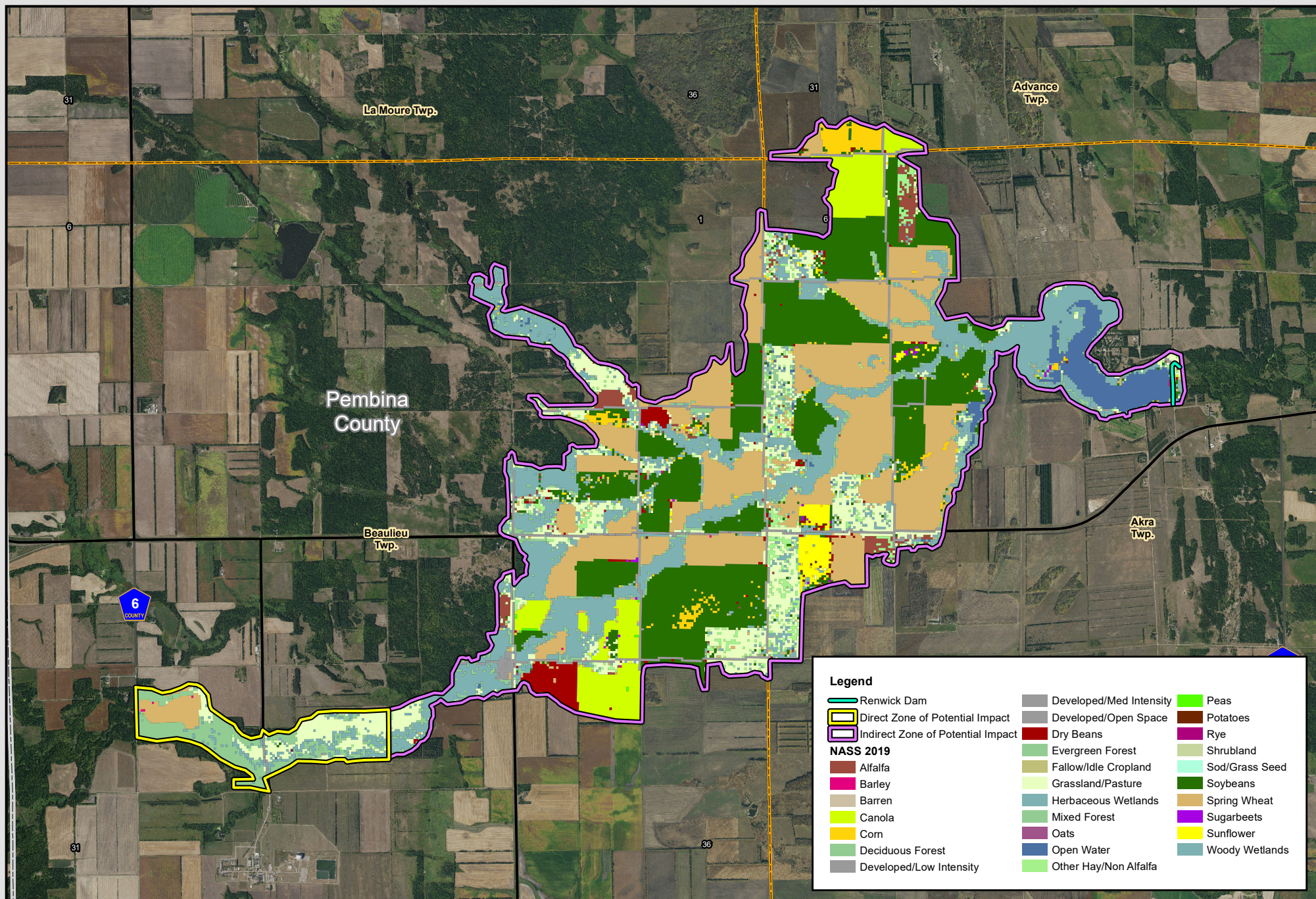
Tongue River Sub-Watershed Plan
 Watershed Plan and Environmental Assessment
 Pembina Water Resource District

1 inch = 1 miles

0 1 2 Miles

N
 W E
 S

C-19



Legend

- | | | |
|-----------------------------------|-------------------------|----------------|
| Renwick Dam | Developed/Med Intensity | Peas |
| Direct Zone of Potential Impact | Developed/Open Space | Potatoes |
| Indirect Zone of Potential Impact | Dry Beans | Rye |
| NASS 2019 | | |
| Alfalfa | Evergreen Forest | Shrubland |
| Barley | Fallow/Idle Cropland | Sod/Grass Seed |
| Barren | Grassland/Pasture | Soybeans |
| Canola | Herbaceous Wetlands | Spring Wheat |
| Corn | Mixed Forest | Sugarbeets |
| Deciduous Forest | Oats | Sunflower |
| Developed/Low Intensity | Open Water | Woody Wetlands |
| | Other Hay/Non Alfalfa | |

Scale: AS SHOWN

Drawn by: JHL

Checked by: DJ

Project No.: 7135-0037

Date: 4/26/2022

Sheet: 1 of 1



C-19 -Agricultural Products - Cropland Data - Direct and Indirect Zones of Potential Impact

Tongue River Sub-Watershed Plan
Watershed Plan and Environmental Assessment
Pembina Water Resource District

