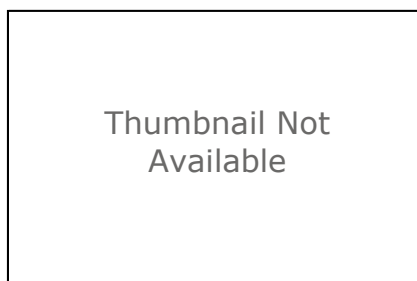


## ACPF Six-year Land Use by field: Minnesota

### Table



### Tags

United States Department of Agriculture (USDA), USDA/ARS, Agricultural Conservation Planning Framework, ACPF, scientificInformation, Farming, boundaries, Field Boundaries, farming, Digitizing, NASS Crop Data Layer, conservation planning, USDA/ARS, Minnesota, Agricultural Conservation Planning Framework, ACPF

### Summary

Improving the quality of water discharged from agricultural watersheds requires comprehensive and adaptive approaches for planning and implementing conservation practices. These measures will need to consider landscape hydrology, distributions of soil types, land cover, and crop distributions in an integrated manner. The two most consistent challenges to these efforts will be consistency and reliability of data, and the capacity to translate conservation planning from watershed to farm and field scales. The translation of scale is required because, while conservation practices can be planned based on a watershed scale framework, they must be implemented by landowners in specific fields and riparian sites that are under private ownership. To support these goals, it has been necessary to develop planning approaches, high-resolution spatial datasets, and conservation practice assessment tools that will allow the agricultural and conservation communities to characterize and mitigate these challenges. The field boundary dataset represents a spatial framework for assembling and maintaining geospatial data to support conservation planning at the scale where conservation practices are implemented.

### Description

This 6-year land-use summary table has been assembled to support field-scale agricultural conservation planning using the USDA/ARS Agricultural conservation Planning Framework (ACPF). The original data used to create this database are the NASS Crop Data Layer datasets and individual HUC12 watershed field boundary feature classes. For each of the last six years, 2014-2019, the dominant (majority) land use and its percentage of the field's area have been used to assigned land use each individual field polygon (e.g 'maj18' and 'pct18'). This summary information for each field are assigned, including; a six-year crop rotation string, a crop summary string, a continuous corn count, a mixed land use count, and a general land use class.

### Credits

There are no credits for this item.

### Use limitations

In no event shall the creators, custodians, or distributors of this information be liable for any damages arising out of its use ( or the inability to use it).

**Extent**

There is no extent for this item.

**Scale Range**

**Maximum (zoomed in)** 1:5,000

**Minimum (zoomed out)** 1:150,000,000

**ArcGIS Metadata ►****Topics and Keywords ►**

**THEMES OR CATEGORIES OF THE RESOURCE** farming, planningCadastre, geoscientificInformation, boundaries

**\* CONTENT TYPE** Downloadable Data

**EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION** No

**PLACE KEYWORDS** Minnesota, MN

**TEMPORAL KEYWORDS** 2010 - 2019 Aerial photography, 2010 - 2019 NASS Crop Data Layer

**THEME KEYWORDS** USA, United States Department of Agriculture (USDA), geoscientificInformation, Farming, boundaries, Field Boundaries, farming, Digitizing, USDA, conservation planning

*Hide Topics and Keywords ▲*

**Citation ►**

**TITLE** ACPF Six-year Land Use by field: Minnesota

**PUBLICATION DATE** 2014-01-01

**EDITION** 1

**PRESENTATION FORMATS** digital table

**FGDC GEOSPATIAL PRESENTATION FORMAT** tabular digital data

*Hide Citation ▲*

**Citation Contacts ►**

**RESPONSIBLE PARTY**

**ORGANIZATION'S NAME** David James, USDA, Agricultural Research Service, National Laboratory of Agriculture and the Environment

**CONTACT'S ROLE** originator

*Hide Citation Contacts ▲*

**Resource Details ►**

**DATASET LANGUAGES** English (UNITED STATES)

**DATASET CHARACTER SET** utf8 - 8 bit UCS Transfer Format

**STATUS** completed

**SPATIAL REPRESENTATION TYPE** \* text table

\* PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.7.1.11595

#### ARCGIS ITEM PROPERTIES

\* NAME MN\_ACPFFields\_LandUse2014\_2019  
 \* LOCATION file:///\\ARSIAAMN4-216C\E\$\Data\ACPF\ACPF2019  
 \AgDataCmns\_contributions\MN\_fieldBoundaries.gdb  
 \* ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

## Extents ►

#### EXTENT

DESCRIPTION  
 Minnesota

#### GEOGRAPHIC EXTENT

GEOGRAPHIC DESCRIPTION  
 GEOGRAPHIC IDENTIFIER  
 VALUE Minnesota

DESCRIPTION CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

## Resource Points of Contact ►

#### POINT OF CONTACT

INDIVIDUAL'S NAME David James  
 ORGANIZATION'S NAME USDA, Agricultural Research Service, National Laboratory of Agriculture and  
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 CONTACT'S ROLE point of contact

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[Hide Contact information ▲](#)

[Hide Resource Points of Contact ▲](#)

## Resource Maintenance ►

#### RESOURCE MAINTENANCE

UPDATE FREQUENCY not planned

[Hide Resource Maintenance ▲](#)

## Resource Constraints ►

### LEGAL CONSTRAINTS

#### LIMITATIONS OF USE

In no event shall the creators, custodians, or distributors of this information be liable for any damages arising out of its use ( or the inability to use it).

### CONSTRAINTS

#### LIMITATIONS OF USE

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[Hide Resource Constraints ▲](#)

## Geoprocessing history ►

### PROCESS

#### PROCESS NAME

DATE 2020-03-03 15:16:48

TOOL LOCATION c:\program files (x86)\arcgis\desktop10.7\ArcToolbox\Toolboxes\Data Management Tools.tbx\Append

#### COMMAND ISSUED

```
Append D:\ACPFproc\ACPF2019\buildFB_HUC8
\ACPF2019_State_Fields.gdb\mn04;D:\ACPFproc\ACPF2019\buildFB_HUC8
\ACPF2019_State_Fields.gdb\mn07;D:\ACPFproc\ACPF2019\buildFB_HUC8
\ACPF2019_State_Fields.gdb\mn09 D:\ACPFproc\ACPF2019\buildFB_HUC8
\ACPF2019_State_Fields.gdb\MN_ACPFfields2019 TEST # #
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

[Hide Geoprocessing history ▲](#)

## Distribution ►

### DISTRIBUTION FORMAT

NAME Table

VERSION v2010-2019

[Hide Distribution ▲](#)

## Fields ►

### DETAILS FOR OBJECT MN\_ACPFfields\_LandUse2014\_2019 ►

\* TYPE Table

\* ROW COUNT 673864

#### DEFINITION

Agricultural land use by field, Minnesota

#### DEFINITION SOURCE

Originator

FIELD OBJECTID ►

\* ALIAS OBJECTID

\* DATA TYPE   OID

\* WIDTH    4

\* PRECISION   0

\* SCALE    0

#### FIELD DESCRIPTION

Internal feature number.

#### DESCRIPTION SOURCE

Esri

#### DESCRIPTION OF VALUES

Sequential unique whole numbers that are automatically generated.

*Hide Field OBJECTID ▲*

#### FIELD FBndID ►

\* ALIAS   FBndID

\* DATA TYPE   String

\* WIDTH    255

\* PRECISION   0

\* SCALE    0

#### FIELD DESCRIPTION

A unique field identifier constructed by concatenating the HUC12 identification code and a sequential number.

#### DESCRIPTION SOURCE

Originator

*Hide Field FBndID ▲*

#### FIELD GenLU ►

\* ALIAS   GenLU

\* DATA TYPE   String

\* WIDTH    255

\* PRECISION   0

\* SCALE    0

#### FIELD DESCRIPTION

General Land Use is assigned to each field based upon the majority land use, as derived from the NASS Cropland Data Layer, for each of six years, 2012-2017. The use codes are concatenated over the period into a rotation string, e.g. 'CBCCCB', and evaluated based on the distribution of uses, majority percent of the field, and occurrence of continuous corn. The GenLU field is concatenated from both the PrimeName and OneName fields in the ACPF land use rasters (e.g. WSCDL2017)

#### DESCRIPTION SOURCE

USDA/ARS

*Hide Field GenLU ▲*

#### FIELD AgLandUse ►

\* ALIAS   AgLandUse

\* DATA TYPE   String

\* WIDTH    255

\* PRECISION   0

\* **SCALE** 0

**FIELD DESCRIPTION**

Agricultural Land Use is assigned to each field based upon the majority land use, as derived from the NASS Cropland Data Layer, for each of six years, 2012-2017. The use codes are concatenated over the period into a rotation string, e.g. 'CBCCCB', and evaluated based on the distribution of uses, majority percent of the field, and occurrence of continuous corn. The AgLandUse should be considered a slightly more detailed description of land use than GenLU, as it aggregates only PrimeName values to form its result.

**DESCRIPTION SOURCE**

USDA/ARS

[Hide Field AgLandUse ▲](#)

**FIELD CropRotatn ►**

\* **ALIAS** CropRotatn

\* **DATA TYPE** String

\* **WIDTH** 255

\* **PRECISION** 0

\* **SCALE** 0

**FIELD DESCRIPTION**

The dominant (majority) land use codes are concatenated over the six-year period into a crop rotation string, e.g. 'CBCCCB'. The land use codes (ROTVL) are:

C-Corn,  
B-Soybean,  
E-Sugarbeets,  
F-Forest,  
p-Grapes,  
G-Sorghum,  
I-Idle,  
J-Rice,  
L-Double crops,  
N-Cotton,  
P-Pasture,  
R-Other,  
T-Water,  
W-Wheat,  
U-Developed,  
X-Barren, clouds, no data,  
a-Nuts,  
d-Fruit,  
g-SmallGrains,  
m-Legumes,  
o -OilSeed,  
q-Orchards,  
v-Vegetables

**DESCRIPTION SOURCE**

USDA ARS

[Hide Field CropRotatn ▲](#)

**FIELD CropSumry ►**

\* **ALIAS** CropSumry

\* **DATA TYPE** String

\* WIDTH 255  
 \* PRECISION 0  
 \* SCALE 0

#### FIELD DESCRIPTION

The Cropsumry field concatenates the number of occurrences of a summary land use value (ROTVL) with the summary value to represent a summary of land use, such that:  
 C3CB - 3 years corn, 3 years soybean  
 C2B1P3 - 2 years corn, 1 year soybean, 3 years pasture/grass/hay

#### DESCRIPTION SOURCE

USDA/ARS

[Hide Field CropSumry ▲](#)

#### FIELD CCCount ►

\* ALIAS CCCount  
 \* DATA TYPE String  
 \* WIDTH 255  
 \* PRECISION 0  
 \* SCALE 0

#### FIELD DESCRIPTION

Continuous Corn Count. The number of occurrences of 'CC' in the crop rotation string, e.g. 2/6, would suggest that there are 2 occurrences of 'CC' in the six years of the rotation. Both of the following conditions would exhibit 2/6...  
 CCCBCB  
 CCBCCB

#### DESCRIPTION SOURCE

USDA/ARS

[Hide Field CCCount ▲](#)

#### FIELD MixCount ►

\* ALIAS MixCount  
 \* DATA TYPE String  
 \* WIDTH 255  
 \* PRECISION 0  
 \* SCALE 0

#### FIELD DESCRIPTION

A count of the number of years where the dominant land use percent of the field falls below 75%. Referenced as the number of years mixed out of all years, e.g. 2/6 is two years out of six.

#### DESCRIPTION SOURCE

USDA/ARS

[Hide Field MixCount ▲](#)

[Hide Details for object MN\\_ACPFFields\\_LandUse2014\\_2019 ▲](#)

#### OVERVIEW DESCRIPTION ►

##### ENTITY AND ATTRIBUTE OVERVIEW

The land use assigned to the fields in this table are derived from the NASS Crop Data Layer for each of the six years in the period of record. For the majority assignment (e.g. maj15), the field is assigned as per the VALUE field below, which is the original NASS CDL

value. For the summary fields, the crop rotation string (CropRotatn) and the crop summary string (CropSumry).

[Hide Overview Description ▲](#)

[Hide Fields ▲](#)

## Metadata Details ►

METADATA LANGUAGE English (UNITED STATES)  
 METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format  
 METADATA IDENTIFIER 6BAAD9B4-8E61-439B-816A-8359AD084361

SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset  
 SCOPE NAME \*dataset

\* LAST UPDATE 2020-12-14

### ARCGIS METADATA PROPERTIES

METADATA FORMAT ArcGIS 1.0  
 METADATA STYLE North American Profile of ISO19115 2003  
 STANDARD OR PROFILE USED TO EDIT METADATA NAP

CREATED IN ARCGIS FOR THE ITEM 2020-12-11 14:46:52  
 LAST MODIFIED IN ARCGIS FOR THE ITEM 2020-12-14 11:50:49

### AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes  
 LAST UPDATE 2020-12-11 15:02:43

[Hide Metadata Details ▲](#)

## Metadata Contacts ►

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[Hide Contact information ▲](#)

[Hide Metadata Contacts ▲](#)

## Metadata Maintenance ►

### MAINTENANCE

UPDATE FREQUENCY   not planned

[Hide Metadata Maintenance ▲](#)

## Metadata Constraints ►

### SECURITY CONSTRAINTS

CLASSIFICATION   unclassified

CLASSIFICATION SYSTEM   None

ADDITIONAL RESTRICTIONS

None

[Hide Metadata Constraints ▲](#)

## FGDC Metadata (read-only) ▼