

CAFO: A Missouri Overview

Missouri Department of Natural Resources

Water Protection Program

Denise Marcum

Missouri's CAFO Program Breakdown

CAFO Definition:

Animal feeding operation where animals are confined or stabled and fed for 45 days or more in a 12-month period and crops, forage or other vegetative ground cover is not sustained over at least 50% of the confinement area with more than 1,000 animal units (based on the animal weight).

Missouri's regulatory authority includes Class IA, IB and IC CAFOs

Class II AFOs can be designated as a CAFO upon determination it is a significant contributor of pollutants to waters of the state.

- 1A Facilities have at least 7,000 animal units
- 1B Facilities are between 3,000 and 6,999 animal units
- 1C Facilities are between 1,000 and 2,999 animal units

CAFO Permit Requirements

All types and sizes of CAFO permits require manure nutrient sampling, defined storage capacity and a treatment and utilization system to be designed, engineered, operated and managed to meet water quality standards.

All CAFO permits must either conduct land application or export all manure.

Nutrient Management Plan

CAFO Permit Application Process and Review

When reviewing a CAFO permit we first assess the type of permit they are applying for:

NO CONSTRUCTION CAN BEGIN UNTIL AN OPERATING PERMIT IS OBTAINED.

- MOGS1 - A master general state no-discharge permit where process wastes are collected and managed as fertilizer by spreading onto agricultural fields at agricultural rates according to the permit.
- MOGO 1 - A master general NPDES permit where process wastes are collected and reused as fertilizer by spreading onto agricultural fields at agricultural rates. There are no discharges except during storms exceeding the design storm event.
- A site specific NPDES permit

MOGS1 - General-No-Discharge Permit Review Process

Process wastes are collected and managed as fertilizer by spreading onto agricultural fields at agricultural rates according to the permit.

This permit for new and expanding facilities requires:

1. 30-day Neighbor Notice of required buffer distance
2. Form W - application review
3. NMP
4. Engineer approval for adequate days of manure storage capacity
5. Response to any comments received
6. Technical and management review

MOGS1 - Neighbor Notice Requirements

- Facility name
- Number and type of animals
- Number and size of production areas
- Coordinates of property by county and state
- Facility location and aerial map
- A plan for how waste is handled.
- A facility contact
- A comment that written comments are received by the department with contact information

Other requirements:

- Must have given a 30-day comment period
- Must be provided to all property owners within the buffer distance
- Map showing the buffer distance around the property and all parcels it touches
- List of neighbor notices sent
- Certified receipts that neighbor notices were sent

Buffer Distances

Buffer and Neighbor Notice Distances		
Class Size	Buffer Distance (ft.)	Neighbor Notice (ft.)
Class 1A	3000 ft.	9000 ft.
Class 1B	2000 ft.	6000 ft.
Class 1C	1000 ft.	3000 ft.
Class II and smaller	Not Required	Not Required

Use Animal Numbers Chart to Determine Class Size

MOG01 and Site-Specific Permit Review Process

- NPDES No-Discharge Permit
- Process wastes are collected and reused as fertilizer by spreading onto agricultural fields at agricultural rates
- There is no discharge except during storms exceeding the design storm event

This permit application requires:

1. 15-day public notice
2. Form W - application review
3. NMP review with land application table
4. Response to any comments received
5. Technical and management review

Missouri's CAFO Universe

While Missouri is ranked 2nd in the nation for the number of farms with 87.6 thousand farms in 2023.

It is 14th in CAFO facilities.

- Total 514
- MOGS1 469
- MOG01 27
- Site specific 18

Missouri's CAFO Universe by Animal Type

- MOGS1

• Swine	233
• Beef	2
• Dairy	7
• Poultry	227
• TOTAL	469

- MOG01

• Swine	25
• Beef	0
• Dairy	2
• Poultry	0
• TOTAL	27

- Site Specific

• Swine	14
• Beef	0
• Dairy	0
• Poultry	4
• TOTAL	18

CAFO Permit

MoDNR ensures that permit requirements are being met through:

- Routine inspections every 12-months
- Compliant inspections
- Enforcement actions
- Monitoring and reporting requirements
- Coordination with partner agencies

CAFO Permit Statistics

Compliance Rate 2023= 92% routine inspections in compliance

MoDNR conducts routine CAFO inspections on a 12-month schedule

MoDNR staff respond to complaints, permittee requests for technical and planning assistance and follow up inspections as needed to assure compliance.

Recent changes to General Permits

- Weather record keeping/wet weather management
- New permitted features
 - Agricultural truck wash
 - Domestic wastewater/land application
 - Annual Reporting requirement

New Requirements for Annual Reporting

- Annual Report submittal date changed from February 15 to January 28 each calendar year.
- E-submittal of annual report
- Summary Manure Export report by HUC-12 to include:
 - Land Application - acres and gallons/tons
 - Type and volume of waste exported
 - List all fields land application has occurred on
 - The receiving Hydrologic Unit Code (HUC) 12
 - Obtained through mapping tool provided by MoDNR utilizing MAP-IT

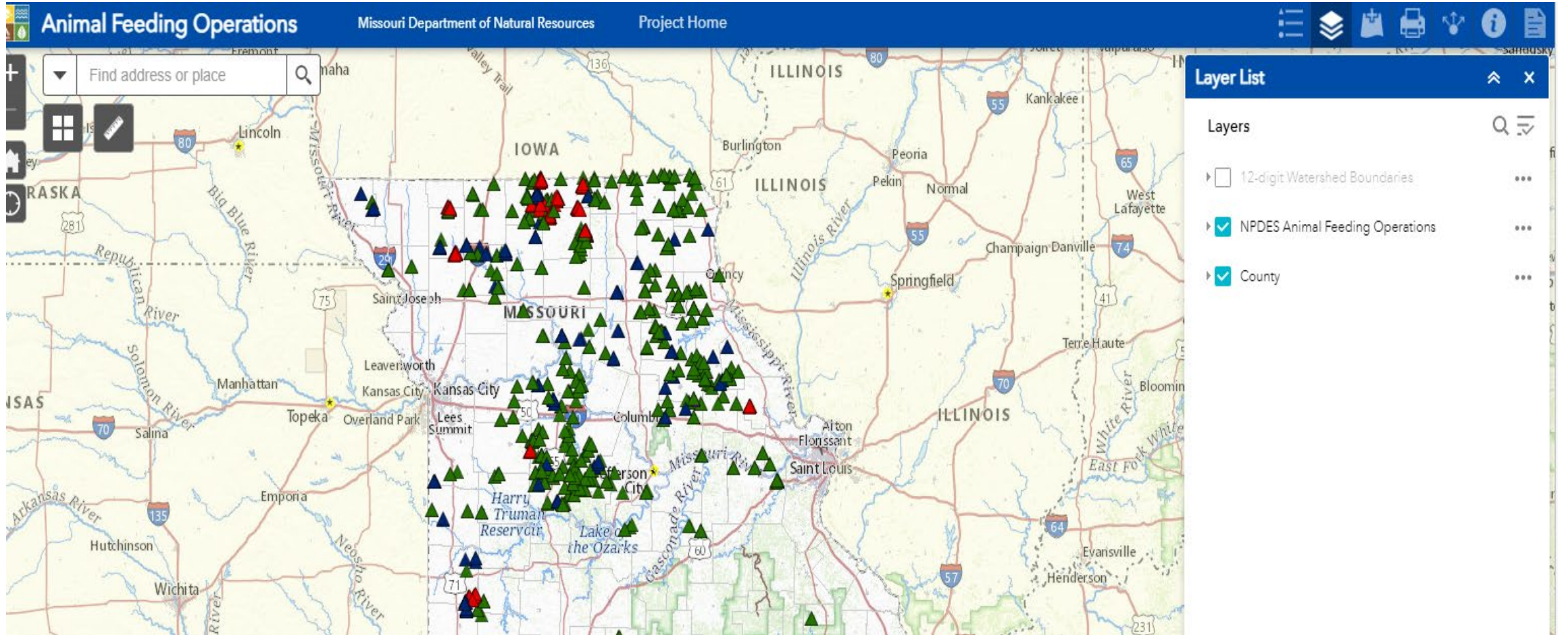
HUC 12 Reporting

PART VIII – SUMMARY MANURE EXPORT REPORT				
OPERATION NAME		PERMIT NUMBER		
Receiving HUC-12**	Volume of Exported Waste		Manure Type	
	<input type="checkbox"/> Gallons	<input type="checkbox"/> Solid	<input type="checkbox"/> Swine	
	<input type="checkbox"/> Tons	<input type="checkbox"/> Liquid	<input type="checkbox"/> Poultry (chicken, turkey)	
	<input type="checkbox"/> Gallons	<input type="checkbox"/> Solid	<input type="checkbox"/> Cow (beef, dairy, calf)	
	<input type="checkbox"/> Tons	<input type="checkbox"/> Liquid	<input type="checkbox"/> Horses, sheep, lambs, other	
	<input type="checkbox"/> Gallons	<input type="checkbox"/> Solid	<input type="checkbox"/> Swine	
	<input type="checkbox"/> Tons	<input type="checkbox"/> Liquid	<input type="checkbox"/> Poultry (chicken, turkey)	
	<input type="checkbox"/> Gallons	<input type="checkbox"/> Solid	<input type="checkbox"/> Cow (beef, dairy, calf)	
	<input type="checkbox"/> Tons	<input type="checkbox"/> Liquid	<input type="checkbox"/> Horses, sheep, lambs, other	
	<input type="checkbox"/> Gallons	<input type="checkbox"/> Solid	<input type="checkbox"/> Swine	
	<input type="checkbox"/> Tons	<input type="checkbox"/> Liquid	<input type="checkbox"/> Poultry (chicken, turkey)	
	<input type="checkbox"/> Gallons	<input type="checkbox"/> Solid	<input type="checkbox"/> Cow (beef, dairy, calf)	
	<input type="checkbox"/> Tons	<input type="checkbox"/> Liquid	<input type="checkbox"/> Horses, sheep, lambs, other	
	<input type="checkbox"/> Gallons	<input type="checkbox"/> Solid	<input type="checkbox"/> Swine	
	<input type="checkbox"/> Tons	<input type="checkbox"/> Liquid	<input type="checkbox"/> Poultry (chicken, turkey)	
	<input type="checkbox"/> Gallons	<input type="checkbox"/> Solid	<input type="checkbox"/> Cow (beef, dairy, calf)	
	<input type="checkbox"/> Tons	<input type="checkbox"/> Liquid	<input type="checkbox"/> Horses, sheep, lambs, other	

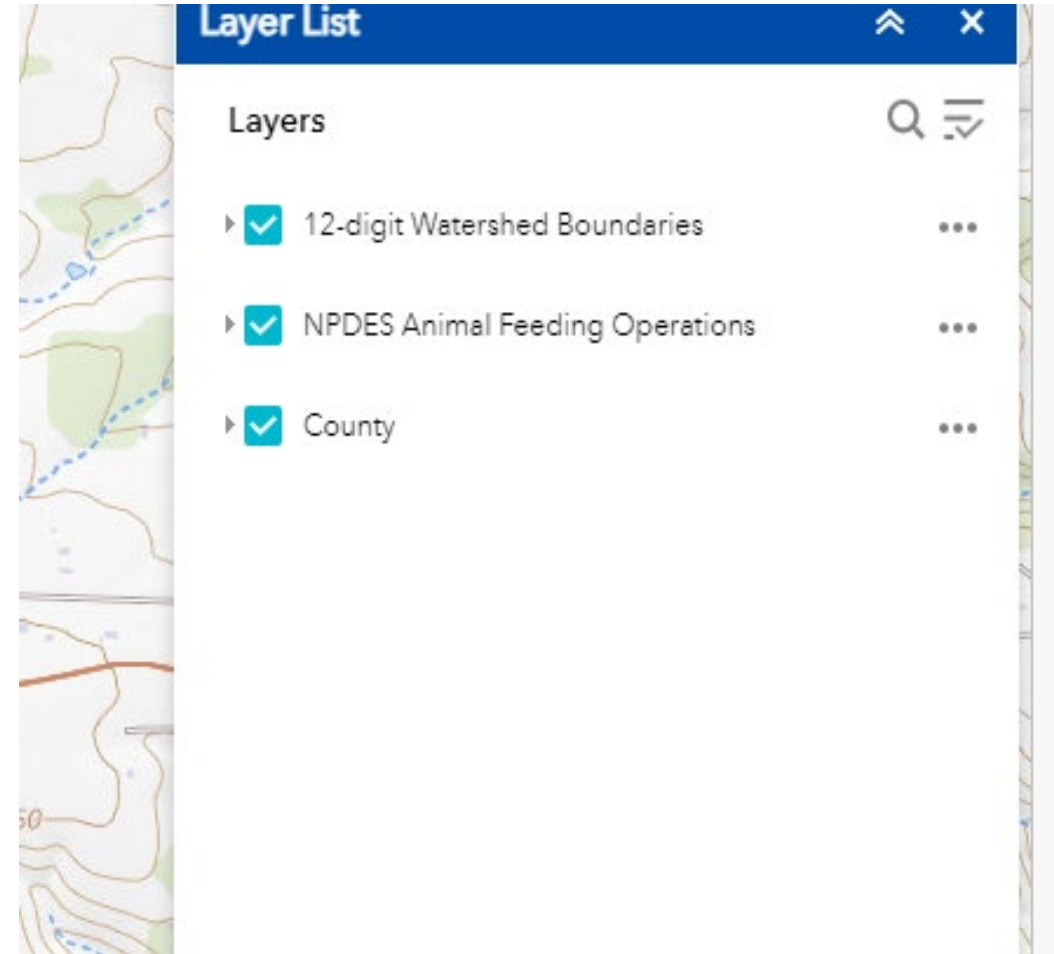
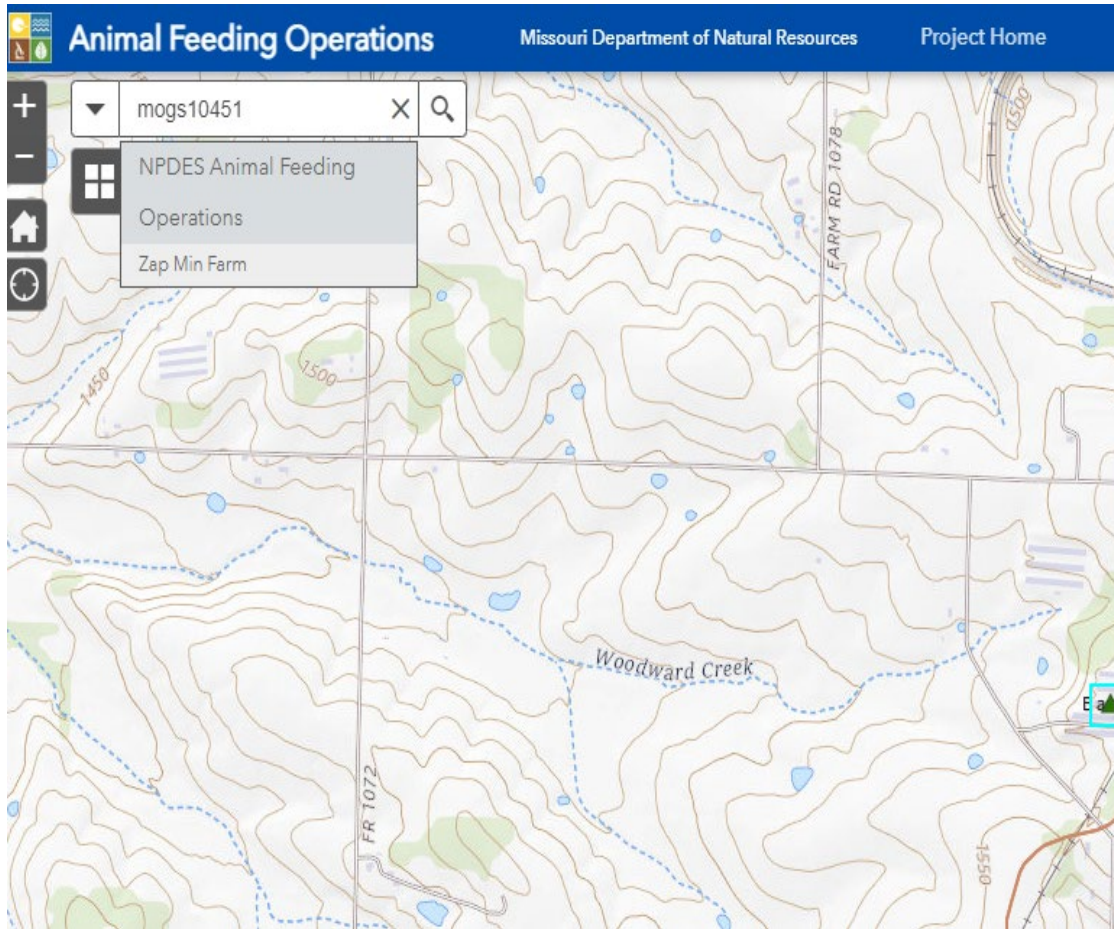
MO 780-1953 (08-23)

**HUC-12 boundary maps are available on our webpage: [MoDNR Animal Feeding Operations Map Viewer](#) (Select the 12-digit watershed boundary layer. There are imagery layers available as well to help identify locations). Attach additional pages if needed.

Animal Feeding Operations Map

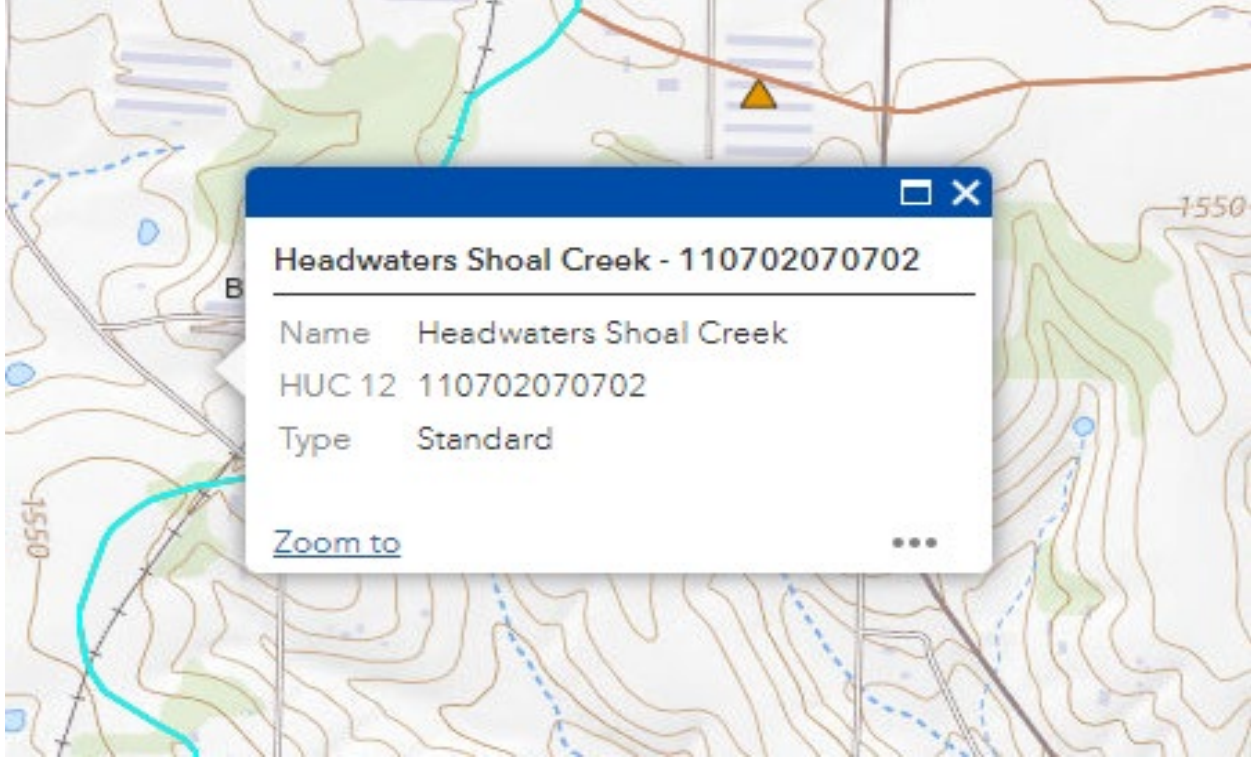


Interactive Map

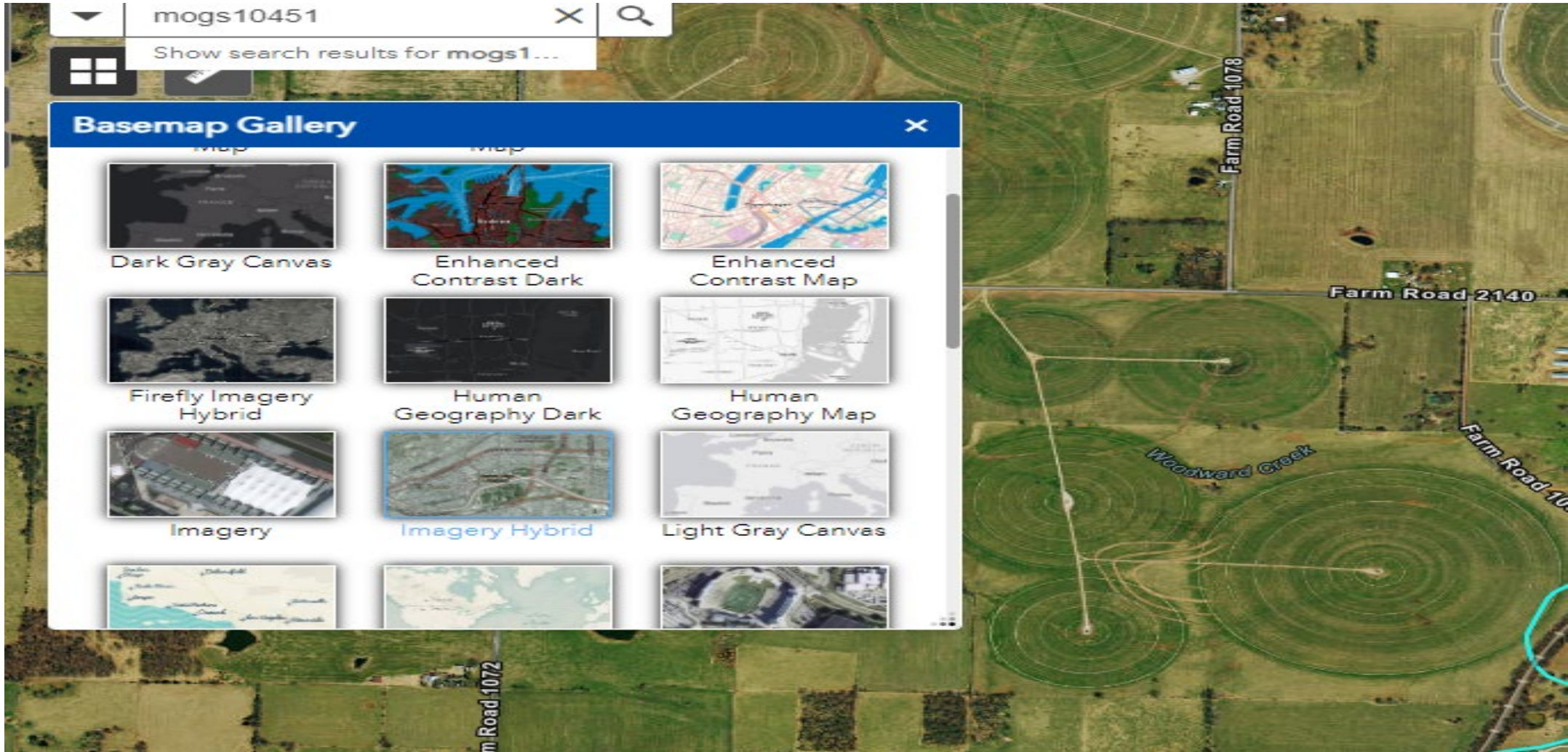


HUC 12 Name and 12-digit Watershed Boundary

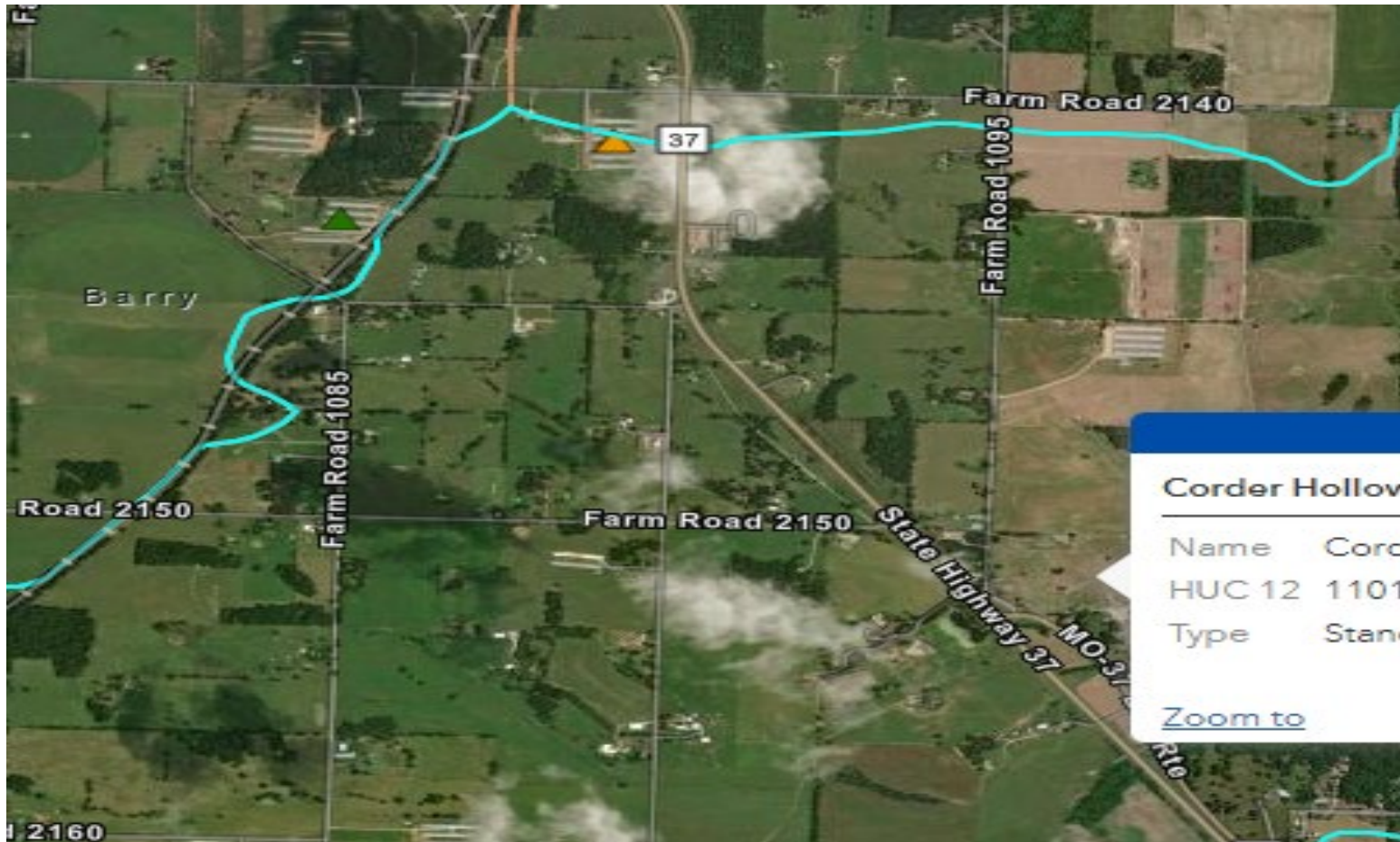
Identifying HUC-12



Identifying HUC 12 by Fields



Identify HUC 12



Corder Hollow-Flat Creek - 110100020402

Name	Corder Hollow-Flat Creek
HUC 12	110100020402
Type	Standard

[Zoom to](#) ⋮

Division of Environmental Quality Regional Offices

Kansas City Area

- **Kansas City Regional Office**
200 Unity Circle North, Suite 2A
Lee's Summit, MO 64086-6018
816-251-0700 EMAIL: kcro@dnr.mo.gov

Southwest Area

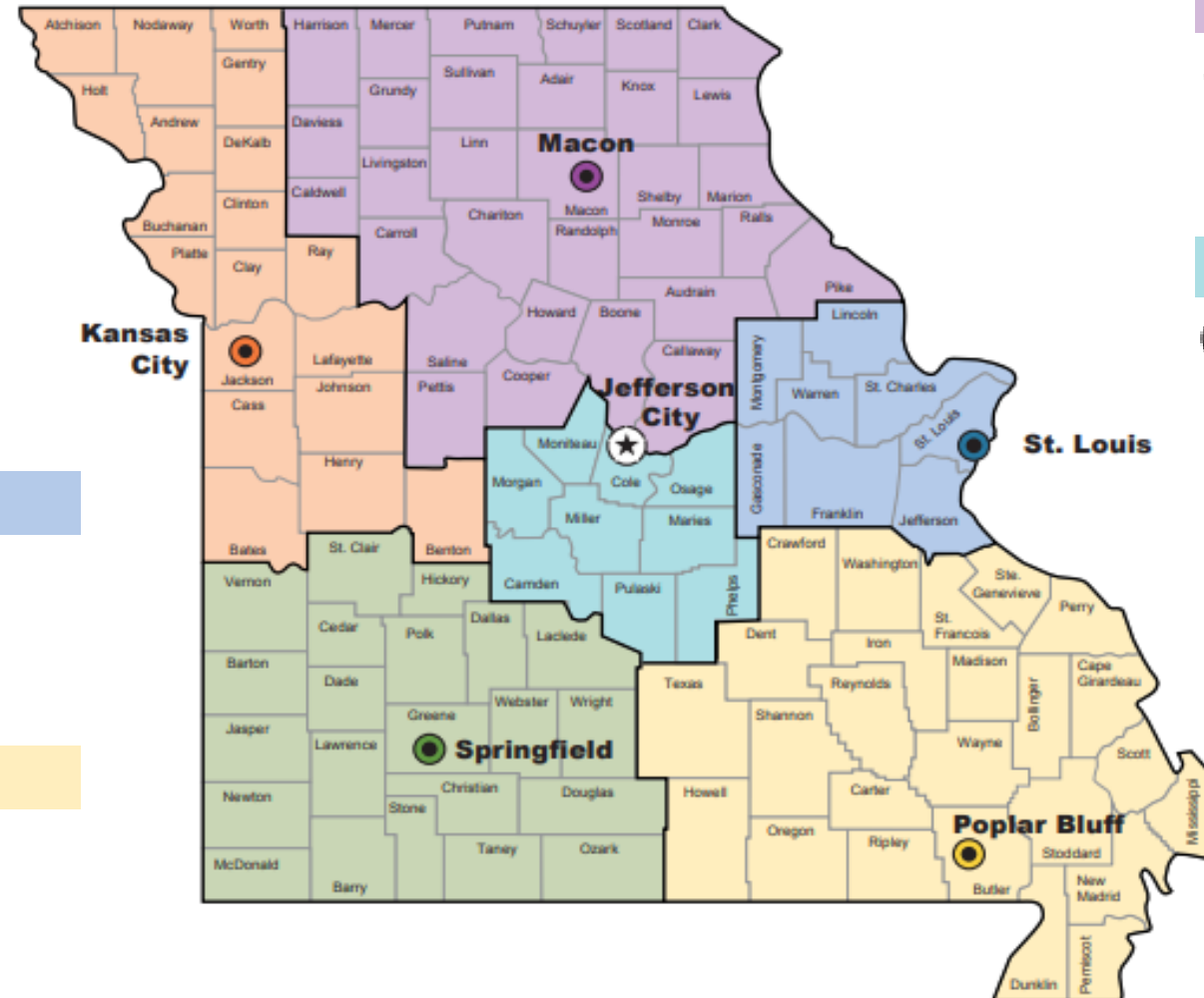
- **Southwest Regional Office**
2040 W. Woodland
Springfield, MO 65807-5912
417-891-4300 FAX: 417-891-4399

St. Louis Area

- **St. Louis Regional Office**
7545 S. Lindbergh, Ste 210
St. Louis, MO 63125
314-416-2960 FAX: 314-416-2970

Southeast Area

- **Southeast Regional Office**
2155 North Westwood Blvd.
Poplar Bluff, MO 63901
573-840-9750 FAX: 573-840-9754



Northeast Area

- **Northeast Regional Office**
1709 Prospect Drive
Macon, MO 63552-2602
660-385-8000 FAX: 660-385-8090

Central Area

- ★ **Department Central Offices**
P.O. Box 176
Jefferson City, MO 65102-0176
573-751-3443

- Central Field Operations**
P.O. Box 176
Jefferson City, MO 65102-0176
573-522-3322 FAX: 573-522-3522

Additional Information

Missouri Department of Natural Resources

Water Protection Program

cafo@dnr.mo.gov

(573) 522-4502

- Missouri CAFO webpage:
- <https://dnr.mo.gov/water/business-industry-other-entities/permits-certification-engineering-fees/concentrated-animal-feeding-operation-cafo>