



Missouri Animal Feeding Operation Site Evaluation Report



Report Prepared 4/11/2007

Geographic Summary

Evaluation Site Area:	154.6 Acres
County(s):	Henry
Legal Description (Central Section):	Sec. 5, T40N, R27W, 5th PM
Center of Site Latitude/Longitude (Degrees):	38° 17' 14.8" N 93° 56' 19.0" W
Center of Site Latitude/Longitude (Decimal Degrees):	38.2874 N -93.9386 W

Community Concerns Summary [LEARN MORE...>](#)

Population:

Distance	Total Persons	Persons per Square Mile
Within 1 mile	8	2.6
Within 5 miles	858	10.9

Community Sites Within 5 Miles:

Incorporated Areas	Parks (Public Lands)	Schools	Enrollment	Churches
1) Montrose 2) La Due	1) Montrose Conservation Area 2) Ladue Bottoms Conservation Area	3	153	2

Biosecurity Concerns Summary [LEARN MORE...>](#)

Concentrated Animal Feeding Operations within 5 Miles:

Facility Class	Animal Type	Distance from Site Center (miles)
No Concentrated Animal Feeding Operations within 5 miles of the evaluation area.		

Hydrologic Summary

Streams [LEARN MORE...>](#)

Total Stream (ft)	Perennial (ft)	Intermittent (ft)	Canal or Ditch (ft)	Other Stream (ft)
931	0	931	0	0

Rivers, Ponds and Lakes: [LEARN MORE...>](#)

Total Water Acres	River Acres	Pond / Lake Acres	Swamp Acres	Other Water Acres
6.2	0.0	6.2	0.0	0.0

USDA-NRCS 12-Digit Hydrologic Units: [LEARN MORE...>](#)

HU ID	HU Name	On Farm Acreage	Total HU Acreage
102901080503	Montrose Lake	146.7	33,717
102901080504	Deep Water Creek Middle 1	7.9	21,988

Watershed Concerns

Critical Watersheds: [LEARN MORE...>](#)

Public Water Supply	Outstanding National Resource Waters	Outstanding State Resource Waters
Henry Co. PWSD #3 - Truman Reservoir Henry Co. PWSD #2 - Truman Reservoir	None	None

Drinking Water Wells Within 1 Mile: [LEARN MORE...>](#)

Public Wells	Private Wells
0	2

2002 303(d) List I Impaired Water Bodies in Evaluation Area 12-Digit Hydrologic Units: [LEARN MORE...>](#)

(The Clean Water Act section 303 requires states to develop lists of impaired waters, called the 303(d) list, and develop TMDLs for these waters. Listed waters are targeted for clean-up programs.)

Water Body	Pollutant	Source	Priority	TMDL Approved
No 303(d) listed water bodies in the evaluation area hydrologic units.				

Existing CAFOs in Evaluation Area 12-Digit Hydrologic Units: [LEARN MORE...>](#)

Hydrologic Unit	Facility Class	Animal Type	Animal Units	Distance from Site Center (miles)
No Concentrated Animal Feeding Operations in the evaluation area hydrologic units.				

Other Sensitive Areas

Karst Features: [LEARN MORE...>](#)

(The information for land with soil types prone to karst features is only available in selected areas. [Click for karst prone soils availability map](#))

KNOWN Sinkholes	Acres in Karst Prone Soils
0	0.0

Floodplain: [LEARN MORE...>](#)

(The available data for floodplain features is incomplete. [Click for data availability map](#))

(Manure storage structure must not be located in 25-year floodplain. Flood prone areas which flood at a frequency greater than once every 10 years should not be the only land available for application of manure)

Acres in 100-Year Floodplain	Additional Acres in 500-Year Floodplain	Acres in Excluded Areas
-	-	-

Warning: The entire evaluation area is outside floodplain mapping area

Groundwater Table Depth-Annual Minimum: [LEARN MORE...>](#)

	0-20 in.	20-40 in.	40-60 in.	60 in. or More	Not Rated
Acres / Percent of Evaluation Area	93.2 / 60.3%	0.0 / 0.0%	61.4 / 39.7%	0.0 / 0.0%	0.0 / 0.0%

Regulations Affecting Animal Feeding Operations:

Type of Legislation	Regulating Authority	Office to Request this Information	Office Phone
State Requirements	State of Missouri	MoDNR - Kansas City Regional Office	(816) 662-7000
County Health Ordinance	Henry County	Henry County Clerk's Office	(660) 885-6963

Facility Setback:

Feature	Facility Size	Requirement	Regulating Authority
Dwelling (Non-Owned)	1000 AU or more	3000 feet	Henry County
Well	All	100 feet (poultry litter) 300 feet (other)	State of Missouri
WARNING: No lagoons shall be located on an elevation less than 742 feet. The entire evaluation area is above 742 feet elevation.			Henry County

Land Application Setback:

Feature	Method of Application	Requirement	Regulating Authority
Dwelling (Non-Owned)	Tank Wagon	50 feet	State of Missouri
	Irrigated	150 feet	State of Missouri
	Processed Waste	300 feet	Henry County
	Other Waste	1000 feet	Henry County
Property Boundary	Processed Waste	300 feet	Henry County
	Other Waste	1000 feet	Henry County
Well	Processed Waste	300 feet	Henry County
	Other Waste	1000 feet	Henry County
Intermittent Stream	Processed Waste	300 feet	Henry County
	Other Waste	1000 feet	Henry County
Permanent Stream	Processed Waste	300 feet	Henry County
	Other Waste	1000 feet	Henry County
Losing Stream	Processed Waste	300 feet	Henry County
	Other Waste	1000 feet	Henry County
Drinking Water Lake	Processed Waste	300 feet	Henry County
	Other Waste	1000 feet	Henry County
Sinkhole or Cave	Processed Waste	300 feet	Henry County
	Other Waste	1000 feet	Henry County
Rock Outcrop	Processed Waste	300 feet	Henry County
	Other Waste	1000 feet	Henry County
WARNING: Processed animal wastewater shall not be applied on land located at an elevation of less than 742 feet. The entire evaluation area is above 742 feet elevation.			Henry County

Slope and Soil Characteristics

Slope Classification: [LEARN MORE...>](#)

Slope Category	Description	Acres	Percent of Area
0% to 3% Slope	Prime Farm Land, Suitable for Land Application	88.7	57.5%
3% to 6% Slope	Suitable Farm Land, Suitable for Land Application	31.4	20.3%
6% to 10% Slope	Marginal for Land Application	22.2	14.4%
10% to 15% Slope	Land Application of Manure not Allowed	5.8	3.7%
15% or Greater Slope	Unsuitable for Agriculture	6.2	4.0%

Soils:

Map Unit	Name	Acres	Percent of Area	Hydrologic Group (Dominant Condition)
BaB2	Barco Loam, 2 to 5 Percent Slopes, Eroded	22.8	14.7%	B
BaC2	Barco Loam, 5 to 10 Percent Slopes, Eroded	1.7	1.1%	B
DeB	Deepwater Silt Loam, 2 to 5 Percent Slopes	26.4	17.1%	B
DeB2	Deepwater Silt Loam, 2 to 5 Percent Slopes, Eroded	19.1	12.4%	B
DeC2	Deepwater Silt Loam, 5 to 10 Percent Slopes, Eroded	15.9	10.3%	B
HtB	Hartwell Silt Loam, 2 to 4 Percent Slopes	8.9	5.8%	D
HyB3	Hartwell Silty Clay Loam, 2 to 5 Percent Slopes, Severely Eroded	14.7	9.5%	D
Mp	Mine Pits and Dumps	39.2	25.3%	
W	Water	6.0	3.9%	

Land Application Opportunities Summary

Land Area for Manure Application:

Distance from Site Center	Total Acres	Cropland < 10% Slope (acres)	Grassland < 10% Slope (acres)	Percent Area Suitable for Application
Within 2 miles	8,043.1	1,103.5	3,940.8	62.7

Estimated Animal Density

Permitted Operations in Your Watershed:

12-Digit Watershed	Total Acres per Animal Unit	Total Acres Suitable for Land Application per Animal Unit
No Concentrated Animal Feeding Operations in the evaluation area hydrologic units.		

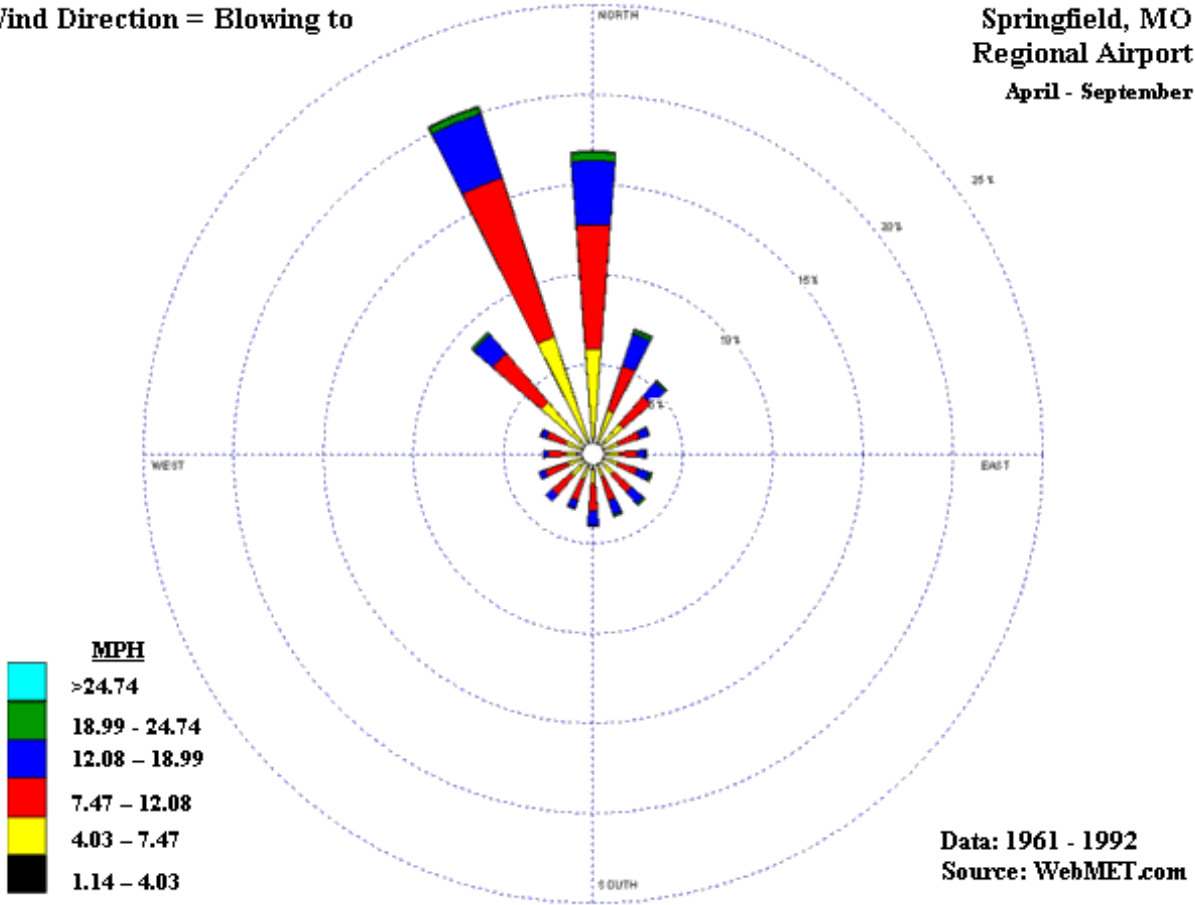
Rainfall:

County	Mean Annual Rainfall	25-Year 24-Hour Maximum	100-Year 24-Hour Maximum	Wettest Year in 10
Henry	42.2 in.	7 in.	8 in.	54.9 in.

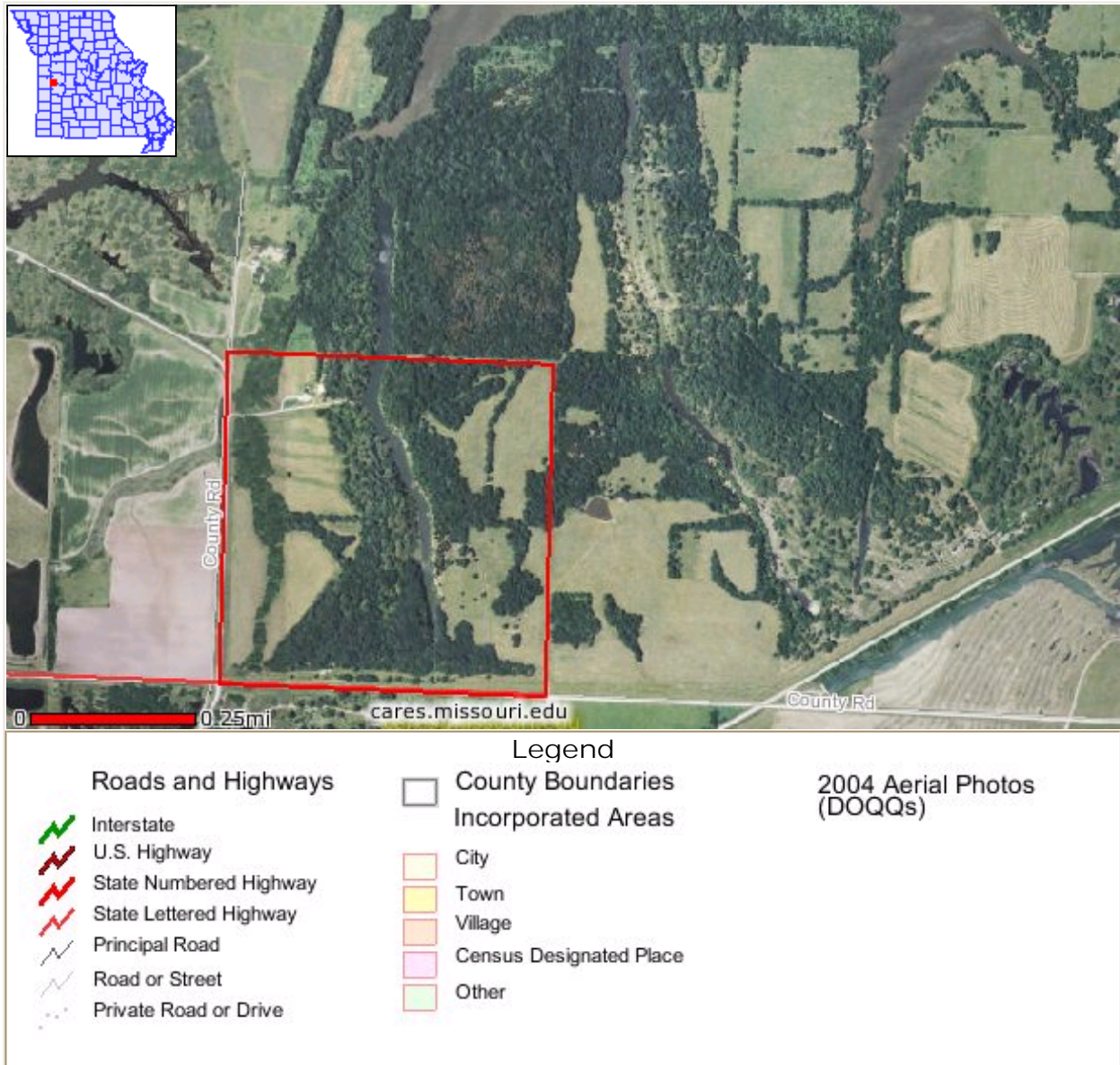
Windrose (Apr-Sep):

Wind Direction = Blowing to

**Springfield, MO
Regional Airport
April - September**



Evaluation Area Map



Report prepared on 4/11/2007 at the [AFO Site Evaluation Report web site](http://www.cares.missouri.edu/AFO), University of Missouri - Columbia. For questions regarding this report, contact [John Lory \(LoryJ@missouri.edu\)](mailto:LoryJ@missouri.edu) at the University of Missouri [Commercial Agriculture Program](http://www.cares.missouri.edu).

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Web Site: <http://www.cares.missouri.edu/AFOSITE>