

Presentation for the Joint Committee on Restructuring Fees of the Clean Water and Storm Water Programs

OCTOBER 9, 2007



644.054 RSMo

“There shall be convened a joint committee appointed by the president pro tem of the Senate and Speaker of the House of Representatives to consider proposals for restructuring the fees imposed in sections 644.052 and 644.053. The committee shall review storm water programs, state’s implementation of the federal clean water program, storm water, and related state clean water responsibilities, and evaluate the costs to the state for maintaining the programs. The committee shall prepare and submit a report, including recommendations on funding the state clean water program, and storm water programs, to the governor, the house of representatives, and the senate no later than Dec. 31, 2008.”

Presentation for Joint Committee on Clean Water Fees

- Income and Expenditures for Missouri's Clean Water Effort
- Overview - Clean Water in Missouri
- Case Study: Recreational Use Attainability Analysis
- Organization - DNR and Partners
- Challenges Facing Communities
- White Paper - "Funding Missouri's Clean Water Effort"

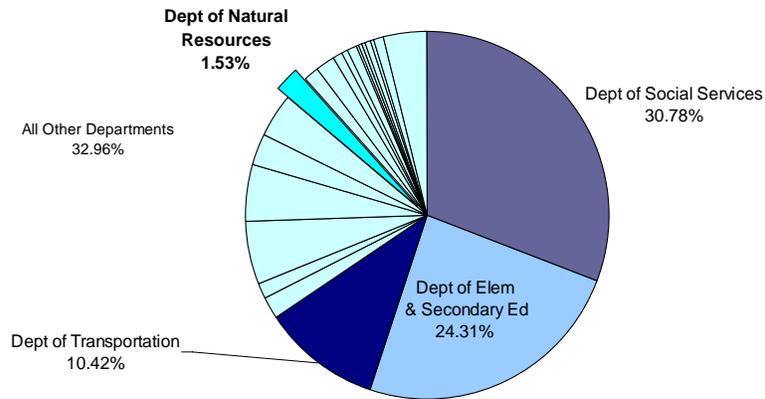
Background: Clean Water Fees

Permitting Fee Law

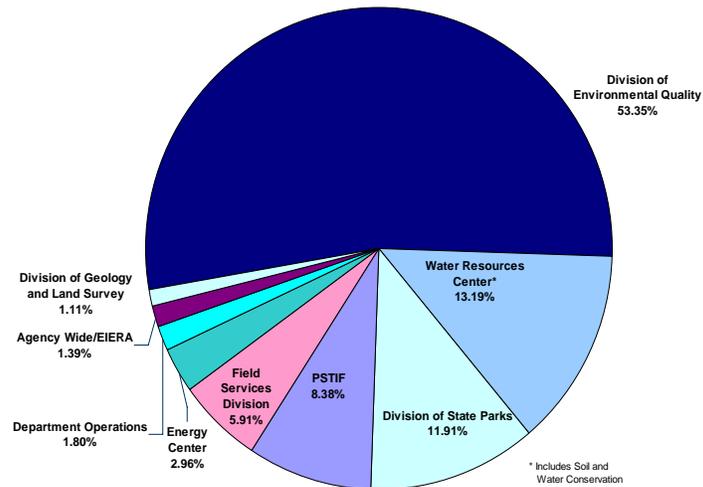
- Permitting fees were first established under Missouri Clean Water Law in 1990. The fee was renewed in 2000. The current system of water pollution permit fees may be found under Chapter 644 RSMo, in the Water Pollution Sections 644.052, 644.053 and 644.054 at <http://www.moga.mo.gov/statutesearch/>.
- The department's regulation may be found in *10 CSR-6.011 – Permits* implementing the procedures for collection of fees at <http://www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp>. Fees are collected for state operating permits, construction permits and several other permit types
- An appendix to the rule in Chapter 6 reflects the range of fees established under the Missouri Clean Water Law in 644.011

Income and Expenditures of the Clean Water Effort

State of Missouri FY 2008 Governor's Recommended Budget



Department of Natural Resources FY08 TAFP Budget

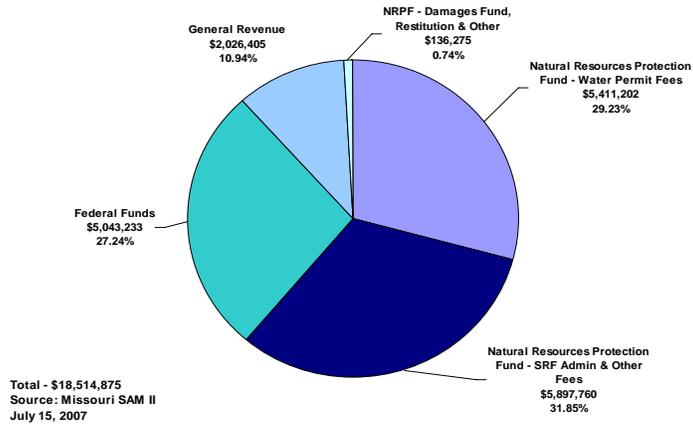


Clean Water Effort FY 2007

Revenues

All Fund Sources

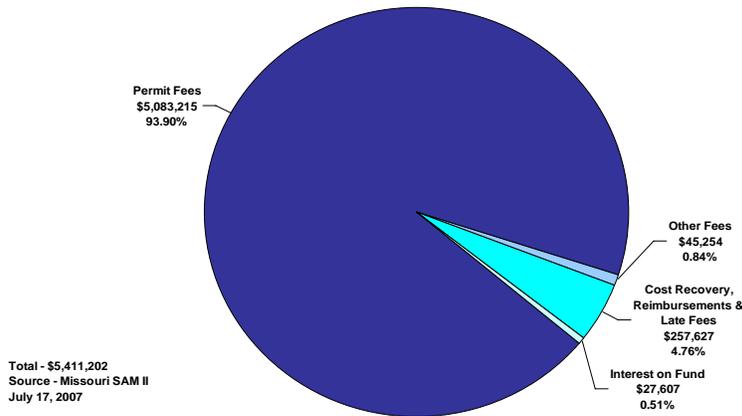
General Revenue, Federal Funds, Natural Resources Protection Fund, Other



Clean Water Effort FY 2007

Revenues

Natural Resources Protection Fund (0568) Permit Fees Subaccount

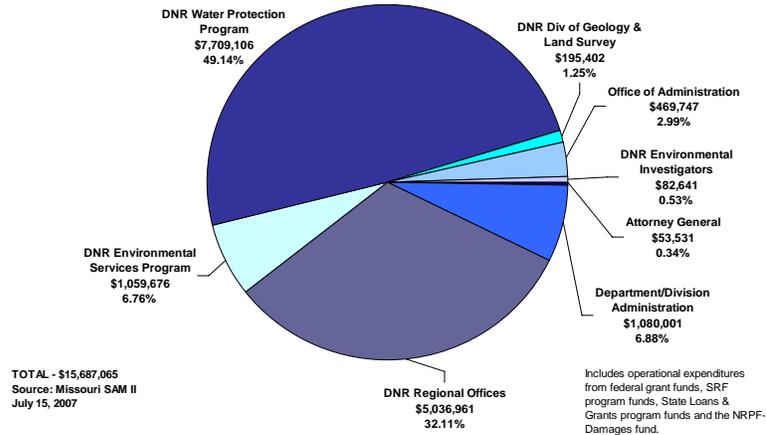


Clean Water Effort FY 2007

Expenditures by Organization

All Fund Sources

General Revenue, Federal Funds, Natural Resources Protection Fund, Other

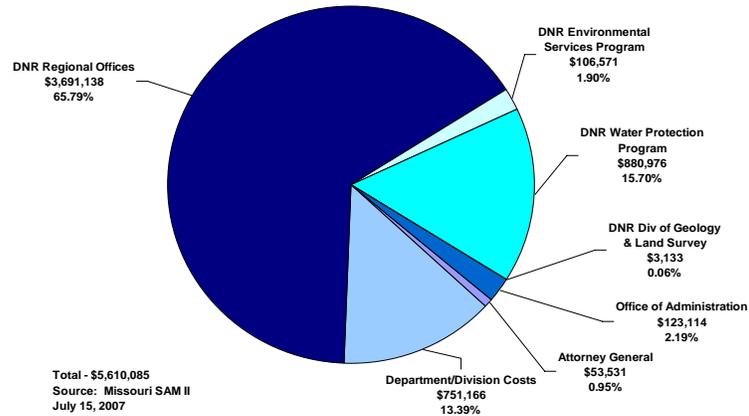


Clean Water Effort FY 2007

Expenditures by Organization

Natural Resources Protection Fund (0568)

Permit Fees Subaccount

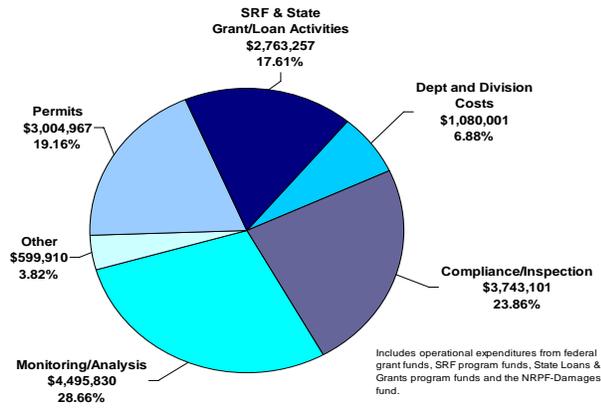


Clean Water Effort FY 2007

Expenditures by Activity

All Fund Sources

General Revenue, Federal Funds, Natural Resources Protection Fund, Other



TOTAL - \$15,687,065
Source: Missouri SAM II
July 15, 2007

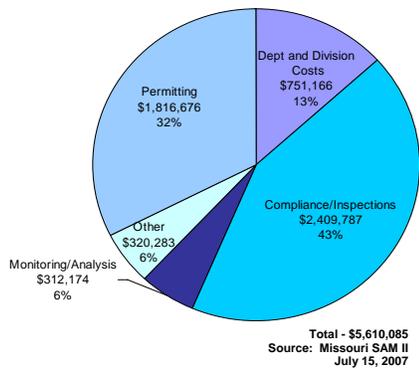
Clean Water Effort FY 2007

Expenditures by Activity

Natural Resources Protection Fund (0568)

Permit Fees Subaccount

36 percent of Total Clean Water Effort



Total - \$5,610,085
Source: Missouri SAM II
July 15, 2007

Permit Fee Schedule

Fee Category	Examples of Parties Affected	Current Fees	Annual # of Permit Fees Paid	Estimated Annual Revenues	Percentage
CONSTRUCTION PERMITS					
Construction	Extension of sewer lines, construction of water treatment plants/systems	\$75 - \$2,200	1132	\$420,000	9.12%
PUBLICLY-OWNED TREATMENT SYSTEMS					
Service Connection Fee (collected by publicly-owned treatment works or districts)	Fee on each residential and industrial-commercial customer of a public sewer system	\$0.40 - \$25 per connection and up to \$700 for multiple connections	796	\$1,369,608	29.73%
GENERAL PERMITS					
Land Disturbance	Land disturbance from industrial and residential developments	\$300 at application time only (five year permits)	1,700	\$459,000	9.96%
General Permit-Other	Car washes, limestone quarries, petroleum storage, metal fabrication, etc.	\$150/yr - New Facilities \$60/yr - Renewed Permits	3,007	\$172,359	3.74%
General Permit-Chemical Fertilizer/Pesticide	Wholesale distribution of chemical fertilizers and pesticides	\$50/year	542	\$24,390	.53%
General Permit-CAFO and AFO	Concentrated Animal Feeding Operations (CAFOs) - Class IB and IC Animal Feeding Operations (Class II)	\$150 at application time only (five year permits)	82	\$12,474	.27%
INDUSTRIES					
Industrial	Mining industry, chemical industry, manufacturing, underground injection	\$1,500 - \$5,000	297	\$692,100	15.02%
Site Specific-Storm Water	Stockpiling of industrial specific products outdoors where it is exposed to rainwater	\$1,350/year < 1mgd \$2,350/year > 1mgd	89	\$129,735	2.82%
CAFOs	CAFOs with site-specific permits	\$5,000	21	\$105,000	2.28%
DOMESTIC SEWAGE					
Small Domestic	Subdivisions, resorts, schools, restaurants, etc.	\$100/year < 5,000 gpd	746	\$67,140	1.46%
Other Domestic	Domestic wastewater facilities discharging >5,000 gpd	\$150 - \$3,500 /year based on design flow	1,092	\$1,025,033	22.25%
OTHER FEES					
401 Certifications	Dredging or filling activities in waterways	\$75 at application time	200	\$15,000	.33%
Permit Modifications	Anyone modifying a permit, including transfers. (Name and address change not included as transfers)	Municipals - \$200 each All Others-25% of Annual Fee	200	\$103,370	2.24%
Permit-by-Rule	Automatically received under authority of rule	\$25 one time registration fee	24	\$600	.01%
Permit Variance	Anyone requesting a variance to water quality or technology based effluent limits	\$250 each	45	\$11,250	.24%
ESTIMATED ANNUAL TOTAL				\$4,607,059	100%

Overview Clean Water in Missouri

Clean Water Act - Section 101(a)

“... to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

“... water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water...”

[33 U.S.C. § 1251 (a)]

Missouri Clean Water Law

“... 44.011. it is hereby declared to be the public policy of this state to conserve the waters of the state and to protect, maintain, and improve the quality thereof for public water supplies and for domestic, agricultural, industrial, recreational and other legitimate beneficial uses and for the propagation of wildlife, fish and aquatic life; to provide that no waste be discharged into any waters of the state without first receiving the necessary treatment or other corrective action to protect the legitimate beneficial uses of such waters and meet the requirements of the Federal Water Pollution Control Act as amended; to provide for the prevention, abatement and control of new or existing water pollution; and to cooperate with other agencies of the state, agencies of other states, the federal government and any other persons in carrying out these objectives.”

(L. 1972 S.B. 424, A.L. 1973 S.B. 259, S.B. 321) Effective 7-23-73

Water Quality Based Process



Setting Water Quality Goals Water Classification

- Lakes (455 Lakes - 293,258 acres)
 - L1 - Primarily Used for Drinking Water Supply
 - L2 - Major Reservoirs
 - L3 - Other Lakes
- Streams (3761 Stream Segments- 22,231 miles)
 - P - Permanent Flow
 - C - Intermittent Flow
- Wetlands - Class W
- Unclassified Waters - Class U

Setting Water Quality Goals

Beneficial Uses

- Drinking Water Supply
- Protection of Aquatic Life
- Recreation
- Human Health Protection - Fish Consumption
- Livestock and Wildlife Watering
- Irrigation
- Industrial Process and Cooling
- Etc.

Setting Water Quality Goals

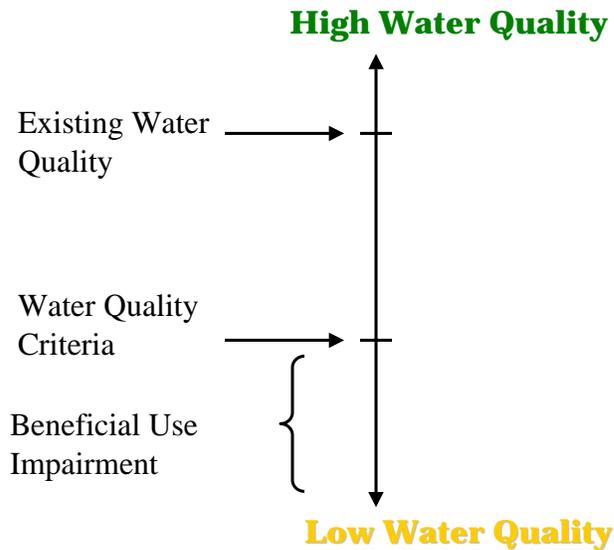
Water Quality Criteria

- Numeric Criteria (Metals, Organic Chemicals, Pesticides, Ammonia, Dissolved Oxygen, pH)
- General Criteria (Narrative) Free from observable impacts such as odor, scum, turbidity, tires, appliance

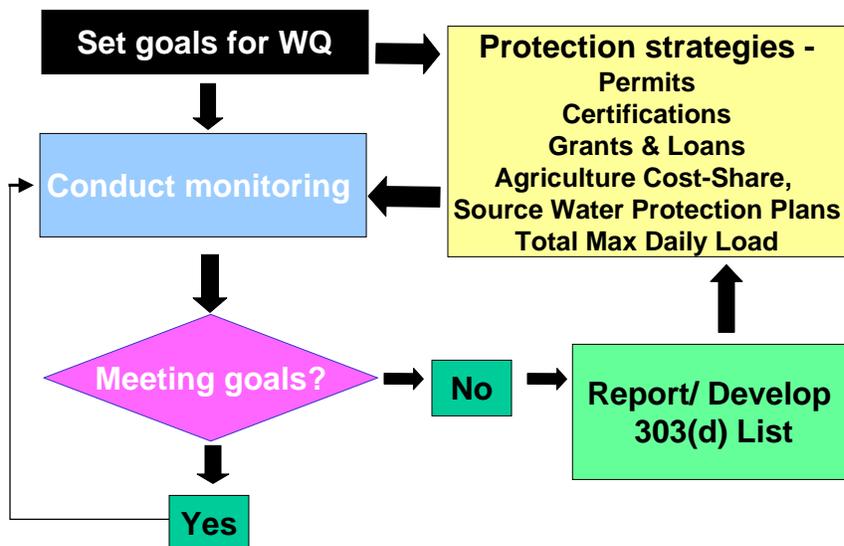


Setting Water Quality Goals

Antidegradation



Water Quality Based Process



Water Quality Monitoring



DNR File Photo

- Gauge the health of Missouri's waters
- Determine which waters do not meet standards
- Identify types and sources of pollution
- Establish permit limits

Water Quality Monitoring



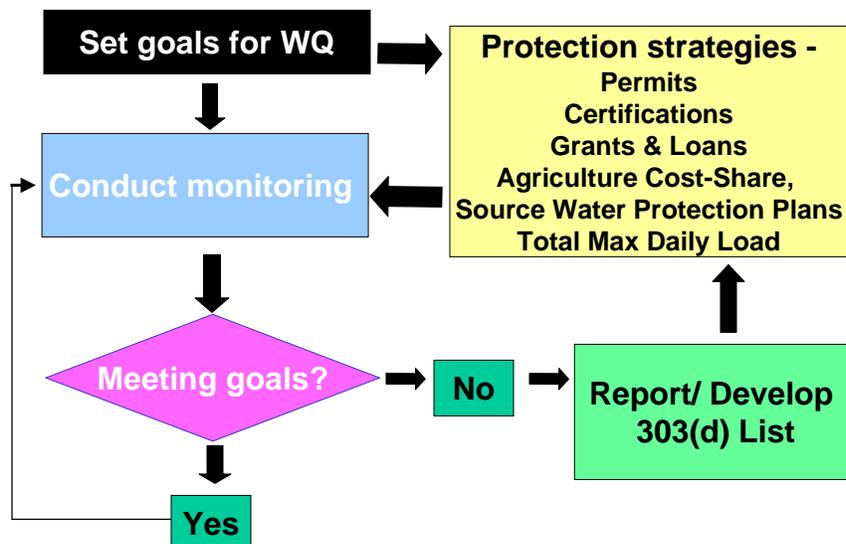
DNR File Photo

- Fixed Station Monitoring
 - Long Term
 - Statewide
- Special Studies
 - Region or site specific
 - Usually temporary
- Scanning
 - Visual impact assessments

Reporting Integrated Water Quality Report

- Integrated Water Quality Report
 - 305(b) Water Quality Assessment
 - 303(d) List of Impaired Waters

Water Quality Based Process



Protection Strategies
Total Maximum Daily Load
(TMDL)

A study to identify the sources and amount of a specific pollutant a water body can receive and still meet water quality standards.

$$\begin{aligned} &\text{Sum of Point Sources} \\ &\text{Sum of Nonpoint Sources} \\ &+ \text{Margin of Safety} \\ &= \text{TMDL} \end{aligned}$$

Protection Strategies
Missouri State Operating Permit



Facility

Anytown WWTF
Little Muddy Creek

Receiving Water Body



Protection Strategies

Missouri State Operating Permit*

- Point Source Discharges to Waters of the State
- Authorization to put pollutants in the water at amounts that will protect the water quality (except in case of “no discharge” permit)
- Permits answer the question:

Given the characteristics of the stream and the volume of the discharge, what is the concentration of pollutants in the discharge that will protect the stream?

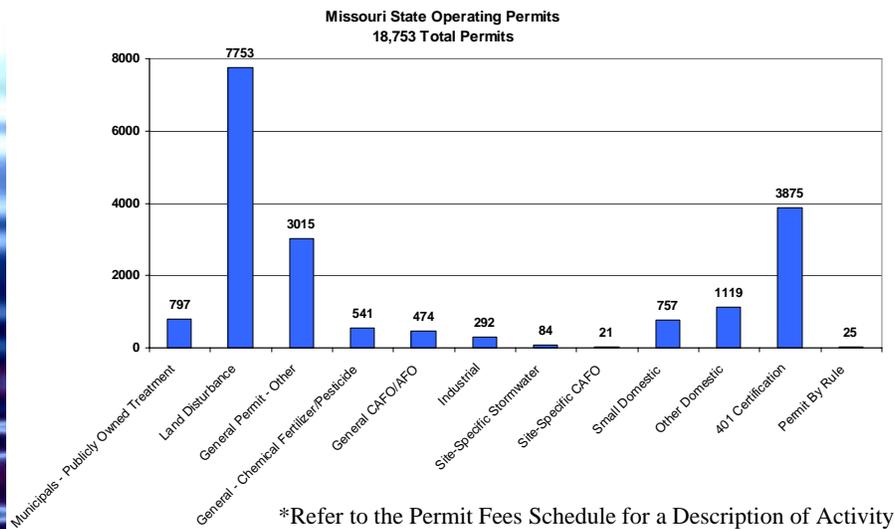
* Missouri is delegated to administer the federal National Pollutant Discharge Elimination System Permitting (NPDES) Program under Section 402 of the Clean Water Act. In Missouri, the permit is called Missouri State Operation Permit (MSOP)

Protection Strategies

Examples of MSOP Permitted Activities

- Domestic Wastewater Treatment
(cities, sewer districts, private)
- Industrial Wastewater Treatment
- Land Disturbance (>1 acre)
- Industrial Storm Water
- Municipal Separate Storm Water Sewer System (MS4)
- 401 Certification
- Concentrated Animal Feeding Operations (CAFO)

Protection Strategies Operating Permits by Type



Protection Strategies Concentrated Animal Feeding Operations (CAFO) Permitting

- Designed to be no discharge to waters
- Manure managed through agronomic best management practices based on calculation of nutrient concentrations and crop needs.

Protection Strategies CAFO Permitting

1 Animal Unit =					
1.0	Beef feeder or slaughter animal	2.5	Swine weighing over 55 lbs.	30	Laying hens
0.5	Horse	15	Swine weighing less than 55 lbs.	60	Pullets
0.7	Dairy cow	10	Sheep	55	Turkeys
				100	Broiler chickens

Class IA 7,000 animal unit equivalents	Class IB 3,000 to 6,999 animal unit equivalents	Class IC 1,000 to 2,999 animal unit equivalents	Class II 300 to 999 animal unit equivalents
7,000 Beef feeder or slaughter animal	3,000 to 6,999 Beef feeder or slaughter animal	1,000 to 2,999 Beef feeder or slaughter animal	300 to 999 Beef feeder or slaughter animal
3,500 Horse	1,500 to 3,499 Horse	500 to 1,499 Horse	150 to 499 Horse
4,900 Dairy cow	2,100 to 4,899 Dairy cow	700 to 2,099 Dairy cow	200 to 699 Dairy cow
17,500 Swine weighing over 55 lbs.	7,500 to 17,499 Swine weighing over 55 lbs.	2,500 to 7,499 Swine weighing over 55 lbs.	750 to 2,499 Swine weighing over 55 lbs.
105,000 Swine weighing under 55 lbs.	45,000 to 104,999 Swine weighing under 55 lbs.	15,000 to 44,999 Swine weighing under 55 lbs.	4,500 to 14,999 Swine weighing under 55 lbs.
70,000 Sheep	30,000 to 69,999 Sheep	10,000 to 29,999 Sheep	3,000 to 9,999 Sheep
210,000 Laying hens	90,000 to 209,999 Laying hens	30,000 to 89,999 Laying hens	9,000 to 29,999 Laying hens
420,000 Pullets	180,000 to 419,999 Pullets	60,000 to 179,999 Pullets	18,000 to 59,999 Pullets
385,000 Turkeys	165,000 to 384,999 Turkeys	55,000 to 164,999 Turkeys	16,500 to 54,999 Turkeys
700,000 Broiler chickens	300,000 to 699,999 Broiler chickens	100,000 to 299,999 Broiler chickens	30,000 to 99,999 Broiler chickens

Protection Strategies MS4 Storm Water Program Components

- Public Education and Outreach
- Public Involvement and Participation
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Management Program
- Post-Construction Site Runoff Management Program
- Pollution Prevention & Good Housekeeping in Municipal Operations

Municipal Separate Storm Sewer System (MS4) Permits

Airport Drive, Village of	Cole County	Hannibal	Moberly	Springfield*
Arnold	Columbia	Hazelwood	Moline Acres	St. Charles
Ballwin	Cool Valley	Herculaneum	Neosho	St. Ann
Battlefield	Cottleville	Holts Summit	Newton County	St. Charles County
Bellefontaine Neighbors	Country Club, Village of	Independence*	Nixa	St. George
Bel-Nor, Village Of	Country Club Hills	Jackson city	Nomandy	St. John
Bel-Ridge, Village Of	Crestwood	Jackson County (Salem E)	North Kansas City	St. Joseph
Belton	Creve Coeur	Jasper County	Northwoods	St. Louis (MSD)
Berkeley	Crystal City	Jefferson City	Norwood Court, Town of	St. Louis County
Black Jack	Dardenne Prairie	Jefferson County	Oakland	St. Martins
Blue Springs	Dellwood	Jennings	O'Fallon	St. Paul
Boone County	Des Peres	Joplin	Olivette	St. Peters
Breckenridge Hills	Duenweg	Kansas City*	Overland	Sugar Creek
Brentwood	Duquesne	Kennett	Ozark	Sunset Hills
Bridgeton	Ellisville	Kirksville	Pagedale	Town And Country
Buchanan County	Excelsior Springs	Kirkwood	Parkville	Valley Park
Byrnes Mill	Farmington	Ladue	Pevely	Vinita Park
Callaway County	Fenton	Lake Lotawana	Platte County	Warrensburg
Calverton Park, Village of	Ferguson	Lake St. Louis	Pleasant Valley	Warson Woods
Cape Girardeau	Festus	Lake Waukomis	Poplar Bluff	Washington
Carl Junction	Florissant	Lakeshire	Randolph	Weatherby Lake
Cartersville	Frontenac	Leawood, Village of	Raymore	Webb City
Carthage	Fulton	Lebanon	Raytown	Webster Groves
Cass County	Gladstone	Lee's Summit	Richmond Heights	Weldon Spring
Charlack	Glendale	Liberty	Riverside	Wentzville
Chesterfield	Grain Valley	Manchester	Riverview, Village Of	West Plains
Christian County	Grandview	Marlborough, Village of	Rock Hill	Wildwood
Clarkson Valley	Green Park	Marshall	Rolla	Winchester
Clay County	Greene County	Maryland Heights	Sedalia	Woodson Terrace
Claycomo, Village of	Greenwood	Maryville	Shrewsbury	
Clayton	Hanley Hills, Village of	Mexico	Sikeston	

*Three of these communities came in under Phase I.

Communities may be added to or removed from this list after further review.

This list is also subject to change upon completion of the 2010 U.S. Census.

Note:

We terminated 3 permits due to eligibility for exemption (Oaks Villag

Revised July 23, 2007

Protection Strategies Inspections Performed by Permit Type

	# of Facilities as of Aug. 6, 2007 *	# of Inspections in SFY 2007	% Inspected Annually
Land Disturbance	7,753	468	6 %
401 Certification	3,875	1	0 %
General Permit - Other	3,015	94	3 %
Other Domestic	1,119	148	1 %
Municipals - Publicly Owned Treatment	797	187	23 %
Small Domestic	757	318	42 %
General - Chemical Fertilizer/Pesticide	541	45	8 %
General CAFO/AFO	474	71	15 %
Industrial	292	51	17 %
Site-Specific Storm Water	84	104	125%
Site-Specific CAFO	21	83	395 %

* Does not include Permit By Rule

Compliance Performance

The department conducted 2,158 clean water Environmental Assistance Visits in 2007.

	SFY05	SFY06	SFY07
Number of Permits ¹	12,108	13,610	14,853 ²
Inspections Conducted	1,754	1,591	1,570 ³
Concern Investigations Conducted	1,727	1,523	1,466
Notices of Violation Issued	703	306	572
Enforcement Actions Required	56	50	59
Cases Resolved by Program	30	32	8
Cases Resolved through Attorney General's Office	15	11	10

¹ Does not include Permit By Rule or 401 Certifications.

² Permitted Facility Total as of Aug. 6, 2007

³ Does not include FAC inspections

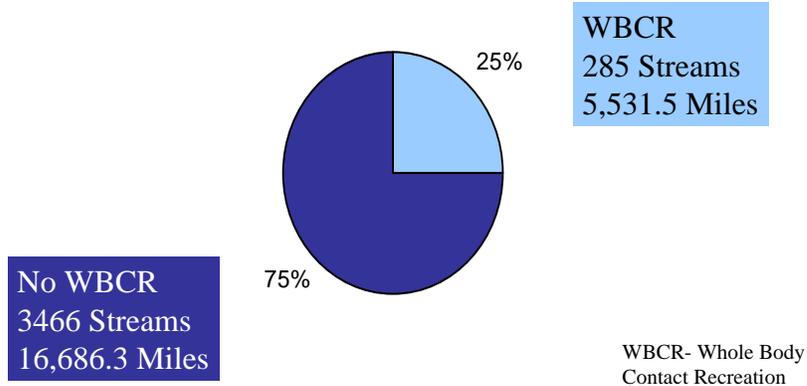
SFY - State Fiscal Year

Less than 1 percent of inspections result in referral to the Attorney General's Office for legal action.

Case Study: Recreational Use Attainability Analysis

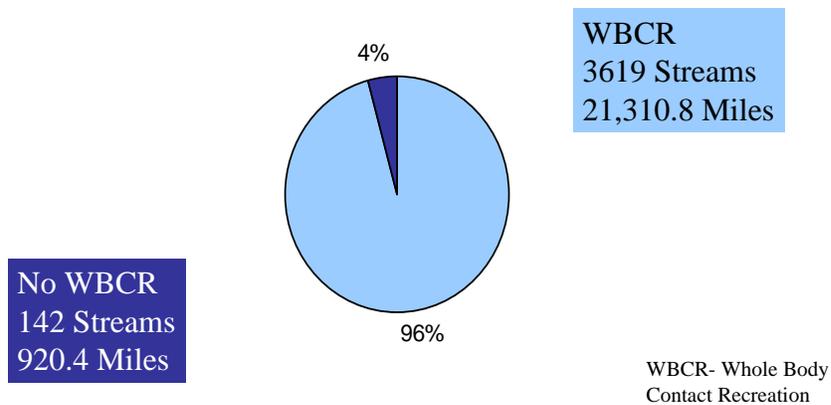
Whole Body Contact Recreation Use Designations

Streams - Before 2005 Rulemaking



Whole Body Contact Recreation Use Designations

Streams - After 2005 Rulemaking

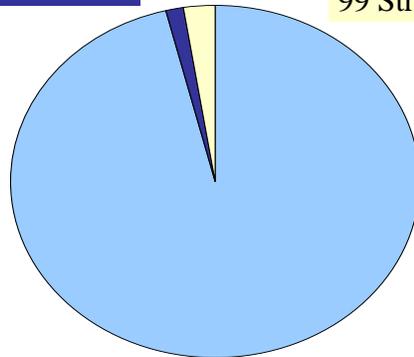


WBCR Use Designations

October 31, 2006 EPA Finding

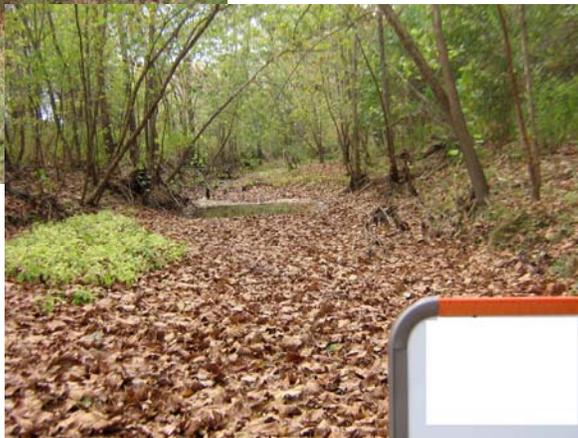
No WBCR
43 Streams

Disputed
99 Streams



WBCR
3619 Streams

WBCR- Whole Body
Contact Recreation



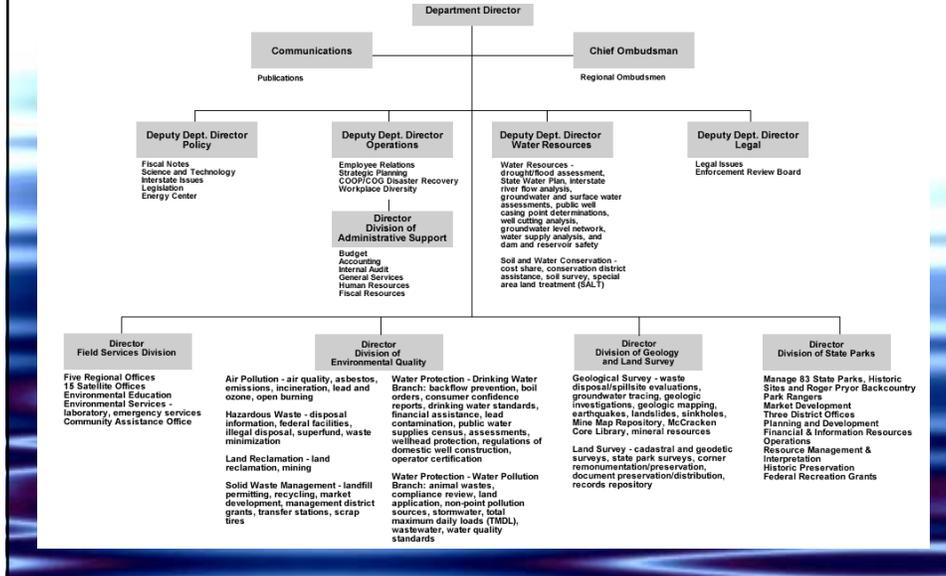




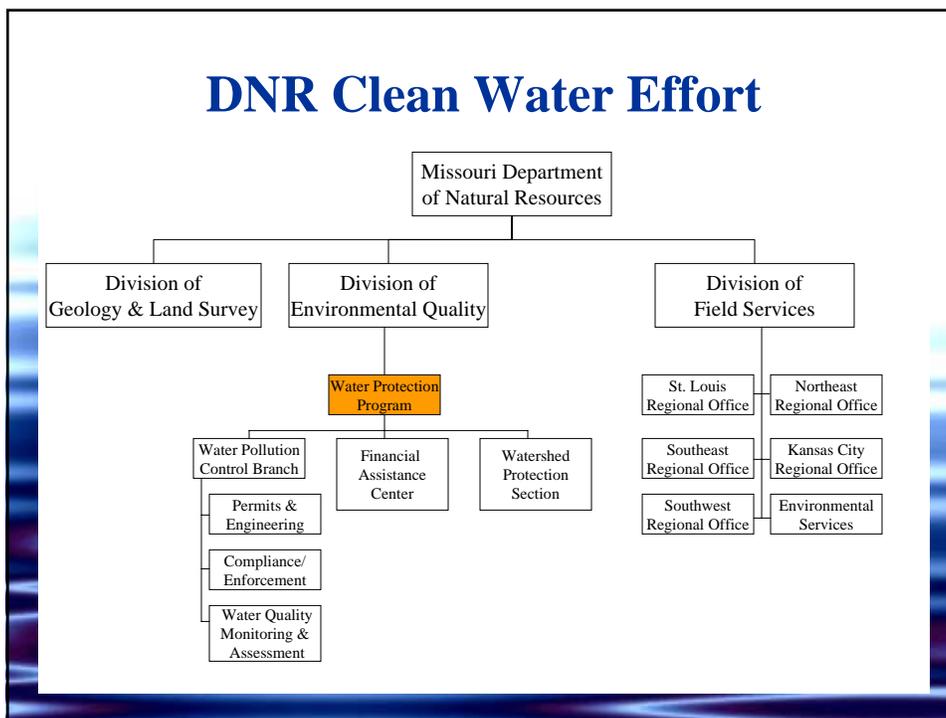
Organization

DNR and its Partners

DNR Organization



DNR Clean Water Effort



DNR and its Partners

- Missouri Clean Water Commission
- U.S. Environmental Protection Agency
- U.S Army Corps of Engineers
- U.S. Geological Survey
- Missouri Department of Health and Senior Services
- Missouri Department of Conservation
- Missouri Attorney General's Office

Challenges Facing Communities

- Disinfection
- Ammonia
- Antidegradation
- Metals
- Wet Weather

**Challenges Facing the State's
Clean Water Effort**

Funding
Missouri's
Clean Water Effort