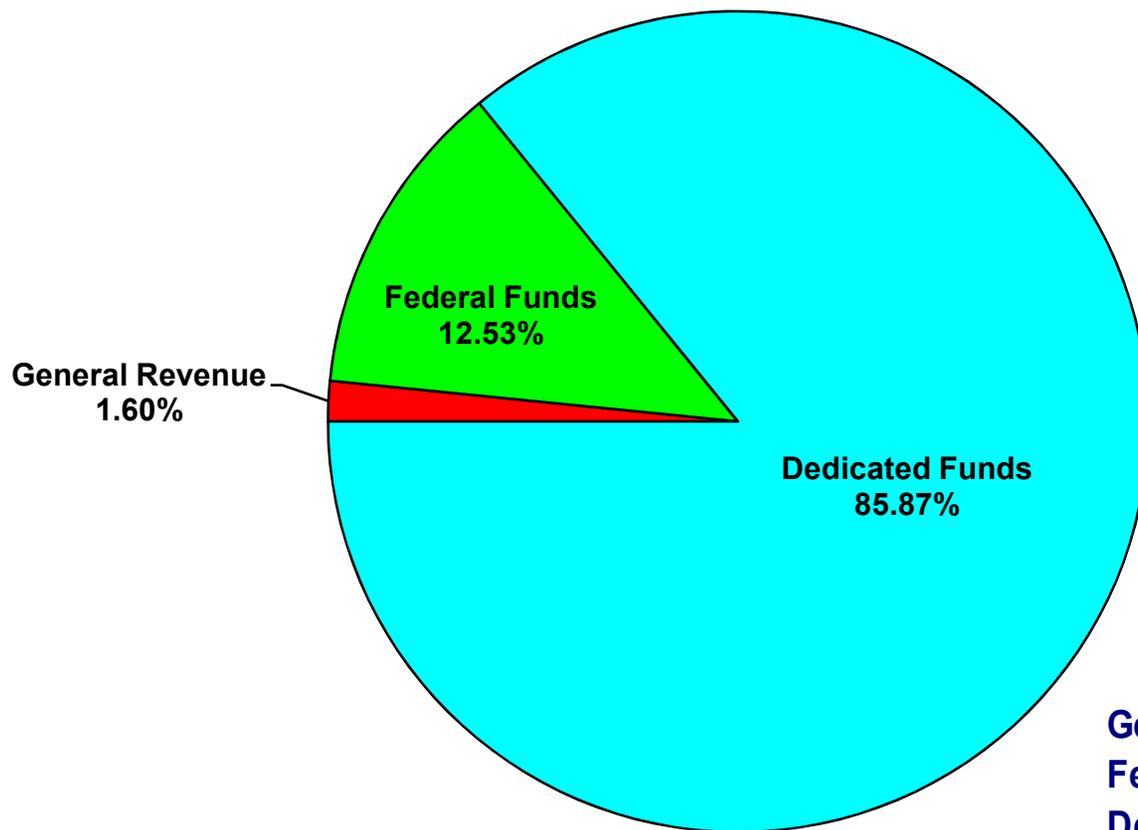


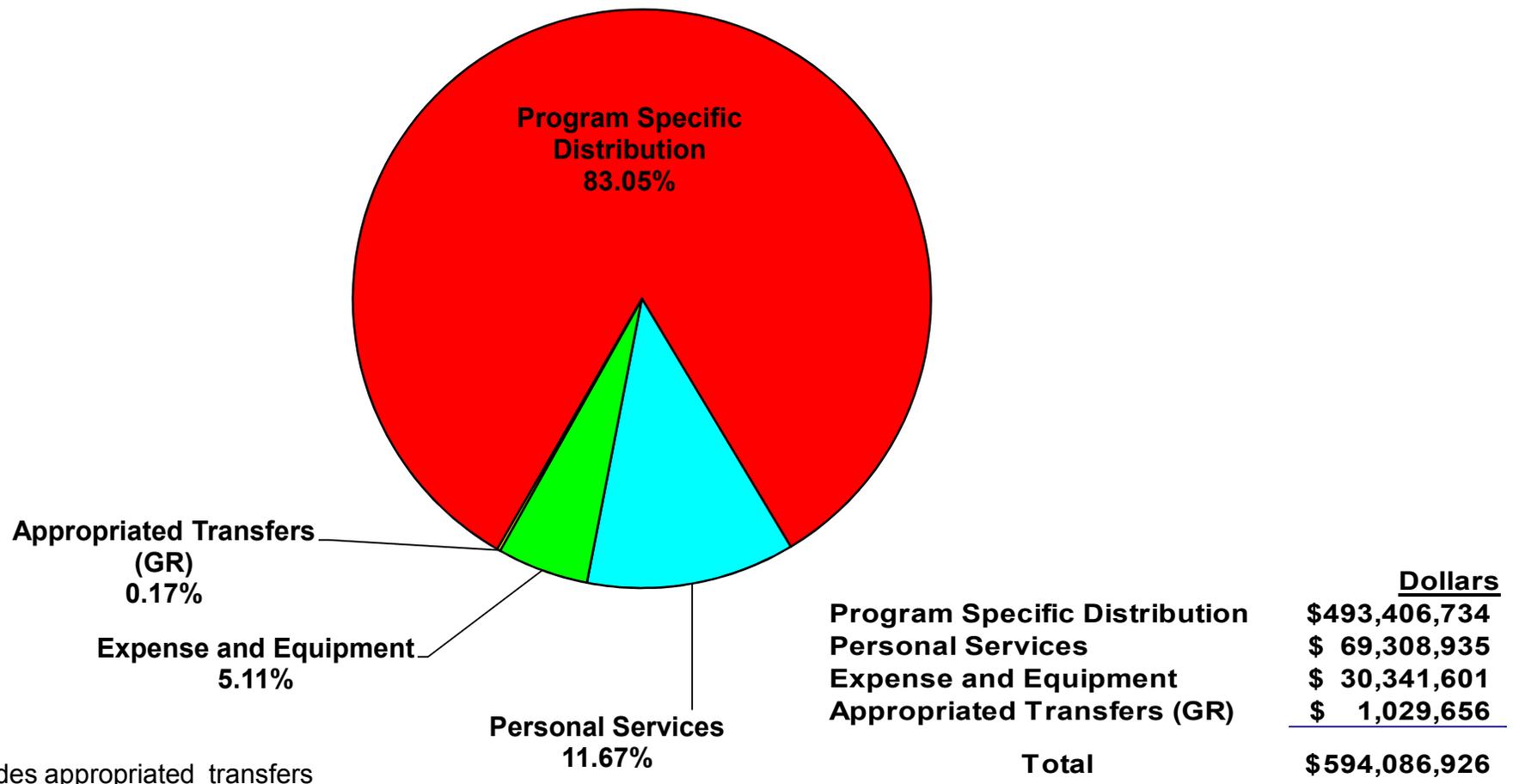
**Missouri Department of Natural Resources**  
**Local Government Kitchen Cabinet**  
**June 14, 2012**

**FY 2013 Truly Agreed and Finally Passed  
DNR Operating Budget (HB6) by Fund\***



	<u>Dollars</u>
General Revenue	\$ 9,466,601
Federal Funds	\$ 74,451,496
Dedicated Funds	\$ 510,168,829
<b>Total</b>	<b>\$ 594,086,926</b>

**FY 2013 Truly Agreed and Finally Passed  
 DNR Operating Budget (HB6)\***



\*Includes appropriated transfers

Missouri Department of

**Natural Resources**

# **Environmental Quality**

## Clean Water

- *Protect the quality of Missouri's rivers, streams, lakes and groundwater*



- *Ensure that all public drinking water supplies have access to clean source water and that water produced by a public water supply is safe to drink.*

## Clean Water

- **Where you will see us at work in your community.**
  - Permitting (business/industry, water and wastewater facilities, land disturbance)
  - Inspections
  - Compliance and technical assistance
  - Water quality monitoring
  - Stream Teams

## Clean Water



Deer Creek @ Litszinger Rd – St. Louis

### Current Issues :

- Strict EPA water quality standards
- Community affordability
- Funding
- E-permitting for land disturbance permits
- Watershed based planning
- Centralized permitting
- Non-point source pollution

## Clean Water



### Current Issues:

- Drinking Water Primacy Fee
- HB1251
- Design and Use Guide
- Small systems
- Affordability

## Clean Water



### *How we can help:*

- Financial Assistance Center
- 319 Nonpoint Source Implementation Grants
- Compliance & Technical Assistance
- Innovative Partnerships
- Operator Certification Training
- Design and Use Guide
- Small system compliance assistance

## Clean Water

### Financial Assistance

- Financial assistance is available to municipalities, counties, public water and public sewer districts and political subdivisions for the construction of new and improvement to existing drinking water, wastewater, and storm water systems.
- *Provided more than \$2.4 billion to Missouri communities saving them more than \$940 million in interest costs from 1989 through June 30, 2011*

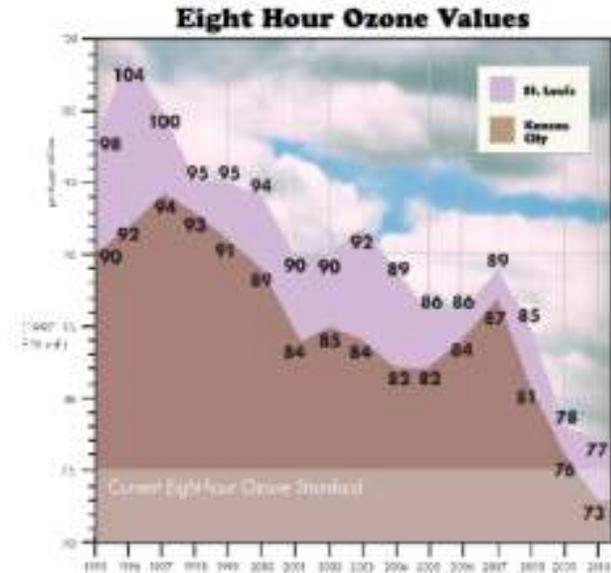


## Clean Air

- *Protect and improve the quality air for Missouri's citizens.*

**Where you will see us at work in your community.**

- Permitting of air pollution sources
- Inspections
- Air monitoring and data gathering (quality & emissions)
- Poor air quality alert days
- Compliance and technical assistance



## Clean Air

### Current Issues:

- Cross State Air Pollution Rule – power plants
- Vapory Recovery Phase-out – St. Louis
- Asbestos – Redevelopment



## Clean Air

### *How we can help:*

- Grants - Diesel Emissions Reduction Act
- Disaster Recovery/Debris Management



## Waste Management and Cleanup

*The mission of the Hazardous Waste Program is to protect human health and the environment from threats posed by hazardous waste.*



*The mission of the Solid Waste Management Program is to protect our health and environment through proper management of solid waste including beneficial reuse and recycling of materials.*

## **Waste Management and Cleanup**

### *Where you will see us at work in your community*

- Clean up oversight of contaminated sites (tanks, CERCLA, B/VCP, RCRA)
- Permitting of hazardous waste generators
- Inspections
- Shipment of hazardous waste and radiological materials through MO
- Permits for landfills and waste processing facilities
- Inspection and enforcement activities at regulated facilities and illegal dump sites
- Assist local communities in cleaning up illegal dump sites and waste tire sites

## **Waste Management and Cleanup**

### **Current Issues:**

- No stricter than federal.
- Long-term stewardship.
- Risk Based Corrective Action (RBCA).
- Landfill space
- Market development of recycled products
- Illegal dumping increase during difficult economy
- Beneficial Use Determinations for waste materials
- Solid Waste District oversight of subgrants (20 districts waste reduction, recycling, recovery)



## Waste Management and Cleanup

### *How we can help:*

- Brownfields Voluntary Cleanup Program – no costs assessments
- Voluntary Cleanup Program (grants, loans and tax credits)
- Petroleum Storage Tanks Cleanup Assistance
- Drycleaning Environmental Response Trust Fund
- Radiological Response Training and Equipment for Emergency Responders
- Pesticide/Mercury Roundups/Collection Events
- Scrap Tire Resurfacing Grant
- Scrap Tire Cleanup
- Solid Waste Management District Grants
- Illegal dumping investigation
- Missouri Market Development



## **Land Reclamation**

*Ensure proper stewardship of the environment during and after mining activities and restores abandoned mine lands to productive use*

*Where you will see us at work in your community*

- Permits to coal mines, industrial minerals (e.g., limestone), sand and gravel operations and metallic minerals (lead)
- Inspections, and compliance assistance.
- Abandoned mine land restoration projects.



## Land Reclamation

### *Current Issues:*

- Increase in mining for Missouri aggregates
- Abandoned mine shafts still behind discovered



## Land Reclamation

### *How we can help:*

- Funding available for historic surface coal mine restoration
- Funding available for permanent sealing of open coal and metal underground mines.



## Environmental Services

- Provide laboratory services including chemical analysis of samples for over 300,000 parameters and chemical analysis of drinking water samples for public water supplies



- Operate a statewide network of air monitoring stations (monitor ambient air quality in accordance with EPA regulations)

## Environmental Services

- Conduct water quality monitoring activities in Missouri's rivers and streams
- Conduct landfill gas and groundwater sampling and analysis
- Conduct land-based and groundwater sampling for presence or migration of hazardous substances



## **Environmental Emergency Response (EER)**

- Maintain a 24/7 Environmental Emergency Response service for hazardous materials releases, natural and manmade disasters, and homeland security incidents
- Provide assistance to communities with Local Emergency Planning Committees, and also provides assistance with meth lab chemical waste, and mercury collection
- Monitor and assess the status of regulated facilities impacted or threatened by natural disasters, including hands-on mitigation and remediation of hazardous materials



## Energy

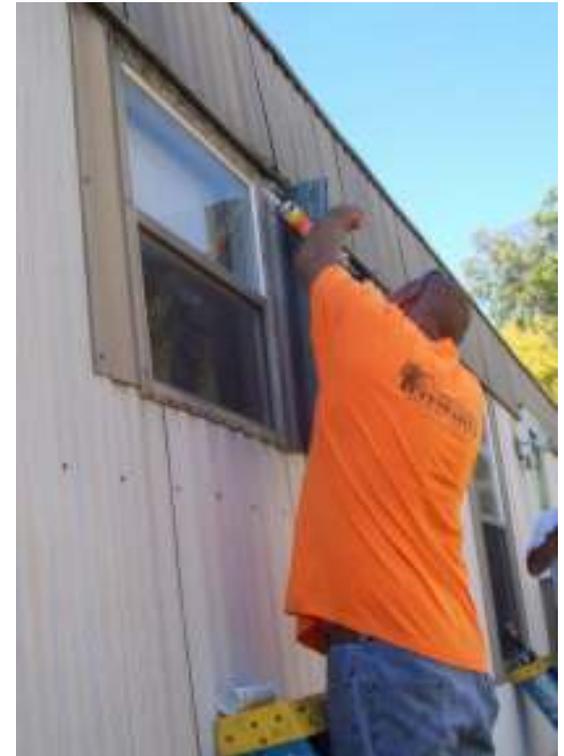
- Low Income Weatherization Assistance Program
- Energy Efficiency and Conservation Block Grant Program
- School and Local Government Revolving Loan Fund
- Energize Missouri Schools and Local Governments Program
- Property Assessed Clean Energy (PACE) and Qualified Energy Conservation Bonds (QECCB)
- Building Energy Codes

## Low Income Weatherization Assistance

### **Mission:**

*Help qualified, low-income families reduce their energy expenses by providing energy-saving home weatherization services, while ensuring their health and safety as it relates to the condition of their home and its appliances.*

- *A home that has been weatherized can reduce average annual energy consumption per dwelling by 30 percent.*



## **Energy Efficiency and Conservation Block Grant (EECBG) Program**

DNR received \$12,568,100 in EECBG funding under ARRA to improve energy efficiency in the public sector, reduce fossil fuel emissions and create jobs. Funds were awarded to 64 smaller cities and counties that did not receive direct funding from the U.S. DOE.

Grants awarded in 4 program areas:

- Public Buildings Energy Efficiency Retrofits – 33 grant awards
- Green Streets – 6 grant awards
- Water and Wastewater Treatment Efficiency – 19 grant awards
- Special Community Initiatives – 6 grant awards

Projected results of the grants:

- 105 jobs created
- 47,750,000 kilowatt-hours saved per year
- 11,657 tons of CO<sub>2</sub> reduced (equal to 2,022 cars removed from the road)

## Energy Efficiency and Conservation Block Grant (EECBG) Program

### Project Examples:

City or County	Grant Award \$	Project Description	Total Project Cost \$
City of Gladstone	\$75,000	Retrofit 6 buildings with lighting and HVAC.	\$100,000
City of Independence	\$1,000,000	Change wastewater treatment process from mechanical aeration to diffused aeration.	\$1,449,539
City of Columbia	\$1,000,000	Establish a heat recovery system at the landfill gas recovery power plant.	\$3,976,261
City of Fulton	\$436,911	Install a 280 kW generator for landfill gas (methane) to energy project.	\$582,548

## **Energy Efficiency and Conservation Block Grant (EECBG) Program**

**City of Cape Girardeau**  
Lighting Efficiency Improvements  
Award: \$333,724



## **School and Local Government Revolving Loan Fund**

Since 1989, the Revolving Loan Fund has loaned nearly \$82 million throughout Missouri.

Loans provided to public schools, universities, colleges, cities, counties, public hospitals and water treatment plants to help reduce energy costs. Funds can be used for insulation, lighting systems, heating and cooling systems, windows and other measures that reduce energy use and cost.

Loan financing frees up tax dollars for essential services or other capital improvements. Loan recipients repay the loan with money saved on energy costs as a result of implementing energy-efficiency projects. Energy-saving loans are not defined as debt and therefore do not count against debt limits or require a public vote or bond issuance.

## *Energize Missouri*

### **Schools and Local Governments Program**

ARRA funds provided to public schools, local governments, colleges and universities to help reduce energy costs. Such projects included upgrading:

- insulation,
- lighting systems,
- heating and cooling systems,
- windows, and
- other items that affect energy use.

Estimated energy savings -- \$1,925,237 annually through this program.

## ***Energize Missouri Schools and Local Governments Program***

### **Project Example:**

**Lincoln University** in Jefferson City, MO

- **Loan amount:** \$1.6 million
- **Purpose:** Replace an existing boiler plant and upgrade lighting in several buildings

### **Estimated Savings:**

- \$205,120 annually
- 1,208,744 kilowatt hours of electricity
- 1,587 MMBtu of natural gas annually
- 912.4 metric ton of Co<sub>2</sub>e reduced (equal to removing 179 cars from the road)



## **Other Funding Opportunities**

### **Property Assessed Clean Energy (PACE)**

- Missouri PACE enacted in 2010 (Chapter 67.2800-67.2835, RSMo)
- Cities and counties form boards to finance energy efficiency and renewable energy projects repaid by owner on property tax bills

### **Qualified Energy Conservation Bonds (QECBs)**

- ARRA-created tax credit bond program for state/local governments for energy efficiency, renewable energy, green community programs
- Administered by Missouri Department of Economic Development

### **Building Energy Codes**

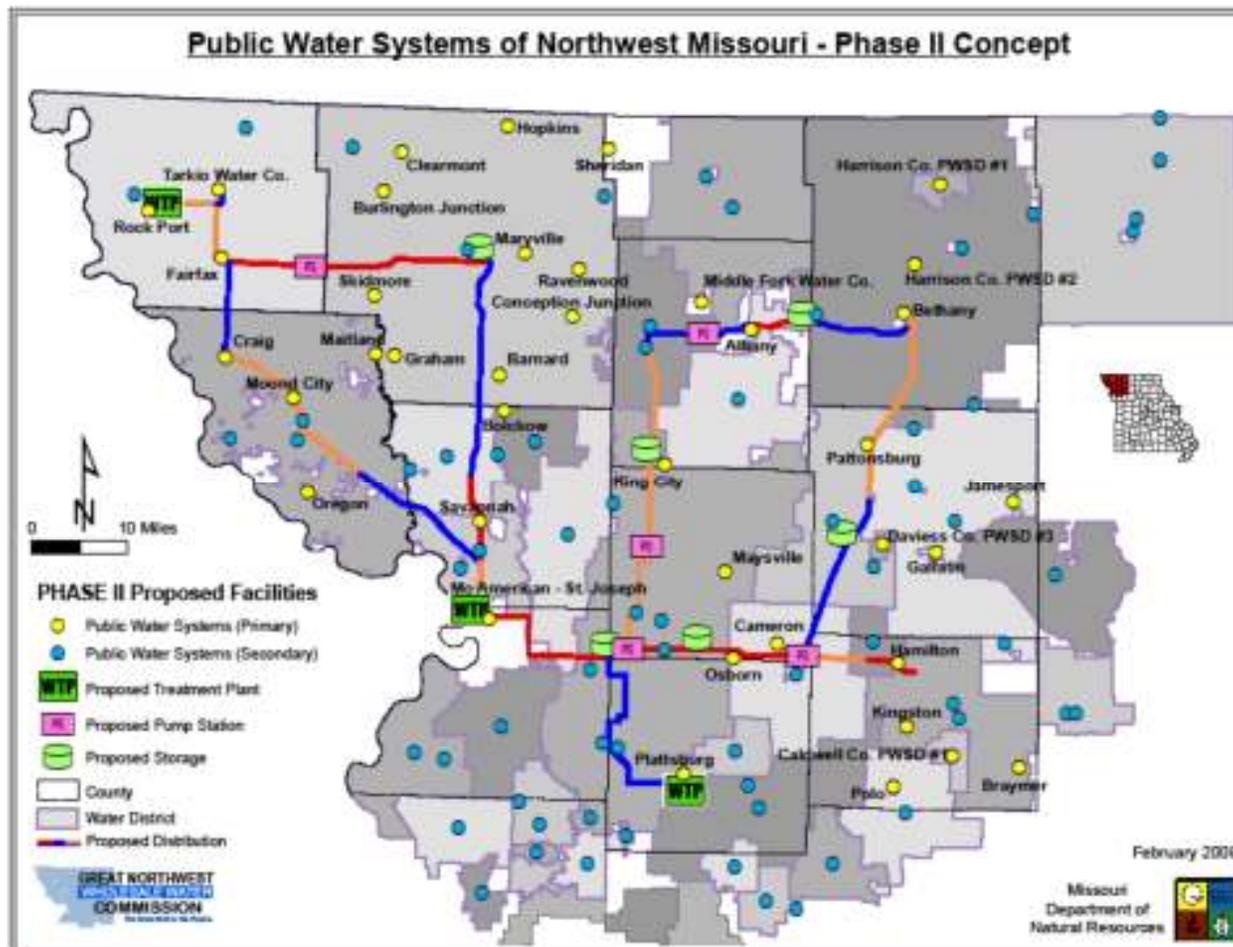


## **Water Resources**

Current water resources development and implementation efforts

- Water supply reservoir capacity – primarily Northern MO
- Regional water transmission study - Northwest MO
- Regional water supply planning – Howard County Commission
- 50 year water demand forecast study (Tri State) – SW MO
- Water supply storage (Clarence Cannon) - Northeast MO
- Water supply development (North Central, MO reservoir)
- Regional groundwater availability studies - Stone, Taney & Greene Co.
- Regional irrigation water use study – SW and West Central MO
- Enhanced water resources monitoring - Statewide
- Drought Response – Statewide (as needed)

# Northwest Missouri Water Supply Project



## Tri-State Water Supply Planning (SW MO)

- Groundwater supply limitations
- Tri-State Water Resource Coalition formed
- 2006 Study identified 6 alternatives
- 2009 Screening study for potential new reservoir locations
- 50 Year Water Demand Projection Study

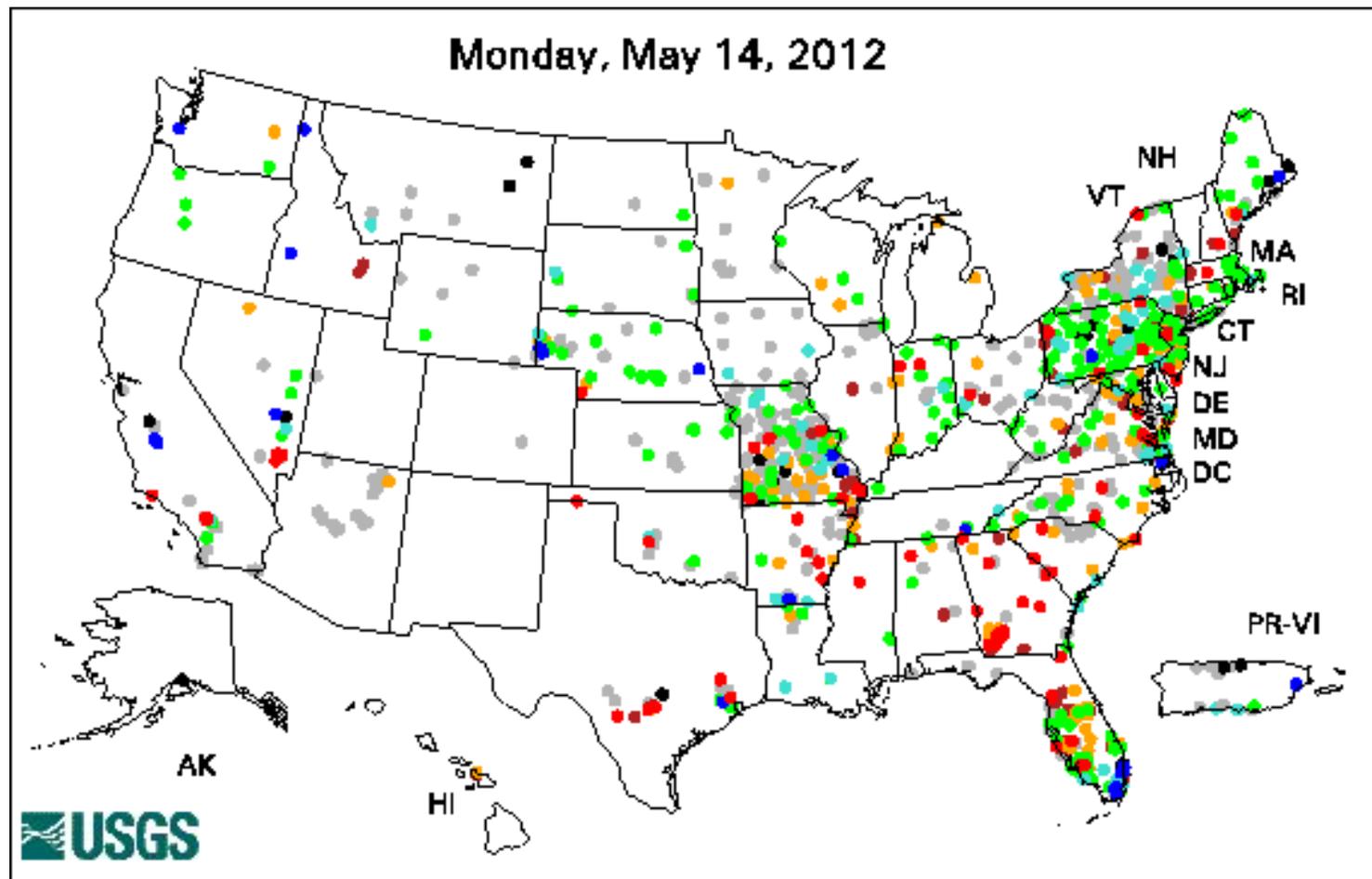
## Water Supply Studies

Grindstone Reservoir  
Cameron, MO.

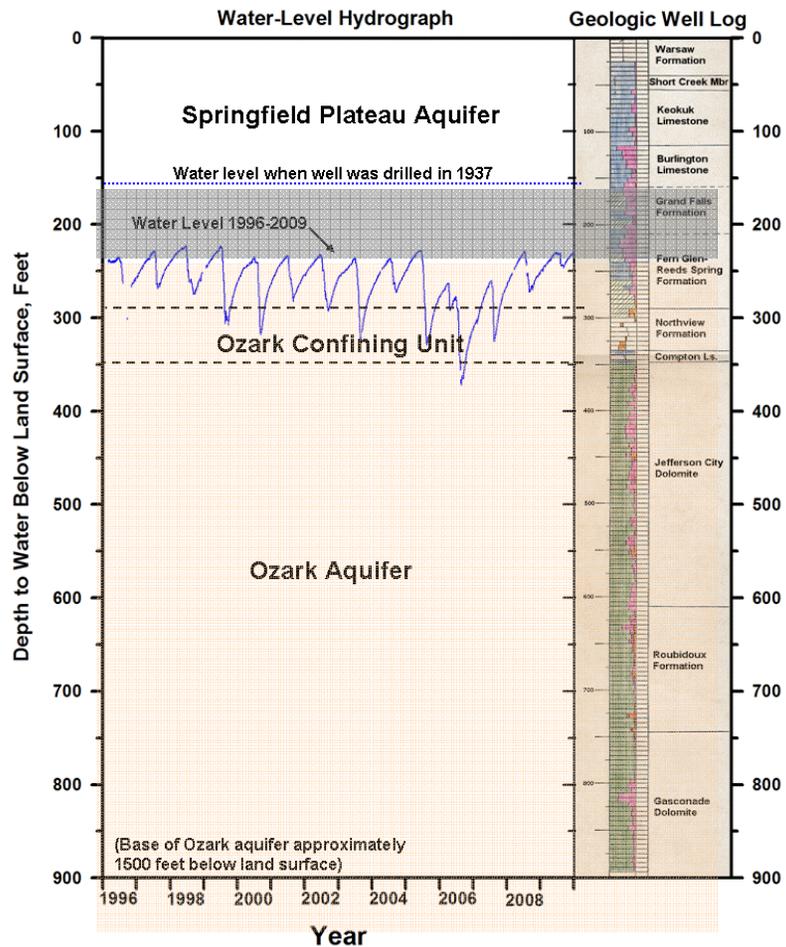
2005 Photo  
Looking East  
from boat ramp,  
down 93 inches



# Real-time Groundwater Monitoring



**Golden City Observation Well, Barton County**



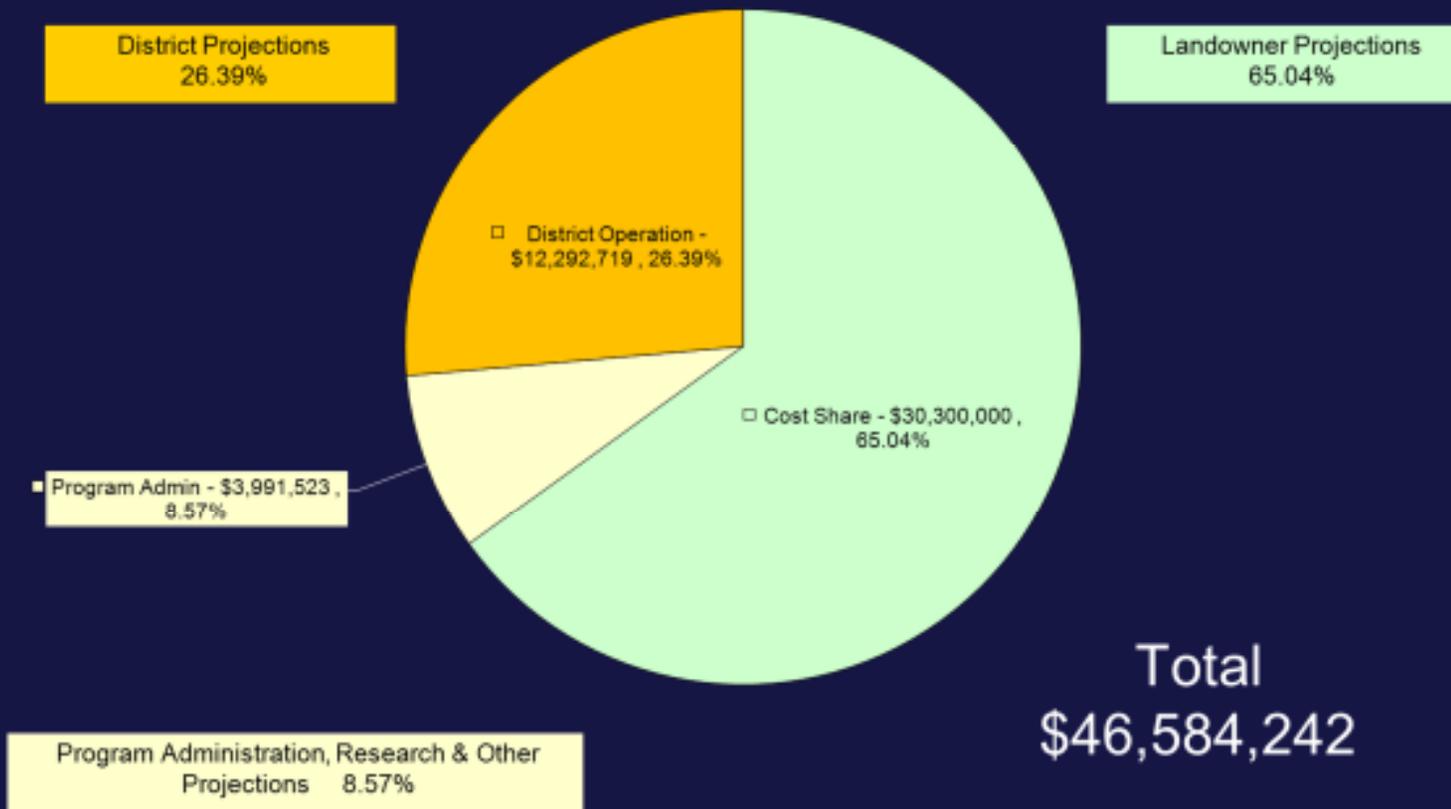
Missouri Department of Natural Resources  
 Water Resources Center

## **Soil and Water Conservation**

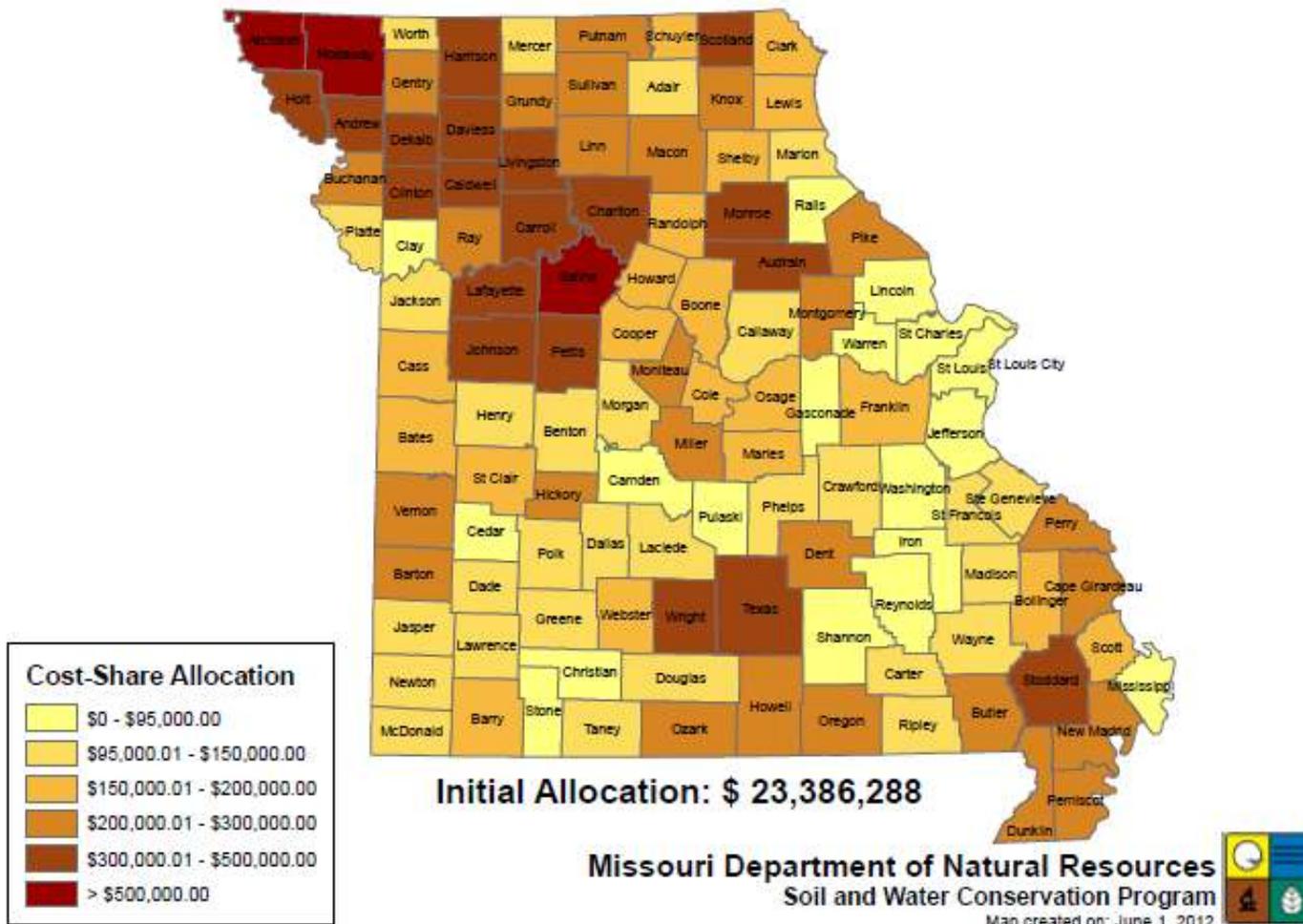
### **Conservation Resource Concern Categories**

- Sheet/ Rill and Gully Erosion
- Woodland Erosion
- Irrigation Management
- Animal Waste Management
- Sensitive Areas
- Nutrient and Pest Management
- Grazing Management

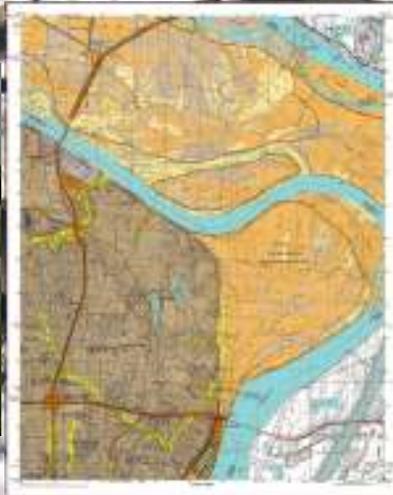
**FY 2013 SWCP Projected Budget Allocation  
As of 6/8/12**



**FY13 Initial Cost-Share Allocation**



# Geology and Land Survey



Practical application of geology and related earth sciences for the benefit of Missouri

# Geology and Land Survey

## Geological Survey Program

- Geologic Mapping
- Energy Resources
- Wellhead Protection
- Economic Geology
- Environmental Geology
- Geologic Hazards
- Data Preservation
- Emerging Technologies



## Geological Survey Program

### *Services for Communities*

- Geologic suitability of liquid and solid waste disposal sites
- Geologic/hydrologic assessment of karst terrain
- Watershed assessment
- Waste water evaluations
- Infrastructure evaluations



# Geology and Land Survey

## Land Survey Program

- *Preserve, protect, and maintain the Public Land Survey System and the Missouri Geographic Reference System*



## Land Survey Program

### *Services for Communities*

- Nearly 2 million documents and records in the Land Survey repository for public access
- County Cooperative – partnership to restore corner monuments



Missouri Department of

**Natural Resources**

# Missouri State Parks

## **Land and Water Conservation Fund (LWCF) Grant Program**

- Federal-aid assistance program through the Department of the Interior's National Park Service.
- Administered in Missouri by the State Inter-Agency Council for Outdoor Recreation and the Department of Natural Resources.
- Purpose is to help states provide Outdoor Recreation to the public.
- Funding comes from off shore oil leases, *no federal taxes used.*

## Eligible LWCF Projects

Three categories for Outdoor Recreation

Land Acquisition, Development, Renovation



## LWCF Grant Details

Eligible: Local Governments and School Districts

Grant maximum is \$75,000.00

Grant requires a match - of 55%

- cash match
- in-kind – labor and equipment
- donations - labor (not to exceed 25% of match), materials and equipment

Grant is reimbursed, not paid upfront

## Recreational Trails Grant Program

Federal-aid assistance program thru Federal Highway Administration (SAFETEA-LU).

Purpose to help state provide and maintain recreational trails for motorized and non-motorized statewide recreational trail use.

Funding comes from the portion of motor fuel excise tax attributed to non-highway recreational fuel use.

## Eligible RTP Projects

New Trail Construction



Renovation of Existing Trails



Develop Trailheads or Amenities



Purchase trail equipment to maintain trails

## RTP Grant Details

Local, state and federal governments, school districts, for-profit and non-profit organizations, businesses and Indian Tribes are eligible.

Grant maximum is \$100,000.00

Grant requires a match - at least 20% cash match  
in-kind (labor, equipment)  
donations (labor, materials, equipment)

Grant is reimbursed, not paid upfront

## Division of State Parks



- The **State Historic Preservation Office** works with citizens and groups throughout the state to identify, evaluate and protect Missouri's diverse range of historic, architectural and archaeological resources.

## Certified Local Government Program (CLG)

- Communities participating work with the SHPO and the National Park Service (NPS) to carry out **historic preservation activities in their communities.**
- SHPO staff helps communities to draft **local preservation ordinances** and **assist communities in getting ordinances passed by local city councils.**
- SHPO staff **monitors the activities of local preservation commissions** to ensure that they are carrying out their duties in a defensible manner.
- **Historic Preservation Fund (HPF) grants** are awarded to assist in local preservation projects.
- SHPO staff organizes and presents a **CLG Training Forum** each year.



## Missouri's 53 Certified Local Governments

Arrow Rock	Augusta	Blue Springs
Boonville	Cape Girardeau	Carthage
Chesterfield	Clarksville	Columbia
Cottleville	Cuba	Excelsior Springs
Fayette	Ferguson	Florissant
Fredericktown	Grandview	Hannibal
Harrisonville	Hermann	Independence
Jefferson City	Joplin	Kansas City
Kirkwood	Kirksville	Lee's Summit
Lexington	Liberty	Lone Jack
Louisiana	Manchester	Moberly
Oakland	Ozark	Pasadena Hills
Pleasant Hill	Poplar Bluff	Rocheport
St. Charles	St. Joseph	St. Louis
Ste. Genevieve	Saline County	Springfield
Troy	University City	Warrensburg
Washington	Webb City	Webster Groves
Weston	Wildwood	

## Historic Preservation Fund (HPF) Grants

- **10% of yearly federal appropriation** to the states is made available as pass-through grants to Certified Local Governments.
- Grants can be used for activities such as **architectural survey**, preparation of **National Register of Historic Places nominations**, **design guidelines** and other **educational and protection activities**.
- HPF Grants are funded on a **60/40 ratio**.
- HPF Grants are **restricted to CLGs**.



## Missouri Heritage Properties Program



- Grant program established in 2007 to assist in the **preservation of historic publically owned buildings.**
- Program is funded with monies from the **Nonresident Athletes and Entertainers Tax.**
- Grant program has targeted the rehabilitation of **Missouri's historic courthouses.**
- This year's grant's will target the preparation of **courthouse Masterplans.**



Questions?

Thank you...time for lunch!