

Department of Natural Resources

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The Department of Natural Resources (DNR) preserves, protects and enhances Missouri's natural, cultural and energy resources. The department was created under state reorganization on July 1, 1974. Staff works to ensure Missouri's citizens enjoy clean air to breathe, clean water for drinking and recreation and land that sustains a diversity of life. The department continues to learn how to improve environmental protection by using new technologies and through better understanding.

The department deals with the critical area of energy; helps develop mineral resources in an environmentally safe manner; protects Missouri's land, air and water resources; and works to preserve the state's historic and natural heritage through state parks and state historic sites.

Several offices enable the department to carry out its responsibilities: the divisions of energy, environmental quality, geological survey, state parks and administrative support. In addition, the State Environmental Improvement and Energy Resources Authority and the Petroleum Storage Tank Insurance Fund are connected administratively to the department through the Office of the Director.

Stakeholder and public involvement plays a critical role in helping the department protect and improve Missouri's natural resources. By working together, Missouri's abundant and glorious natural resources will continue to provide a valuable quality of life for generations to come.

Office of the Director

The director of the Department of Natural Resources is appointed by the governor and confirmed by the Senate. The director and the Office of the Director staff manage the policy and operations of the department through its five divisions, improve efficiencies through strategic planning and ensure public participation through the decision-making process to ensure the department follows federal and state regulations. The office



SARA PARKER PAULEY Director



VALERIE EVERS Executive Assistant to Director



JAY ATKINS Legislative Liaison



GENA TERLIZZI Director of Communications



RENEE BUNGART Deputy Director of Communications

includes general counsel, communication and education, legislative, water resources and soil and water conservation.

The director serves as the state historic preservation officer, chair of the State Interagency Council for Outdoor Recreation and the Energy Policy Council. The director also serves as a member of the Soil and Water Districts Commission, the Petroleum Storage Tank Insurance Fund Board of Trustees and the Unmarked Human Burial Consultation Committee. The department director represents Missouri on three interstate river organizations: the Missouri River Basin



RICHARD FORDYCE Chair, Soil and Water Conservation Program



GARY VANDIVER Vice Chair, Soil and Water Conservation Program



CHARLIE AUSFAHL Member, Soil and Water Conservation Commission



THOMAS BRADLEY Member, Soil and Water Conservation Commission



H. RALPH GAW Member, Soil and Water Conservation Commission



Ex Officio Member, Soil and Water Conservation Commission

Commission, the Arkansas-White-Red Basins Interagency Committee and the Upper Mississippi River Basin Commission.

Soil and Water Conservation Program

The Office of the Director houses the Soil and Water Conservation Program. The program administers the policies and general programs for agricultural lands developed by the Soil and Water Districts Commission. The primary responsibility of the program is to assist local soil and water conservation districts as they promote voluntary soil and water conservation to their constituents. The districts provide financial incentives and technical assistance working with state and federal conservation partners to agricultural landowners.

Other program activities include administering statewide cost-share assistance and providing educational programs on soil and water conservation. The program provides direct assistance to the 114 county soil and water conservation districts through grants and training to support district staff and other administrative expenses. The program also provides each district with a website at *swcd.mo.gov* as well as software and training to further assist constituents.



SARA PAULEY PARKER Ex Officio Member, Soil and Water Conservation Commission



ROBERT L. ZIEHMER Ex Officio Member, Soil and Water Conservation Commission



THOMAS PAYNE Ex Officio Member, Soil and Water Conservation Commission



COLLEEN MEREDITH Staff Director, Soil and Water Conservation Commission

Missouri citizens have shown strong support for soil and water conservation and state parks by passing a 0.1 percent sales tax in 1984, 1988, 1996 and 2006 to fund these efforts. In 2006, the tax passed with more than 70 percent voting in favor of continuing the tax. Fifty percent of the sales tax is deposited in the Soil and Water Conservation Sales Tax Fund to support programs within the Department of Natural Resources used for saving soil and protecting the water resources of the state of Missouri.

Soil and Water Districts Commission

- Fordyce, Richard, (R), chair;
- Vandiver, Gary, (D), vice chair;

Ausfahl, Charlie, (D), member;

Bradley, Thomas, (D), member;

Gaw, H. Ralph, (D), member;

- Bozoian, Harry, ex officio member, acting director, Department of Agriculture;
- Parker Pauley, Sara, director, Department of Natural Resources, ex officio member;
- Payne, Thomas, dean, University of Missouri, College of Agriculture, Food and Natural Resources, ex officio member;
- Ziehmer, Robert L., director, Department of Conservation, ex officio member;

Vacancy (1);

Meredith, Colleen, staff director, Soil and Water Districts Commission.

Water Resources Center

The Office of the Director houses the Water Resources Center, which addresses the development, conservation and utilization of the state's water resources. To assist communities, public entities and state and federal agencies, the center provides technical assistance through drought assessment, planning and water resource monitoring. Areas of expertise within the center include interstate waters, groundwater, surface water, dam and reservoir safety, wetland studies and water resource planning.

The interstate waters staff coordinates issues relating to major river basins that affect Missouri and provide technical support for negotiations and litigation actions to protect the state's rights to these waters. The groundwater section operates and maintains a groundwater-level observation well network for monitoring Missouri's aquifers. Collection and analysis of groundwater data provides knowledge of available water quantity, aquifer response to water use, groundwater recharge and aquifer characteristics. The surface water section provides technical support by performing water supply analyses, in-stream flow assessments and flood inundation studies. This section also administers the collection and analysis of statewide water use data in accordance with the Major Water User Law. The Dam and Reservoir Safety staff and the Dam and Reservoir Safety Council are responsible for ensuring all new and existing non-agricultural, non-federal dams 35 feet or more in height meet minimum safety standards as established by the Dam and Reservoir Safety Law. The center also provides technical support to the Missouri Drought Assessment Committee and leadership and coordination of regional water resources planning initiatives and wetland activities.



KAREN MASSEY Director, EIERA

Dam and Reservoir Safety Council

Boehler, Pat, (D), public member;

Buxton, Dan, PE, (D), professional engineer representing public;

- Cawlfield, Jeffrey D., PE, (D), engineering geologist;
- Clay, Robert, chief engineer;
- Dickerson, Kim, (R), industry;
- **Drury, Kyle, PE,** (R), industry representing earthmoving;

Waddell, Tom, (R), owner of dam or reservoir; Vacancy, professional engineer.

Environmental Improvement and Energy Resources Authority

Telephone: 573-751-4919 / FAX: 573-635-3486

The Missouri General Assembly established the Environmental Improvement and Energy Resources Authority (EIERA) in 1972 to protect Missouri's environment, develop energy alternatives, promote economic development and conduct research.

The EIERA finances projects with tax-exempt bonds and notes, conducts environmental studies and provides technical and financial assistance for market development. The EIERA's mandate is broad, and assistance can be offered to businesses, institutions, municipalities and government agencies for energy conservation and environmental projects.

Cherry, Deron, (R), member; Dalton, Andy, (D), member; DeFreece, LaRee, (D), member; Doyle, Ryan, (R), member; Massey, Karen, director.

Petroleum Storage Tank Insurance Fund Board of Trustees

The Petroleum Storage Tank Insurance Fund Board of Trustees administers the Petroleum Storage Tank Insurance Fund, which insures tank



DONALD McNUTT Chair, Petroleum Storage Tank Insurance Fund



SCHUYLER J. MARIEA Trustee, Petroleum Storage Tank Insurance Fund



JAMES P. FORD Vie Chair, Petroleum Storage Tank Insurance Fund



DANNY OPIE Trustee, Petroleum Storage Tank Insurance Fund

owners against the risks associated with leaks of petroleum products from their tanks or piping. It also provides funding to clean up certain properties where historic tank operations have contaminated the environment, restoring their properties to economic viability.

The 11-member board also includes the commissioner of administration and the directors of the departments of agriculture and natural resources. The governor appoints and the Senate approves eight citizens who each serve a fouryear term. The citizens represent tank owners, financial institutions, industrial and commercial users of petroleum, the insurance industry and the public.

- McNutt, Donald, chair, large owner/operator of petroleum storage tanks representative;
- Ford, James P., vice chair, insurance underwriting industry representative;
- Albert, John, Department of Agriculture designee;
- Kolb, Thomas, small owner/operator of petroleum storage tanks representative;
- Mariea, Schuyler J., financial institutions representative;
- Miller, Marty, department designee, Department of Natural Resources;
- **Opie, Danny,** industrial and commercial users of petroleum representative;



JOHN ALBERT Trustee, Petroleum Storage Tank Insurance Fund



THOMAS J. PFEIFFER Trustee, Petroleum Storage Tank Insurance Fund



RENEE SLUSHER Trustee, Petroleum Storage Tank Insurance Fund



THOMAS KOLB Trustee, Petroleum Storage Tank Insurance Fund



MELVIN SCHEBAUM Trustee, Petroleum Storage Tank Insurance Fund



CAROL R. EIGHMEY Executive Director, Petroleum Tank Insurance Fund

Pfeiffer, Thomas J., public member;
Schebaum, Melvin, owner/operator of aboveground storage tanks representative;
Slusher, Renee, Office of Administration designee;
Vacancy, public member;
Eighmey, Carol R., executive director.

Division of Administrative Support

Telephone: 573-751-7961 / FAX: 573-751-7749

The Division of Administrative Support provides the department with administrative and management support. Budget development, internal audit, accounting, human resources, procurement, grants management and general services are functions performed by the division. The division reviews proposed policies, regulations and legislation to determine fiscal or procedural impacts on the department. Procedures are developed to implement the approved policies, regulations and legislation.

The **Budget Program** is responsible for developing the department's annual operating and capital improvement budgets as well as the preparation of management and legislative reports.

The **Internal Audit Program** performs audits of departmental activities to evaluate internal controls and compliance with laws, regulations and policies, as well as efficiencies and effectiveness of meeting department goals and objectives.

The **Accounting Program** is responsible for purchasing, fixed assets, accounts payable and maintenance; grant, project and fund accounting, reporting and monitoring; and grant and fund fiscal management receipt processing, special projects and analyses.

The **Human Resources Program** is responsible for administering the human resources function for the department. This program assists all divisions with position classification, implements the provisions of the state personnel law, interprets employee benefits, conducts personnel research, coordinates training, provides career counseling and maintains personnel records for all employees of the department.

The **General Services Program** is responsible for maintenance and operation of the agency's motor pool, maintenance and operation of a centralized mailroom and supply center, surplus of departmental property and coordination of telecommunications. The program acts as liaison with the Office of Administration, Division of Facilities Management.

Division of Environmental Quality

Telephone: 573-751-0763 / FAX: 573-751-9277

Protecting and enhancing the quality of Missouri's environment is the responsibility of the department's Division of Environmental Quality. The division assists Missourians with these goals through the traditional roles of permitting, inspections and through proactive efforts to revitalize contaminated sites for redevelopment. Through its regional offices, the department provides compliance assistance, permitting, inspections and other environmental expertise closest to where Missourians live and work. This division also is responsible for protecting and enhancing Missouri's water quality. The division certifies and tracks the required continuing education of



LORI GORDON Director, Division of Administrative Support



LEANNE TIPPETT MOSBY Director, Division of Environmental Quality

all operators of public drinking water systems, wastewater systems and concentrated animal feeding operation waste management systems. The division works to ensure clean air, land and water by cleaning up pollution from the past, addressing pollution problems of today and identifying potential pollution issues of the future. The division administers six technical programs: air pollution control, environmental services, hazardous waste management, land reclamation, solid waste management and water protection.

Air Pollution Control Program

The Air Pollution Control Program works to maintain the purity of Missouri's air to protect the health, general welfare and property of the citizens. The program researches, develops and implements control strategies that help Missouri improve air quality and implement the federal Clean Air Act.

The program evaluates industries wanting to operate in Missouri, predicting their emissions and their impact on the state's air quality and requiring restrictions on emissions where necessary. The program issues construction and operating permits, selects locations for air monitoring equipment and analyzes data collected from these monitors. The program also surveys and inspects sources of air pollution. If a source consistently violates the state's air pollution control regulations, it is subject to enforcement action to return the facility to compliance.

Under the state's federally required plan, the Air Pollution Control Program implements a vehicle emissions testing program in the St. Louis ozone nonattainment area. Ozone is a respiratory irritant that can cause health problems, especially for children, the elderly and people with heart and lung diseases. Through this program, all 1996-and-newer gas-powered vehicles and 1997-and-newer diesel-powered vehicles 8,500 pounds or less registered in the St. Louis ozone

nonattainment area are tested to ensure emissions systems are working properly. This program is a key component of the ongoing effort to improve air quality in the St. Louis region.

The Air Pollution Control Program works with stakeholders, the general public and regulated facilities to comply with local, state and federal air quality regulations. The program carries out the policies established by the Air Conservation Commission.

Air Conservation Commission

The Missouri Air Conservation Commission carries out the Missouri Air Conservation Law. The commission's activities are directed toward achieving and maintaining the National Ambient (outdoor) Air Quality Standards. When air quality in an area meets all standards, the area is considered to be in attainment. If air monitors detect too much of a pollutant, the area is labeled as nonattainment for that pollutant.

The commission adopts, amends and rescinds rules related to air quality and assigns duties to local air pollution control agencies. The commission, through a program involving four delegated local governments and citizens' input, develops strategies for bringing pollutants down to safe levels in nonattainment areas. The commission makes decisions on appeals from enforcement orders and permit conditions. When necessary, the commission also begins legal actions to ensure compliance with Missouri Air Conservation Law and rules.

Pendergrass, Gary J., (R), chair/public member; Baker, Jack C., (D), agriculture representative; Garnett, Mark S., (D), public member;

Zimmermann, David, (D), labor representative; Vacancies (3);

Moore, Kyra, staff director, Air Pollution Control Program.

Small Business Compliance Advisory Committee

The Small Business Compliance Advisory Committee and Small Business Ombudsman are supported by the Air Pollution Control Program. The Clean Air Amendments require states to implement a three-component program to assist small businesses in their efforts to comply with air regulations: the Small Business Ombudsman, technical assistance to small businesses, and the compliance advisory committee.

Cole, T. Robin III, chair; Holsman, Gale, vice chair; Potterfield, Randy L., member; Vacancies (4);

Thompson, Lucy, staff contact, Small Business Compliance Advisory Committee.



GARY J. PENDERGRASS Chair / Public Member Air Conservation Commission



MARK S. GARNETT Public Member Air Conservation Commission



JACK C. BAKER Agriculture Representative Air Conservation Commission



DAVID ZIMMERMANN Member Air Conservation Commission



KYRA MOORE Staff Director Air Conservation Commission

Environmental Services Program

The Environmental Services Program provides department staff with accurate scientific data to perform their work. The program performs field work, conducts monitoring, collects samples and provides laboratory testing for pollutants.

The program's Emergency Environmental Response section, with staff located throughout the state, responds to hazardous substance spills anywhere in the state, 24 hours a day, seven days a week. The department's 24-hour spill notification line logs approximately 3,400 incidents a year. Approximately one half of the incidents involve methamphetamine-related calls. Staff coordinate the department's response to the State Emergency Operations Center during man-made or natural disasters and participate in homeland security efforts. They also oversee the disposal of drug lab chemicals and provide drug-lab-related training to law enforcement.

The Environmental Services Program operates the state's primary laboratory for drinking water chemistry and environmental chemistry, performing approximately 266,000 parameters per year. This includes performing laboratory analysis for nearly 202,000 parameters on drinking water from public systems.

Staff operate air monitoring instruments at approximately 50 locations throughout Missouri, perform air quality studies and upload air quality data to the Internet for public access. The program operates an audit program for air instruments in the state.

The program also conducts water quality monitoring for compliance with wastewater permits. It performs fish tissue sampling, stream surveys, bacterial analyses of surface waters, toxicity analyses, waste load allocations, biological monitoring, landfill groundwater and gas monitoring, and complaint sampling.

Hazardous Waste Program

The department's Hazardous Waste Program protects public health and the environment by keeping Missouri's water, soil and air from being polluted with hazardous wastes and hazardous substances. In addition to enforcing state and federal laws passed to ensure proper management of hazardous wastes being generated today, the program also oversees the cleanup of problem sites resulting from poor waste management in the past.

The Hazardous Waste Program reviews permit applications that, if approved, may allow facilities to treat, store for longer than 90 days or dispose of hazardous waste in accordance with environmental laws and regulations. These permits can also authorize facilities to perform certain types of cleanup activities. The program provides oversight for hazardous waste treatment, storage and disposal facilities in Missouri.

The program maintains a database for more than 15,500 Missouri sites registered as generators of hazardous waste. Many of these sites are no longer generating waste but the information is maintained for future reference.

The program's compliance and enforcement staff help the regional offices inspect generators and treatment, storage and disposal facilities. The program oversees cleanup activities at active and formerly used federal facilities in Missouri. These facilities include those owned or operated by the U.S. Department of Energy, U.S. Department of Defense, other federal agencies and, in some cases, companies that have a contractual tie with one of the federal agencies. The program also currently provides oversight and long-term stewardship at Minuteman II missile sites.

The program's Superfund section evaluates and cleans up federal National Priorities List sites, sites not listed and sites on, or proposed, for the Registry of Abandoned or Uncontrolled Sites in Missouri.

The program promotes voluntary cleanups by allowing landowners to pay voluntarily for state oversight of hazardous substance cleanups. Brownfield cleanups put properties back into productive use, encourage redevelopment and increase economic development in distressed areas.

The department's Hazardous Waste Program has oversight of underground storage tanks and leaking underground storage tanks that contain petroleum, as well as contaminated dry cleaner sites. The program carries out the policies of the Hazardous Waste Management Commission.

Hazardous Waste Management Commission

The Hazardous Waste Management Commission encourages efforts to recycle, incinerate, properly dispose of or otherwise treat hazardous waste. The commission is responsible for categorizing hazardous waste by disposal method and determines fees to be paid by owners or operators of hazardous waste facilities that must obtain a permit. The commission establishes regulations for the generation, transportation, treatment, storage, cleanup and disposal of hazardous waste and hazardous substances. The commission also hears appeals and rules on requests for variances.

All members represent the general interest of the public and have an interest in and knowledge of waste management and the effects of improper waste management on the health of the public and the environment.

Adams, Charles, (D), agriculture representative; Aull, Elizabeth B., (R), waste management industry representative;

Bracker, Andrew J., (D), public member;

Foresman, Michael R., (R), public member;

Frakes, James T. (Jamie), (R), public member;

Sugg, Deron, (D), public member;

Vacancy (1);

Lamb, David, staff director, Hazardous Waste Management Commission.



ELIZABETH B. AULL Waste Management Industry Representative, Hazardous Waste Management Commission



ANDREW J. BRACKER Public Member Hazardous Waste Management Commission

Land Reclamation Program

The Land Reclamation Program works with the mining industry and Missouri communities to minimize the environmental and health impacts of mining activities in Missouri.

The program carries out Missouri's Abandoned Mine Land program to reclaim abandoned coal mine sites within Missouri that have safety hazards or environmental problems. The program also regulates mining and reclamation activities and issues permits. Reclamation bonds ensure sites are properly graded, replanted and maintained after mining ceases. After the mining company completes all required reclamation, the commission releases these financial assurances and relieves the responsible company of any further reclamation liabilities.

The program works with stakeholders, the general public and regulated facilities to comply with state and federal mining and land reclamation regulations.

Land Reclamation Commission

The Land Reclamation Commission is the ruling body over Missouri's mining requirements set forth in three state statutes. These mining statutes protect public health, safety and the environment from the adverse effect of mining and assure the beneficial restoration of mined lands.

The Land Reclamation Commission is responsible for issuing mining permits and oversees Missouri's Abandoned Mine Land program. The commission establishes rules and regulations for mining activities and oversees investigations and inspections necessary to ensure compliance. The commission conducts hearings and when necessary may revoke a permit, order a forfeiture of bonds or cease operations at a facility for failure to comply.

The seven-member commission includes three statutory and four public members. The



MICHAEL R. FORESMAN Public Member Hazardous Waste Management Commission



DERON SUGG Public Member Hazardous Waste Management Commission



JAMES T. (Jamie) FRAKES Public Member Hazardous Waste Management Commission



DAVID LAMB Staff Director Hazardous Waste Management Commission

statutory members include the state geologist, the director of the Missouri Department of Conservation and the staff director of the Clean Water Commission. The four public members must have an interest in and knowledge of conservation and land reclamation, and one must have training and experience in surface mining. Only one member of the commission may have a direct link with the mining industry. With Senate approval, the governor appoints four public members. All members serve a four-year term and continue until their successors are appointed.

DiPardo, James M., (D), chair/surface mining;

- Haddock, Dr. Gregory, (R), vice chair/public member;
- Gillman, Joe, statutory member, director and state geologist, Missouri Geological Survey;
- **Madras, John,** statutory member, staff director of Clean Water Commission;
- Gertsch, Dr. Leslie, (I), public member;
- Vacancy, (1), public member;
- Jeffries, Aaron, ex officio member, designee, Department of Conservation;
- Mohammadi, Kevin, staff director, statutory member, Land Reclamation Commission.





JAMES M. DiPARDO Chair/Surface Mining Land Reclamation Commission

DR. GREGORY HADDOCK Vice Chair/Public Member Land Reclamation Commission

Regional and Satellite Offices

The regional offices and satellite offices assist with local environmental matters. Regional offices in St. Louis, Kansas City, Springfield, Poplar Bluff and Macon provide the department closer contact with the public through field inspections of regulated facilities, complaint investigation, front-line troubleshooting and technical assistance, as well as local environmental emergency response.

Solid Waste Management Program

The department's Solid Waste Management Program works to help Missourians and Missouri businesses properly manage their solid waste to protect public health and the environment.

The Solid Waste Management Program issues permits and permit modifications for solid waste disposal and processing facilities. Staff review proposed permits for facility design, construction, operations and proper monitoring controls. Program staff inspect permitted facilities quarterly and oversee the operations of these facilities. In addition, staff investigate reports of illegal dumping across Missouri and teach state regulations to landfill operators. Enforcement activities are conducted when necessary to ensure proper solid waste management. Other focuses of the program include planning, financial and technical assistance and educational activities that inform the public of the relationship between individual consumption and solid waste management.

The Solid Waste Management Program works with stakeholders, the general public and regulated facilities to comply with state and federal solid waste regulations.

Solid Waste Advisory Board

The Solid Waste Advisory Board advises the department about the effectiveness of its technical assistance and challenges experienced by the solid waste management districts in developing and implementing solid waste management



JOE GILLMAN Statutory Member Missouri Geological Survey



JOHN MADRAS Statutory Member Land Reclamation Commission



DR. LESLIE GERTSCH Public Member Land Reclamation Commission



AARON JEFFRIES Ex Officio Member Land Reclamation Commission



KEVIN MOHAMMADI Staff Director/Statutory Member Land Reclamation Commission

plans. The board advises the department and develops improved methods of solid waste minimization, recycling and resource recovery.

The membership of this board consists of the chair of the executive board of each of Missouri's 20 recognized solid waste management districts; three public members; two representatives from the solid waste industry; and one representative from the recycling or composting industry appointed by the director of the Missouri Department of Natural Resources.

Roach, Debbie, chair, Region A; Heil, Nelson, chair, Region B; **Thompson, Mark,** vice-chair, Region C; Bontrager, Drew, chair, Region D; Bussen, Chris, chair, Region E; Dyer, Tracy, chair, Region F; Wyatt, Alan, chair, Region G; Henry, Lauren, chair, Region H; Little, Lon, chair, Region I; True, Brad, chair, Region J; Wilson, Brady, chair, Region K; Haasis, John, chair, Region L; Honey, Jim, chair, Region M; Lomax, Gary, chair, Region N; Smith, Tim, chair, Region O; Collins, Gary L., chair, Region P; Dement, Darrell, chair, Region O; Heaps, Patrick, chair, Region R; Herbst, Jeannie, chair, Region S; Wright, Tom, chair, Region T; Bahrenburg, David, IESI Missouri, solid waste industry representative; Standley, Derrick, Waste Corporation of Missouri, solid waste industry representative; Geraty, Patrick, St. Louis Composting, recycling

industry representative;

Noel, Sue, Silver Dollar City, public member;

Bennett, Denise, Macon County Economic Development, public member.

Water Protection Program

The department's Water Protection Program administers clean water and drinking water responsibilities for Missouri. The program is delegated by the U.S. Environmental Protection Agency to conduct duties for the federal Clean Water Act and Safe Drinking Water Act, and also carries out state responsibilities, such as operator certification and construction permitting. The Water Protection Program works with stakeholders, the general public and regulated facilities to comply with state and federal water regulations.

For clean water, the program regulates pollutants entering the state's waters by issuing permits for the construction and operation of wastewater and stormwater discharges. Permits set wastewater treatment levels necessary to protect water quality. These treatment levels are included in permits issued to municipal, industrial and other dischargers. The program evaluates dischargemonitoring and other data to determine whether facilities comply with applicable laws and whether permits are sufficient to protect water quality. The program, with the Division of Environmental Quality's regional offices, is responsible for the inspection and monitoring of water contaminant sources and investigates complaints from the public. If a source violates the Missouri Clean Water Law, the program works with the facility to correct the problem and may assess penalties if necessary.

Water quality standards protect beneficial uses of water such as swimming, maintaining fish and other aquatic life and providing drinking water for people, livestock and wildlife. The program, with the Clean Water Commission, develops water quality standards that provide clear expectations for Missouri water quality and conducts monitoring to determine if the standards are met. Waters that do not meet these standards are placed on the impaired waters (303(d)) list, which provides a focus for special attention to restore water quality in the lakes, streams and rivers. Once a waterway is added to the 303(d) list, the department develops and implements a study to correct the water impairments. Generally, this study takes the form of a total maximum daily load document. It describes the maximum amount of a pollutant that may enter a water body without violating water quality standards.

For drinking water, the program reviews plans and issues permits for the construction and operation of public drinking water systems and requires these systems to monitor for contaminants and take corrective action if any health-based standards are exceeded. The program performs monitoring of drinking water and conducts periodic inspections and provides compliance assistance on water supply problems to cities, water districts, subdivisions, mobile home parks and other facilities.

Financial assistance is provided through grants and low-interest loans to local governments to assist in the construction of wastewater, drinking water and storm water facilities. The program also provides financial and technical assistance for the control of nonpoint source pollution caused by agriculture, mining, transportation and other activities.

Clean Water Commission

The Clean Water Commission brings together and coordinates all aspects of water quality in an effort to ensure the state's progress toward protecting, preserving and improving water quality in Missouri. The commission implements the federal Clean Water Law through rules and policies, and hears appeals based on those permit decisions. When necessary, the commission will take enforcement action against those who violate the Missouri Clean Water Law and related regulations. The commission also establishes funding priorities and oversees financial assistance to protect and preserve water quality.

All commission members represent the general interest of the public and shall have an interest in and knowledge of conservation and the effects and control of water contaminants.

EXECUTIVE DEPARTMENTS — NATURAL RESOURCES



BUDDY BENNETT Waste Water Treatment Representative Clean Water Commission



IOHN COWHERE Public Member Clean Water Commission



SAMUEL M. HUNTER Agriculture, Industry or Mining Representative Clean Water Commission



SAM LEAKE Agriculture, Industry or Mining Representative Clean Water Commission



BEN A. (Todd) PARNELL Public Member Clean Water Commission



WALLIS WARREN Public Member Clean Water Commission

Cowherd, John, (R), public member;

- Bennett, Buddy, (I), wastewater treatment representative:
- Hunter, Samuel M., (D), agriculture, industry or mining representative;
- Leake, Sam, (D), agriculture, industry or mining representative;
- Parnell, Ben A. (Todd), (D), public member;

Warren, Wallis, (D), public member;

Wood, Dennis, (R), public member;

Madras, John, staff director, Clean Water Commission.

Safe Drinking Water Commission

The purpose of the Safe Drinking Water Commission is to ensure all 2,800 public water systems in Missouri provide safe drinking water. The commission adopts rules to carry out the requirements of the Missouri Safe Drinking Water Law and Federal Safe Drinking Water Act. The commission establishes criteria and procedures for administering the Drinking Water State Revolving Fund, which makes federal and state loan funds available to communities to upgrade and improve their drinking water systems.



DENNIS WOOD Public Member Clean Water Commission



JOHN MADRAS Staff Director Clean Water Commission

All members of the commission represent the general interest of the public or public water systems.

- Grove, Elizabeth K., chair, represents water systems of 75 to 2,500;
- Armstrong, Susan McCray, vice chair, public representative;
- Bockenkamp, D. Scott, public representative;
- Hazelwood, Susan, public representative;
- Ledgerwood, Charli Jo, represents a water system of 2,500 to 100,000;
- Manning, Bruce, public representative;
- Owens, Rodger D., represents water systems 75 or less:
- Skouby, Curtis, represents water systems 100,000 or more:
- Vacancy, public representative;
- Sturgess, Steven W., staff director, Safe Drinking Water Commission.

Missouri Geological Survey

Telephone: 573-368-2100 / FAX: 573-368-2111

The Missouri Geological Survey provides technical assistance, education and guidance in the use and protection of Missouri's natural re-







D. SCOTT BOCKENKAMP Public Representative Safe Drinking Water Commission



SUSAN HAZELWOOD Public Representative Safe Drinking Water Commission



BRUCE MANNING Public Representative Safe Drinking Water Commission



RODGER D. OWENS Safe Drinking Water Commission



Safe Drinking Water Commission



STEVEN W. STURGESS Staff Director Safe Drinking Water Commission

sources, interprets the state's geological setting, helps determine the availability of its energy and mineral resources, evaluates and interprets geological hazards and regulates well drillers. The division investigates and reports on the state's geological resources and defines hazardous areas, such as those subject to earthquake or catastrophic collapse.

They cooperate with the U.S. Geological Survey on numerous projects, including the National Cooperative Geologic Mapping Program. The division also performs work under contract for other state agencies through grants and agreements.

Division Director and State Geologist

The division director serves as the state geologist and is responsible for ensuring that statutory obligations are met. The state geologist is the administrator of the Missouri State Oil and Gas Council; serves on the Well Installation Board, Land Reclamation Commission and Industrial Minerals Advisory Council; serves as *ex officio* member on the Board of Geologist Registration; and is a Missouri representative to the Central United States Earthquake Consortium and the Association of American State Geologists.

Geological Survey Program

The Geological Survey Program uses geologic information and knowledge to assist Missouri citizens in the management of natural resources for a higher standard of living and healthy natural environment. The program gathers data that describes and interprets Missouri's vast geological resources, which is important in making landuse decisions. This information is necessary for locating mineral deposits, managing groundwater resources, selecting waste disposal facilities and evaluating geologic hazards. The program receives thousands of requests for geological assistance each year.

Staff in this program also conduct geologic field investigations that provide technical assistance to the public and government agencies. These services include determining the environmental hazards posed by waste disposal sites and spills of hazardous materials. Geological principles also are applied to minimize the impact of chemical releases or spills.

The Geological Survey Program works to protect groundwater from contamination through regulation of the construction of wells, plugging of abandoned wells and licenses all Missouri well drillers and pump installers. In addition to assistance provided in siting waste disposal facilities, the program also implements the Oil and Gas Act and the Underground Injection Control Program of the Safe Drinking Water Act.

State Oil and Gas Council

The State Oil and Gas Council promotes the economic development and production of Missouri's oil and gas resources, works to ensure that wastes generated by oil and gas wells are managed properly and protects groundwater aquifers that may be affected by oil and gas well drilling.

- Madras, John, council chair and director, Clean Water Commission, Division of Environmental Quality's Water Protection Program director;
- Dunn-Norman, Shari Ph.D., vice chair and professor, Petroleum Engineering, Missouri University of Science & Technology, Rolla;
- Gillman, Joe, department designee, director and state geologist, Missouri Geological Survey;
- Bleakley, David, industry member, Colt Energy Inc.;
- Kenney, Robert S., chair, Missouri Public Service Commission;
- Luebbert, William J., public member;
- **Ransdall, Bill L.,** specialist, Community Planning and Development, Department of Economic Development;

Vacancy, public member.

Industrial Minerals Advisory Council

The Industrial Minerals Advisory Council is composed of eight representatives of the industrial minerals industry who are appointed by the director of the department. The representatives include three from limestone producers and one each from industries involved in mining clay, sandstone, sand and gravel, barite and granite. Other members include the director (or designee) of the Department of Transportation and the director (or designee) of the Department of Natural Resources, who acts as chairperson of the council.

The primary duty of the council is to advise the department on the collection, processing, management and distribution of geologic and hydrologic information to assist the industrial mineral industry. Expenditures from the geologic resources fund, which was created to complete these activities, are reviewed by the council, and the council advises the department on appropriate fees to support the fund.

- Gillman, Joe, chair, department designee, director and state geologist, Missouri Geological Survey;
- Ahlvers, David, state construction and materials engineer, Department of Transportation;
- Carlson, Mikel, limestone, Gredell Engineering Resources Inc.;



JOE GILLMAN Director Missouri Geological Survey

Keller, David, clay, Harbison Walker Refractories;
Rowe, Dan, sandstone, Unimin Corporation;
Tucker, Diane, limestone, APAC;
Upp, Chris, limestone, Conco Quarries Inc.;
Winter, Ryan, sand and gravel, Winter Brothers Materials;
Vacancy, barite;
Vacancy, granite.

Well Installation Board

The Well Installation Board adopts and amends rules governing well construction and the well drilling industry to protect Missouri's groundwater resources. The board also oversees the examination and licensing of all well drillers and pump installers and takes actions against those who violate the Water Well Driller's Act and Well Construction Rules. The board sets fees by establishing rules that do not substantially exceed the cost and expense of administering the law. The board acts as an appeal board by sustaining, reversing or modifying enforcement orders issued by Missouri Geological Survey after an appeal has been made by an affected person.

All members of the board are conversant in well drilling, completion and plugging methods and techniques.

Flynn, Danny, chair, well installation contractor representative;

- Schoen, Fred, vice chair, heat pump installation contractor representative;
- Broz, Robert, public member;
- Gillman, Joe, department director designee, director and state geologist, Missouri Geological Survey;
- Lawrence, Robert, well installation contractor representative;
- Morgan, M. Sharlene, public member;

St. Clair, Annetta, private well user representative;

Vacancy, public water user representative;

Vacancy, monitoring well installation permit representative.

Division of State Parks

Telephone: (573) 751-2479 / FAX: 573-751-8656 Toll free: (800) 334-6946 Mostateparks.com

This division develops and manages state parks and historic sites and coordinates statewide programs in the areas of outdoor recreation and trails. The division is funded primarily through the parks and soils sales tax, which was approved by voters in 1984, 1988, 1996 and 2006.

In addition to providing Missourians with recreational opportunities, this division preserves natural and historically significant resources and houses the State Historic Preservation Office. The division also coordinates federal grants in the areas of outdoor recreation and trails.

State Historic Preservation Office

The Department of Natural Resources receives federal Historic Preservation Fund monies from the U.S. Department of the Interior's National Park Service. These funds are used to help identify, evaluate and protect Missouri's cultural resources.

The department coordinates surveys statewide to identify historic, architectural and archaeological resources. Significant properties identified in the surveys may be nominated to the National Register of Historic Places. Missouri has approximately 2,200 listings on the National Register, representing more than 40,400 historic buildings, sites, structures and objects. The Missouri Cultural Resource Inventory is being built from information gathered from the survey and nomination process.

As part of its federally mandated responsibilities, the department reviews all federally funded or licensed projects in Missouri to ensure compliance with related federal legislation. The department also administers federal Historic Preservation Fund matching grants. Through Missouri's Certified Local Government program, the department trains municipalities in local preservation techniques and awards federal matching grants to help accomplish local preservation goals.

Since 1976, federal tax incentives and related legislation have promoted interest in rehabilitating historic buildings. In 1998, that interest was augmented with the authorization of state tax credits, administered by the Missouri Department of Economic Development. The federal tax credits are available to private investors who rehabilitate historic buildings for uses that produce income, such as office buildings and apartments. The Department of Natural Resources reviews both federal and state tax credit applications for historic eligibility and conformity with preservation guidelines.



BILL BRYAN Director Division of State Parks

The State Historic Preservation Office also administers the Missouri Heritage Properties Program using funds from the Missouri's Historic Preservation Revolving Fund. The program provides assistance to help preserve endangered publicly owned historic buildings.

Missouri Advisory Council on Historic Preservation

This council reviews all Missouri nominations to the National Register of Historic Places and advises the state's historic preservation officer.

Crittenden, Brent, architect;

Garner, Martha (Kacky), public member;

Hibbeler, Cheryl, public member;

Holland, Antonio, Ph.D., historian;

Kuypers, Thomas, public member;

Shirley, Allen R., economic and community development;

Stepenoff, Bonnie, Ph.D., architectural historian; Stiritz, Mary (Mimi), historian;

Wiegers, Robert, Ph.D., historic and prehistoric archaeologist;

Wyatt, Dwight E., architect;

Vacancy (2), public members.

Unmarked Human Burial Consultation Committee

This committee was established under provisions of Missouri's Unmarked Human Burial Act, which governs the disposition of unmarked human burial remains uncovered during grounddisturbing activities.

Appointed by the governor, the seven-member committee, which includes an archaeologist, an anthropologist and representatives of minority and American Indian groups, makes final decisions as to the respectful treatment and appropriate reburial of all recovered unmarked human remains.

Missouri State Parks

Protecting, developing and interpreting a well-balanced system featuring areas of outstanding natural and historic importance are the functions of Missouri State Parks, a division of the Department of Natural Resources. The park system includes 87 state parks and historic sites totaling more than 200,000 acres acres available to the public, including the Roger Pryor Pioneer Backcountry.

Approximately 18 million people visit the state park system annually to hike, camp, fish, discover the past and explore nature. The state's most outstanding landscapes are preserved for everyone's enjoyment–deep forests, glades, prairies and blue streams and lakes. State historic sites commemorate events or structures of state-wide historical importance and honor people of state and national importance. The system includes homes of famous Missourians, Civil War battlefields, and reminders of yesterday such as gristmills and covered bridges.

Missouri State Park Advisory Board

The governor-appointed board was created in 1986 to advise the department on matters relating to state parks and historic sites.

Grant Management

The Division of State Parks is responsible for administering federal grant programs that provide financial assistance to individuals, groups and public entities for a variety of purposes.

The division administers funds from the Recreational Trails Program, which provides federal money for the development of trails. The Missouri Trails Advisory Board views and scores the grant applications and makes recommendations on grant awards.

The division also administers and monitors projects funded through the federal Land and Water Conservation Fund program, which provides federal funds for local outdoor recreation projects. The grants are awarded through the State Inter Agency Council for Outdoor Recreation (SIACOR), which also provides advice and a forum for outdoor recreation problems.

SIACOR members include the commissioner of the Office of Administration, a representative from the University of Missouri and directors of the departments of natural resources, agriculture, conservation, economic development, transportation and social services. The director of the Department of Natural Resources or its appointee serves as council chair. The director of Conservation or its appointee serves as the council vice chair.

State Parks and State Historic Sites

Central Region

- Arrow Rock State Historic Site, Saline County, 15 miles east of Marshall on Missouri 41.
- **Boone's Lick State Historic Site,** Howard County, MM from Missouri 87, 19 miles northwest of Boonville.
- **Bothwell Lodge State Historic Site,** Pettis County, 5 miles north of Sedalia on U.S. 65.
- Clark's Hill/Norton State Historic Site, Cole County near Osage City.
- Finger Lakes State Park, Boone County, 10 miles north of Columbia on U.S. 63.
- Jefferson Landing State Historic Site/Missouri State Museum, Jefferson City, between State Capitol and Governor's Mansion.
- Jewell Cemetery State Historic Site, Boone County, near Columbia.
- Katy Trail State Park, the 240-mile trail has been developed between Clinton and Machens.
- **Rock Bridge Memorial State Park,** Boone County, 7 miles south of Columbia on Missouri 163.
- Sappington Cemetery State Historic Site, Saline County, 4 1/2 miles southwest of Arrow Rock on County AA Spur.
- Van Meter State Park, Saline County, 12 miles northwest of Marshall on Missouri 122.

Kansas City Region

- Battle of Island Mound State Historic Site, near Butler in Bates County.
- Battle of Lexington State Historic Site, Lafayette County, in Lexington on U.S. 24.
- Thomas Hart Benton Home and Studio State Historic Site, Jackson County, 3616 Belleview, Kansas City.
- **Big Lake State Park,** Holt County, 11 miles southwest of Mound City on Missouri 118 and Missouri 159.
- **Confederate Memorial State Historic Site,** Lafayette County, 1 mile north of Higginsville on Missouri 20 and Missouri 13.
- Knob Noster State Park, Johnson County, Knob Noster on U.S. 50.
- Lewis and Clark State Park, Buchanan County, 20 miles southwest of St. Joseph on Missouri 45.
- **Rock Island Trail State Park,** from Pleasant Hill to Windsor (under development).
- Wallace State Park, Clinton County, 6 miles south of Cameron on Missouri 121.
- Watkins Woolen Mill State Park and Historic Site, Clay County, 6 ¹/₂ miles north of Excelsior Springs on U.S. 69.
- Weston Bend State Park, Platte County, 1 mile south of Weston on Missouri 45.

Lakes Region

- Battle of Carthage State Historic Site, Jasper County, East Chestnut St., Carthage.
- Bennett Spring State Park, Dallas County, 12 miles west of Lebanon on Missouri 64.
- Big Sugar Creek State Park, McDonald County, 5 miles east of Pineville on County Road S.E. W24.
- Nathan Boone Homestead State Historic Site, Greene County, north of Ash Grove on Missouri V.
- Ha Ha Tonka State Park, Camden County, 5 miles southwest of Camdenton.
- Harry S Truman Birthplace State Historic Site, Barton County, in Lamar on U.S. 160.
- Harry S Truman State Park, Benton County, west of Warsaw.
- Lake of the Ozarks State Park, Camden County, near Osage Beach on Missouri 42.
- Osage Village State Historic Site, Vernon County, near Schell City, 9 miles north of U.S. 54 off Vernon County C.
- **Pomme de Terre State Park,** Hickory County, 4 miles north of Pittsburg on Missouri 64.
- Prairie State Park, Barton County, 25 miles north of Joplin on Barton County P and K, off Missouri 43.
- **Roaring River State Park,** Barry County, 7 miles south of Cassville on Missouri 112.
- Stockton State Park, Cedar County, at Stockton on Missouri 215.
- Table Rock State Park,Stone County, 5 mileswest of Branson on Missouri 165.

Northeast Region

- Battle of Athens State Historic Site, Clark County, near Revere.
- **Crowder State Park,** Grundy County, 2 miles west of Trenton on Missouri 128.
- **Cuivre River State Park,** Lincoln County, 5 miles east of Troy on Missouri 47.
- Gen. John J. Pershing Boyhood Home State Historic Site, Linn County, in Laclede on Missouri 139.
- Graham Cave State Park, Montgomery County, 2 miles west of Danville on County TT.
- **Iliniwek Village State Historic Site,** Clark County, southeast of St. Francoisville.
- Locust Creek Covered Bridge State Historic Site, Linn County, 3 miles west of Laclede on U.S. 36.
- Long Branch State Park, Macon County, 5 miles west of Macon on U.S. 36.
- Mark Twain Birthplace State Historic Site, Monroe County, near Paris on Missouri 107.
- Mark Twain State Park, Monroe County, at Florida on Missouri 107.
- Pershing State Park, Linn County, 2 miles southwest of Laclede off U.S. 36.

- Thousand Hills State Park, Adair County, 4 miles west of Kirksville on Missouri 157.
- Union Covered Bridge State Historic Site, Monroe County, 8 miles southwest of Paris on County C.
- Wakonda State Park, Lewis County, 3 miles south of LaGrange on U.S. 61.

Southeast Region

- **Big Oak Tree State Park,** Mississippi County, 10 miles south of East Prairie on County A to Missouri 102.
- Bollinger Mill State Historic Site and Burfordville Covered Bridge State Historic Site, Cape Girardeau County, in Burfordville on Missouri 34.
- **Current River State Park**, north of Eminence in Shannon County (under development).
- **Dillard Mill State Historic Site,** Crawford County, 12 miles southeast of Steelville near Missouri 49 at Dillard.
- **Elephant Rocks State Park,** Iron County, northeast edge of Graniteville on Missouri 21.
- Fort Davidson State Historic Site, Iron County, in Pilot Knob on Missouri 21.
- Grand Gulf State Park, Oregon County, 6 miles west of Thayer.
- Hunter-Dawson State Historic Site, New Madrid County, in New Madrid on U.S. 61.
- Johnson's Shut-Ins State Park, Reynolds County, 8 miles north of Lesterville on County N.
- Lake Wappapello State Park, Wayne County, 12 miles north of Poplar Bluff on U.S. 67 and nine miles east on Missouri 172.
- Montauk State Park, Dent County, 21 miles southwest of Salem on Missouri 119.
- Morris State Park, Dunklin County, southwest of Malden.
- **Onondaga Cave State Park,** Crawford County, 3 miles south of Leasburg on County H.
- **Roger Pryor Pioneer Backcountry,** Shannon County, off State Route P from Hwy. 72.
- Sam A. Baker State Park, Wayne County, 3 miles north of Patterson on Missouri 143.
- Taum Sauk Mountain State Park, Iron County, 9 miles southwest of Ironton.
- **Towosahgy State Historic Site,** Mississippi County, east of East Prairie on County FF.
- Trail of Tears State Park, Cape Girardeau County, 10 miles north of Cape Girardeau on Missouri 177.

St. Louis Region

- Castlewood State Park, St. Louis County, near Ballwin.
- Deutschheim State Historic Site, Gasconade County, 109 W. Second St., Hermann.
- Dr. Edmund A. Babler Memorial State Park, St. Louis County, 20 miles west of St. Louis on Missouri 109 off St. Louis County CC.

- Don Robinson State Park, Jefferson County, southeast of Pacific (under development).
- Edward "Ted" and Pat Jones-Confluence Point State Park, St. Charles County, in West Alton.
- Felix Valle State Historic Site, Ste. Genevieve County, Merchant at Second St., Ste. Genevieve.
- First Missouri State Capitol State Historic Site, St. Charles County, in St. Charles on Main St.
- **Gov. Daniel Dunklin's Grave State Historic Site,** Jefferson County, in Herculaneum on U.S. 61.
- Hawn State Park, Ste. Genevieve County, 13 miles east of Farmington on Missouri 32.
- Mastodon State Historic Site, Jefferson County, near Imperial, off I-55.
- Meramec State Park, Franklin County, 4 miles east of Sullivan on Missouri 185.

- **Missouri Mines State Historic Site,** St. Francois County, in Park Hills on Hwy. 32.
- **Robertsville State Park,** Franklin County, 8 miles east of I-44 on Rt. O.
- Route 66 State Park, St. Louis County, 2 miles east of Eureka off I-44.
- **St. Francois State Park**, St. Francois County, 4 miles north of Bonne Terre on U.S. 67.
- St. Joe State Park, St. Francois County, in Park Hills.
- Sandy Creek Covered Bridge State Historic Site, Jefferson County, 5 miles north of Hillsboro, off Missouri 21.
- Scott Joplin House State Historic Site, St. Louis County, 2658-A Delmar, St. Louis.
- Washington State Park, Washington County, 14 miles northwest of Potosi on Missouri 21.