



Enhancing Missouri ~ *it's in our nature*



Summer 2016

Director Sara Parker Pauley
Director's Update on the
Missouri Department of Natural Resources



The mission of the Missouri Department of Natural Resources is to protect our air, land and water; to preserve our unique natural and historic places; and to provide recreational and learning opportunities for everyone.

Learn more about the department at dnr.mo.gov/aboutus.htm

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Director's Update

“Nature is not a place to visit, it is home.” I couldn’t agree more with these words written by award-winning poet and environmental advocate Gary Snyder.

I’ve always felt as if I were home in the quiet and the beauty of Missouri’s outdoors. The benefits of being in nature, engaging in outdoor recreation and understanding that our natural resources are closely connected to our health and well-being is a deep part of my heritage.

This summer, I had the honor of joining Governor Jay Nixon, and Missouri Parks Director Bill Bryan as we dedicated Missouri’s 88th state park – Echo Bluff State Park in Shannon County. As we celebrated the opening of the park on that hot summer day, it was a coming home again for me while I explored and enjoyed the Ozark scenery and amenities found within this magnificent state park.

Since 1917, Missouri State Parks have been inviting families to explore and experience nature in Missouri’s beautiful state parks and historic sites. I certainly hope you will visit Echo Bluff State Park soon. May it be a homecoming for you as well.

Enhancing Missouri - it's in our nature!

Sara Parker Pauley

Director, Missouri Department of Natural Resources

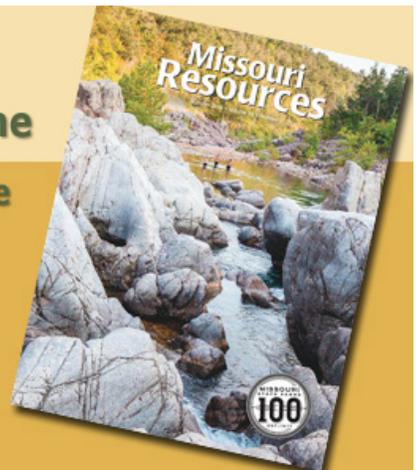


Missouri Resources magazine

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Visit dnr.mo.gov/magazine





Parks, Soils and Water Sales Tax

The citizens of Missouri demand good stewardship of this tax

The Parks, Soils and Water Sales Tax is a statewide one-tenth-of-one percent sales tax that provides funding for Missouri state parks and historic sites and soil and water conservation efforts. The tax is divided equally between the two efforts and is up for renewal in November 2016 for voter approval. The PSWST brings together a diverse mix of organizations and individuals made up of agricultural, environmental, and conservation organizations as well as individual citizens. These groups form the Citizens Committee for the Parks, Soils and Water Sales Tax.

CONSERVING SOIL AND WATER FOR FUTURE GENERATIONS
The Parks, Soils and Water Sales Tax



Revenues from the Parks, Soils and Water Sales Tax have resulted in Missouri having the greatest soil erosion reduction rate of any other state with more than 10 million acres of cultivated cropland. Due to the efforts of the Missouri Soil and Water Conservation Program, Missouri has saved more than 177

million tons of soil over the past 30 years. The department has provided over \$660 million to Missouri agricultural landowners to implement more than 220,000 conservation practices that protect our soil, water quality and quantity.

STATE PARK BENEFITS
The Parks, Soils and Water Sales Tax



The tax funds approximately 75 percent of the Missouri State Parks' budget to operate and improve parks and historic sites. Unlike most states, there are not entrance or day-use fees in Missouri State Parks. The public can enter every state park and historic site at no charge. New initiatives have focused on engaging youth in the wonder of the outdoors. In 2014 alone, nearly 55,000 interpretive programs were presented in state parks and historic sites.

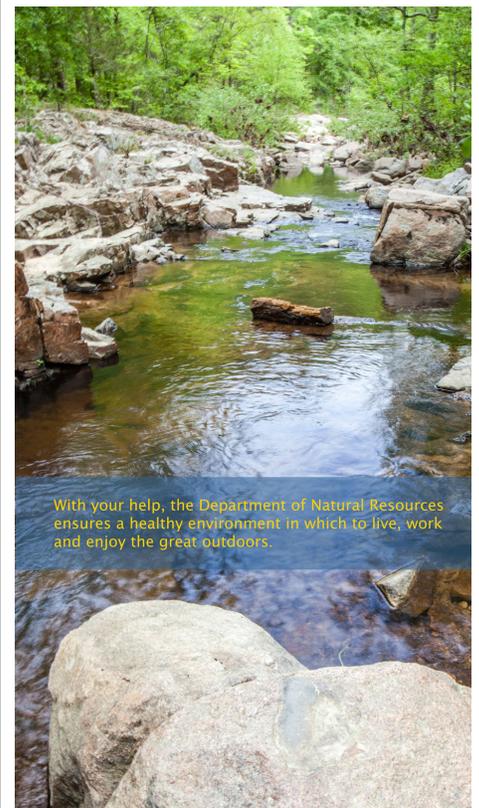
If you are interested in finding out more information go to soilwater-parks.com.

Executive Staff Updates

New Regional Office Coordinator



Erin Lepper is the department's new Regional Office Coordinator for the Division of Environmental Quality. Lepper graduated from UMR, now Missouri S&T, with her master's degree in Geological Engineering. Her masters work consisted of studying and developing a sustainable drinking water source in the rural highlands of Guatemala. She previously worked as an engineer, rig geologist and consultant before joining the department in 2010. Lepper has worked in the Public Drinking Water Branch and the Water Resources Center during the last 6 years before accepting this position.





Legislation

The 2016 Legislative Session ended May 13, 2016. Of interest to the Department was HB 1717 which was passed by the General Assembly and signed by the Governor on June 28, 2016.

Sponsored by Rep. Lichtenegger, HB 1717 (i) requires a public water system that intends to add or remove fluoridation from its water supply to notify its customers, and the departments of Natural Resources and Health, at least 90 days prior to any vote on the matter; (ii) requires the Department of Natural Resources to provide information regarding the latest technology for wastewater treatment facilities; and (iii) changes the law related to the Missouri Water Resources multipurpose water fund.

Bills that were passed by the General Assembly, but vetoed by the governor include:

- HB1414 (Rep. Houghton) which exempts certain agricultural data from disclosure under Missouri's sunshine law. The Governor's veto letter is available at <http://on.mo.gov/2bpGgF3>
- HB1713 (Rep. Remole) which, in addition to all the provisions in HB 1717, changes the requirements of the make-up of the Missouri Clean Water Commission to potentially include fewer representatives from the public, and more representatives from the regulated community. The Governor's veto letter is available at <http://on.mo.gov/2biWcX5>.

Veto session will be on September 14, 2106. In the Missouri Senate, Republicans hold a 24 seat veto

proof majority over the 8 Democrats and 2 vacancies. 23 votes are needed to override a Governor's veto. In the Missouri House, Republicans hold a 117 seat veto proof majority over the 45 Democrats and 1 Independent. 109 votes are needed to override a Governor's veto.

If you have questions about any of these or other bills that may affect the department please contact Lorisa Smith at 573-751-4732 or by email to Lorisa.Smith@dnr.mo.gov.

Director Newsletter Archives

Older versions of the Director's Newsletters are available on the web at dnr.mo.gov/kitchen-cabinet

Youth Education and Interpretation

Providing today's youth with the knowledge and appreciation of nature.

The Department of Natural Resources' Youth Education and Interpretation program is providing education and interpretive services for youth, teachers and youth leaders.

The department is responsible for our natural resources and has the opportunity to make a unique contribution through education, interpretation, partnerships and our staff's knowledge and expertise.

The program has launched a new website covering subjects across natural and cultural resources, stewardship, the connection between nature and our health and

wellness, and education about the department's role in these areas. In addition to youth-oriented informational pages, the website provides lesson plans for the classroom and activities for everyone.

Learn about how you can celebrate nature and get more involved by checking out the Awareness Calendar. The department continues to

add additional content regularly so sign-up to receive notices.

The website also includes information on how Missourians can take action and start a monarch butterfly garden to help increase the monarch butterfly populations

Explore the new website at dnr.mo.gov/education.

Youth Education & Interpretation It's in Our Nature

Our website has Missouri-specific natural resource information, relevant lesson plans, activities and ways to help get kids outdoors. Print materials, discover researchable content for youth and start planning a field trip at one of our amazing state parks - all in one place.

Visit dnr.mo.gov/education to learn more.



E3 - Enhancing Effectiveness and Efficiency

Implementing a Lean in Government approach to enhance effectiveness and efficiency

In 2015 the department began implementing Lean, a set of principles and tools to make processes more effective and efficient while increasing customer service.

Restoring Impaired Waters

The department has many tools to improve water quality and restore impaired waters: designation of waters to the 303(d) list, development of Total Maximum Daily Load (TMDL) for waterways, permit development, 319 Grants, Soil and Water conservation practices, drinking water source water protection, and more. Many of these tools are housed within different administrative units, which can pose challenges to coordination. In May, the department used a Value Stream Mapping process to identify ways to increase coordination and do a better job of applying tools strategically to achieve restoration of impaired waters.

Southwest Regional Office

In June, the department conducted a one-day event at the Southwest Regional Office to help staff identify and select Lean projects that will help improve their work. During the event, staff brainstormed opportunities for improvements, developed solutions, evaluated solutions using an Impact/Difficulty matrix and selected projects to work on. Sixteen projects were selected and are in process of implementing. Examples



Everybody every day, with discipline, looking at what we did yesterday and, with discipline, thinking about how we do it better tomorrow.

include better coordination with department programs and specific technical training for staff.

Capacity Building; E3 Challenge

In order to increase our ability to conduct process improvement events, the department recently completed training eight staff in Value Stream Mapping facilitation. The newly trained facilitators are required to observe an event and co-facilitate with an experienced facilitator to complete their training.

Beginning in June, the department has launched a quarterly E3 Challenge to supervisors to identify and execute a process improvement in their work areas. Each quarter, judges will evaluate the results and a winner will be announced. Goals for the challenge include solving common problems, emphasizing the expectation of continuous improvement, and involving staff across the department in enhancing effectiveness and efficiency. The challenge has generated a lot of interest and we expect numerous submissions.

The department will continue to provide updates and outcomes from the process improvements.

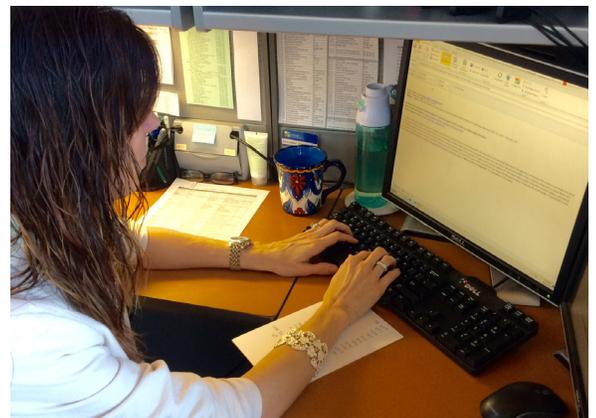
Succession Planning

Building on the department's wealth of talented staff

The department has launched an academy for administrative professionals that will provide a 12-month curriculum in course topics including administration, communication, conceptual knowledge and skills, interpersonal skills and group dynamics, information management, self-management and growth for participants. Each day, the department's administrative profession-

als are on the front line ensuring our mission-critical work is accomplished through their organization, planning, coordination and communication they expertly manage each day.

The department is committed to ensuring our indispensable employees serving in these positions have the knowledge, skills and abilities necessary to successfully fulfill their challenging duties as well as provide them with



the capacity to grow within our department.



Echo Bluff State Park Opens

Echo Bluff State Park is Missouri State Park's 88th park and celebrated its grand-opening at the end of July 2016. More than 85 years ago, this area opened as Camp Zoe, a summer youth camp that provided outdoor experiences and memories for thousands of young people. Today, Echo Bluff State Park is a year-round outdoor destination that allows visitors to experience the Ozarks.



The park offers amenities including an iconic lodge, with guest rooms, indoor and outdoor casual dining and meeting room space. The park

also has nine full-service cabins with 13 units and camping space. Visitors can go floating, hiking swimming or fishing.

Visit mostateparks.com for more information.



Multi-discharge Variance

The department is evaluating a potential variance that would address well-functioning municipal lagoon wastewater treatment systems in cases where the cities will not be able to upgrade the systems to meet ammonia criteria.

The pilot effort has involved about a dozen systems and may recommend that several of them be authorized to continue their operation as lagoons. Through department assistance, some of the cities have identified other ways to meet the ammonia criteria, such as using a no-discharge system. Additional systems will be reviewed as their permits are renewed and may also be authorized through the variance. Further development of the variance will be discussed in the Water Protection Forum and would require approval by the Clean Water Commission. For more information visit: dnr.mo.gov/env/wpp/cwforum/index.html.

Carver Prairie

The Department of Natural Resources is excited to be partnering with the Missouri Prairie Foundation to help restore prairie that was lost due to mining and contamination. The department and the U.S. Fish and Wildlife Service are trustees for the state's Natural Resource Damages Program and the trustees have committed \$750,000 to the Missouri Prairie Foundation to acquire and restore remnant prairie to date. Carver Prairie is one example of this partnership where the foundation was able to purchase a 160-acre tract of land in Newton County for prairie restoration.

In the department's capacity as trustees, we have the responsibility to restore, replace, or protect the equivalent of the resources that were lost, to provide the greatest benefit to Missouri's citizens and to the health of our environment. The Carver Prairie tract includes 65 acres of original unplowed prairie that will be protected and an additional 26 acres that will undergo prairie re-



Plains Coreopsis

construction and 69 acres of savanna/woodlands.

Projects like this support the department's larger mission because preserving prairies helps protect water quality, and provides habitat for pollinators and species like Monarch butterflies, while also allowing

opportunities for the public to enjoy nature.



Partnerships for Watershed Studies

The department is preparing to sign an agreement with the Corps of Engineers, Kansas City District in partnership with the Missouri Department of Conservation and the Missouri Department of Transportation to study the hydrologic issues in the Grand River Basin.

This study will span over a three year period and lead to the identification, design and implementation of projects in the Locust Creek Watershed. The study will address flooding and other severe hydrologic problems in and around Pershing State Park and the Fountain

Grove Conservation Area. The study will enable the department to secure future federal funding to implement recommendations.

This study is an example of how state government agencies can work collaboratively with federal agencies to solve formidable chal-

lenges collectively that are too big to tackle individually.

The study is a result of the department's Our Missouri Waters and will provide valuable information to continue these efforts in the future. To learn more about Our Missouri Waters or to contact your local watershed coordinator visit the department's website at dnr.mo.gov/omw.



Pershing State Park, Laclède



Missouri's waterways are a vital resource to the state of Missouri.

Water Quality Trading

The Water Quality Trading Framework will be submitted to the Missouri Clean Water Commission for approval this fall. This item was shared with the Missouri Clean Water Commission at their meeting on July 13 as part of the regularly scheduled commission meeting.

The framework, once approved, will set general policy guidelines for water quality trading in Missouri. Those seeking to establish a trading program will apply to the department for approval of their specific trading program by preparing a prospectus before having the terms of the trading program written into the applicable permits, as required. The department anticipates a small number of pilot trading programs will be established to help provide a practical test of the framework and is committed to making changes in

the framework, as needed, based on these early experiences.

Working with stakeholders, the department defined 13 elements required to be included in a water quality trading prospectus. The department has committed to creating a clearinghouse with the needed capabilities that could help implement local trading programs.

Point source to point source and point source to nonpoint source trading are both promoted as a potential way to meet permit conditions under the proposed policy.

Public comment was accepted on the framework document from June 24 through Aug. 24. Stakeholders also shared comments with the commission directly at that time.

For more information visit: <http://dnr.mo.gov/env/wpp/cwforum/nutrient-trading.htm>.



Clean Power Plan

On Feb. 9 the U.S. Supreme Court, in a 5-4 vote, issued an order staying the U.S. Environmental Protection Agency's Clean Power Plan (CPP).

Twenty-seven states and numerous industry groups challenged the CPP's legality in the U.S. Court of Appeals for the District of Columbia D.C. Circuit, which had denied a stay in January. Many of those petitioners sought to stay the rule until the legal proceedings are complete. The stay will remain in effect until the D.C. Circuit Court resolves the legal challenges to the CPP and either the Supreme Court decides not to review the D.C. Circuit's decision or the Supreme Court issues its own opinion.

The D.C. Circuit previously granted a motion to consider the challenges on an expedited basis and planned for a three judge panel to hear oral arguments on June 2, 2016. However, on May 16, 2016, it announced that that the full court will hear the oral arguments on the CPP beginning on Sept. 27.

The department's Air Pollution Control Program is following the legal developments and will continue to communicate with stakeholders and interested parties as issues de-

velop. To subscribe to receive topic updates on this issue or read the latest information, visit the department's Clean Power Plan website at dnr.mo.gov/env/apcp/cpp.

EPA issued the final Clean Power Plan on Aug. 3, 2015. The goal of the plan is to reduce carbon dioxide emissions from existing power plants. The final rule, as released in August, would require 21 power plants in Missouri to cut emissions of carbon dioxide.



Helping the Monarch Butterfly

The monarch butterfly is one of the most familiar butterflies in North America. The orange-and-black butterfly is known for its annual, multi-generational migration from Mexico to as far north as Canada. Monarch populations have decreased considerably over the past 20 years. Habitat loss in the United States and Mexico is one of many

reasons that have caused the monarch population to decline.

Fortunately the state of Missouri is within the migratory flyway of the monarch butterfly so we have a great opportunity to help meet the needs of this iconic butterfly and increase their numbers. The department has many unique opportunities to help in this effort through restoration efforts, the management of our state park lands, additional partner incentives for soil and water

practices, and through education and technical assistance efforts.

Take Action!

Planting milkweed and other nectar plants is one way to help the monarchs meet their habitat needs. This helps support monarch populations and is a great way to help pollinators as well.

For more information about how you can help, go to dnr.mo.gov/education/monarchs.htm.

