



**EAST-WEST GATEWAY**  
**Council of Governments**

Creating Solutions Across Jurisdictional Boundaries

**AGENDA**  
**WATER RESOURCES ADVISORY COMMITTEE**  
**Thursday, September 27, 2018**  
**10:30 AM – 12:00 PM**  
**East-West Gateway Boardroom**

**Chair**

Steve Stenger  
County Executive  
St. Louis County

**Vice Chair**

Mark A. Kern  
Chairman, St. Clair County Board

**2nd Vice Chair**

Robert Elmore  
Chairman, Board of Commissioners  
Monroe County

**Executive Committee**

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Presiding Commissioner  
Franklin County  
Steve Ehlmann  
County Executive  
St. Charles County  
Lyda Krewson  
Mayor, City of St. Louis

Kurt Prenzler  
Chairman, Madison County Board  
Ken Waller  
County Executive  
Jefferson County

**Members**

Emeka Jackson-Hicks  
Mayor, City of East St. Louis

Carol Johnson

Franklin County

Reggie Jones

St. Louis County

Mark Kupsky

Vice President,

Southwestern Illinois

Council of Mayors

Norman C. McCourt

Municipal League of Metro St. Louis

Roy Mosley

St. Clair County

Lewis Reed

President, Board of Aldermen

City of St. Louis

Herbert Simmons

President, Southwestern Illinois

Metropolitan & Regional

Planning Commission

Tom Smith

President, Southwestern Illinois

Council of Mayors

Michael Walters

Madison County

John White

St. Charles County

*Regional Citizens*

Barbara Geisman

C. William Grogan

Richard Kellett

John A. Laker

**Non-voting Members**

Erin Aleman

Illinois Department of

Transportation

Erika Kennett

Illinois Department of Commerce

and Economic Opportunity

Patrick McKenna

Missouri Department of

Transportation

John Nations

Bi-State Development

Aaron Willard

Missouri Office of Administration

**Executive Director**

James M. Wild

1. CALL TO ORDER - Carol Lawrence, Chair, East-West Gateway Council of Governments
  - A. Introductions
2. DISCUSSION ITEMS
  - A. Water Matters Impact Report
    - Allie Magee, Nine Network of Public Media
  - B. Meramec River Basin Ecosystem Restoration Feasibility Study
    - Matt Vielhaber, U.S. Army Corps of Engineers
  - C. Road Salt & Urban Streams
    - Danelle Haake, St. Louis University
  - D. OneSTL Water and Green Infrastructure Working Group Activities
3. OTHER BUSINESS/ANNOUNCEMENTS
4. ADJOURNMENT

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## Minutes

Regional Water Resources Advisory Committee

Thursday, June 21, 2018

10:30 am – 12:00 pm

East-West Gateway Council of Governments Board Room

### Attendees:

Carol Lawrence, Chair – East-West Gateway Council of Governments

Barbara Charry – The Nature Conservancy

Jim Kirchherr – Nine Network

Molly Saunders – Nine Network

Shawn Sullivan – US Army Corps of Engineers

Colin Wellenkamp – Mississippi River Cities and Towns Initiative

Rebecca Weaver – The Nature Conservancy

John Johnson – Missouri Department of Natural Resources, Non-Point Source Program

Douglas Bjornstad – Jefferson County Public Sewer District

Steven Brendel – Madison County Planning & Development

Curt Skouby – City of St. Louis Department of Public Utilities/Water Division

Jason Peterein – Metropolitan St. Louis Sewer District

Libby Reuter – Watershed Cairns

Josh Ward – Missouri Department of Conservation

Gene Rovak – H&S EWRI/ASCE

John Schumacher – United States Geological Survey

Erin Grossmann – Nine Network

Jennifer Hoggatt – Missouri Department of Natural Resources

Heather Navarro – Missouri Coalition for the Environment

Jadine Sonoda – Missouri Coalition for the Environment

Jamie Page – City of Wentzville

### Staff:

Mary Grace Lewandowski Aaron Young Bonnie Harper Maureen McCarthy

### 1. CALL TO ORDER

The meeting of the Regional Water Resources Advisory Committee (WRC) was called to order by Chari Carol Lawrence, East-West Gateway Council of Governments (EWG).

#### A. Introductions

### 2. DISCUSSION ITEMS

#### A. Missouri Water Resources Plan

-Jennifer Hoggatt, Director of the Water Resources Center, Missouri Department of Natural Resources

Development, maintenance and updating the Missouri Water Resources Plan is a statutory responsibility (640.415 RSMo). The current update began in 2016 and will go through fall 2019.

It is a joint project management partnership between the Department of Natural Resources (MoDNR) and the U.S. Army Corps of Engineers (COE). One of the major objectives of the COE's Planning Assistance to States is to help states plan for long term water sustainability. The contractors are CDM Smith and the University of Missouri. The Interagency Task Force, a statutory required advisory group, includes representatives from Missouri utilities, agriculture, and state agencies. The way MoDNR is assuring the inclusion of different perspectives on the plan is through technical workgroups that cover five different topics: consumptive needs, infrastructure needs, non-consumptive needs, agricultural needs, and water quality.

The overall goals for the Water Resources Plan are to provide an updated evaluation of current and future water use needs, determine water availability, and to identify shortfalls in water supply/infrastructure needs. The plan strives to create understanding of areas where developing new or more sustainable water sources, better infrastructure, and more integrated water supplies will provide an adequate supply of water to meet the needs of Missouri. Looking at both the surface and ground water supplies for Missouri, the focus is on the hydrologic unit code (HUC) 4 watersheds in the state. The elements of the plan include developing estimates of water needs for all sectors, assessing water supplies and quality, identifying infrastructure needs and costs, and gathering public and stakeholder input.

The University of Missouri is leading the assessment of agriculture needs. They are going to evaluate historical monthly water use of livestock and irrigated crops by county in Missouri and project the monthly volume of water needed for irrigation and livestock for each county. The data will be projected out to the year 2060.

CDM Smith will be doing the analysis of the HUC 4 watersheds by looking at all of the ways water enters and leaves the watershed. Naturalized streamflow is quantified by gathering data from U.S. Geological Survey (USGS) gages within the watersheds. Then a composite flow is developed based on the drainage area to each selected gage and it is scaled for the entire basin. Streamflow represents available flow at the outlet of each basin. There is the potential to look more specifically at smaller water basins, HUC8 basins, to identify where both current and future demands are highest.

One of the main focus points of the plan is water infrastructure. The method for assessing the infrastructure will involve identifying existing water infrastructure using national and state information, projecting future infrastructure needs, evaluating potential funding opportunities, and documenting the findings. Since that assessment was more general than specific, MoDNR is reaching out to local agencies to gather any information they may have on the regional infrastructure. Some of the most useful information for infrastructure assessment has come from regional water supply studies which provide an in-depth analysis about the current and future water demands. Wastewater and drinking water infrastructure needs in Missouri over the next twenty years are estimated to exceed \$9.5 billion and \$8.4 billion, respectively. Water quality is another main focus of the plan. MoDNR wants to know how water quality affects the drinking water supplies in Missouri. In examining the surface water quality the goal is to identify the primary parameters of concern. The approach includes analyzing statewide water quality and evaluating water for assessment of wastewater improvements. This assessment is not intended as a regulatory plan. Water quality regulations are authorized under different regulatory

statutes than those that authorize the development of the statewide water resources plan. MoDNR has been looking at the 303(d) list of impaired streams to see the current surface water impairments and identify statewide changes in the impairment listings over time.

The final part of plan development is public engagement and outreach. MoDNR is utilizing the Water Resources Plan website, [www.dnr.mo.gov/mowaterplan/](http://www.dnr.mo.gov/mowaterplan/), to provide more detailed information on the goals and tasks of the plan and interagency taskforce and technical workgroups activities. The interagency taskforce meets twice a year and the technical workgroups meet quarterly. The next meetings are in August and November 2018 and several times in 2019. The interagency task force met in May and will meet again in November. Through stakeholders and public outreach events MoDNR has reached over 1,500 people in the last 18 months.

Work on the Water Resources Plan is scheduled to continue until fall 2019. There is a draft of the consumptive and non-consumptive demands chapter of the plan available for review. Water quality analysis is estimated to continue to the end of 2018 and infrastructure evaluations will be carried out until the summer of 2019. Adaptive management discussions will be ongoing to decide how to account for the many variables that can affect water management.

It is important to plan for water in good and bad times because there is always a chance for something unexpected that could affect our water resources. Currently there is a drought in Northern Missouri. In the areas affected they rely on surface water supplies. Livestock producers are some of the hardest hit by the diminishing water resources.

B. Metropolitan St. Louis Sewer District Stormwater Management Plan  
- Jason Peterein, Metropolitan St. Louis Sewer District

The current municipal separate storm sewer system (MS4) permit was issued on December 14, 2016. The permit follows a co-permittee strategy. There are 59 municipalities participating in addition to the Metropolitan Sewer District (MSD) and St. Louis County which all covers about 525 square miles. A revised Stormwater Management Plan (SWMP) was due within one year of that date. In the spring and summer of 2017 a steering committee developed a draft of the revised SWMP. After the public comment period, the revised plan was sent to MoDNR on December 5, 2017. Stormwater management is an iterative process that requires the continued cycle of developing the plan, implementing the plan, evaluating the plan, and creating a report. The reporting aspect of the process is crucial for finding necessary edits to the plan. MSD is made up of a separated sewer and storm sewer system and a combined sewer system.

The six minimum control measures (MCMs) to be addressed in the SWMP are public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff control, post construction runoff control for new and redevelopment sites, and pollution prevention/good housekeeping for municipal operations. The plan within this permit cycle consists of 68 best management practices (BMPs) for the six minimum control measures. Of these, forty-four of those BMPs are the responsibility of MSD with the remaining twenty-four a shared responsibility with the co-permittee. The SWMP under the current MS4 permit is good for five years which means that some of the BMPs will start in later years. The

way the SWMP is set up as a BMP table that will provide a description of the BMP and its purpose, goals and milestones, and how it will be evaluated.

The goal of the first MCM, public education and outreach, is to increase public awareness about the impact of stormwater discharges on water bodies and steps they can take to reduce pollutants in runoff. With the new version of the SWMP there will be more reporting and tracking of contractors conducting major land disturbance. Recently, MSD partnered up with the Earth Ways Center at the Missouri Botanical Garden to assist with MSD's education and outreach by hosting free classes open to the public that address residential BMPs and survey results. There were two events in April and MSD anticipates more in the next fiscal year. Co-permittees will also be involved in community outreach by giving presentations and providing educational materials to trade associations, schools, and watershed groups. Six Flags has been a great outreach partner for MSD's community engagement MCM as eighty percent of St. Louis City and County residents visit Six Flags annually. One of the MSD clean water campaigns seeks to educate people about the harm of bacteria from pet and human waste can cause to our watersheds. The SWMP is heavily involved with reporting so a new tracking form was developed that will allow co-permittees can submit along with their annual report.

The second MCM is public participation and involvement. The goal of this MCM is to provide opportunities for public involvement in the development and oversight of the SWMP and the renewal application. MSD is trying to get additional co-permittee involvement at cleanup events. At the March 23<sup>rd</sup> Trash Bash, 21 co-permittees participated. Each co-permittee has different resources and skills that can assist with MSD's clean water efforts. Some of the different ways to get involved include providing dumpsters for clean-up, hosting a clean-up site, lending tools to projects, scouting out suitable clean-up locations, and being a part of single stream recycling sorting staff.

The goal of the third MCM is to detect and eliminate illicit discharges into the regulated MS4 area. Part of the 2018 SWMP update includes developing a tabular data base and GIS layer of areas that may utilize individual on-site sewage disposal systems. MSD will compile and house the data. MSD inspects 280 miles of streams annually and the data base will help to focus those efforts.

The fourth MCM is construction site stormwater runoff control. The goal is to reduce pollutants in any stormwater runoff from construction and land disturbance activities of greater than one acre. MSD will provide co-permittees with a form they can use to track that and submit with their annual report. Co-permittees are also being encouraged to require more robust inspections and reporting intervals for some of the land disturbance sites in their land disturbance ordinances. MSD would also like co-permittees to track the informal enforcements in order to gather a clearer picture of what is going on.

The focus of MCM five is post construction runoff control for new and redevelopment sites. The goal is to address the quality of long-term stormwater runoff from new and redevelopment projects that disturb equal to or more than one acre and discharge into the MS4 area. A new addition to the SWMP is the audit of up to five new/re-development projects. The audits will try

to target a variety of project types to make sure the site appropriately planned for water quality in the present and the future.

MCM six is pollution prevention and good housekeeping for municipal operations. The goal is to implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. A new update to the SWMP requires the co-permittees to list all operational facilities that are subject to MCM six and the No Exposure certification in each O&M manual. It is now also required to install BMPs such as rain gardens and permeable pavement with the construction of municipal facilities and roadways, where feasible. MSD will take the lead to update for the co-permittees the February 2005 Operation and Maintenance Program model template.

MSD has been working with MoDNR to get the latest updates to the SWMP approved. MSD's Annual Report is due to MoDNR on February 28, 2019. Coldwater Creek, Creve Coeur, Fishpot Creek, and Watkins Creek all have EPA approved bacteria Total Daily Maximum Loads (TMDLs). The deadline to submit the Assumptions and Requirement Attainment Plan (ARAPs) to address bacteria and *E.coli* impairment is June 14, 2019.

- B. OneSTL Water and Green Infrastructure Working Group
  - Rebecca Weaver, The Nature Conservancy
  - Bonnie Harper, East-West Gateway Council of Governments

As part of the continued implementation of OneSTL regional plan for sustainable development, several working groups were formed which are focused on meeting six regional targets established last year. The Water and Green Infrastructure Working Group is considered to be a sub-group of the WRC. The water quality target is centered on watershed planning and states that 100 percent of land in the East-West Gateway region will be represented by active watershed organizations. The goal is to have watershed plans underway by 2025 and completed by 2030. This is a process oriented target that encourages active watershed planning and strives for improved water quality. This working group will meet monthly, but will count WRC meetings as the working group meeting. One of the main focuses of this working group is to show how green infrastructure can help with flood mitigation and improving water quality.

The Water and Green Infrastructure Working Group decided to split into an action project committee, a data collection and analysis committee, and an education and outreach committee. The data collection committee has begun building on EWG's inventory of the watershed organizations that already exist and how they are functioning. The education and outreach committee is focused on building general awareness of watersheds and finding what watershed education materials are currently being used. The Water and Green Infrastructure Working Group would like to know if they can support other watershed groups and help to coordinate their efforts. The action project committee is looking at existing organizations and projects and how the committee can help those organizations and projects.

In addition to breaking up into sub groups the working group has come up with a list of projects. The next step is to prioritize the projects on the list for the next year during the working group meetings on the third Wednesday of every month, except for the months the WRC is meeting.

- C. Water Matters – Nine Network
  - Molly Saunders, Nine Network

The Water Matters initiative began two or three years ago. When the Nine Network asked those involved in water quality and members of the community what was of interest to them, they learned that the one of the main concerns was the quality and quantity of water in the region. For Water Matters there is ongoing media content being produced to inform the St. Louis region of the issues related to our water quality. On June 18 at 9 pm a Living St. Louis Special aired titled, *The 25th Anniversary of the Flood of '93*. This special is available to view on the Nine Network website <http://www.ninenet.org/blogs/living-st-louis/june-18-2018/>

#### D. OTHER BUISNESS / ANNOUNCEMENTS

There is a PowerPoint that provides information on events happening between June and the end of September. This PowerPoint can be found on the EWG website.

#### E. ADJOURNMENT

There being no other business, the meeting of the Regional Water Resources Committee was adjourned.