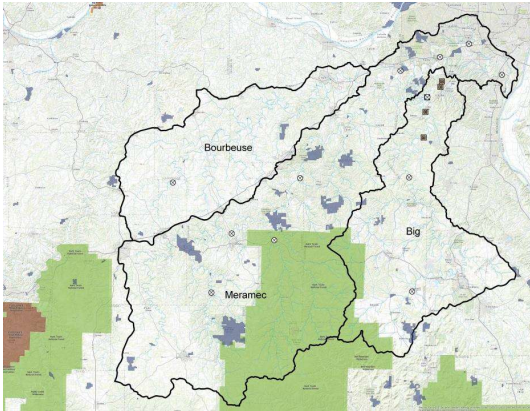


Meramec/Big River Work Plan - 2021

Location:

The Meramec and Big River project is located southwest of St. Louis, Missouri. The Meramec River is one of the longest waterways flowing through Missouri before emptying into the Mississippi River and is well known for its recreational uses.



Point of Contact

Mary Grace Lewandowski, Director of Community Planning
East-West Gateway Council of Governments
marygrace.lewandowski@ewgateway.org

Background

Formerly a booming lead-producing region, the towns in the Meramec and Big River watersheds hold over 200 years of lead mining pollution. As a result, high levels of heavy metals and lead sediment have entered the Meramec and Big Rivers. Lead contamination has affected wildlife, especially mussel and fish populations.

Partners

The UWFP Meramec and Big River Partnership location “network” continues to grow and consists of federal agencies, state agencies, local governments, NGOs, and private citizens. Current members include:

- *Federal Government:* EPA, USACE, USFWS, USGS, NRCS, NPS, FEMA, USFS, EDA, Agency for Toxic Substances and Disease Registry (ATSDR), and US Department of Housing and Urban Development.
- *State:* Missouri Departments of Conservation, Natural Resources, and Health and Senior Services
- *Local/County Government:* East-West Gateway Council of Governments, Meramec Regional Planning Commission, Soil and Water Conservation Districts, County Health Departments, and several local municipalities such as the cities of Pacific, Eureka, and Byrnes Mill
- *NGOs:* TNC, Open Space Council, Meramec River Recreation Association and Ozark Regional Land Trust

Overall Goals and Objectives

1. Accelerate On-the-Ground Projects (public lands, water, outdoor education, environmental restoration, water quality education)
2. Facilitate Better Collaboration Among Partners (to achieve better outcomes for the watershed)
3. Promote Water Quality and Restore Ecosystems
4. Increase Public Health Awareness
5. Encourage Community and Stakeholder Engagement and Collaboration (communication, information sharing, partnering & continuity)

Initiatives

The projects and initiatives active in the Meramec/Blue River basin are categorized into two Tiers. Tier 1 includes projects being completed by current Urban Waters partners. Tier 2 includes projects that contribute to the goals and objectives of the Partnership and are implemented by agencies and organizations affiliated with current Urban Waters partners, but are being conducted outside of Partnership coordination/collaboration.

Tier 1 - Urban Waters Partner Projects

<i>Accelerate On-the-Ground Projects (public lands, water, outdoor education, environmental restoration, water quality education)</i>				
Project Name	Partners	Purpose	Upcoming Activities	Ambassador Role
Big River Animations	Department of the Interior - Fish and Wildlife Service	Create animation videos directed at public education on human health, ecological issues, economic issues and the history of mining as related to lead contamination.	- Big River Task Force partners providing final comments. -Finalize the videos. -Post videos to Urban Waters website and distribute links	-Provide input and feedback. -Assist with posting the videos and distribution
Viburnum Trend Restoration Plan (implementation)	Doe Run, MDNR, USFS Lead: USFWS	Restore wildlife habitat by treating contaminated soil and removing contaminated sediment from properties and from streams.	-Treat contaminated soil. -Cap tailing piles. -Remove contaminated sediment.	Communicate agency progress to the community
Meramec River Basin Ecosystem Restoration Plan	MDNR, USFWS Lead: USACE	Ecosystem Restoration project that will address habitat degradation and excessive sedimentation within the Meramec River Basin through bank stabilization, reforestation, and sediment management features resulting in approximately 1,600 acres of habitat restored. The Meramec River Basin is recognized as one of the most significant, diverse watersheds in the US but is listed as impaired with over fifty-five river miles adversely affected by sediment including endangered freshwater mussel habitat.	Waiting federal appropriations	Communicate potential project benefits to the community
<i>Facilitate better collaboration between state and Federal agencies to achieve better outcomes for the watershed</i>				
Project Name	Partners	Purpose	Upcoming Activities	Ambassador Role
Big River Partner Meetings	Big River Task Force Technical Group	The <i>Big River Task Force Technical Group</i> is a group of state, federal, and local government agencies and a few NGO's that work in the Big River and the counties it runs through. Subsets of this group meet regularly to coordinate on projects.	-Look for alternative to remote meetings while COVID travel restrictions are in place. -Reconvene in-person when travel restrictions are lifted	Organize and facilitate.
Subgroup meeting facilitation	EWG as Ambassador	Bring together BRTF members for issue specific topics such as communications and funding	-Mailchimp newsletter to broader stakeholder group -Pilot project review	Organize and facilitate
Meramec/Big River UWFP Storymap	EWG as Ambassador / Groundworks Network	ArcGIS storymaps create inspiring, immersive stories by combining text, interactive maps, and other multimedia content. An Urban Waters storymap is being created for EPA R7 that will be used to brief the regional administrator as well as for distribution to communities in the project area.	-Finalize and publish the Storymap	Provide content for story map. Distribute to link to partnership and stakeholders.
Multidisciplinary communication and coordination	EWG as Ambassador / EPA Lead	Attend UWFP and DOI UW calls, share information with partners, participate in national UWFP network, attend conferences, attend regional, engage new partners through 1-on-1 contacts	Attend monthly EPA Urban Waters Locations calls Present at the September DOI Quarterly Urban Waters meeting	Initiate contact and arrange meetings, contribute to information transfer work of the UWLN
Multidisciplinary communication and coordination	EPA Lead	Establish internal MS-Teams page to share information/documents. Attend UWFP and DOI UW calls, share information with UWFP partners, participate in national UWFP network, attend conferences, coordinate within EPA R7	Attend monthly EPA Urban Waters Locations calls Present at the September DOI Quarterly Urban Waters meeting	
<i>Promote Water Quality and Restore Ecosystems</i>				
Project Name	Partners	Purpose	Upcoming Activities	Ambassador Role
Big River Assessment	MDNR Lead: USFWS	Evaluate mussel, other aquatic wildlife, and migratory bird populations. Determine appropriate restoration to compensate for injured resources.	-Complete Restoration compensation and determination plan.	Communicate agency progress to the community
Bonehole Park	USFWS Lead: MDNR	Ecological restoration of recently acquired parkland.	-Continue clearing invasive species and restore native habitat.	Communicate agency progress to the community
Borehole Capping	USFWS Lead: MDNR	Cap historic mining exploration boreholes to halt erosion and prevent continued introduction of lead contamination from ground water to surface water.	-Prioritize boreholes that are causing the most damage.	Communicate agency progress to the community

Calico Creek	MDNR, USFWS, USEPA Lead: USACE	Ecosystem Restoration project at the confluence of the Big River and Calico Creek Pilot that will utilize both traditional and innovative bank stabilization techniques to prevent lead contamination from entering the river and restore aquatic and riparian habitat. This project includes a partnership of multiple agencies (Federal and State) in an effort to determine the efficacy of executing work with multiple features that include both remediation and restoration components.	- Begin construction Spring 2021 - Stream Bank Stabilization - Riparian Corridor Restoration - Floodplain and Upland Restoration - Soil lead bio-availability reduction w/phosphate treatment.	Communicate agency progress to the community
Kiefer Creek bank stabilization Phase II	MDNR, MO State Parks Lead: TNC	TNC, Missouri Department of Natural Resources and Missouri State Parks stabilizing severely eroding stream bank along Kiefer Creek and improve riparian habitat	Scheduled to begin in 2021	Communicate progress to watershed partners
Kiefer Creek - Feasibility Study	EWG, MSD Lead: EWG	Determine location and cost of removing septic systems and connecting residences to the regional sewer system	-Survey residents -Assess number of properties with systems and proximity to regional sewer system	Communicate progress to watershed partners
Keifer Creek - Water Quality Monitoring	USGS	This objective of this proposal is to provide scientific data on the origin and source of fecal bacteria in Kiefer Creek, a tributary to the Meramec River.	-Collect and analyze water samples during various hydrology events.	Communicate progress to watershed partners
Labarque Creek - bank stabilization monitoring	Tyson Research Center Lead: TNC	Monitor the streambank for the next two years to see if it geomorphology changes over time - measuring for physical and biological responses to the restoration.	-site visits	Communicate progress to watershed partners
Riffle 96 Modification Project	MDNR, USFWS, USEPA Lead: USACE	Modification of a previously designed/constructed grade control feature at River Mile 96 of the Big River. The engineered rock riffle was constructed to encourage deposition of sediment for removal and disposal. Current project will modify the structure to allow for passage, stabilize an adjacent bankline, and implement riparian restoration within the project site.	-Removal of trapped sediment is on-going. -Complete bank stabilization and revegetation work. -Reworking the in-stream rock archway to allow fish passage.	Communicate agency progress to the community
Trash Free St. Louis	Blue2Blue, MDC Stream Teams, EFC Lead: Missouri Confluence WaterKeeper	Install and maintain floating "trash traps" in local creeks and streams. https://missouriconfluencewaterkeeper.org/trashfreestl	-Find locations for four additional trash traps. -Monitor, clean and maintain installed trash traps.	Communicate progress to watershed partners
RCCP	USFWS, TNC, Ozark Land Trust, Land Learning Foundation, MDC Lead: MDNR	Reduce soil erosion, improve soil and water quality, and restore and enhance fish and wildlife resources by implementing riparian forest buffer, streambank stabilization, wetland restoration, and other practices. We will also establish easements to ensure long-term protection of target areas.	- Grant award May 2021 - Execute award and sub agreements	Collaborate on land owner engagement

Increase Public Health Awareness

Project Name	Partners	Purpose	Upcoming Activities	Ambassador Role
Blood Lead Testing and Related Efforts	ATSDR, DHSS, EPA, County Health Departments	Support local efforts to increase blood lead testing. Receive all blood lead data and assist in identifying community needs and educational efforts for lead poisoning prevention.	-Form a steering committee and begin meeting -Identify new locations and events to have testing drives. -Testing ongoing	Communicate opportunities to the community
Well Water Testing	County Health Departments, DHSS, USEPA	Test well water for lead contamination Note: EPA does not provide testing that is otherwise unrelated to their specific site activities as noted below	-Testing ongoing	Communicate opportunities to the community
Fish Advisories	DHSS	Issue annual fish advisories	-Ongoing postings	Communicate to the community
Residential Soil and Water Testing	USEPA	Conduct soil sampling (testing) on residential property at no cost to property owners. Provide filtration systems and bottled water if well water lead levels are high	-Meet with agencies to discuss ways to encourage use of filtration systems and discuss any ways that local governments can communicate the need for sampling and provide health education in response to PB contamination in private well water.	Communicate opportunities to the community

Private Property Soil Remediation within Superfund site boundaries of Jefferson, and all of St. Francois, and Washington Counties	USEPA	If residential property is tested and found to be contaminated with elevated lead levels near the home, an EPA contractor will perform the cleanup at no cost to the property owner. (Southwest Jefferson County and Washington County Lead District Sites only)	-Testing ongoing	Communicate opportunities to the community
<i>Encourage Community and Stakeholder Engagement and Collaboration (communication, information sharing, partnering & continuity)</i>				
Project Name	Partners	Purpose	Upcoming Activities	Ambassador Role
Big River Partner Meetings - Big River Task Force	Lead: EWG	The <i>Big River Task Force</i> is a larger group of stakeholders that work in the watershed on issues related to water quality and ecological restoration.	Next anticipated meeting will be spring or summer 2022.	Organize and facilitate.
Sustainable Funding	EWG, EFC, EPA R7	Find and help secure a source to fund the River Ambassador position into the future.	-Locate source(s) of funding for River Ambassador position -Evaluate and complete report on funding sources	Complete in coordination with EFC
Tools for Engaging Landowners Effectively workshop	EWG, MDNR Lead: USDA USFS	TELE applies targeted marketing principles to the challenge of promoting good stewardship on private lands. Rather than using a broad-brush approach that tries to appeal to everyone, TELE practitioners design outreach programs to bring about a specific behavior change in a selected group of people.	- Secure funding to cover the cost of the workshop. - Coordinate with workshop facilitators to create an agenda specific to needs in Meramec and Big Rivers.	Assist with planning.