

Missouri
Department of
Natural Resources

DRAFT BACTERIA TOTAL MAXIMUM DAILY LOAD (TMDL)
PUBLIC COMMENTS

For

Coldwater Creek (WBID 1706), Creve Coeur Creek (WBID 1703),
Fishpot Creek (WBID 2186), and Watkins Creek (WBID 1708)

Public Notice
May 23 – Oct. 21, 2014

St. Louis County, Mo.

Missouri Department of Natural Resources
Water Protection Program
PO Box 176
Jefferson City, MO 65102-0176
800-361-4827 / 573-751-1300

U.S. Environmental Protection Agency (EPA) regulations require that total maximum daily loads (TMDLs) be subject to public review (40 CFR 130.7). The Missouri Department of Natural Resources placed the draft Coldwater Creek, Creve Coeur Creek, Fishpot Creek, and Watkins Creek bacteria TMDLs and implementation plans on an initial 90-day public notice and comment period from May 23, 2014 to Aug. 21, 2014. The public comment period was extended to Oct. 21, 2014. All comments received are included in this document; however, attachments or supporting documents that were submitted with some of these comments are not included. These supplementary files will be maintained by the department and can be made available upon request.

Comments were received from the following groups or individuals:

The Boeing Company
Cavender, David
City of Chesterfield
City of Clayton
City of Creve Coeur
City of Ellisville
City of Florissant
City of Hazelwood
City of Ladue
City of Manchester
City of Winchester
Delcoure, Sandra
Howard Bend Levee District
Metropolitan St. Louis Sewer District
Missouri Department of Transportation
Monarch-Chesterfield Levee District
The Partnership for Tomorrow
St. Louis County - Office of the County Executive
St. Louis County Municipal League



The Boeing Company
P.O. Box 516
St. Louis, MO 63166-0516

October 14, 2014

RECEIVED

OCT 21 2014

Mr. John Hoke
Chief, Watershed Protection Section
Missouri Department of Natural Resources
Water Protection Program
P.O. Box 176
Jefferson City, Missouri 65102

WATER PROTECTION PROGRAM

RE: Comments on Draft Bacteria Total Maximum Daily Load (TMDL) and Implementation Plan Coldwater Creek (WBID 1706)

Dear Mr. Hoke:

The Boeing Company (Boeing) retained an environmental consultant, Barr Engineering Co., to review and provide comments on the previously mentioned documents. In general, we have restricted our interest and comments to areas of the TMDL and Implementation Plan that may have either a direct and/or an indirect effect on the Boeing St. Louis manufacturing facility. For clarification, due to the fact that pollutant of concern (i.e., bacteria) is not directly applicable to the Boeing facility, we did not focus our review of the TMDL on sections that pertain to the technical analysis of the data including modeling analysis, load capacity determination/allocation, and waste load allocation determination. The following comments are offered for consideration regarding the TMDL and Implementation Plan.

Total Maximum Daily Load (TMDL)

1. Section 3.1.2 Industrial and Non-Domestic Wastewater Permits – In Table 5 of this section of the report, the four non-domestic site-specific permits are identified. The Boeing St. Louis facility is identified on this list (MO-0004782) with an SIC description of "Nonresidential Building Operators." Boeing requests the SIC description in Table 5 be modified to be consistent with our permit, which appropriately lists the SIC as 3721 Aircraft Assembly/Manufacturing. Boeing suggests that "Nonresidential Building Operators" be replaced with "Aircraft" for the SIC description in Table 5.

This table also indicates that the flow from the facility is 0.3 million gallons per day (MGD) but neglects to include any mention of the stormwater that also discharges from the facility. Boeing suggests that Table 5 be modified to include "stormwater" in addition to the 0.3 MGD.

2. Section 3.1.2 Industrial and Non-Domestic Wastewater Permits – The description of these four industrial/non-domestic facilities in the TMDL indicates that *"According to the fact sheets available for these permits, these facilities are not considered to contribute to the bacteria impairment of Coldwater Creek."* While the Missouri Department of Natural Resources (MDNR) correctly concludes that these facilities do not contribute to the impairment (exceedances of bacteria criteria), the TMDL is not definitive in its future treatment of these dischargers. The paragraph goes on to indicate that should information *"become available indicating changes to permit limits or conditions are necessary to assure compliance with Missouri's water quality standards, then these permits may be reopened and modified, or alternatively revoked and reissued."* Boeing understands the MDNR's need to be able to reopen permits should situations of documented discharges of pollutants from these facilities be found to be causing or contributing to the impairment. However, Boeing does not believe that it is appropriate for the MDNR to arbitrarily and without good cause, require any or all of these permittees to gather data to make such a demonstration, particularly when sources of E.coli bacteria are not known to exist on the site. In the case of Boeing, continuous discharges of non-contact cooling water and groundwater from building drains occur at Outfalls 007 and

010. Neither of these outfalls have sources of pollutants that have any reasonable likelihood to contain E.coli bacteria that would subsequently be discharged from the outfall.

Furthermore, stormwater is discharged from Outfalls 006, 012, 013, 014, and 015 in addition to Outfalls 007 and 010 at the Boeing facility. Boeing has recently engaged the MDNR in discussions of the potential pollutant sources of stormwater discharges for each individual outfall at the facility. Boeing has provided the MDNR with detailed information regarding the individual potential pollutant sources "up-stream" of each outfall including information on the magnitude, duration, and frequency of the activities and resulting pollutants that may be contained in the discharge. Furthermore, Boeing is not aware of any large populations of animals (e.g., geese) that might contribute E.coli to the runoff from the facility. Given Boeing's proximity to the Lambert International Airport, Federal Aviation Administration rules require Boeing to take the necessary steps to control large populations of wildlife that might endanger aircraft. Consequently, every effort is made to minimize any resident populations of migratory birds or animals on the Boeing property that might endanger aircraft as they ingress/egress the airport.

In summary, Boeing is not aware of any sources of E.coli bacteria on the property that would be discharged in stormwater in sufficient quantities to cause or contribute to the bacteria impairment of Coldwater Creek. In fact, the second paragraph of Section 7 of the TMDL corroborates this conclusion by indicating "...there are no site-specific permitted point sources in the Coldwater Creek watershed that are likely to cause or contribute to the bacteria impairment. For this reason, the industrial and non-domestic dischargers identified in Table 5 are given a wasteload allocation of zero." Given that Boeing has no known sources of E.coli and the previously mentioned statement of Section 7 of the TMDL, Boeing requests that the MDNR include a sentence in the first paragraph of Section 3.1.2 of the TMDL to clarify monitoring expectations for the facilities that specifically indicates that *"The MDNR does not believe that additional monitoring for E.coli is necessary and will not be required of the permittees at this time."* Boeing suggests that this sentence be inserted immediately before the sentence that begins with *"Should information"*

TMDL Implementation Plan

1. Section 8.1 Point Source Implementation – Boeing believes that some additional language that clarifies the expectations for non-domestic/industrial site-specific dischargers within the watershed of Coldwater Creek is needed. This section specifically lumps together all wastewater dischargers and indicates that they will be evaluated during permit issuance to determine if more protective effluent limits or conditions are needed to protect water quality. Boeing understands that the MDNR must evaluate each individual situation to ensure that the discharges protect water quality. However, in order to provide clarity and reduce any future confusion over monitoring for E.coli, Boeing suggests that this section specifically identify that no additional E.coli monitoring is needed for the non-domestic/industrial site-specific permitted dischargers unless sources of E.coli are identified, at a given facility, that are capable of causing or contributing to the impairment of Coldwater Creek.

Boeing appreciates the opportunity to comment on these documents. If you have any questions or desire to discuss any of the comments, please contact me at (314) 777-9172 or by email at gary.s.buford@boeing.com.

Sincerely,



Gary S. Buford
The Boeing Company

Kruse, Michael

From: Hoke, John
Sent: Thursday, July 10, 2014 10:29 AM
To: Kruse, Michael
Cc: Whipps, Bill
Subject: FW: Creve Coeur Creek TMDL and Implementation Plan

John Hoke
Chief, Watershed Protection Section
Water Protection Program
Missouri Department of Natural Resources
P: 573-526-1446, F: 573-526-6802

Celebrating 40 years of taking care of Missouri's natural resources. To learn more about the Missouri Department of Natural Resources visit dnr.mo.gov.

From: David P. Cavender [<mailto:dpcavender@hornershifrin.com>]
Sent: Thursday, July 10, 2014 7:42 AM
To: Hoke, John
Subject: Creve Coeur Creek TMDL and Implementation Plan

John,

The Draft TMDL and the Draft Implementation Plan make no mention of a physical inspection of the affected reach of stream and upstream areas for illicit discharges including failing septic systems. The TMDL cannot adequately assess potential sources of bacteria without such a survey being conducted.

Such a survey must be made to both complete the TMDL and to implement the recommendations. It would logically take place in conjunction with additional sampling. The sampling should guide the intensity of the physical inspection with most resources directed to areas with the greatest concentrations of bacteria.

Given the time it will take to complete the survey, I recommend the TMDL remain in draft status until it is completed but the Implementation Plan move forward on a parallel track.

David Cavender, P.E.

Board Certified Environmental Engineer
Senior Project Manager

Horner & Shifrin, Inc.

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640 Pierce Boulevard
O' Fallon, IL 62269-2579

Visit us at www.hornershifrin.com



RECEIVED

SEP 8 2014

WATER PROTECTION PROGRAM

690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

August 29, 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

We are writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, we ask the Department to carefully consider and satisfactorily resolve MSD's comments.

We also want to take this opportunity to highlight the following priority concerns we have with the proposed TMDLs and Implementation Plans.

1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Please also add language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
2. In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, the Department must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans. Our community is taking many positive steps to improve this region's water quality. The Department should support the region by approving the SWMP.
3. The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. Additionally, MSD is making comprehensive improvements to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct implementation activities. This reality supports the need for iterative

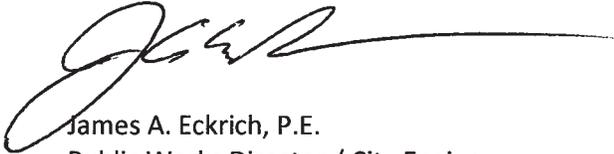
Mr. John Hoke
August 29, 2014
Page 2

implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.

4. We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Please revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
5. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.

We appreciate the opportunity to provide these comments. The City of Chesterfield is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact me at 646-537-4764 or jeckrich@chesterfield.mo.us if you have any questions or would like to discuss these issues further.

Sincerely,

A handwritten signature in black ink, appearing to read 'JECKRICH', with a long horizontal line extending to the right.

James A. Eckrich, P.E.
Public Works Director / City Engineer

cc: Jay Hoskins, MSD
Michael O. Geisel, Director of Public Services



Department of Public Works

10 N. Bemiston Ave. • Clayton, Missouri 63105 • Phone (314) 290-8540 • Fax (314) 863-0296

October 13, 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

Subject:

Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

We are writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, we ask the Department to carefully consider and satisfactorily resolve MSD's concerns.

We also want to take this opportunity to highlight the following priority concerns we have with the proposed TMDLs and Implementation Plans.

1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable. Please also include language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
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3. The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not just the values that were higher than the water quality geometric mean criteria. Additionally, MSD is making comprehensive improvements to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct implementation activities. These facts support the need for iterative implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.
4. We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Please revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.

We appreciate the opportunity to provide these comments. The City of Clayton is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input.

Sincerely,

A handwritten signature in blue ink that reads "Dale L. Houdeshell". The signature is written in a cursive style and is underlined.

Dale Houdeshell,
Director of Public Works
Clayton, MO

Cc: Jay Hoskins, MSD



city
of

CREVE COEUR

300 North New Ballas Road • Creve Coeur, Missouri 63141
(314) 432-6000 • Fax (314) 872-2539 • Relay MO 1-800-735-2966
www.creve-coeur.org

October 14, 2014

RECEIVED

OCT 17 2014

WATER PROTECTION PROGRAM

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans
Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creek
St. Louis County and St. Louis City, Missouri

Dear Mr. Hoke:

The City of Creve Coeur wishes to commend the Missouri Department of Natural Resources (DNR) on its study of Creve Coeur Creek and others in the St. Louis area. This was certainly a significant effort. However, the City is concerned about the proposed Total Maximum Daily Load (TMDL) and implementation plan for Creve Coeur Creek, and the City shares several of the concerns expressed by the Metropolitan St. Louis Sewer District (MSD), namely:

- Introducing set criteria into the municipal separate storm sewer system (MS4) permits is an unwelcome change to the nature of the permit that has thus far focused on best management practices (BMPs), education, and outreach to make improvements to the maximum extent practicable (MEP).
- MSD, the City, and the other co-permittees in the MS4 need DNR's support, particularly through the approval of stormwater management plans (SWMP) intended to implement the TMDLs through permits. DNR's approval of the SWMP will provide the MS4 permittees certainty and transparency as to what is required to comply.
- The bacteria reductions in the TMDL should be based upon all of the available water quality data, and this data should be updated as necessary to reflect current efforts by MSD to eliminate sanitary sewer overflows.
- We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Please revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
- The margin of safety set in the TMDL is too high, resulting in a requirement for more bacteria removal than is necessary.

The City asks DNR to carefully consider MSD's comments and to work toward a satisfactory resolution to them.

The City has a few additional concerns that relate to those expressed by MSD:

1. Don't set MSD and the City up for failure. The benchmarks of our future implementation plan(s) should be based upon what MSD and the City can reasonably achieve together, through the implementation of BMPs to the maximum extent practicable, not upon how close we can get to a set numeric limit.

The TMDL cites a 2010 study from the United States Geological Survey that attributes e-coli in creeks to several sources, namely:

Dogs	10%
Geese	20%
Humans	33%
Unknown	33%

The City has noted a significant deer population in the Creve Coeur Creek watershed. At least some of the "unknown" source of e-coli should be attributed to the deer and other wildlife that thrive in the established and protected riparian corridors lining the creeks in the watershed. If all of the deer, squirrels, and other woodland wildlife is assumed to account for 10-15% of the e-coli loading, then wildlife would account for about one-third of the e-coli load in Creve Coeur Creek.

The City finds this significant, because there does not appear to be a means to control the wildlife source. In the best-case scenario, the City would implement a plan that would successfully remove all human and canine contributions and some of the contributions from unknown sources to achieve 50%-66% reduction in e-coli loading. According to Table 4 of the TMDL, even this best-case scenario would have fallen short of meeting the set limit in 2006 and 2009.

Is it realistic to require MSD, the City, and the rest of the co-permittees in the MS4 to meet a standard that, in the best case scenario, cannot be achieved in two out of four years without reducing the contributions from wildlife?

2. The City does not necessarily control the effluent. The majority of the land in Creve Coeur is established residential, suburban, private property. Creve Coeur Creek and its tributaries run through and drain residential neighborhoods, with much of the banks of these waterways along the back property lines of area homes.

A few months ago, Jay Hoskins from MSD brought up a hypothetical scenario that someone walking their dog could negatively impact the bacteria levels in an area creek by throwing the bag of their dog's waste into the storm inlet. Quite honestly, City staff thought this story was an exaggeration. That is, until this exact scenario was reported in Creve Coeur a few days later. The point is that, even though the City and MSD have ordinances (best management practices) to address this kind of source, we are not able to control every circumstance or potential pollution source, even in what might be considered a well-kept neighborhood of relatively educated people.

The City's right of way and properties account for less than 10% of the area within Creve Coeur, and even that is impossible to completely control the quality of runoff from, as the example above demonstrates.

This example also supports the City's skepticism that reliance upon voluntary implementation, incentive programs, and encouragement of public participation (as are

suggested in Section 8.1.2 of the implementation plan) will be effective. The City has no doubt that some of its citizens will take great steps to improve water quality. It is not realistic, however, to expect all citizens to be capable of or interested in participating.

3. MoDOT should play a role. The City of Creve Coeur is practically surrounded by, and is literally bisected by, interstates and state routes. Interstate 270, Olive Boulevard, Old Olive Street Road, and Lindbergh Boulevard and portions of Ladue Road, Coeur de Ville Drive, and Emerson Road are owned and operated by the Missouri Department of Transportation (MoDOT). Combined, these roadways represent some 500,000 square yards of pavement. Comparatively, the City's streets total approximately 1,000,000 square yards of pavement. In other words, MoDOT is responsible for about one-third of the publicly maintained pavement in Creve Coeur.

The TMDL cites a study from the Federal Highway Administration (FHWA) that found runoff from paved areas can contain bacteria. The TMDL is quick, however, to diminish the significance of this report as it relates to highways, stating that contributions from highway corridors are "likely" to be less than other area sources (TMDL Section 3.1.3, page 15).

Considering that pavement owned and maintained by MoDOT represents about one-third of the publicly maintained pavement in Creve Coeur, and considering that the number of vehicles that use MoDOT's roads are disproportionately higher than the number of vehicles using the City's roadways, the City finds it reasonable to request that DNR revisit the study and determine the actual contribution of bacteria from MoDOT's roadways so that MoDOT can be held accountable for its share.

After all, MoDOT is an MS4, just as MSD and its co-permittees are. MoDOT should be held to the same standard in this TMDL.

This letter has been reviewed and endorsed by the City's Stormwater Committee and the Creve Coeur City Council.

The City appreciates the opportunity to provide these comments. The City of Creve Coeur is committed to working with DNR and MSD to ensure that Missouri's waters are protected through application of good science, practical solutions, and stakeholder input. Please contact me at (314) 442-2084 or at mwohlberg@ci.creve-coeur.mo.us if you would like to discuss these issues further.

Sincerely,

CITY OF CREVE COEUR



Matt Wohlberg, P.E.
City Engineer

cc: Mark Perkins, City Administrator
Creve Coeur Stormwater Committee
Jay Hoskins, MSD



City of Ellisville

September 4, 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102

RECEIVED

SEP 9 2014

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

WATER PROTECTION PROGRAM

We are writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, we ask the Department to carefully consider and satisfactorily resolve MSD's comments.

The City of Ellisville also want to take this opportunity to highlight the following priority concerns we have with the proposed TMDLs and Implementation Plans.

1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Please also add language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
2. In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, the Department must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans. Our community is taking many positive steps to improve this region's water quality. The Department should support the region by approving the SWMP.
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Mr. John Hoke
September 4, 2014
Page 2

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5. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.

We appreciate the opportunity to provide these comments. The City of Ellisville is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact Mr. John Collins, Assistant City Engineer, at 636-227-9660 if you have any questions or would like to discuss these issues further.

Sincerely,



Mr. Bill Schwer
City Manager/City Engineer

Cc: Jay Hoskins, MSD



CITY OF FLORISSANT

Honorable Thomas P. Schneider, Mayor

September 3, 2014

RECEIVED

SEP 8 2014

WATER PROTECTION PROGRAM

Mr. John Hoke
Missouri Department of Natural Resources
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

Subject: Public Comments for Bacteria Total Maximum Daily Loads (TMDL) and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

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CITY HALL	POLICE DEPARTMENT	PARKS DEPARTMENT	HEALTH DEPARTMENT	MUNICIPAL COURT
955 Rue St. Francois Florissant, MO 63031 314 / 921-5700 Fax: 314 / 921-7111 TDD: 314 / 839-5142	1700 North Highway 67 Florissant, MO 63033 314 / 831-7000 Fax: 314 / 830-6045	#1 James J. Eagan Drive Florissant, MO 63033 314 / 921-4466 Fax: 314 / 839-7672	#1 St. Ferdinand Drive Florissant, MO 63031 314 / 839-7654 Fax: 314 / 839-7656	1055 Rue St. Francois Florissant, MO 63031 314 / 921-3322 Fax: 314 / 839-7663

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Mr. John Hoke
September 3, 2014
Page 2

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5. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.

We appreciate the opportunity to provide these comments. The City of Florissant is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact me at 314-839-7643 if you have any questions or would like to discuss these issues further.

Sincerely,



Timothy J. Barrett, P.E.
City Engineer

TJB

Cc:
Mayor Thomas P. Schneider
Louis B. Jearls, Jr., P.E., Director of Public Works
Jay Hoskins, MSD



The City of Hazelwood

much more
than you imagine



September 10, 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

The City of Hazelwood is writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, we ask the Department to carefully consider and satisfactorily resolve MSD's comments.

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1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Please also add language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
2. In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, the Department must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans. Our community is taking many positive steps to improve this region's water quality. The Department should support the region by approving the SWMP.
3. The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. Additionally, MSD is making comprehensive improvements to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct implementation activities. This reality supports the need for iterative implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.

City Hall & Public Works
t: 314.839.3700
f: 314.839.0249
415 Elm Grove Lane

City Maintenance
t: 731.8701
f: 731.4240
115 Ford Lane

Fire Department
t: 731.3424
f: 731.1976
6800 Howdershell Road

Municipal Court
t: 839.2212
f: 838.5169
415 Elm Grove Lane

Parks & Recreation
t: 731.0980
f: 731.0989
1186 Teson Road

Police Department
t: 839.3700
f: 838.5169
415 Elm Grove Lane

Mr. John Hoke
September 10, 2014
Page 2

4. We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Please revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
5. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.
6. The City financial situations is stressed, partly the result of unfunded mandates from the State and Federal government. If additional mandates are required that increases the work load of local government it is recommended that a funding source is included.

We appreciate the opportunity to provide these comments. The City of Hazelwood is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact Earl Bradfield at 314-513-5013 if you have any questions or would like to discuss these issues further.

Sincerely,



Earl Bradfield MCRP, AICP
City Planner

Cc: Jay Hoskins, MSD

CITY OF LADUE

Public Works

September 2, 2014

RECEIVED

SEP 8 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
E-mail: tmdl@dnr.mo.gov

WATER PROTECTION PROGRAM

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

We are writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, we ask the Department to carefully consider and satisfactorily resolve MSD's comments.

We also want to take this opportunity to highlight the following priority concerns we have with the proposed TMDLs and Implementation Plans.

1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Please also add language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
2. In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, the Department must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans. Our community is taking many positive steps to improve this region's water quality. The Department should support the region by approving the SWMP.
3. The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. Additionally, MSD is making comprehensive improvements to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct implementation activities. This reality supports the need for iterative implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.

Mr. John Hoke
September 2, 2014
Page 2

4. We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Please revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
5. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.

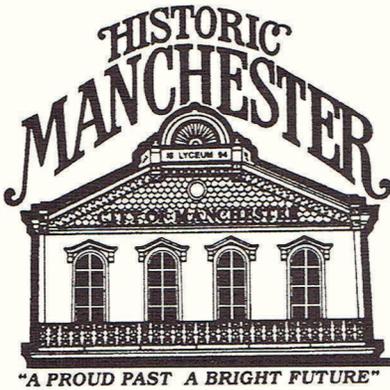
We appreciate the opportunity to provide these comments. The City of Ladue is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact me at (314) 993-5665 if you have any questions or would like to discuss these issues further.

Sincerely,



Anne C. Lamitola, P.E.
Director of Public Works

Cc: Mayor Nancy F. Spewak
Michael W. Wooldridge, Assistant to the Mayor/City Clerk
Jay Hoskins, MSD, jshosk@stlmsd.com



DIRECTOR OF PUBLIC WORKS
BOB RUCK
City of Manchester
14318 Manchester Road
Manchester, Missouri 63011

(636) 227-1385, ext. 131

October 10, 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102

Subject: Public Comments for Bacteria Total Maximum
Daily Loads and Implementation Plans for Watkins Creek,
Creve Coeur Creek, Coldwater Creek, and Fishpot Creek
in St. Louis County and St. Louis City, Missouri

Dear Mr. Hoke:

As the City of Manchester is a co-permittee to the St. Louis Small MS4 General Permit, I am writing to express my support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies and the implementation plans. MSD has raised a number of significant concerns that I believe the Department should carefully consider and satisfactorily resolve.

I appreciate the opportunity to comment on this matter. The City of Manchester is committed to working with the Department of Natural Resources and MSD to ensure that Missouri's waters are protected through application of good science and stakeholder input. I may be contacted at 636-227-1385, extension 131, or by email at ruck@manchestermo.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "Bob Ruck", is written over a light blue circular stamp.

Bob Ruck
Director of Public Works
City of Manchester

cc: David L. Willson, Mayor
Andy Hixson, City Administrator
Jay Hoskins, MSD



CITY OF WINCHESTER
109 LINDY BLVD.
WINCHESTER, MISSOURI 63021-5299
(636) 391-0600
FAX (636) 391-6365

RECEIVED

SEP 29 2014

WATER PROTECTION PROGRAM

September 25, 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

We are writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, we ask the Department to carefully consider and satisfactorily resolve MSD's comments.

We also want to take this opportunity to highlight the following priority concerns we have with the proposed TMDLs and Implementation Plans.

1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Please also add language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
2. In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, the Department must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans. Our community is taking many positive steps to improve this region's water quality. The Department should support the region by approving the SWMP.
3. The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. Additionally, MSD is making comprehensive improvements to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct implementation activities. This reality supports the need for iterative implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.
4. We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Please revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
5. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.

We appreciate the opportunity to provide these comments. The City of Winchester is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact Barbara Beckett at 636-391-0600 if you have any questions or would like to discuss these issues further.

Sincerely,

A handwritten signature in cursive script that reads 'Gail M. Winham'.

Gail M. Winham, Mayor
City of Winchester

Kruse, Michael

From: Schaben, Darlene
Sent: Monday, July 14, 2014 7:58 AM
To: Whipps, Bill; Kruse, Michael
Subject: FW: comments on TMDLs

Thanks

Darlene Schaben
Administrative Assistant
Watershed Protection Section
Water Protection Program
MO Dept. of Natural Resources/DEQ
PO Box 176
Jefferson City, MO 65102
Phone: (573) 751-7428
FAX: (573) 526-6802

Celebrating 40 years of taking care of Missouri's natural resources. To learn more about the Missouri Department of Natural Resources visit dnr.mo.gov.

-----Original Message-----

From: Sandra Delcoure [<mailto:sdelcoure@sbcglobal.net>]
Sent: Saturday, July 12, 2014 10:29 AM
To: DNR.TMDL
Cc: MO Streamteam
Subject: comments on TMDLs

Living on Cold Water Creek in Florissant, North County St. Louis, I hope that you can the best water quality goals to reduce bacteria and other pollutants in that stream. Not being familiar with all the technical and background knowledge to achieve this goal I trust the MO DNR to do the best possible job and work they are able to achieve the best results for TMDL issues.

Thank you,
Sandra Delcoure
Cold Water Creek MO Stream Team #30
3029 Willow Creek Est. Dr.
Florissant, MO 63031

Copy: MO Dept. of Conservation Stream Team Program

HOWARD BEND LEVEE DISTRICT

Warren Stemme
President
Howard Bend Levee District
190 Carondelet Plaza, Suite 600
St. Louis, Missouri 63105
warren.stemme@gmail.com

October 21, 2014

VIA E-MAIL

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
E-mail: tmdl@dnr.mo.gov

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

We are writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, we ask the Department to carefully consider and satisfactorily resolve MSD's comments.

We also want to take this opportunity to highlight the following priority concerns we have with the proposed TMDLs and Implementation Plans.

1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Please also add language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
2. In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, the Department must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans. Our community is taking many positive steps to improve this region's water quality. The Department should support the region by approving the SWMP.
3. The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. Additionally, MSD is making comprehensive improvements to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
October 21, 2014
Page 2

dataset is extremely limited to support and direct implementation activities. This reality supports the need for iterative implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.

4. We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Please revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
5. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.

We appreciate the opportunity to provide these comments. The Howard Bend Levee District is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact Dan Human, Executive Director at (314) 603-2647 if you have any questions or would like to discuss these issues further.

Sincerely,



Warren Stemme
President, Howard Bend Levee District

cc: Jay Hoskins, MSD
jshosk@stlmsd.com

HOWARD BEND LEVEE DISTRICT

Warren Stemme
President
Howard Bend Levee District
190 Carondelet Plaza, Suite 600
St. Louis, Missouri 63105
warren.stemme@gmail.com

RECEIVED

OCT 24 2014

October 21, 2014

WATER PROTECTION PROGRAM

VIA E-MAIL

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
Watershed Protection Section
P.O. Box 176
Jefferson City, MO 65102-0176
tmdl@dnr.mo.gov

RE: TMDLs and Implementation Plans for Streams in St. Louis County – Watkins Creek, Creve Coeur Creek, Fishpot Creek and Coldwater Creek

Dear Mr. Hoke:

We are submitting these comments in accordance with the public notice of Draft Total Maximum Daily Loads (TMDLs) and Implementation Plans for several streams in St. Louis County, including: Coldwater Creek, Creve Coeur Creek, Fishpot Creek and Watkins Creek, for which the public review and comment period is open through October 21, 2014.¹ As a Levee District in St. Louis County, our primary concerns are with the probable impacts this will have on our operations and ability to provide flood protection to people and property in leveed areas. There is much critical infrastructure, numerous businesses and many people that live, work or play in St. Louis County's leveed areas.

While our fundamental purpose is to provide flood protection, in doing so we seek to comply with appropriate rules and regulations, including those for stormwater management. A review of these TMDLs and associated Implementation Plans does not reveal an adequate basis for us to undertake efforts aimed at reducing the subject pollutant that may occur within our leveed areas. E. coli is targeted to be reduced in an effort to restore waters in these streams to the standard of whole body contact, recreation category B, and it is encouraged that other pollutants be

¹ MDNR, Public Notice, May 23, 2014.

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
Watershed Protection Section
October 21, 2014
Page 2

addressed as well.² Lacking is a scientific basis for allocating the source of bacteria, which is necessary to determine how to reduce the bacteria and the financial means for doing so.

When TMDLs were first identified for several streams in St. Louis County in 2012, public comments were submitted stating that due to the complexity and cost of implementing TMDLs in urban areas that effort should be delayed. Technical concerns were identified, notably that the TMDL approach fails to distinguish the source of bacteria. This makes it difficult to determine what measures to use, and where, to reduce the pollutant. Potential bacteria sources include sanitary sewer overflows, septic tanks/fields not working properly, and urban runoff/stormwater. The complexities will surely result in a permit process that requires more time and ends up costing more money, and that will not ensure a reduction in bacteria in receiving streams. Rather than adhering to the typical permit requirements, special attention will be given when permits are written for both new and continuing discharges into those streams.³ The implementation of TMDLs can be expected to bring about ongoing water quality monitoring costs associated with both determining the measures needed to improve water quality and then to assess their efficacy. They may also set the stage for citizen lawsuits. The associated costs, and lengthened project timelines, would ultimately be borne by those seeking stormwater permits, including those for levee improvements.

We understand the EPA and the states each to have responsibilities for developing and implementing TMDL pollution targets. EPA oversees the TMDL efforts by establishing in regulations the minimum requirements TMDLs need for approval, providing funding, and furnishing technical assistance. States are required to develop TMDLs, which undergo EPA review and approval.⁴ States may choose when to implement TMDLs, at which time they take the lead by identifying pollutants that impair water quality and actions to reduce them. Because states are not required to develop TMDL implementation plans and, if they do, EPA does not approve them, we encourage MDNR to delay the TMDL Implementation Plans until such time when there is available a body of research and knowledge that will allow for an equitable division of the costs and responsibilities to implement plans that effectively reduce pollutants.

The money and time needed to implement these TMDLs and Implementation Plans will not be insignificant. The information needed to effectively and efficiently reduce E. coli is not provided and additional research does not yield much more than a developing field of study. There simply is not yet available a defensible basis for expending and distributing what may be excessive costs associated with establishing and implementing these TMDLs at this time. Implementation plans

² E.g., Missouri Department of Natural Resources, Water Protection Program, Bacteria Total Maximum Daily Load Implementation Plan for Coldwater Creek, DRAFT, (as displayed on website August 6, 2014), <http://dnr.mo.gov/env/wpp/tmdl/docs/ip-bacteria-coldwater-cr.pdf>.

³ Missouri Department of Natural Resources, MISSOURI 2000 303(d) STRATEGY DOCUMENT, (Apr. 1, 2000), p. 19, http://www.dnr.mo.gov/env/wpp/tmdl/tmdl_Strategy_III.pdf.

⁴ Clean Water Act Section 303(d)(1)(C).

for TMDLs should have the requisite detail to provide a clear path forward with respect to achieving the target and sharing the burden of doing so. Without, they do not provide a framework to accomplish the overall goal of cleaner waters in our streams, but rather generate confusion and unnecessary costs - costs that are not necessarily born by the responsible parties.

In addition to conveying our concerns as expressed above, we are writing to express support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD.) MSD has raised a number of significant concerns. In the event that MDNR proceeds with implementing TMDLs, we share in the concerns of MSD. Accordingly, we ask that MDNR consider and satisfactorily resolve our comments as well as those of MSD. Specifically, if these TMDLs are to be implemented, we want to take this opportunity to highlight the following concerns:

- We believe it is inappropriate for the TMDLs to set load reductions at flood flows and the TMDLs should be revised to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
- We strongly disagree with MDNR's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Clarifying language stating the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits is needed.
- The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. There are comprehensive improvements being made by MSD to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct these TMDL implementation activities. An adaptive and iterative process should be used for implementation activities to ensure they are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.
- An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.
- In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, MDNR must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans. Efforts are underway to improve the water quality in St. Louis County and MDNR should acknowledge and support those efforts by approving the SWMP for this region.

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
Watershed Protection Section
October 21, 2014
Page 4

We appreciate the opportunity to provide these comments and are committed to continuing our work in such a manner as to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact Dan Human, Executive Director at (314) 603-2647 if you have any questions or would like to discuss these issues further.

Sincerely,

A handwritten signature in cursive script that reads "Warren Stemme".

Warren Stemme
President, Howard Bend Levee District

cc: Jay Hoskins, MSD
jshosk@stlmsd.com



**Metropolitan St. Louis
Sewer District**

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
Phone: 314.768.6200 www.stlmsd.com

October 21, 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

The Metropolitan St. Louis Sewer District (MSD) appreciates the opportunity to review and provide comments on the above referenced Total Maximum Daily Loads (TMDLs) and TMDL Implementation Plans (IPs). MSD believes the TMDLs and IPs require a number of important revisions before they are finalized by the Department of Natural Resources (Department). MSD and Department staff met twice during the comment period (July 22 and October 2, 2014) to discuss these revisions. MSD has already provided the Department draft markups of each TMDL and IP, which were discussed at the October 2nd meeting. Subsequent to the October 2nd meeting, MSD completed final revisions of these documents, which are included as attachments to this letter. Please use the attached document revisions as MSD's final comments to the May 18, 2014, public noticed TMDLs and IPs for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creek.

The Department should revise the TMDLs and IPs in some significant ways. First, the Department should revise its approach in the TMDL on "Reasonable Assurance", and MSD's final document markups include language on Reasonable Assurance that should be acceptable to the Department. Second, the TMDL should acknowledge that the recreational season geometric mean criterion allows for significant daily fluctuations in *E. coli* loadings, and therefore no specific daily loading level must be met on any specific day to comply with the criterion. Third, calculated load reductions targeted in the implementation plans should be revised and based on the entire set of available water quality data from a flow regime, not only the values that were higher than the water quality geometric mean criterion. MSD is providing revised load reduction calculations as an attachment to this letter.

MSD also requests that the Department modify its use of the flow duration curve approach to establish the TMDL at flood flows and its use of the explicit Margin of Safety (MOS). At the October 2, 2014, meeting, the Department requested additional information about how other states and regions have addressed similar situations. We have attached USEPA-approved TMDLs that exclude extreme flow conditions and/or use an explicit 5 percent MOS to provide additional supporting documentation. MSD further notes that USEPA's flow duration curve guidance document (An Approach for Using Flow Duration Curves for the Development of TMDLs) includes reference to the Pee Dee River bacteria TMDL. This USEPA TMDL case study excludes extreme flow conditions from TMDL development and uses a 5 percent explicit MOS. We are not aware of any provisions within Missouri's Water Quality Standards, or other rules and regulations, that prevent the Department from taking this same approach.

Mr. John Hoke
October 21, 2014
Page 2

MSD is also attaching photos and video of all four of the watersheds during high flow conditions at their respective USGS gauging stations, whose flow data were used as the basis of the proposed TMDLs. The photographs and video support our contention that flows higher than the 10th percentile exceedance flow are not the critical flows for addressing public health concerns or for meeting Missouri's recreational season geometric mean *E. coli* criterion.

All of these TMDLs allocate the Wasteload Allocation (WLA) to the Municipal Separate Storm Sewer Systems (MS4) present within the watersheds. MSD also wants to take this opportunity to highlight the importance of implementing the WLA in MS4 NPDES permits using Best Management Practices to the Maximum Extent Practical (BMPs to the MEP) in lieu of numeric effluent limits. MS4 systems and permits that utilize BMPs as source controls are fundamentally different from typical point sources (e.g., industrial and municipal wastewater treatment facilities) that rely on end-of-pipe treatment and numeric limits. When BMPs are utilized, the ultimate goal is to employ an iterative process using BMPs to the MEP, assessment, and refocused BMPs, leading toward attainment of Water Quality Standards. It is important that the TMDL acknowledge this process in the Wasteload Allocation portion of the document to avoid confusion over TMDL implementation in MS4 permits. In addition, in order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, the Department must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans.

Finally, our community is taking many positive steps to improve this region's water quality. For example, MSD will spend over \$4 billion over the next 20 years improving its sanitary and combined sewer systems. The water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct TMDL implementation activities. This reality supports the need for iterative implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure TMDL implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost. This is critically important at this time, as MSD and co-permittees face significant stormwater funding challenges.

We appreciate the opportunity to provide these comments. MSD requests a meeting to review these final comments and documents with Department staff. We believe this is reasonable given the role MSD will be required to have in TMDL implementation.

MSD is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact Jay Hoskins at 314-436-8757 if you have any questions or would like to discuss these issues further.

Mr. John Hoke
October 21, 2014
Page 3

Sincerely,



Susan Myers
General Counsel

cc: Jay Hoskins, MSD

Attachments:

1. Markups of Bacteria TMDLs for Watkins Creek Coldwater Creek, Creve Coeur Creek, and Fishpot Creeks (4 documents)
2. Markups of Bacteria TMDL Implementation Plans for Watkins Creek Coldwater Creek, Creve Coeur Creek, and Fishpot Creeks (4 documents).
3. Load Reduction Calculations
4. Example TMDLs
5. Stream photos and video

Missouri Department of Transportation

David B. Nichols, Director

573.751.2551
Fax: 573.751.6555
1.888.ASK MODOT (275.6636)

October 15, 2014

Missouri Department of Natural Resources

Attention: Mr. John Hoke

Water Protection Program

P.O. Box 176

Jefferson City, MO 65102

Email: tmdl@dnr.mo.gov

Dear Mr. Hoke:

Subject: Design – Environmental Section
Public Comments for Bacteria Total Maximum Daily Loads and
Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater
Creek, and Fishpot Creeks located in St. Louis County and St. Louis City,
Missouri

The following are MoDOT's comments for the bacteria TMDLs and implementation plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek and Fishpot Creeks.

1. The following is from the Reasonable Assurance section of the TMDLs.
“Under this provision, the permitting authority has the discretion to include requirements for reducing pollutants in stormwater discharges as necessary for compliance with water quality standards (EPA 2010)”.

The citation is based on a memorandum and not legal standing. MDNR cannot require a MS4 permittee to comply with water quality standards through the MS4 permit.

2. The load allocation cannot realistically be equal to zero. The non-point sources must be given a share of the allocation. It is not reasonable to make the assumption that all septic systems and such are functioning properly.
3. MoDOT disagrees with the implementation of TMDLs through the MS4 permits. TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP).



4. Sampling locations are few in the watersheds, 1 to 2. More sampling locations would give more accurate data. The calculated load reductions should be based on the entire set of available water quality data, not only values that were higher than the criteria. The existing water quality dataset is extremely limited to support and direct implementation activities. There is a need for more data collection over a period of years to fully support a TMDL and assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.
5. It is unreasonable to expect MoDOT to reduce bacteria under a waste load allocation (WLA) when any minor contributions likely come from the traveling public and there are no single structural BMPs that are able to reduce bacteria sufficiently. MoDOT, while a holder of a stormwater permit, should be removed from the WLA.
6. Section 3. Source Inventory and Assessment: Urban Runoff (non-MS4 permitted areas): It is not realistic to assume the MS4 entities will assume all responsibilities for reduction of *E. coli* when there are other sources beyond the MS4s control that are contributors to the drainage onto or in the MS4, i.e., unmaintained on-site septic systems and pet waste coming from homeowners.
7. Stormwater runoff – “because there is insufficient data to adequately disaggregate the MS4 wasteload allocation among the permitted entities, all wasteload allocations are aggregated and allocated to the total MS4 area.” Because of the diffuse nature of stormwater, there will always be insufficient data to disaggregate the WLA, and yet parts of the *E. coli* contributors (e.g., homeowners) are not permitted and yet contribute to the impairment.
8. Section 5. TMDL Source Assessment Summary and Section 5.1.2 MS4 Regulated Urban Runoff (start of page 9): “Although the TMDL considers urban runoff in the Creve Coeur Creek watershed to be a regulated point source, due to the diffuse nature of the urban runoff prior to entering a storm sewer system, implementation efforts should address urban runoff as a nonpoint source and BMPs would consist of those typically used to control or reduce runoff events.” The implementation plan considers urban runoff as nonpoint source, but in the TMDL it is a point source? The information is contradictory.
9. Riparian Corridor Conditions (page 18): Grassland areas in the urban watershed seem to be community shared spaces, e.g., parks/playgrounds and cemeteries. “Areas within the riparian corridor of “X” Creek are within the urban area described by EPA as requiring MS4 permit regulations (see Section 2.3). Therefore, the purposes of this TMDL, stormwater runoff from these areas is considered a regulated point source (see Section 3.1.2).” But in 3.1.2 it says “no industrial or non-domestic wastewater facilities with site-specific permits in the “X” Creek

watershed.” Bacterial inputs could be coming from dog parks if they are located in this watershed.

10. Reviewed the USGS study on *E. coli* source tracking (page 21 of USGS document). With the strands that were identifiable, 35% from human sources (presumably onsite wastewater systems, sanitary sewer overflows, and combined sewer overflows); 11% from dog waste; 20% from geese; and the remaining 34% from unknown sources – but some of these sources might be one of the three listed above but the samples were unable to meet the 80% similarity criteria need to source match.
11. MoDOT’s contribution to these TMDLs are insignificant in comparison to the other regulated and non-regulated sources. It should be better identified within the TMDLs how much of the watershed is not only roadway but MoDOT roadway. MoDOT roads in most of these watersheds are a minor road component compared to city/county roads. Further, it should be based on impervious surface, not just right-of-way. It is our belief that t TMDL should be more specific in this regard.

If you have any questions about the enclosed report, please do not hesitate to call me at (573) 526-6684.

Sincerely,



Melissa A. Schepeler
Senior Environmental Specialist

MONARCH-CHESTERFIELD LEVEE DISTRICT

Earl R. Hoffmann
President
Monarch-Chesterfield Levee District
190 Carondelet Plaza, Suite 600
St. Louis, Missouri 63105

RECEIVED

October 21, 2014

OCT 24 2014

VIA E-MAIL

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
Watershed Protection Section
P.O. Box 176
Jefferson City, MO 65102-0176
tmdl@dnr.mo.gov

WATER PROTECTION PROGRAM

RE: TMDLs and Implementation Plans for Streams in St. Louis County – Watkins Creek, Creve Coeur Creek, Fishpot Creek and Coldwater Creek

Dear Mr. Hoke:

We are submitting these comments in accordance with the public notice of Draft Total Maximum Daily Loads (TMDLs) and Implementation Plans for several streams in St. Louis County, including: Coldwater Creek, Creve Coeur Creek, Fishpot Creek and Watkins Creek, for which the public review and comment period is open through October 21, 2014.¹ As a Levee District in St. Louis County, our primary concerns are with the probable impacts this will have on our operations and ability to provide flood protection to people and property in leveed areas. There is much critical infrastructure, numerous businesses and many people that live, work or play in St. Louis County's leveed areas.

While our fundamental purpose is to provide flood protection, in doing so we seek to comply with appropriate rules and regulations, including those for stormwater management. A review of these TMDLs and associated Implementation Plans does not reveal an adequate basis for us to undertake efforts aimed at reducing the subject pollutant that may occur within our leveed areas. E. coli is targeted to be reduced in an effort to restore waters in these streams to the standard of whole body contact, recreation category B, and it is encouraged that other pollutants be addressed as well.² Lacking is a scientific basis for allocating the source of bacteria, which is necessary to determine how to reduce the bacteria and the financial means for doing so.

When TMDLs were first identified for several streams in St. Louis County in 2012, public comments were submitted stating that due to the complexity and cost of implementing TMDLs in urban areas that effort should be delayed. Technical concerns were identified, notably that the TMDL approach fails to distinguish the source of bacteria. This makes it difficult to determine what measures to use, and where,

¹ MDNR, Public Notice, May 23, 2014.

² E.g., Missouri Department of Natural Resources, Water Protection Program, Bacteria Total Maximum Daily Load Implementation Plan for Coldwater Creek, DRAFT, (as displayed on website August 6, 2014), <http://dnr.mo.gov/env/wpp/tmdl/docs/ip-bacteria-coldwater-cr.pdf>.

October 21, 2014

TMDLs and Implementation Plans for Streams in St. Louis County

to reduce the pollutant. Potential bacteria sources include sanitary sewer overflows, septic tanks/fields not working properly, and urban runoff/stormwater. The complexities will surely result in a permit process that requires more time and ends up costing more money, and that will not ensure a reduction in bacteria in receiving streams. Rather than adhering to the typical permit requirements, special attention will be given when permits are written for both new and continuing discharges into those streams.³ The implementation of TMDLs can be expected to bring about ongoing water quality monitoring costs associated with both determining the measures needed to improve water quality and then to assess their efficacy. They may also set the stage for citizen lawsuits. The associated costs, and lengthened project timelines, would ultimately be borne by those seeking stormwater permits, including those for levee improvements.

We understand the EPA and the states each to have responsibilities for developing and implementing TMDL pollution targets. EPA oversees the TMDL efforts by establishing in regulations the minimum requirements TMDLs need for approval, providing funding, and furnishing technical assistance. States are required to develop TMDLs, which undergo EPA review and approval.⁴ States may choose when to implement TMDLs, at which time they take the lead by identifying pollutants that impair water quality and actions to reduce them. Because states are not required to develop TMDL implementation plans and, if they do, EPA does not approve them, we encourage MDNR to delay the TMDL Implementation Plans until such time when there is available a body of research and knowledge that will allow for an equitable division of the costs and responsibilities to implement plans that effectively reduce pollutants.

The money and time needed to implement these TMDLs and Implementation Plans will not be insignificant. The information needed to effectively and efficiently reduce E. coli is not provided and additional research does not yield much more than a developing field of study. There simply is not yet available a defensible basis for expending and distributing what may be excessive costs associated with establishing and implementing these TMDLs at this time. Implementation plans for TMDLs should have the requisite detail to provide a clear path forward with respect to achieving the target and sharing the burden of doing so. Without, they do not provide a framework to accomplish the overall goal of cleaner waters in our streams, but rather generate confusion and unnecessary costs - costs that are not necessarily born by the responsible parties.

In addition to conveying our concerns as expressed above, we are writing to express support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD.) MSD has raised a number of significant concerns. In the event that MDNR proceeds with implementing TMDLs, we share in the concerns of MSD. Accordingly, we ask that MDNR consider and satisfactorily resolve our comments as well as those of MSD. Specifically, if these TMDLs are to be implemented, we want to take this opportunity to highlight the following concerns:

- We believe it is inappropriate for the TMDLs to set load reductions at flood flows and the TMDLs should be revised to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
- We strongly disagree with MDNR's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the

³ Missouri Department of Natural Resources, MISSOURI 2000 303(d) STRATEGY DOCUMENT, (Apr. 1, 2000), p. 19, http://www.dnr.mo.gov/env/wpp/tmdl/tmdl_Strategy_III.pdf.

⁴ Clean Water Act Section 303(d)(1)(C).

October 21, 2014

TMDLs and Implementation Plans for Streams in St. Louis County

TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Clarifying language stating the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits is needed.

- The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. There are comprehensive improvements being made by MSD to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct these TMDL implementation activities. An adaptive and iterative process should be used for implementation activities to ensure they are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.
- An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.
- In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, MDNR must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans. Efforts are underway to improve the water quality in St. Louis County and MDNR should acknowledge and support those efforts by approving the SWMP for this region.

We appreciate the opportunity to provide these comments and are committed to continuing our work in such a manner as to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact Earl Hoffmann at (314) 480-1500 if you have any questions or would like to discuss these issues further.

Sincerely,



Earl R. Hoffmann
President, Monarch-Chesterfield Levee District

cc: Jay Hoskins, MSD
jshosk@stlmsd.com

MONARCH-CHESTERFIELD LEVEE DISTRICT

Earl R. Hoffmann
President
Monarch-Chesterfield Levee District
190 Carondelet Plaza, Suite 600
St. Louis, Missouri 63105

RECEIVED

OCT 24 2014

October 21, 2014

WATER PROTECTION PROGRAM

VIA E-MAIL

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

We are writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, we ask the Department to carefully consider and satisfactorily resolve MSD's comments.

We also want to take this opportunity to highlight the following priority concerns we have with the proposed TMDLs and Implementation Plans.

1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Please also add language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
2. In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, the Department must approve permittees' Stormwater Management Plans (SWMP) including their TMDL implementation plans. Our community is taking many positive steps to improve this region's water quality. The Department should support the region by approving the SWMP.
3. The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. Additionally, MSD is making comprehensive improvements to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality

Mr. John Hoke
October 21, 2014
Page 2

dataset is extremely limited to support and direct implementation activities. This reality supports the need for iterative implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.

4. We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Please revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
5. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.

We appreciate the opportunity to provide these comments. The Monarch-Chesterfield Levee District is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact Earl Hoffmann at (314) 480-1500 if you have any questions or would like to discuss these issues further.

Sincerely,



Earl R. Hoffmann
President, Monarch-Chesterfield Levee District

cc: Jay Hoskins, MSD
jshosk@stlmsd.com

**THE
PARTNERSHIP
FOR TOMORROW**

AGC ST. LOUIS 



RECEIVED

September 29, 2014

OCT 3 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

WATER PROTECTION PROGRAM

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

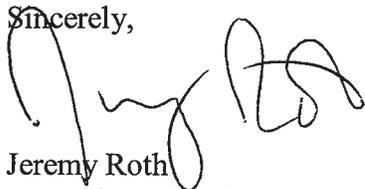
The Partnership for Tomorrow is writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, The Partnership asks the Department to carefully consider and satisfactorily resolve MSD's comments.

We also want to take this opportunity to highlight the following priority concerns we have with the proposed TMDLs and Implementation Plans.

1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). Please also add language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
2. The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. Additionally, MSD is making comprehensive improvements to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct implementation activities. This reality supports the need for iterative implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost.
3. We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Please revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
4. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 5% is more than adequate and appropriate.

We appreciate the opportunity to provide these comments. The Partnership for Tomorrow is committed to working with the Department to ensure that Missouri's waters are protected through application of good science and stakeholder input. Please contact Emily Wineland (Home Builders Association of St. Louis and Eastern Missouri) at 314-817-5625 if you have any questions or would like to discuss these issues further.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeremy Roth', written over the word 'Sincerely,'.

Jeremy Roth
McBride & Son Companies
Chairman, The Partnership for Tomorrow

Cc: Jay Hoskins, MSD



OFFICE OF THE COUNTY EXECUTIVE
SAINT LOUIS COUNTY
41 SOUTH CENTRAL AVENUE
SAINT LOUIS, MISSOURI 63105

CHARLIE A. DOOLEY
COUNTY EXECUTIVE

October 10, 2014

(314) 615-7016
TTY (314) 615-5889

Missouri Department of Natural Resources
ATTN: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102

Dear Mr. Hoke:

I am writing to express St. Louis County's support for comments submitted by the Metropolitan St. Louis Sewer District (MSD) for the Bacteria Total Maximum Daily Loads (TMDLs) and Implementation Plans for Creve Coeur Creek, Watkins Creek, Fishpot Creek, and Coldwater Creek.

St. Louis County concurs with MSD's significant concerns regarding the proposed TMDLs and Implementation Plans. Therefore, I am asking that the Department of Natural Resources address MSD's concerns and comments before moving forward with any changes.

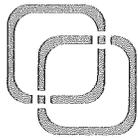
As you know, the process of improving water quality in the St. Louis region is well underway, as we continue to implement improvement measures required in our Consent Decree with the EPA. I am requesting that the Department of Natural Resources support our region's efforts by approving permittees' Stormwater Management Plans (SWMPs).

St. Louis County does want to make sure that our waters are clean and healthy, but we must approach this task through the application of good science, with input from the community, and in an affordable way. Thank you very much for your thoughtful review of MSD's comments.

Sincerely,

Charlie A. Dooley
County Executive

copy: Jay Hoskins, Metropolitan St. Louis Sewer District



**ST. LOUIS COUNTY
MUNICIPAL LEAGUE**

September 3, 2014

Missouri Department of Natural Resources
Attention: Mr. John Hoke
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102
e-mail: tmdl@dnr.mo.gov

Subject: Public Comments for Bacteria Total Maximum Daily Loads and Implementation Plans for Watkins Creek, Creve Coeur Creek, Coldwater Creek, and Fishpot Creeks located in St. Louis County and St. Louis City, Missouri

We are writing to convey our support for the comments submitted by the Metropolitan St. Louis Sewer District (MSD) on the referenced TMDL studies. MSD has raised a number of significant concerns that we share. Accordingly, we ask the Department to carefully consider and satisfactorily resolve MSD's comments. When we consider our options in matters like these, we try to balance all interests, not just take positions. Our interests are in producing a cleaner environment at reasonable costs that considers the greatest benefits to the highest numbers of citizens. Given all the clean water issues (storm, sewer, drinking, etc.), we have a lot on our plate. We also are facing substantial increases in MSD rates already. Just this week, we have also been told to expect significant increases in drinking water rates in order to replace aging infrastructure. And our Ameren electric bills have gone up about 50% in recent years due to their pollution and infrastructure issues, with more increases in the pipeline. With stagnant wages, we are increasingly fearful of placing home ownership beyond the reach of more and more people. We believe that we have a common interest to create a pathway to a sustainable creek system, not one that requires excessive expenditures for minor benefits.

So we strongly encourage solutions that take all these interests into consideration. We also need to insure that we are using the best science to "diagnose" our illnesses, and the best "medicine" to mend them. We also need to consider the improvements scheduled to the sewer system that will reduce human waste entering streams via Project Clear. And we need to know if there are existing remedies even available to address some of the pollution associated with the TMDLs. Dealing with the runoff from animals is extremely challenging as you know.

With these interests in mind, the League would like to offer the following:

1. We strongly disagree with Department's apparent intention to implement these TMDLs by including numeric effluent limits into municipal separate storm sewer system (MS4) permits. Instead, the TMDLs should call for implementation of best management practices (BMPs) to the maximum extent practicable (MEP). We do not believe that there are practical measures yet discovered that will meet the proposed standards to remove pollution sourced from wild animal runoff. Please also add language clarifying that the daily TMDL loadings are not intended to be implemented in Missouri State Operating Permits as daily permit limits.
2. In order to provide certainty and transparency as to what is required for MS4 permittees to comply with their permits, the Department must approve permittees'

BOARD OF DIRECTORS:

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City of Wildwood

Executive Director
Tim P. Fischesser

1034 S. Brentwood Blvd.
Suite 410
Richmond Height, MO 63117
314.726.4747
fax 314.726.1520
web www.stlmuni.org
e-mail staff@stlmuni.org

Stormwater Management Plans (SWMP) including their TMDL implementation plans. Our community is taking many positive steps to improve this region's water quality particularly for the foreseeable future through Project Clear now being funded through significant rate increases with more to come. The Department should support the region by approving the SWMP.

3. The calculated load reductions in the implementation plans should be based on the entire set of available water quality data, not only the values that were higher than the water quality geometric mean criteria. The approach taken by DNR is comparable to taking a person's temperature several times, finding it high one time, ignoring all the average temperatures, and then treating the person as if they are always sick. That does not strike us as either logical or fair to rate payers. Additionally, MSD is making comprehensive improvements to its sanitary sewer system, and therefore the water quality data presented in the TMDLs and Implementation Plans may no longer be representative of stream water quality. As such, the existing water quality dataset is extremely limited to support and direct implementation activities. This reality supports the need for iterative implementation while a reasonable amount of data is collected over a period of years. An iterative approach is necessary to assure implementation activities are focused on the right sources in a manner that will achieve the highest water quality improvements at the lowest cost. This cannot be overstated. We need targeted, scientifically validated efforts that will get us the biggest bang for our buck. This will help tens of thousands of people with fragile budgets who are already facing utility rate increases that far exceed the rate of inflation.
4. We believe that it is inappropriate for the TMDLs to set load reductions at flood flows. Storms send more pollutants into streams, so are not a fair representation of pollution in our streams. Additionally, if streams are to be used for recreational purposes, it far more likely to be during normal flows than after rain events. Again, we believe it is all interests to revise the TMDLs to focus on non-flood level stream flows, which are flows less than the 10th percentile exceedance flow.
5. An explicit margin of safety of 10% is too conservative; an explicit margin of safety of 0 to 5% is more than adequate and appropriate.

As your records will show, our member cities had us express concerns in recent years regarding the proposed TMDL plans. During the summer, the League board of directors again reviewed the matter and directed me to once again express our desire to balance all interests while making it clear that we have grave concerns about significant rate increases for marginal benefits. The League is committed to working with the Department to ensure that Missouri's waters are protected through application of good science at reasonable rates, taking into consideration improvements that are committed via Project Clear, a very costly program in itself. If we are to get to "yes" on this TMDL effort, we must consider all interests and stakeholder input. Please contact me at 314-726-4747 if you have any questions or would like to discuss these issues further.

Sincerely,



Tim Fischesser,
Executive Director