



**Stormwater Committee
Committee Meeting Agenda
January 12, 2022
4:45 PM
Online**

Meeting Connection Information

As a precautionary measure to help prevent exposure to and spread of COVID-19, the Stormwater Committee meeting scheduled for 4:45 p.m. on Wednesday, January 12, 2022, will be held virtually as a Zoom meeting.

Citizens are encouraged to participate and submit public comments in the following ways:

1. **Video Livestream** - Watch a live online broadcast of the Stormwater Committee meeting using the following link: <https://us02web.zoom.us/j/87071796099>.
The public will be required to provide a name and email address to enter the meeting (the email address will not be saved or used to contact you). Citizens will have the opportunity to make public comments live during the meeting using the Zoom program.
2. **Teleconference** - Call in to the meeting by dialing (312) 626-6799 and entering meeting ID 870 7179 6099 when prompted.
3. **Email** - Questions or comments that citizens wish the Stormwater Committee to consider may be emailed to the City. In order for questions and comments to be considered at this meeting, those questions or comments must be submitted no later than 4:00 p.m. on Tuesday, January 11, 2022. Submit questions and comments to Matt Wohlberg, City Engineer, at mwohlberg@crevecoeurmo.gov.

I. Call Meeting to Order

II. Roll Call

III. Approval of Agenda

IV. Approval of Minutes

1. **Approval of December 8, 2021 Stormwater Committee Meeting Minutes**

V. Public Comments

VI. New Business

VII. Unfinished Business

Items A through D were either tabled or not fully discussed at the December Stormwater Committee meeting.

A. Stormwater Policy

Discussion of this item began at the Stormwater Committee meeting on December 8, 2021. The Committee opted to continue discussion of this item at the January meeting.

The City's code of ordinances provides regulations regarding stormwater and stormwater-related issues, but the City does not currently have a specific stormwater policy document. Dick Kutta has drafted a stormwater policy for the Stormwater Committee's consideration and discussion.

1. Draft Stormwater Policy



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B. Stormwater Management Plan Goals

Laura Catalano has developed a draft list of goals for the City's stormwater management plan for the Stormwater Committee's consideration.

1. Stormwater Management Plan - Draft Goals

C. Stormwater Management Plan Process

Staff has developed a recommended process to follow for the development of the stormwater management plan for the Committee's consideration.

1. Stormwater Management Plan - Recommended Process

D. Stormwater Management Study

Staff has developed a recommended scope of work for the stormwater management study for the Committee's consideration.

1. Stormwater Management Study - Staff Recommendation

E. FY2023-FY2027 Capital Improvement Program

i. CIP Schedule

1. FY2023-FY2027 CIP Schedule

ii. Parks and Stormwater Capital Improvements - Q&A

Members asked several questions regarding the City's policy toward the use of funds from the parks and stormwater sales tax. Staff has included those questions and responses to each for the Committee's information.

1. Stormwater Capital Expenses and Policy - Q & A

VIII. Business from Committee Members

A. Notice for Meetings and Schedule Changes (Judy Campbell)

Public notice for a Committee meeting is required to be posted at least 24 hours in advance of the meeting. The Committee members are asked to comment regarding what should be considered sufficient notice for a change to the meeting time or date.

IX. Business from Staff Liaison

A. Citizen Survey

The City has recently completed its triennial resident survey. You can find a brief description of the survey and a link to the survey itself on the City's website at: <https://www.crevecoeurmo.gov/CivicAlerts.aspx?AID=1236>.



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B. Strategic Plan

The Creve Coeur City Council uses a Strategic Plan to set the City's short-term and long-term goals on a variety of issues. These goals are relevant to the City's budget and which issues staff attempts to address. The City has begun to consider updates to its Strategic Plan, with the goal of developing a draft plan by the end of January 2022. Adoption of the strategic plan by the City Council could be in spring 2022.

C. 2022 Meeting Schedule

The planned 2022 meeting schedule is attached for the Committee's reference. This schedule is also posted on the City's website.

Judy Campbell has requested that everyone bring their calendars to the meeting.

1. 2022 Stormwater Committee Meeting Schedule

D. February Meeting

The next Stormwater Committee meeting is scheduled for 4:45 p.m. on Wednesday, February 16. This meeting will be held online using Zoom.

X. Adjourn



**Stormwater Committee
Committee Meeting Minutes
December 8, 2021
6:00 PM
Online**

Meeting Connection Information

As a precautionary measure to help prevent exposure to and spread of COVID-19, the Stormwater Committee meeting on Wednesday, December 8, 2021, was held virtually as a Zoom meeting.

I. Call Meeting to Order

II. Roll Call

Martin Jaffe	Committee Member
Laura Catalano	Vice Chair
Judith Campbell	Chair
Richard Kutta	Committee Member
Patrick Brown	Committee Member
Kathleen Rizzo	Committee Member
Bernard Feldman	Committee Member
Mary Helen Gerst	Committee Member
Elliot Sharpe	Committee Member
Tim Carney	Council Member (Ward 2) and Liaison
Jim Heines	Public Works Director
Matt Wohlberg	City Engineer

III. Approval of the Agenda

The Committee amended the agenda to include discussion about the November field trip under New Business.

IV. Approval of Past Meeting Minutes

A. October Stormwater Committee Meeting

1. Approval of October 13, 2021 Stormwater Committee Meeting Minutes

RESULT:	ACCEPTED [UNANIMOUS]
MOVER:	Martin Jaffe, Committee Member
SECONDER:	Patrick Brown, Committee Member
AYES:	Jaffe, Catalano, Campbell, Kutta, Brown, Rizzo, Feldman, Gerst, Sharpe

B. November Field Trip

1. November Field Trip Photos

RESULT:	ANNOUNCED
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2. Approval of November 3, 2021 Stormwater Committee Meeting Minutes

Minutes Acceptance: Minutes of Dec 8, 2021 6:00 PM (Approval of Minutes)



**Stormwater Committee
Committee Meeting Minutes
December 8, 2021
6:00 PM
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The Committee voted to add the field trip itinerary as part of the field trip minutes, and then voted to approve the amended minutes.

RESULT:	ACCEPTED AS AMENDED [UNANIMOUS]
MOVER:	Judith Campbell, Chair
AYES:	Jaffe, Catalano, Campbell, Kutta, Brown, Rizzo, Feldman, Gerst, Sharpe

V. Public Comments

Melissa Inkley (12958 Ferntop Lane) and Jim Hearne (12970 Ferntop Lane) attended to provide the status of MSD's planned repair of a deteriorating storm drain and a partially broken storm drain behind their homes. The residents will contact staff regarding supply of gabion rock to help reduce erosion on their lots.

VI. New Business

[Amended Agenda] November Field Trip Review

Staff reviewed the highlights of the November field trip, including discussion about funding for stormwater projects in parks.

During discussion about the site visited on Chamblee Lane, Mrs. Campbell asked how many homes are in the floodplain in Creve Coeur. Staff stated that they would need to look into this. Mr. Feldman asked if the City should even consider assisting flooded properties. Mrs. Campbell answered that this would be appropriate to discuss under the stormwater policy and stormwater plan items on the agenda.

A. Capital Improvement Program

i. Engineer / Project Manager

Staff informed the Committee that the City was in the process of hiring a project manager to assist with the administration of the capital projects that have been added to the Capital Improvement Program since the parks and stormwater tax was implemented.

ii. FY2023-FY2027 CIP

Staff introduced the Capital Improvement Program (CIP) process and suggested that the Stormwater Committee provide a recommendation for the CIP in February 2022.

B. Stormwater Policy

The Committee voted to pursue a stormwater policy and agreed that it is a critical element for the development of a stormwater program. Discussion of this item was tabled until the January meeting.

1. Draft Stormwater Policy

RESULT:	DEFERRED [UNANIMOUS]
AYES:	Jaffe, Catalano, Campbell, Kutta, Brown, Rizzo, Feldman, Gerst, Sharpe

VII. Unfinished Business



**Stormwater Committee
Committee Meeting Minutes
December 8, 2021
6:00 PM
Online**

A. Stormwater Management Plan

Staff provided the Stormwater Committee with a suggested schedule for the development of a stormwater management plan.

Staff has also provided a recommendation for which goals to pursue with the stormwater management plan. The Committee is asked to consider these goals and to decide whether to support the staff recommendation.

i. Stormwater Management Study and Plan

1. Stormwater Management Plan - Draft Goals

Mrs. Catalano introduced the goals for the stormwater study that she prepared based upon area stormwater management plans and suggested that the City consider incorporating its stormwater policy into the stormwater management plan.

Mr. Brown stated that he supported the goals as written and wants the City's stormwater plan to consider future conditions so that stormwater improvements are long-lasting.

RESULT:	ANNOUNCED
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2. Stormwater Management Plan - Recommended Process

Staff referred to a process that staff had outlined for the Stormwater Committee in an email in November. Staff sought direction from the Stormwater Committee regarding 1) whether to pursue a stormwater management plan, and 2) what issues to try to address through that plan.

This discussion was tabled to the January meeting.

RESULT:	DEFERRED [UNANIMOUS]
MOVER:	Judith Campbell, Chair
AYES:	Jaffe, Catalano, Campbell, Kutta, Brown, Rizzo, Feldman, Gerst, Sharpe

3. Stormwater Management Study - Staff Recommendation

Discussion of the recommended stormwater management study was deferred to January.

RESULT:	DEFERRED [UNANIMOUS]
MOVER:	Judith Campbell, Chair
AYES:	Jaffe, Catalano, Campbell, Kutta, Brown, Rizzo, Feldman, Gerst, Sharpe

VIII. Business from Committee Members

Minutes Acceptance: Minutes of Dec 8, 2021 6:00 PM (Approval of Minutes)



**Stormwater Committee
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A. 2022 Meeting Schedule (Judy Campbell)

i. Monthly/Semi-Monthly Meetings

The Committee voted to hold monthly meetings in 2022.

ii. January MSD Presentation

The City had invited MSD to meet with the Stormwater Committee on January 12, 2022. This item was not discussed at the December meeting.

IX. Business from Staff Liaison

A. Citizen Survey

Discussion of this item was deferred to the January Stormwater Committee meeting.

B. Strategic Plan

Discussion of this item was deferred to the January Stormwater Committee meeting.

C. In-Person or Virtual Meetings

The Committee voted to continue virtual meetings through April 2022, at which time the Committee would re-evaluate the meeting format in light of the pandemic situation.

D. Next Meeting

Staff announced that the next meeting of the Stormwater Committee was scheduled to begin at 4:45 p.m. on Wednesday, January 12, 2022.

X. Adjourn

The meeting adjourned at approximately 7:40 p.m.

Minutes Acceptance: Minutes of Dec 8, 2021 6:00 PM (Approval of Minutes)

Stormwater Policy Statement - Draft

City of Creve Coeur MO

Purpose: To guide Creve Coeur City Council and administrative staff regarding stormwater legislation, development planning and capital and operations budgets and expenditures.

1. Public safety and health should receive primary emphasis in prioritizing expenditure of stormwater budget and staff resources. Examples would include public infrastructure such as critical facilities and city-maintained roads.
2. Stormwater mitigation projects should provide the greatest expected benefit for the expenditure required. This principle is expected to favor projects that involve multiple beneficiaries.
3. Stormwater problems that involve the likelihood of flooding of non-governmental structures should be mitigated by prioritizing habitable residences over industrial and commercial structures.
4. Private structures that lie within the FEMA Special Flood Hazard Area SFHA (100-year base flood) will only be eligible primarily for stormwater emergency assistance. Private habitable structures classified as outside the FEMA Special Flood Hazard Area should be eligible for all appropriate resource assistance.
5. Construction permits for residential structures should be granted only where the elevation of the lowest occupied level is greater than **TBA** feet above the maximum expected flood water level.
6. Reserve flood-prone areas for low loss risk uses such as parks, public use recreational areas or unoccupied non-residential uses such as parking and landscaping. Flood-prone areas should be designated in city's comprehensive plan and reserved through zoning.
7. Stormwater runoff from municipal and private pavements should be directed away from low-lying areas and mitigated through incorporation of stormwater detention and stormwater best practices.
8. Stormwater storage capacity should not be reduced by private or public development projects. Where storage capacity is reduced, equivalent offsets should be provided by developer.
9. The Stormwater Committee should review planned stormwater projects annually for consistency with the Stormwater Master Plan and advise Council their opinion on which projects should be retained, advanced or removed.
10. Stormwater projects should be distributed throughout the City to benefit the greatest number of residents.
11. Stormwater projects that reduce ongoing operating costs or minimize public property losses should receive high priority.
12. Maintenance of creeks and drainages is the responsibility of property owner.

Draft Stormwater Master Plan Study Goals

Prepared by Laura Catalano, Creve Coeur Stormwater Committee Vice Chair
December 6, 2021

Background

The City of Creve Coeur first created a Stormwater Master Plan (SWMP) in 1999 and updated it again in 2012. Due to lack of funding, most projects were not completed. In November 2020, voters in Creve Coeur approved a half-cent sales tax dedicated to finance operations, maintenance, and capital improvements for the City's parks and stormwater infrastructure. The City now needs to update the SWMP and create a project priority list for the Capital Improvement Plan (CIP).

Goals

Primary

1. Collect data to develop a new Stormwater Master Plan:
 - a. Review all concerns in 1999 and 2012 Stormwater Master Plans (some projects have been completed by homeowners, others are worse due to recent heavy rain storms, some concerns extended to more properties that were originally listed in the program)
 - b. Review all concerns documented in 2012-21 Stormwater Committee meeting minutes
 - c. Add an online stormwater concern questionnaire to website for resident concerns (example: Frontenac)
 - d. Survey city residents for new concerns
 - e. Acquire stormwater concerns records and stormwater infrastructure condition/status from Metropolitan Sewer District (MSD)
 - f. Inspect city properties and infrastructure for stormwater condition and maintenance needs (examples: roadside drainage, culverts, retention/detention ponds)
 - g. Inspect select MSD infrastructure (pipes, inlets, culverts, etc.) for age, condition and maintenance issues or ask MSD for condition report
 - h. Do ground/walk or aerial surveys to visually identify areas of flooding or erosion
2. Create a comprehensive hydrologic map of the City of Creve Coeur including stormwater concern locations, creeks, streams, and major stormwater infrastructure (i.e. detention and retention ponds)

3. Analyze patterns of flooding (outside of the 100yr FEMA Flood Plain) and erosion and identify recurrent and/or widespread problems
4. Update the SWMP and create a list of projects to repair and prevent stormwater damage to residential and city properties in the City of Creve Coeur
5. Demonstrate how stormwater projects meet the Creve Coeur Capital Improvement Program (CIP) Criteria and Goals such as Economic Growth, Public Safety, Citizen Demand, and Beautification
6. Provide a legal framework and policy for managing stormwater program funds (i.e. Stormwater Policy and updates to Creve Coeur City Code and Ordinances)

Secondary

1. Consider “Green Infrastructure” stormwater project solutions such as bioswales, permeable pavement and rain gardens, that improve water quality and create wildlife habitat
2. Engineering designs should consider response to severe rainstorms such as August 9, 2020
3. Educate the residents on benefits of stormwater projects and best management practices through community outreach programs and an updated website
4. Coordinate with Parks and Historic Preservation Committee, Public Works Department Streets and Sidewalks program, and their CIP master planning process



Matt Wohlberg <mwohlberg@crevecoeurmo.gov>

Stormwater Management Plan Recommendations

1 message

Matt Wohlberg <mwohlberg@crevecoeurmo.gov>

Fri, Nov 19, 2021 at 8:58 PM

To: Matt Wohlberg <mwohlberg@crevecoeurmo.gov>

Cc: Jim Heines <jheines@crevecoeurmo.gov>, Tim Carney <tcarney@crevecoeurmo.gov>

Bcc: Bernard Feldman <feldmanb@umsl.edu>, Dick Kutta <richardkutta@earthlink.net>, Elliot Sharpe <lynda-elliott@att.net>, Judy Campbell <jacampbell314@gmail.com>, Kathleen Rizzo <krizzo@stlcc.edu>, Laura Catalano <lauracatalano@gmail.com>, Martin Jaffe <martin.jaffe@mjaffegroup.com>, Mary Helen Gerst <maryhg@sbcglobal.net>, Patrick Brown <pbrown6@me.com>

Dear Stormwater Committee,

The December meeting agenda will include discussion about updating the City's stormwater management plan. I have a few recommendations for that discussion and for the process for developing the plan.

Step 1 - Set Goals for the Program

Schedule: Winter 2021-2022

At the December meeting, I think the Stormwater Committee should focus on setting goals for the stormwater management plan. These goals do not need to be set in stone, but they should serve as a guide for the next steps in the process. Some simple yet significant questions need to be answered, including:

1. Does the Stormwater Committee support the development of a plan for its stormwater program?
2. There are several issues or topics to consider with the stormwater management plan, including:
 - Flooding and flood plains
 - Erosion
 - Infrastructure (MSD system, City's facilities, locations with inadequate drainage)
 - Water quality
 - Wildlife habitat
 - Private property (backyard concerns, detention basins, etc.)

Which among these issues are suitable goals for the plan? Maybe a better question is which among these issues can or should we eliminate from consideration now? These will be good questions to consider for discussion at the next meeting.

Step 2 - Data Collection

Schedule: Spring 2022

The main portion of this step will be a survey of the residents of Creve Coeur to get a list of stormwater concerns and reports of stormwater problems from throughout the City. This would be similar to what was done in 2011, and I imagine that we will get reports of 50-100 concerns.

Step 3 - Site Investigations

Schedule: Summer 2022-Spring/Summer 2023

During the data collection phase, we would start the process of hiring a consultant to review the City's previous stormwater plans, the issues reported from the survey, and any other relevant information available from the City, MSD, Deer Creek Watershed Alliance, etc. I imagine that we would have the consultant begin their investigation next summer. How long the investigation takes will depend on our goals for the plan.

The site investigation would involve evaluations of the City's properties, streams within the City, the issues from the survey, and the issues remaining from the 2011 master plan update. The goal would be to get an understanding of the cause and severity of each issue, as well as the scope and rough cost to address each issue.

Step 4 - Report of Stormwater Needs

The consultant's investigation effort would culminate with a report to document all of their findings. This report would include details of each issue they investigated and a map of the issues.

This report would include a prioritization methodology and a preliminary prioritization of the stormwater issues.

Step 5 - Select Issues for Preliminary Designs

The Stormwater Committee would be asked to review the report, priorities, and location, nature, and cost of the issues to develop a list of sites to advance to a preliminary design. (Preliminary design is at about 30-50% completion. At this stage in the design, the general scope of the project should be determined and the easement needs should become clear.) With these designs, the projects can be accurately prioritized, and the project can be reviewed with adjacent homeowners to determine their willingness to provide any easements needed for the project.

Not all projects in the report would advance to this stage, and it may be that not all of those that are evaluated in this stage move on. There will be some projects that the preliminary design will find to be more work than anticipated and others where the adjacent property owners refuse to provide easements. I think the goal should be to develop about 15-20 years worth of viable projects from these preliminary designs.

Step 6 - Prioritize Projects into the Capital Improvement Program

The final planning step would be to program the design and construction of projects into the five-year capital improvement program. Projects would not advance to this stage unless there is a commitment from the adjacent homeowners to provide the necessary easements.

We have previously proposed advancing several projects to preliminary design (step 5) now in order to fill in the gap between the immediate construction projects and the completion of the stormwater management plan.

I hope that this explanation of how I envision the process of plan development helps to guide the discussion in December to set goals for the stormwater management plan.

Thank you,

Matt

CITY OF CREVE COEUR

Matt Wohlberg, PE

City Engineer / Assistant Director of Public Works

Certified Floodplain Manager (CFM)

Envision Sustainability Professional (ENV SP)

300 N. New Ballas Road

Creve Coeur, MO 63141

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DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: December 6, 2021

TO: Stormwater Committee

FROM: Matt Wohlberg, P.E., City Engineer

SUBJECT: Evaluation of Stormwater Management Plan Options

There are numerous variations of what the City can expect from its stormwater management plan, and much of that depends on the City's goals for the plan and the anticipated scope of the City's stormwater program. Several basic options are outlined below, followed by the staff recommendation and a general outline of the anticipated stormwater management plan process.

Approaches to the Stormwater Management Study

Three options are summarized for how to approach the stormwater management study. Generally, these options include one with relatively little up-front design work, one with a lot of up-front design work, and one that falls in between the two.

All options generally follow the path of data collection then development of the stormwater management plan. In every case, the City would request residents to submit their concerns for evaluation, and the residents' concerns, issues known to staff, and issues from past iterations of the stormwater management plan would be evaluated for inclusion into the new stormwater management plan. Further, in each option, the data that is collected will be evaluated, prioritized, and mapped. The highest-priority projects will then be incorporated into the Capital Improvement Program (CIP).

Option #1 – Address Resident Concerns and Emergencies

The City's most basic option would be to update the City's current stormwater master plan with an initial effort similar to the master plan update in 2011-2012. The stormwater management study could take the 2012 effort a step further to develop conceptual plans for the highest priorities to help have accurate capital improvement programming.

Key aspects to this option:

- Develop conceptual plans for the highest-priority projects, with a goal to program about 10 years of projects

Anticipated Costs:

Needs assessment/data collection:	\$50,000 - \$100,000
<u>Develop Stormwater management plan:</u>	<u>\$75,000 - \$100,000</u>
Total cost:	\$125,000 - \$200,000

Benefits

Low cost
May be the fastest to implement
Relatively easy to update

Drawbacks

Program is complaint and emergency driven
Little investigation into streams

Option #2 – Determine Highest Priorities and Tailor the Site Work to Address Those Priorities

A second approach to the stormwater management study would be to gather information incrementally, with the scope of each step in the process being evaluated based upon the findings from the previous step. This option would add an initial review of the City's stream network to Option #1 described above, and this would broaden the understanding of stormwater within Creve Coeur and would expand the scope of the City's stormwater program.

Key aspects of this option include:

- Perform a walking evaluation of the streams, culverts, and bridges throughout Creve Coeur during the initial phase of the study
- Conduct a hydraulic analysis of streams where high-priority issues are found
- Develop conceptual plans for the highest-priority projects and/or project areas, with a goal to program about 10-15 years of projects
- Program highest-priority projects into the capital improvement program

Anticipated Costs:

Needs assessment/data collection: \$150,000 - \$200,000

Develop Stormwater management plan: \$200,000 - \$300,000

Total cost: \$350,000 - \$500,000

Benefits

Provides an in-depth and efficient program
Allows for a pro-active stormwater program for streams and infrastructure
Stream improvements can be based upon the entire stream instead of one area
Plan costs are limited to the highest-priority concerns

Drawbacks

Budget may be significantly greater than what is used
An experienced consultant is needed to guide program development
Potential for larger projects along streams that could take multiple years of funding to address

Option #3 – Develop the Plan Based upon a Comprehensive Study of the City

A third approach would be to begin the development of the stormwater management plan with the goal of creating a comprehensive hydrologic and hydraulic model of the City of Creve Coeur. Such a study would give the City the best information regarding how stormwater behaves in the City. Such information would be essential if the City were to use stream protection or similar factors in its designs or regulations for development. Otherwise, the plan-development process would follow a similar path as laid out above in Option #2.

Key aspects of this option include:

- Perform in-depth analysis of all streams, drainage channels, and stormwater infrastructure to build a comprehensive stormwater model of the City.
- Develop conceptual plans for the highest-priority projects and/or project areas, with a goal to program about 10-15 years of projects

Anticipated Costs:

Needs assessment/data collection:	\$50,000 -- \$100,000
Develop Stormwater management plan:	\$800,000 - \$1,000,000
Total cost:	\$850,000 - \$1,100,000

Benefits

Provides comprehensive evaluation of stormwater in Creve Coeur, which could result in better understanding of flooding throughout the City

Allows for a pro-active and forward-thinking stormwater program

Data allows for more accurate stormwater regulations and for goals like channel protection

Drawbacks

High cost

Likely will result in more information and analysis than the City will be able to use before the plan is updated

Potential for larger projects along streams that could take multiple years of funding to address

Achieving goals like stream protection can make regulations more complicated

Approaches Taken by Nearby Cities

Staff reviewed the approach used by Creve Coeur's neighbors when developing the cost estimates included in this report and the recommended approach for the stormwater management study.

Ladue

The City of Ladue developed a stormwater management plan during the period of 2015-2017. The Ladue process involved two primary steps:

Needs Assessment (\$160,000) – Numerous residential concerns were gathered and evaluated. Meanwhile a walking preliminary analysis of the streams in Ladue was conducted (Deer Creek was not evaluated due to the availability of existing information about it). The stream and concern data were mapped to determine areas with common or numerous issues (called “hot spots”).

Plan Development (\$350,000) – Ladue completed conceptual design of 55 stormwater projects based upon the hot spot mapping. Hydraulic modeling was needed for each of these conceptual designs, because much of Ladue's stormwater infrastructure involves channelized runoff. In total, the Ladue stormwater management plan lists an estimated \$114,000,000 in stormwater improvement projects. The five projects with the highest benefit-to-cost ratio were selected as the initial five-year stormwater capital improvement plan.

Frontenac

The City of Frontenac developed its stormwater management plan in 2005. The development of the Frontenac Plan involved the following:

Needs Assessment (\$35,000) – Residential questionnaires were issued to develop a list of stormwater concerns among the Frontenac residents.

Plan Development (\$500,000) – The Frontenac plan created a city-wide hydraulic model to determine areas in the watershed with stormwater issues. The Frontenac plan is generally updated every five years to incorporate new projects into the priority list. The Frontenac website lists \$33,000,000 of stormwater capital improvements that are scheduled through the year 2056.

The stormwater management study has been used by Frontenac to develop their stormwater regulations.

University City

University City is currently in the initial stages of developing a stormwater management plan. Their approach will be similar to that of Ladue, but involves less up-front modeling due to the amount of MSD infrastructure that conveys stormwater and their limited budget to address stormwater issues.

Staff has not yet requested the cost of the University City study.

Recommendations for the Stormwater Management Study

Staff recommends that the City pursue a study that resembles Option #2 above. Through this option, the City would conduct a study that initially considers all streams, issues, and complaints but then focuses the design effort on addressing the issues that are found to be of high priority. This approach would initially be similar to that of Ladue but would eventually resemble what is anticipated of University City's study. In other words, the study would involve in-depth analysis of the City's most pressing needs but would not analyze all potential projects.

Conceptual design plans are recommended for priority projects that sum up to \$10-\$15 million. Such a project list would exhaust the anticipated stormwater budget in the capital improvement program for 10-15 years while providing some "backup" projects that could move up the list if one or more projects needed to be delayed due to a change in circumstances.

One of the primary reasons that staff recommends this approach is the economical use of resources – in terms of financing, personnel, and opportunity. The City will not see the benefit of designing solutions for all of the stormwater issues if only a fraction of those issues can be addressed in the 10-15 years before the plan is due to be updated. Further, the stormwater management plan needs to provide accurate and useful information so that capital improvements can be programmed in the CIP. A stable capital program is easiest to understand, is easiest to manage, and maximizes the amount of design and construction in each year.

This recommendation also assumes that the stormwater management plan aims to address certain issues (such as erosion and infrastructure deficiencies) as primary goals but relegates other goals (such as water quality and channel protection) as secondary considerations. Addressing flooding is a complicated topic, as the expense to address flooding can make such a project impractical and/or unachievable. However, there may be areas where modest changes can limit or eliminate roadway or structural flooding, and staff recommends that projects such as these receive high priority.

SCHEDULE

ANNUAL CAPITAL IMPROVEMENT PROGRAM UPDATE FISCAL YEARS 2023-2027

December 1, 2021 – January 31, 2022	CIP public comment period: City staff solicits input from residents, City committees, staff, and other stakeholders
January 31, 2022	Deadline to submit all new and updated CIP project requests
February 8, 2022	Staff meeting to review the CIP preliminary draft.
February 16, 2022	Staff meeting to review the CIP semi-final draft.
February 25, 2022	City Administrator submits the draft CIP to City Council, Planning & Zoning Commission, and Finance Committee
March 9, 2022	Review the draft CIP with the Parks and Historic Preservation Committee
March 14, 2022	City Council Work Session #1 • Joint work session with the Finance Committee • CIP Overview • Review parks and stormwater programs
March 16, 2022	Review the draft CIP with the Stormwater Committee
March 21, 2022	Introduction of CIP to the Planning & Zoning Commission
March 22, 2022	Review the CIP with the Finance Committee
March 28, 2022	City Council Work Session #2 • Discuss revisions and updates to CIP • Review roadway and sidewalk programs • Review capital equipment
April 4, 2022	Follow-up Meeting with Planning & Zoning Commission
April 11, 2022	Public Hearing before the City Council Possible adoption of the CIP by the City Council

Communication: FY2023-FY2027 CIP Schedule (CIP Schedule)



DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: January 10, 2022
TO: Stormwater Committee
FROM: Matt Wohlberg, P.E., City Engineer
SUBJECT: Answers to Members' Questions Regarding the Parks-Stormwater Fund

Several questions were asked about the use of the Parks-Stormwater Tax Fund following the December Stormwater Committee meeting. Those questions are summarized below, with responses from staff in blue.

For the Conway Park Improvement Project:

- *What is the budget for this project?*
- *How much is being drawn from the Capital Fund and how much from the Parks-Stormwater Tax Fund?*
- *What is the breakdown between the amount attributed to stormwater improvements and the amount attributed to parks improvements? How is this shown in the fund's accounting?*
- *What portion of this project will come from grants?*

The Conway Park Improvement Project is one component of a larger project to improve the paths at both Conway Park and Malcolm Terrace Park. The City received a Municipal Park Grant to reimburse the City for up to \$440,500 for this work. A summary of the costs for this project are included below (all figures rounded to the nearest thousand):

Fund	Capital Fund	Parks-Stormwater Fund	Total
Design	\$ 62,000	\$ 0	\$ 62,000
Conway Park Path **	\$ 0	\$ 550,000	\$ 550,000
Malcolm Terrace Path	\$ 89,000	\$ 0	\$ 89,000
Furniture **	\$ 0	\$ 25,000	\$ 25,000
Signs **	\$ 0	\$ 5,000	\$ 5,000
Totals	\$ 151,000	\$ 580,000	\$ 731,000

** Budget figures are shown for the portions of this project that are underway, because actual costs are not yet known.

Some aspects of the project began before the Parks-Stormwater Tax Fund existed.

The Conway Park Path Improvement Project is turning out to be about 25-30% stormwater-related costs and 70-75% path-related costs. This project is identified as a park project in the budget due to the fact that the majority of its costs are related to the path. Despite the overlap of the stormwater and parks aspects of the project, it is simpler and arguably more transparent to account for the entire project as one line item in the budget instead of two.

The grant will reimburse the Parks-Stormwater Tax Fund. Considering this, the City's contribution to this project from the Parks-Stormwater Tax Fund will be approximately \$ 139,500.

Will the proposed water feature at Millennium Park be considered a stormwater project?

The Millennium Park Master Plan includes many possible improvements and additions to the park. The lakes shown in the plan are not currently identified for funding in the Capital Improvement Program. If these lakes become a project, then they would most likely be considered a park project.

We as a committee need to know where the tax money is being spent. Will some of the tax funding go to additional staff and maintenance?

In March 2021, the City adopted a policy regarding the allocation of funding from the parks and stormwater tax. Approximately 20% of the tax revenue will be used for maintenance and programming, and about 6% will be used to hire staff to administer the new capital improvement projects.

A copy of the policy is attached, along with the staff response to a similar question from March 2021.

Two questions asked about a similar topic, namely: how stormwater funding will be used to assist with residents' stormwater concerns.

The City will have more funds to use to address stormwater issues, but we hear that there are more infrastructure replacement projects and roads that are stormwater related (Conway Park, Hibler roadside drainage) and may be "billed" to the stormwater portion of the Parks-Stormwater Tax Fund.

How much of the stormwater budget will remain for residential projects after the parks and roads related stormwater projects are completed?

I know that many of our citizens are expecting money to correct stormwater problems from water in basements, water flowing on their lots, creek flow, and bank erosion.

Stormwater-related improvements in the City, whether in the right of way, in the parks, or in residential areas, will generally be funded through the Parks-Stormwater Tax Fund.

The number, scope, and prioritization of the stormwater issues in the City can be known only through a new, City-wide stormwater management study. With the information from the study, the City will be in a position to start making decisions about where it makes the most sense to invest in stormwater improvements and what sort of residential projects will qualify for funding through the City's program.

Similar to above, two questions asked specifically about the accounting for the Parks-Stormwater Tax Fund.

The City owes an accounting of the tax funds.

Appendix A of last year's CIP report includes a breakdown of spending for parks and stormwater over the next five years. Whenever the next version is available, we should look at it with the committee and decide if the spending plan is consistent with what voters were told when the tax was proposed.

City staff provides a detailed account of the Capital Improvement Program each year, and this year's CIP includes specific accounting of the Parks-Stormwater Tax Fund. The FY2023-FY2027 CIP will be developed during the spring of 2022 and will include the projected expenditures for FY2022, the first full fiscal year during which the parks and stormwater sales tax was in place.

The policy covering the administration of the parks and stormwater sales tax includes long-term funding goals for administration, parks, and stormwater expenses that are indicated to be measured over time rather than during any specific year.



Matt Wohlberg <mwohlberg@crevecoeurmo.gov>

Re: Storm Water Comp Plan

Matt Wohlberg <mwohlberg@crevecoeurmo.gov>

Fri, Mar 26, 2021 at 1:47 PM

To: Martin Jaffe <martin.jaffe@mjaffegroup.com>

Cc: Jim Heines <jheines@crevecoeurmo.gov>, "Judy Campbell (jacampbell314@gmail.com)" <jacampbell314@gmail.com>

Bcc: Matt Wohlberg <mwohlberg@crevecoeurmo.gov>

Martin,

I hope that I can answer your questions. I have paraphrased them below.

Why have I recommended that we pursue a stormwater management study?

Staff recommends that the City complete a stormwater management study for several reasons:

1. To determine the number, type, and severity of the issues that exist in Creve Coeur.
2. To develop conceptual improvements and cost estimates to resolve these issues.
3. To determine the impacts to private property and the easements that will be required to complete these improvements.
4. To combine this data into a prioritized list of issues and improvements that staff can use as the basis for the City's stormwater program.

The stormwater management study would be the foundation for the City's stormwater program. Recommendations for improvements would be able to reference the priority stated in this study to support the recommendation, and newly discovered or reported issues would be judged against it. I think that this is essential to having an unbiased program that we can plan out. Without a study, the City's program has little choice but to be driven by system failures and complaints.

Can't we just proceed with improvements to known issues?

We can certainly begin projects now, and the capital improvement program lists several stormwater projects for the coming fiscal year and the following year. However, there is not a comprehensive list of issues in the City that we can reference to make many recommendations beyond the few that are currently listed.

In addition, we have little information regarding the scope, cost, and easements needed to complete these projects. The better understanding that we have of the project and what we need in terms of funding and property owner support, the better we can plan for improvements. You have often said over the past year that we should seek easements before we get too far into a project's design. This plan gets us to that stage for each concern that the City would possibly address. Without a plan, we run a greater risk of costs being more than we thought and project delays due to lack of support from adjacent homeowners.

What is the City's policy for the allocation of the parks-stormwater tax?

Please see the draft policy for the use of the parks-stormwater tax attached.

The average annual investment would be broken down as follows for the five-year capital plan (dollar figures are based upon an estimated \$1.9 million in revenue:

20%	(\$380,000/year)	Parks/Stormwater Operations & Maintenance
6%	(\$106,000/year)	Parks/Stormwater Project Management
50-65%	(\$707-919,000/year)	Parks Improvements
35-50%	(\$495-707,000/year)	Stormwater Improvements

This policy is subject to approval and change by the City Council, and staff would recommend changes to it if conditions warranted them.

At the moment, I do not feel that we have the information or planning needed to run an effective \$500,000-\$700,000/year stormwater program. A study would provide what we need. Without a study, I fear that our program would be haphazard and would focus on infrastructure failures and the most vocal complaints.

I hope that this helps. Please let me know if you have additional questions.

Thank you,

Matt

CITY OF CREVE COEUR

Matt Wohlberg, PE, CFM
City Engineer

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On Wed, Mar 24, 2021 at 11:43 AM Martin Jaffe <martin.jaffe@mjaffegroup.com> wrote:

Matt: I would like to know more about your opinion [as City Engineer] and view on the need to jump into a Comp Plan for the City. Is there a push from higher authority wanting the plan? Ladue has greater problems with Deer Creek than we have. As I see it, we have enough information to proceed with some smaller projects. I believe we need a better understanding as to the funds from the tax and the proposed spending plans. I think I have been told that maybe more than 50% will go to parks and some of the funds will be used to pay City cost for administration and maintenance.

Thanks,
Martin

Martin Jaffe

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memo to council - draft policy on parks and sw sales tax usage and allocation.pdf
96K

Communication: Stormwater Capital Expenses and Policy - Q & A (Parks and Stormwater Capital Improvements - Q&A)



CITY OF CREVE COEUR

Memo

To: Mayor and City Council
 From: Mark Perkins, City Administrator
 Date: 3/26/2021
 Re: Policy – Allocation of Parks and Stormwater Sales Tax

With the approval of Proposition C by Creve Coeur voters on November 3, a new one-half cent sales tax dedicated to parks and stormwater control will be collected on retail sales beginning April 1, 2021.

Missouri law requires parks and stormwater (PSW) sales tax funds to be recorded in a separate fund, not to be mixed with other general purpose revenues.

In order to guide our planning for the upcoming budget and long-range capital improvement plan, developing a policy on allocation of the funds will be helpful. A similar allocation policy was developed for the public safety sales tax (see attached Budget and Financial Policies, p6).

Funds will be used for capital improvements per the city's parks master plan and stormwater plan, and maintenance of our parks and stormwater facilities. The parks master plan is very recent, adopted in 2019, and identifies both new amenities as well as replacing and upgrading existing facilities. The stormwater plan was developed in 2012 and provides the framework for improvements but significantly more study and engineering will be necessary to scope and prioritize projects for the next several years. For this reason, we would suggest the first few years to have a slightly greater emphasis on park projects.

Our existing and future parks and stormwater facilities require maintenance to the standard expected of our community, so we will also recommend allocating a portion of the funds to ensure this occurs. These funds will help ensure our maintenance keeps pace with the added responsibilities created by new amenities.

Based on our very early projections, the PSW sales tax is expected to generate \$1.9 Million annually. As a starting point, below is a possible allocation for discussion with the City Council. The ranges shown below are based on an annual average, with some years falling below or exceeding the range. The intent is that the total amount expected over a rolling five year capital improvement program would be within these ranges.



- Capital improvements, including design, construction, projection management and administration: 80% of annual funds, or \$1.52 million.
 - Project management/admin - 7% \$106,000
 - Parks - 50-65% \$707-919,000
 - Stormwater - 35-50% \$495-707,000
- Maintenance/operations, including parks maintenance, stormwater maintenance, recreation programming: 20% of annual funds, or \$380,000.
- Dielmann Recreation Complex (DRC) – Capital improvement projects related to the DRC are included in the Capital Fund. Operating expenses and revenues are accounted for in the Enterprise Fund. No change to this policy is proposed.

Similar to the Public Safety Sales Tax Policy, we would plan to review the allocation for PSW revenues annually, and anticipate that needs and emphasis will shift between parks and stormwater. Staff looks forward to discussing this matter with the City Council.



DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: January 10, 2022
TO: Stormwater Committee
CC: Jim Heines, Director of Public Works
FROM: Matt Wohlberg, P.E., City Engineer
SUBJECT: 2022 Stormwater Committee Meeting Schedule

The Stormwater Committee plans to meet monthly in 2022. These meetings will be held on the first Wednesday after the second Monday of each month. The dates for the Stormwater Committee meetings in 2022 will be:

Wednesday, January 12
Wednesday, February 16
Wednesday, March 16
Wednesday, April 13
Wednesday, May 11
Wednesday, June 15
Wednesday, July 13
Wednesday, August 10
Wednesday, September 14
Wednesday, October 12
Wednesday, November 16
Wednesday, December 14

All of these meetings are planned to begin at 4:45 p.m.

As a precautionary measure to help prevent exposure to and the spread of COVID-19, committee meetings will be held online using the Zoom platform through at least April 2022. Circumstances may allow for the return to in-person meetings later in 2022.

Communication: 2022 Stormwater Committee Meeting Schedule (2022 Meeting Schedule)