

T&E COMMITTEE #2,3
March 17, 2025

Worksession

M E M O R A N D U M

March 12, 2025

TO: Transportation & Environment Committee

FROM: Keith Levchenko, Senior Legislative Analyst

SUBJECT: **Worksession: FY25-30 Amended Capital Improvements Program (CIP)
Conservation of Natural Resources: Agenda Item #2: Storm Drains and
Agenda Item #3: Stormwater Management**

PURPOSE: To review and make recommendations to the Council on FY25-30 amendments to the Storm Drains CIP and Stormwater Management CIP

NOTE: Both the Storm Drains CIP, and the Stormwater Management CIP are funded via the Water Quality Protection Fund and do not affect the affordability calculations regarding GO Bonds.

- **Storm Drains**
 - The County Executive is recommending a technical amendment to the Facility Planning: Storm Drains project (reflecting a project acceleration of \$378,000 from FY25 to FY24).
Council Staff concurs with the County Executive's recommendation.
- **Stormwater Management**
 - Comprehensive Flood Management Plan: The County Executive is recommending an increase of \$1.9 million (+69.6 percent) in the project for the Phase 2 modeling work; based on cost experience from the modeling work for the Sligo Creek Watershed.
 - Implementation of the Flood Management Plan: The County Executive is recommending shifting \$1.5 million in funding to the Comprehensive Flood Management Plan project to partially offset the cost increase noted above.
 - Stormwater Management Retrofit: Countywide: The County Executive is recommending an increase of \$2.4 million to provide for three new upstream mitigation projects.
Council Staff concurs with the County Executive's recommendations.
- The Fiscal Impacts of the Storm Drains and Stormwater Management CIP amendments on the Water Quality Protection Fund will be reviewed by the T&E Committee as part of its worksession on the Department of Environmental Protection Operating Budget in April.
- The Council will take final action on these amendments and the Water Quality Protection Charge in mid-May.

The following officials and staff will be attending this meeting:

Storm Drains CIP

- Emil Wolanin, Deputy Director/Chief Operating Officer, Department of Transportation
- Veronica Jaua, Fiscal and Policy Analyst, Office of Management and Budget

Stormwater Management CIP

- Amy Stevens, Chief, Watershed Restoration Division, DEP
- Saeyin Oh, Section Chief, Design and Engineering, Watershed Restoration Division, DEP
- Stan Edwards, Chief, Energy, Climate, and Compliance Division, (DEP)
- Vicky Wan Chief, Strategic Services Division, DEP
- Rich Harris, Fiscal and Policy Analyst, Office of Management and Budget

Attachments

- Excerpts from the County Executive's FY26 Recommended Capital Budget and Amendments to the FY25-30 Capital Improvements Program (©1-9)¹
- River Falls Storm Drain Improvements Approved Project Description Form (©10-11)
- DEP Presentation Slides: Comprehensive Flood Management Plan (©12-28)

AGENDA ITEM #2: FY25-30 AMENDED STORM DRAINS CIP

Summary

The Department of Transportation (DOT) Division of Transportation Engineering manages the County storm drains program. Properly functioning storm drains remove excess water from the roads, ensuring safer road conditions while also protecting roads from water damage. Properly functioning storm drains also protect adjacent properties from water runoff damage. Work is identified through requests for assistance that come from property owners as well as from government agencies. DOT works in partnership with the state and other municipalities when state roads and/or municipal properties are involved. For more details on the County storm drains program, please see last year's [Council Staff Report for the FY25-30 CIP for Storm Drains](#).

The Approved FY25-30 Storm Drains CIP totals \$35.2 million. For the Amended Storm Drains CIP, the County Executive is recommending \$34.8 million (a decrease of \$378,000 all related to an acceleration of work from FY25 to FY24 for the Facility Planning: Storm Drains project. The following table shows the recommendation by fiscal year compared to the Approved FY25-30 CIP.

¹ The County Executive's Recommended FY25-30 Amended CIP transmittal from January 15, 2025 is [available here](#).

Table #1
Storm Drains CIP (in 000s)

	Six-Year	FY25	FY26	FY27	FY28	FY29	FY30
FY25-30 Approved	35,162	6,131	6,315	5,679	5,679	5,679	5,679
FY25-30 CE Amended	34,784	5,753	6,315	5,679	5,679	5,679	5,679
change from approved	(378)	(378)	-	-	-	-	-
percent change from approved	-1.1%	(0)	-	-	-	-	-

The only change in expenditures recommended by the County Executive is a technical adjustment to the Facility Planning: Storm Drains project (moving \$378,000 from FY25 to FY24 (discussed later).

The sources of funds for the Storm Drains CIP are shown in the following chart.

Table #2
Storm Drains CIP (in \$000s)

	FY25-30 Approved	FY25-30 Amended	\$\$\$ Change	% Change
Total	35,162	34,784	(378)	-1.1%
Water Quality Protection Bonds	23,049	23,049	-	0.0%
Current Revenue: Water Quality Protection	12,113	11,735	(378)	-3.1%

The chart shows that Water Quality Protection Bonds are the major source of funding with Current Revenue from the Water Quality Protection Fund being the other source. The \$378,000 expenditure acceleration noted earlier is all related to Current Revenue: Water Quality Protection funding.

Some storm drain projects can involve State, Federal, or other outside participation, although none of these sources are assumed in the Approved CIP at this time.

Project Amendment Review

Facility Planning: Storm Drains (PDF on ©8-9)

	Facility Planning: Storm Drains								
	Total	FY24	Six-Year	FY25	FY26	FY27	FY28	FY29	FY30
FY25-30 Approved	11,234	8,046	3,188	518	534	534	534	534	534
FY25-30 Amended	11,234	8,424	2,810	140	534	534	534	534	534
change from approved	-	378	(378)	(378)	-	-	-	-	-
percent change from approved	0.0%	4.7%	-11.9%	-73.0%	0.0%	0.0%	0.0%	0.0%	0.0%

This project provides for the investigation and analysis of various storm drainage assistance requests (DARs) initiated by private citizens and public agencies. Non-capital maintenance work (such as cleaning out storm drains) is addressed in the Operating Budget for quick turnaround. For capital work, depending on the complexity of the project, in-house staff or consultants design projects to a 35 percent design level. At that point, projects that cost over \$500,000 become stand-alone projects if approved. Projects costing less than \$500,000 are constructed in the Storm drain: General project.

The project is funded entirely with Water Quality Protection Charge current revenue funding

A large portion of funds from this project covers the costs of responding to Drainage Assistance Requests (DARs), background research, data collection, survey, and concept alternative evaluation.

Last year, for the FY25-30 CIP, the Council approved an inflationary increase in the level of effort in this project to reflect more current cost information.

This year, for the Amended FY25-30 CIP, the County Executive is recommending a technical adjustment to the project to reflect additional spending (\$378,000) occurring in FY24 covered with dollars in FY25. This corrects some invoicing issues that occurred at the end of FY24 involving this and the Storm Drain: General project.

Council Staff concurs with the County Executive's technical adjustment in this project.

Follow-up Item: River Falls Storm Drain Improvements

As part of last year's FY25-30 CIP review, the Council approved a new project, River Falls Storm Drain Improvements (see Approved PDF attached on ©10-11). Below is some background information included in last year's Council Staff Report on this issue.

In June of 2021, the Council approved an \$82,000 supplemental appropriation and amendment to the Facility Planning: Storm Drains project for a Federal Grant (via the Maryland Department of Natural Resources) for the study of the River Falls neighborhood storm drain system.

The study scope included assessing the existing storm drain system's capacity and identifying potential solutions to address current flood hazards as well as future hazards exacerbated by the impacts of climate change. The study, [available here](#), was completed in June 2022. The study found that the existing storm drain systems in the area do not meet current County design criteria (i.e. 10-year storm event).

When this project was first studied the intent was to consider green infrastructure practices that would promote infiltration, reduce runoff, and provide water quality benefits. The intention was to use this work as a model for the County (and potentially other counties as well) for how to address flood hazards while also achieving water quality and climate resilience co-benefits.

The study found that while 53 bioswales could be installed, these would primarily help with water quality and only minimally improve quantity issues. Therefore, storm drain infrastructure improvements will also be needed.

Preliminary engineering was initiated in FY24 under the Storm Drain General project. The order of magnitude cost for storm drain improvements meeting the 10-year design standard is \$8.0 million.

The FY25-30 approved project includes \$1.3 million (a mix of Water Quality Protection Current Revenue and Bonds; spread across FY25 and FY26) to provide for the remaining design work for the project. Final design for this project is scheduled to be completed in June 2026. Once the mitigation options are identified, updated construction costs can be prepared and considered for future inclusion in the CIP.

Since the study of this project was started, the County initiated a Comprehensive Flood Management Plan (see later discussion in the Stormwater Management section of this memorandum) which included a Phase 1 study prioritizing watersheds for detailed modeling which has been completed. Phase 2 detailed modeling of the priority watersheds is underway. The River Falls project is not within a priority watershed. However, the analyses done for the River Falls area could help inform work in the priority areas and elsewhere in the county.

As part of the Council's project review last year, Council Staff suggested:

that when the scope and construction cost estimates for this project are updated, that the scope and the costs and benefits of this project be presented to the T&E Committee. This project will need to be considered in the context of the substantial fiscal impact on the Water Quality Protection Fund of the implementation of the Flood Management Plan, so that the Council can consider how best to prioritize these resources.

DOT staff have indicated that a briefing for the T&E Committee can be scheduled for later this fall at the 70 percent design stage.

No action is required by the Council at this time.

AGENDA ITEM #3: FY25-30 AMENDED STORMWATER MANAGEMENT CIP

Summary

Stormwater management is a shared responsibility among several County departments and agencies. DEP plans and implements the stormwater management CIP program. The Department of Permitting Services reviews, approves, inspects, and enforces requirements for construction of privately-owned stormwater management facilities. DEP works with the County's Department of Transportation (DOT) to address storm drain outfall repair issues, as well as with the Washington Suburban Sanitary Commission (WSSC Water) when WSSC Water infrastructure work is needed. DEP also inspects and provides structural maintenance for most Montgomery County Public Schools (MCPS) and the Montgomery County facilities on Maryland-National Capital Park and Planning Commission (M-NCPPC) land. M-NCPPC, in coordination with DEP, performs stream restoration work (utilizing Water Quality Protection funding) on park land which is credited under the County's MS-4 permit (discussed later). For more details on the County storm drains program, please see last year's [Council Staff Report for the Stormwater Management FY25-30 CIP](#).

Stormwater Permit

The county's 4th generation National Pollution Discharge Elimination System Municipal Separate Storm Sewer System (NPDES-MS4) Permit² was issued in November 2021. Most notably,

² The County's 2021-2026 MS4 permit is available on the Maryland Department of the Environment (MDE) website at: <https://mde.maryland.gov/programs/Water/StormwaterManagementProgram/Documents/Final%20Determination%20Dox%20N5%202021/Montgomery%20County%20MS4%20Permit%20Final.pdf>

in terms of the Stormwater Management CIP, is the requirement that by November 4, 2026, Montgomery County complete the restoration of 1,814 impervious acres that have not been treated to the maximum extent practicable (MEP) with yearly requirements to be met. As noted in prior briefings to the T&E Committee on the County's Financial Assurance Plan (FAP) which is required to be transmitted to MDE every two years, funding in the Stormwater Management CIP, along with some other expenditure areas in the CIP and Operating Budget has been affirmed as covering the costs identified to meet the restoration requirements in the permit.

Fiscal Summary

The Approved FY25-30 Stormwater Management CIP is \$306.3 million. The County Executive's Amended FY25-30 CIP totals \$308.99 million (an increase of \$2.7 million) involving amendments across three projects.

Table #1
Stormwater Management CIP (in 000s)

	Six-Year	FY25	FY26	FY27	FY28	FY29	FY30
FY25-30 Approved	306,277	31,108	24,261	87,932	48,811	57,885	56,280
FY25-30 CE Amended	308,989	31,108	25,871	89,034	48,811	57,885	56,280
change from approved	2,712	-	1,610	1,102	-	-	-
percent change from approved	0.9%	0.0%	6.6%	1.3%	0.0%	0.0%	0.0%

The sources of funds for the Approved FY25-30 CIP and the FY25-30 Amended CIP as recommended by the County Executive are shown in the following chart.

Table #2: Funding Sources (in 000s)

Funding Sources	FY25-30 Approved	FY25-30 Amended	\$\$\$ Change	% Change
Total	306,277	308,989	2,712	0.9%
Water Quality Protection Bonds	169,402	169,402	-	0.0%
Water Quality Protection Current Revenue	36,635	37,037	402	1.1%
Long-Term Financing	69,314	71,624	2,310	3.3%
Contributions	4,860	4,860	-	n/a
Federal Aid	8,680	9,116	436	n/a
State Aid	14,986	14,550	(436)	-2.9%
SWM Waiver Fees	2,400	2,400	-	0.0%

The program is funded mostly through Water Quality Protection (WQP) Bonds, WQP Current Revenue, Long-Term Financing (via the State), and State Aid along with some other smaller funding amounts. The WQP Bonds are separate from the County's General Obligation Bond Spending Affordability limits.

Public Hearing Testimony and Correspondence

The Council received correspondence and public hearing testimony expressing opposition to stream restoration projects in favor of more out of stream stormwater control projects to prevent stream erosion. Similar comments were received last year. One speaker's detailed written testimony in opposition to stream restoration projects is [available here](#). They argue that the construction work results in tree loss and other damage to stream areas, that water quality is not improved, and that the

restoration work is vulnerable to blowout by future heavy storms because the upland causes of the stream degradation are not addressed.

In response to the testimony received last year, DEP provided the Council with a written response (see ©79-88) reiterating its support for stream restoration projects as part of a combined strategy involving “both upland BMPs, (best management practices) to slow down and infiltrate stormwater, and stream restorations, to stabilize the stream and reduce the instream erosion.” DEP staff will be available to discuss stream restorations at the Committee worksession. *NOTE: the County Executive is recommending an amendment to the SM Retrofit: Countywide project to add three upland projects to the CIP.*

Amended Projects Review

The County Executive is recommending CIP amendments to three projects:

- Implementation of the Flood Management Plan – reduce some placeholder costs to offset cost increases in the Comprehensive Flood Management Plan project.
- Comprehensive Flood Management Plan – cost increases
- SM Retrofit: Countywide – adding three new upland projects

These items are discussed further below.

Comprehensive Flood Management Plan (PDF on ©3-4)

	Total	Thru FY24	Six-Year	FY25	FY26	FY27	FY28	FY29	FY30
FY25-30 Approved	5,339	2606	2,733	2,733					
FY25-30 CE Amended	7,241	2606	4,635	2,733	1,500	402			
change from approved	1,902	-	1,902	-	1,500	402	-	-	-
percent change from approved	35.6%	0.0%	69.6%	0.0%					

This project was approved as part of the FY23-28 CIP and is intended to proactively address current flooding problems in the County as well as more frequent and intense rain events expected in the future resulting from climate change. The County’s Climate Action Plan (June 2021) identified frequent and more intense rainfall and the increased risks of flooding as a primary climate hazard the County will need to address in the coming years.

DEP has prepared some presentation slides (see ©12-28) to update the Committee on this initiative.

The Flood Management Plan includes three phases. Phase 1 work (identifying the priority watersheds) was completed two years ago and Phase 2 work (conducting engineering assessments in the priority watersheds) is ongoing. Phase 3 (implementation of mitigation work) is addressed in the Implementation of the Comprehensive Flood Management Plan project.

The priority watersheds are listed in the following table.

Modeled Watersheds	Area (Acres)	Estimated Population	Estimated Population in Areas with SVI > 0.5	% of Population in Areas with SVI > 0.5
Middle Rock Creek	10,780	77,117	37,756	49.0%
Lower Rock Creek	12,005	113,565	26,610	23.4%
Sligo Creek	6,156	68,817	25,792	37.5%
Cabin John Creek	16,303	73,477	5,275	7.2%
Little Falls Branch	4,821	43,454	0	0.0%
Northwest Branch	9,706	58,495	21,078	36.0%
Muddy Branch	12,531	57,984	8,526	14.7%
Middle Great Seneca Creek	9,028	58,791	21,503	36.6%
Middle Great Seneca Creek – Whetstone Run	3,049	44,518	41,154	92.4%
Northwest Branch – Bel Pre Creek	2,866	27,935	15,919	57.0%
Watts Branch	14,231	45,036	1,560	3.5%
Total	101,476	669,189	205,173	30.7%

NOTE: “SVI” is short for “Social Vulnerability Index.” This measure was developed by the Centers for Disease Control and Prevention (CDC) to assess the relative vulnerability of a community to natural and man-made hazards.

According to DEP staff, the modeling of the pilot watershed (Sligo Creek) is nearing completion. The initial steps related to the modeling of Lower and Middle Rock Creek are underway. All watersheds are expected to be modeled by the end of 2026 or early 2027.

For the FY25-30 Amended CIP, the County Executive is recommending adding \$1.9 million in expenditures (funded with Water Quality Protection Fund Current Revenue) to this project to address cost increases experienced with the analysis of the planned watersheds in the Phase 2 work. This increase is mostly offset through the reduction of \$1.5 million in FY26 placeholder expenditures from the Implementation of the Comprehensive Flood Management Plan project.

DEP has noted that the hydraulic analysis work for the watershed analysis requires complete documentation of the storm drain system. County storm drain inventory data is incomplete, and automated processes have been created along with selected field verification work to address missing data points in the Sligo Creek watershed.

DEP staff also provided the following regarding the cost increase:

Developing that process took time, but what was developed for Sligo Creek can be applied to other watersheds and therefore will not need to be recreated. However, the sheer volume of data points that must be examined to ensure a complete network across the remaining 10 watersheds is a component of the cost increase. In addition, due to the size of the watersheds being modeled, it was determined that a robust project optimization tool needed to be incorporated into the process for identifying flood mitigation solutions. This tool will enable tens of thousands of potential mitigation options to be analyzed through an iterative process until the most impactful solutions are determined.

Council Staff recommends approval of this amendment as recommended by the County Executive.

Implementation of the Comprehensive Flood Management Plan (PDF on ©5)

	Total	Thru FY24	Six-Year	FY25	FY26	FY27	FY28	FY29	FY30
FY25-30 Approved	153,000		153,000	3,000	10,000	30,000	30,000	40,000	40,000
FY25-30 CE Amended	151,500		151,500	3,000	8,500	30,000	30,000	40,000	40,000
change from approved			(1,500)	-	(1,500)	-	-		
percent change from approved			-1.0%	0.0%	-15.0%	0.0%	0.0%	0.0%	0.0%

This project, added last year to the FY25-30 CIP includes placeholder construction funding for projects identified in the Comprehensive Flood Management Plan. No spending has occurred in this project to date. The identification of these projects will be done in Phase 2 of the Comprehensive Flood Management Plan project (currently underway) and the expenditures then moved to the administering department for the work. In late FY25, DEP expects to identify potential projects for detailed design and implementation.

For the FY25-30 Amended CIP, the County Executive is recommending a reduction of \$1.5 million in FY26 expenditures (Water Quality Protection Current Revenue) in this project to address cost increases in the analysis of all planned watersheds in the Comprehensive Flood Management Plan project.

Council Staff recommends approval of this amendment as recommended by the County Executive.

SM Retrofit: Countywide (PDF on ©6-7)

	Total	Thru FY24	Six-Year	FY25	FY26	FY27	FY28	FY29	FY30
FY25-30 Approved	161,191	74,431	86,760	13,214	4,217	39,533	9,994	9,898	9,904
FY25-30 CE Amended	163,501	74,431	89,070	13,214	5,827	40,233	9,994	9,898	9,904
change from approved	2,310	-	2,310	-	1,610	700	-	-	-
percent change from approved	1.4%	0.0%	2.7%	0.0%	38.2%	1.8%	0.0%	0.0%	0.0%

This project provides for the design and construction of stormwater management retrofit projects Countywide to meet the County's MS-4 permit requirements.

For the FY25-30 Amended CIP, the County Executive is recommending an additional \$2.3 million in spending in FY26 and FY27 (funded with Long-Term Financing) to add three new upstream mitigation projects. Per DEP, these projects include:

The projects for the additional \$2.3M to the Countywide project are the contribution of \$250k to the Stormwater Management Bioretention for the proposed Loiederman Middle School Outdoor Classroom, \$1.4M in the design and construction of Four Congregations for Cleanwater Bioretention Projects, and \$660k for a Greenvest Reforestation project.

DEP staff will be available at the worksession to talk more about these requested projects.

Council Staff recommends approval of this amendment as recommended by the County Executive

Attachments

FY 25-30 Biennial Recommended CIP
January Budget Amendments Summary (\$000s)
15-Jan-25

Project #	Project Name	Explanation of Adjustment	FY25-30 Change (\$000s)	Funding Sources
P451502	White Flint Fire Station 23	Adds escalation associated with Council's two-year deferral of construction in FY25.	7,923	G.O. Bonds, Recordation Tax Premium (MCG)
P362401	Judicial Security Improvements	Adds funds to support Phase 2 including installation of security walls and doors on the remaining floors; security devices, architectural and engineering fees, permits, and supervision.	1,292	G.O. Bonds, State Aid
P509132	Bridge Design	Adds funds for staff costs associated with the study of Randolph Road Rail Crossing Elimination alternatives.	75	Recordation Tax Premium (MCG)
P507658	Bus Stop Improvements	Adds Federal aid to develop Vision Zero standards for bus stops.	560	Federal Aid
P501914	North Bethesda Metro Station Northern Entrance	Adds \$5 million in a Federal aid awarded to the County in 2024 from the Transportation, Housing and Urban Development (THUD) Federal appropriation bill. Includes funding adjustment based on updated schedule from WMATA.	5,000	Federal Aid, G.O. Bonds
P507596	Bikeway Program Minor Projects	Cost increase needed to complete stormwater management design and approval with Parks staff and Department of Permitting Services.	150	G.O. Bonds
P501107	Goshen Road South	Adds Federal aid from the Transportation, Housing and Urban Development (THUD) Federal appropriation bill to support spot improvements.	845	Federal Aid, G.O. Bonds
P500338	Highway Noise Abatement	Adds State aid to conduct a noise abatement study for the intersection of the Intercounty Connector and New Hampshire Avenue.	250	State Aid
P802505	Oaks Landfill Leachate Pretreatment Plant Retrofitting	Cost increase is due to new State rules on PFAS and PFOS mitigation at landfills.	1,688	Current Revenue: Solid Waste Disposal
P720601	Cost Sharing: MCG	Funds added for CASA Rockville Welcome Center renovations and Scotland AME Zion Church 2nd Century Project.	2,900	Recordation Tax Premium (MCG)
P802202	Comprehensive Flood Management Plan	\$1.5 million shifted from the Implementation of the Comprehensive Flood Management Plan project plus additional cost increases to complete all watersheds planned for analysis.	1,902	Current Revenue: Water Quality Protection
P802507	Implementation of the Comprehensive Flood Management Plan	\$1.5 million shifted to the Comprehensive Flood Management Plan project so that all planned watersheds can be analyzed.	(1,500)	Current Revenue: Water Quality Protection
P808726	Stormwater Management Retrofit: Countywide	Cost increase to reflect three new upstream projects added to FY26.	2,310	Federal Aid, State Aid, Long-Term Financing,

Montgomery County Public Schools

P076506	Building Modifications and Program Improvements	Board of Education's request reflects savings of \$7 million in the prior to the 6-year period to address State aid shortfall in the Charles W. Woodward High School project and a reduction in FY26 for \$4 million.	(4,000)	G.O. Bonds
P652303	Early Childhood Center	Board of Education request to reduce placeholder costs in FY25-FY29 to fund other projects within their request. Sufficient funds are left to address the Burtonsville early childhood education center at the Burtonsville Elementary School.	(36,500)	G.O. Bonds
P816633	HVAC (Mechanical Systems) Replacement: MCPS	Board of Education request to replace the HVAC equipment in one more school. This includes a funding switch between GO bonds and State aid to reflect expenditures eligible for State aid in FY26.	4,500	G.O. Bonds, State Aid
P652101	Major Capital Projects - Elementary	Reflects the following cost changes: 1) Burnt Mills Elementary School - \$9.374 million acceleration of expenditures from FY25 into FY24; 2) Cold Spring Elementary School, Damascus Elementary School, Twinbrook Elementary School, and Whetstone Elementary School - \$3 million reduction in each project in FY30 allocated to projects with cost increases, based on Board of Education request; 3) Stonegate Elementary School - \$5.724 million acceleration of expenditures from FY25 into FY24; and 5) Woodlin Elementary School - \$10.177 million acceleration of expenditures from FY25 into FY24.	(37,275)	G.O. Bonds, State Aid

FY 25-30 Biennial Recommended CIP
January Budget Amendments Summary (\$000s)
15-Jan-25

Project #	Project Name	Explanation of Adjustment	FY25-30 Change (\$000s)	Funding Sources
P711502	Library Refurbishment Level of Effort	Updated estimate and schedules. McGee Library and subsequent library construction for Twinbrook, Rockville, Gaithersburg, Olney, and Kensington Park are delayed to fund the Damascus Library Refresh Cost increase.	1,861	G.O. Bonds
P722301	Holiday Park Net Zero Initiative	Reflects minor project acceleration.	(5)	G.O. Bonds
P721503	Kennedy Shriver Aquatic Center Building Envelope Improvement	Project design/construction start deferred to FY25.	206	G.O. Bonds
P721902	Martin Luther King, Jr. Indoor Swim Center Renovation	Project schedule adjusted to ensure the facility remains open during Kennedy Shriver Aquatic Center closure. Acceleration of \$421,000 of expenditures from FY25 & FY26 into FY24.	(421)	G.O. Bonds
P722506	Recreation Facilities Refurbishment - Indoor Pools	Cost change is due to deferring some projects to reflect realistic implementation timelines.	(5,177)	G.O. Bonds
P722505	Recreation Facilities Refurbishment-Outdoor Pools	Cost change is due to deferring some projects to reflect realistic implementation timelines.	(3,604)	G.O. Bonds
P508180	Facility Planning: Storm Drains	Reflects project acceleration of \$378,000 from FY25 into FY24.	(378)	Current Revenue: Water Quality Protection

FY25-30 Funding Shifts, Switches and Reallocations - Other Technical Changes

P500152	Facilities Site Selection: MCG	Transfer from the American with Disabilities Act (ADA) Compliance project for \$100,000.	100	G.O. Bonds
P450300	Clarksburg Fire Station	Reflects project savings transferred to the Public Safety Communications Center, Phase II, Electrical Distribution and HVAC upgrade Project.	0	G.O. Bonds
P501903	Beach Drive Bridge	GO bond transfer to Good Hope Road Shared Use Path project.	0	G.O. Bonds
P500511	Resurfacing: Residential/Rural Roads	Funding switch with GO bonds to program \$7 million in GO Bonds Premium in FY25.	0	G.O. Bonds, G.O. Bond Premium
P501902	Good Hope Road Shared Use Path	FY25 transfer of \$350,000 from Beach Drive Bridge.	350	G.O. Bonds
P502406	MD 198 Sidewalk Improvements	Funding switch between GO bonds and State aid to facilitate expenditures against the State Aid award incurred in FY24.	0	G.O. Bonds, State Aid
P501404	MCG Reconciliation PDF	Reflects updated impact tax and recordation tax premium revenue estimates with offsetting funding switches in GO bonds.	0	Impact Taxes, Recordation Tax Premium, GO Bonds
P711503	21st Century Library Enhancements Level Of Effort	Transferred \$31,000 in annual Operating Budget Impacts from this CIP project to Libraries' FY26 Operating Budget to reflect additional software licenses and maintenance costs resulting from this project.	(155)	Current Revenue: General
P710500	Clarksburg Library	FY26 transfer of \$180,000 in GO bonds from Clarksburg Library (P710500) to Americans with Disabilities Act (ADA): Compliance (P361107).	(180)	G.O. Bonds
P722001	Shared Agency Booking System Replacement	Project cost adjusted to remove intergovernmental contribution. FY25 funding switch from intergovernmental funding to recordation tax premium (MCG) to fund additional expenditures paid with local funding sources.	(217)	Intergovernmental, Recordation Tax Premium (MCG)

Other CE Recommended Agency Requests



Comprehensive Flood Management Plan (P802202)

Category	Conservation of Natural Resources	Date Last Modified	01/07/25
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Planning Stage

Total	Thru FY24	Rem FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
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EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	6,230	816	779	4,635	2,733	1,500	402	-	-	-	-
Other	1,011	465	546	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	7,241	1,281	1,325	4,635	2,733	1,500	402	-	-	-	-

FUNDING SCHEDULE (\$000s)

Current Revenue: General	1,300	465	835	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	5,816	816	365	4,635	2,733	1,500	402	-	-	-	-
Intergovernmental	125	-	125	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	7,241	1,281	1,325	4,635	2,733	1,500	402	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 26 Request	1,500	Year First Appropriation	FY22
Cumulative Appropriation	5,339	Last FY's Cost Estimate	5,339
Expenditure / Encumbrances	2,497		
Unencumbered Balance	2,842		

PROJECT DESCRIPTION

This project supports the development of a Comprehensive Flood Management Plan (CFMP) for Montgomery County.

The CFPM will improve the County's ability to address flooding based on scientific and engineering data and use a comprehensive, coordinated approach to identify potentially affected residents and businesses, particularly underserved communities and businesses that are least prepared to respond to and recover from flooding events. The CFPM will, among other things:

- gather data on historic flooding in the County, including input from affected communities;
- examine the potential impacts of climate change and other significant factors that can cause flooding in the County, including the effect of updated rainfall predictions;
- provide recommendations for regulatory, policy, and organizational changes necessary for the County to comprehensively plan for, respond to, and recover from flooding events; and
- include detailed hydrologic and hydraulic modeling, vulnerability assessments, and the development of adaptation/mitigation design plans.

Typical tasks in the development of specific watershed/sub-watershed assessments may include evaluations of current risk, future risk due to climate change, and assessment of risk due to aging assets. More specifically, the effort will include identifying areas at risk of flooding, quantifying that risk, developing mitigation alternatives, and conducting cost-benefit analyses, including evaluation of impacts to disadvantaged communities. Additional results will include development of prioritized capital improvement program projects and implementation schedules. The level of detail and budget required to accomplish these tasks will vary by watershed. There are 8 major watersheds and almost 150 smaller watersheds in the County.

This study will complement the State's efforts under Stormwater Management Law, Environment Article 4-201.1, which requires the Maryland Department of the Environment (MDE) to report on the most recent precipitation data available, investigate flooding events since 2000, and update Maryland's stormwater quantity management standards for flood control.

ESTIMATED SCHEDULE

Phase 1 will identify watersheds for detailed modeling in Phase 2 and provide an assessment of current County programs, policies, budgets, and other components of the County's flood management activities. Phase I was completed in May 2023. Modeling of specific watersheds and continued analysis of the County's flood-related programs, policies, etc. began in FY24.

COST CHANGE

Costs increase so that all planned watersheds can be analyzed.

PROJECT JUSTIFICATION

Flooding incidents in Montgomery County have been increasing in frequency and severity for several years. The built environment also affects flooding. An April

CE Recommended (FY25-30 Amended CIP)

2021 report from the Office of Legislative Oversight (OLO) identified an upward trend of urban flooding in the County, from two to four occurrences a year before 2010 to 11 to 39 occurrences per-year since 2010; and that the severity has increased in terms of property damage and loss of life. According to the U.S. Environmental Protection Agency, precipitation in Maryland has increased by about 5 percent in the last century but precipitation from extremely heavy storms has increased in the eastern United States by more than 25 percent since 1958.

To determine the best way to address flooding problems, the County needs a systematic watershed and sub-watershed-based analysis of flooding, a better understanding of the impact the County will experience from increased rainfall linked to climate change, and other significant contributing factors.

FISCAL NOTE

In addition to County support, the Department of Environmental Protection will pursue outside funding to fund these efforts. An FY22 supplemental added Current Revenue: General for the amount of \$1,300,000. FY25 includes a funding switch to reduce Intergovernmental and increase Current Revenue: WQP, including \$75,000 from prior appropriation. In FY26, \$1,500,000 is shifted from the Implementation of the Comprehensive Flood Management Plan project.

COORDINATION

Department of Permitting Services, Office of Emergency Management and Homeland Security, Department of Transportation, Montgomery County Fire and Rescue Service, Maryland-National Capital Park and Planning Commission, Maryland Department of the Environment, U.S. Army Corps of Engineers



Implementation of the Comprehensive Flood Management Plan (P802507)

Category	Conservation of Natural Resources	Date Last Modified	01/07/25
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Planning Stage

	Total	Thru FY24	Rem FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
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EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	33,000	-	-	33,000	2,000	3,000	9,000	9,000	5,000	5,000	-
Construction	118,500	-	-	118,500	1,000	5,500	21,000	21,000	35,000	35,000	-
TOTAL EXPENDITURES	151,500	-	-	151,500	3,000	8,500	30,000	30,000	40,000	40,000	-

FUNDING SCHEDULE (\$000s)

Current Revenue: Water Quality Protection	1,136	-	-	1,136	1,000	136	-	-	-	-	-
Water Quality Protection Bonds	150,364	-	-	150,364	2,000	8,364	30,000	30,000	40,000	40,000	-
TOTAL FUNDING SOURCES	151,500	-	-	151,500	3,000	8,500	30,000	30,000	40,000	40,000	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 26 Request	8,500	Year First Appropriation	FY25
Cumulative Appropriation	3,000	Last FY's Cost Estimate	153,000
Expenditure / Encumbrances	-		
Unencumbered Balance	3,000		

PROJECT DESCRIPTION

This project provides for implementation of Phase III of the County's Comprehensive Flood Management Plan, developed under the Comprehensive Flood Management Plan (P802202) project. Phase I and II studied watersheds throughout the County and identified areas most prone to flooding as well as areas that will become prone to flooding in the future. Phase III constructs improvements in areas with identified needs.

COST CHANGE

Funds (Current Revenue: WQP) are shifted to the Comprehensive Flood Management Plan project.

PROJECT JUSTIFICATION

Flooding incidents in Montgomery County have been increasing in frequency and severity for several years. The built environment also affects flooding. An April 2021 report from the Office of Legislative Oversight (OLO) identified an upward trend of urban flooding in the County, from two to four occurrences a year before 2010 to 11 to 39 occurrences per year since 2010; and the severity has increased in terms of property damage and loss of life. According to the U.S. Environmental Protection Agency, precipitation in Maryland has increased by about 5 percent in the last century but precipitation from extremely heavy storms has increased in the eastern United States by more than 25 percent since 1958.

FISCAL NOTE

This project is intended as a central funding source. As individual projects are identified, funds will be transferred to the administering department, which could include the Department of Transportation, Department of General Services, the Department of Environmental Protection, and the Maryland-National Capital Park and Planning Commission. The funding levels are starting points for Phase III work. The current budget figures are placeholders. Better cost estimates will be available as Phase III projects complete design.

In addition to County support, the Department of Environmental Protection will pursue outside funding to fund these efforts.

In FY26, \$1.5 million is shifted to the Comprehensive Flood Management Plan project.

DISCLOSURES

Expenditures will continue indefinitely.

COORDINATION

Department of Permitting Services, Office of Emergency Management and Homeland Security, Department of Transportation, Montgomery County Fire and Rescue Service, Maryland-National Capital Park and Planning Commission, Maryland Department of the Environment, U.S. Army Corps of Engineers



Stormwater Management Retrofit: Countywide

(P808726)

Category	Conservation of Natural Resources	Date Last Modified	01/08/25
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

	Total	Thru FY24	Rem FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
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EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	52,082	29,842	209	22,031	2,629	4,073	3,783	3,844	3,848	3,854	-
Land	3	3	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	10	10	-	-	-	-	-	-	-	-	-
Construction	104,018	30,045	7,114	66,859	10,585	1,674	36,450	6,050	6,050	6,050	-
Other	7,388	7,042	166	180	-	80	-	100	-	-	-
TOTAL EXPENDITURES	163,501	66,942	7,489	89,070	13,214	5,827	40,233	9,994	9,898	9,904	-

FUNDING SCHEDULE (\$000s)

Current Revenue: Water Quality Protection	26,897	16,934	5	9,958	1,476	1,653	1,633	1,794	1,698	1,704	-
Federal Aid	436	-	-	436	436	-	-	-	-	-	-
Intergovernmental	1,000	1,000	-	-	-	-	-	-	-	-	-
Long-Term Financing	84,356	14,750	4,804	64,802	8,778	1,624	36,400	6,000	6,000	6,000	-
State Aid	18,891	3,717	2,500	12,674	2,324	2,350	2,000	2,000	2,000	2,000	-
Stormwater Management Waiver Fees	1,380	-	180	1,200	200	200	200	200	200	200	-
Water Quality Protection Bonds	30,541	30,541	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	163,501	66,942	7,489	89,070	13,214	5,827	40,233	9,994	9,898	9,904	-

OPERATING BUDGET IMPACT (\$000s)

Maintenance				1,890	90	180	270	360	450	540
NET IMPACT				1,890	90	180	270	360	450	540

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 26 Request	2,108	Year First Appropriation	FY87
Cumulative Appropriation	101,458	Last FY's Cost Estimate	161,191
Expenditure / Encumbrances	100,501		
Unencumbered Balance	957		

PROJECT DESCRIPTION

This project provides for the design and construction of new and upgraded stormwater management facilities throughout the County under the County's Municipal Separate Storm Sewer System (MS4) Permit. Facilities include but are not limited to new or upgraded stormwater management ponds, Environmental Site Design (ESD) / Low-Impact Development (LID) facilities, and stream restorations.

COST CHANGE

The cost increases to pay for three new upstream mitigation projects.

PROJECT JUSTIFICATION

This project is needed to comply with the County's MS4 permitting requirements and to implement the County's adopted water quality goals (COMCOR Chapter 19, Article IV) and protect habitat conditions in local streams. In addition, the project supports the goals of the Anacostia Watershed Restoration Agreement.

OTHER

This project utilizes Maryland Water Quality Revolving Loan Funds (long-term financing). Expenditures in the out-years include expected costs to meet the requirements of the County's next MS4 permit. The scope of the next permit is subject to negotiation with the Maryland Department of Environment.

FISCAL NOTE

Funding sources updated in FY23 to include Water Quality Protection Bonds. There was a transfer of \$200,000 in Stormwater Management Waiver Fees in FY23 from Misc. Stream Valley Improvements (P809319). In FY21, a supplemental added \$93,773 in Intergovernmental and a fund switch removed \$200,748 in State Aid and added Federal Aid for the Chesapeake Bay Trust Green Streets, Green Jobs, Green Towns grant. This project utilizes Maryland Water Quality Revolving Loan Funds (long-term financing). FY24 funding from Federal Aid (\$5,000) and Long-Term Financing (\$223,000) was switched to Water Quality Protection Bond funding.

DISCLOSURES

Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

COORDINATION

Department of Transportation, Maryland National Capital Park and Planning Commission, Department of Permitting Services, Maryland Department of the Environment, Natural Resources Conservation Service, U.S. Army Corps of Engineers, Facility Planning: Stormwater Management (No. 809319), and Maryland Department of Natural Resources.



Facility Planning: Storm Drains (P508180)

Category	Conservation of Natural Resources	Date Last Modified	01/08/25
SubCategory	Storm Drains	Administering Agency	Transportation
Planning Area	Countywide	Status	Ongoing

Total	Thru FY24	Rem FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
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EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	11,025	8,214	1	2,810	140	534	534	534	534	534	-
Land	147	147	-	-	-	-	-	-	-	-	-
Construction	57	57	-	-	-	-	-	-	-	-	-
Other	5	5	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	11,234	8,423	1	2,810	140	534	534	534	534	534	-

FUNDING SCHEDULE (\$000s)

Current Revenue: General	4,103	4,103	-	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	6,948	4,138	-	2,810	140	534	534	534	534	534	-
Federal Aid	82	81	1	-	-	-	-	-	-	-	-
G.O. Bonds	101	101	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	11,234	8,423	1	2,810	140	534	534	534	534	534	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 26 Request	534	Year First Appropriation	FY81
Cumulative Appropriation	8,564	Last FY's Cost Estimate	11,234
Expenditure / Encumbrances	8,436		
Unencumbered Balance	128		

PROJECT DESCRIPTION

This project provides for the investigation and analysis of various storm drainage assistance requests initiated by private citizens and public agencies. These requests are related to the design, construction, and operation of public drainage facilities where flooding and erosion occur. This project includes expenditures for the preliminary and final design and land acquisition for storm drain projects prior to inclusion in the Storm Drain General project, or as a stand-alone project in the Capital Improvements Program (CIP). Prior to its inclusion in the CIP, the Department of Transportation (DOT) will conduct a feasibility study to determine the general and specific features required for the project. Candidate projects currently are evaluated from the Drainage Assistance Request list. As part of the facility planning process, DOT considers citizen and public agency requests and undertakes a comprehensive analysis of storm drainage issues and problems being experienced in the county. This analysis is used to select areas where a comprehensive long-term plan for the remediation of a problem may be required. No construction activities are performed in this project. When a design is 35 percent complete, an evaluation is performed to determine if right-of-way is needed. Based on the need for right-of-way, the project may proceed to final design and the preparation of right-of-way plats under this project. The cost of right-of-way acquisition will be charged to the Advanced Land Acquisition Revolving Fund (ALARF). When designs are complete, projects with a construction cost under \$500,000 will be constructed in the Storm Drain General project. Projects with a construction cost over \$500,000 will be constructed in stand-alone projects.

CAPACITY

Projects will be designed to accommodate the ten-year storm frequency interval.

PROJECT JUSTIFICATION

Evaluation, justification, and cost-benefit analysis are completed by DOT as necessary. In the case of participation projects, drainage studies and preliminary plans will be prepared by the requestor's engineer and reviewed by DOT. Traffic signals, streetlights, crosswalks, bus stops, ADA ramps, bikeways and other pertinent issues are being considered in the design of the project to ensure pedestrian safety.

OTHER

Before being added as a subproject, concept studies are evaluated based on the following factors: public safety; damage to private property; frequency of event; damage to public right-of-way; environmental factors such as erosion, general public benefit, availability of right-of-way; and 5:1 cost-benefit damage prevented ratio. In the case of public safety or severe damage to private property, the 5:1 cost-benefit damage prevented ratio can be waived. Drainage assistance requests are evaluated on a continuing basis in response to public requests. DOT maintains a database of complaints. Recent construction projects completed include: Railroad Street, Saul Road, Lucas Lane, MacArthur Blvd at Persimmon Tree Road, Holly Oak Court, Wildwood Road at Parkwood, Melbourne Avenue, Williamsburg Drive, Woodcrest Drive, Fox Run, Democracy Lane, Fairfax Road. Candidate Projects for FY24 and FY25: Reading Road, Kenilworth Driveway, Conway Drive, Parkwood Drive, Highview Drive, Gardiner Avenue.

FISCAL NOTE

Acceleration of \$378,000 from FY25 into FY24 to get more projects into construction.

DISCLOSURES

A pedestrian impact analysis has been completed for this project. Expenditures will continue indefinitely.

COORDINATION

Montgomery County Department of Environmental Protection, Maryland-National Capital Park and Planning Commission, Maryland Department of the Environment, United States Army Corps of Engineers, Montgomery County Department of Permitting Services, Utility Companies, and Sidewalk Program - Minor Projects (CIP No. 506747)



River Falls Storm Drain Improvements

(P502511)

Category	Conservation of Natural Resources	Date Last Modified	01/05/24
SubCategory	Storm Drains	Administering Agency	Transportation
Planning Area	Potomac-Cabin John and Vicinity	Status	Preliminary Design Stage

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	1,254	-	-	1,254	618	636	-	-	-	-	-
TOTAL EXPENDITURES	1,254	-	-	1,254	618	636	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Current Revenue: Water Quality Protection	618	-	-	618	618	-	-	-	-	-	-
Water Quality Protection Bonds	636	-	-	636	-	636	-	-	-	-	-
TOTAL FUNDING SOURCES	1,254	-	-	1,254	618	636	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	1,254	Year First Appropriation	
Appropriation FY 26 Request	-	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

PROJECT DESCRIPTION

This project provides for the design of the storm drain improvements in the River Falls neighborhood to reduce the risk of flooding. The area is between Brickyard Road to the west and north, and MacArthur Boulevard to the west and south. The storm drain improvements will provide increased capacity at strategic locations. This project will also include bioretention storm water management facilities for water quality improvements.

LOCATION

Potomac, MD

ESTIMATED SCHEDULE

Preliminary engineering was initiated in FY24 under the Storm Drain General CIP (No. 500320). Final design will be initiated in FY25

and completed in FY26.

FISCAL NOTE

The design of the storm water management facilities will consider implementation costs for improvements to the existing storm drain to a 10-year storm design capacity. In addition, the design will investigate additional mitigation opportunities to reduce the risk of flooding to existing structure. The order of magnitude construction cost for the storm drains improvements to meet the 10-year design standard is \$8 million. Once mitigation options are identified then a construction cost will be prepared.

DISCLOSURES

A pedestrian impact analysis will be performed during design or is in progress.

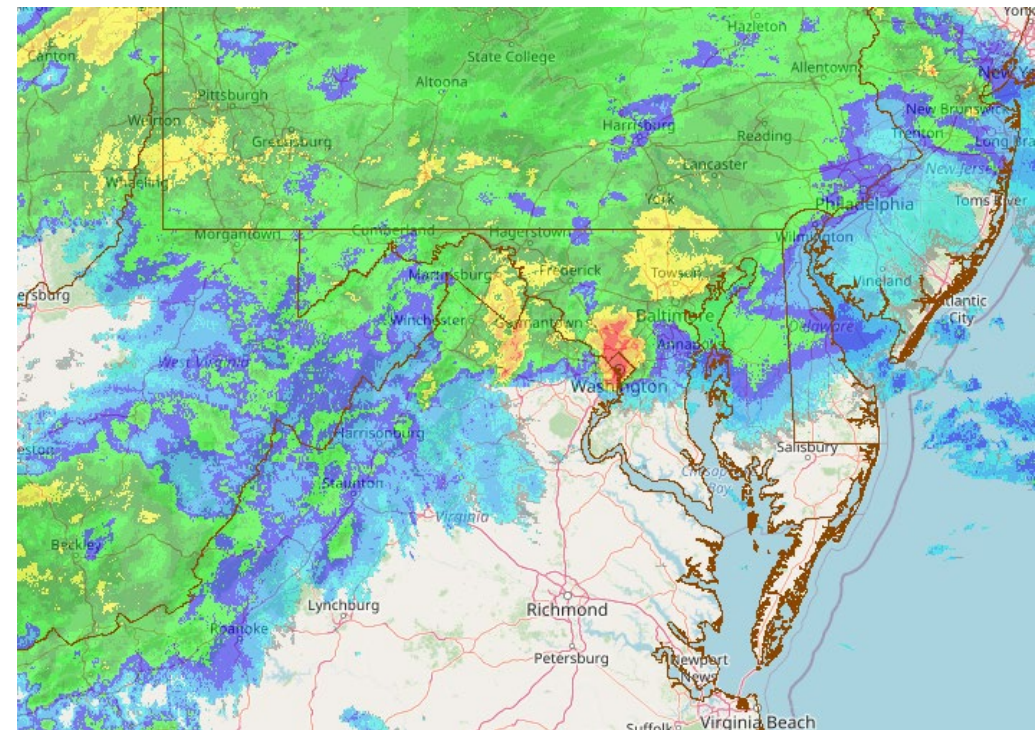
COORDINATION

Montgomery County Department of Environmental Protection, Montgomery County Department of Permitting Services, River Falls community



Montgomery County Comprehensive Flood Management Plan

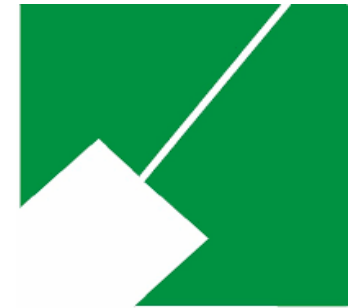
March 2025 Update



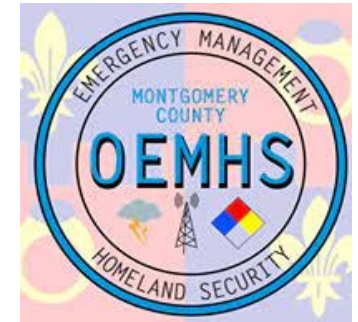
Background

Goals of the Comprehensive Flood Management Plan

Participating Agencies



M-NCPPC



Phases of the CFMP

Phase 1

- Completed in FY23
- Prioritize watersheds for detailed engineering assessments in Phase 2
- Review programs and policies related to understanding and responding to flooding

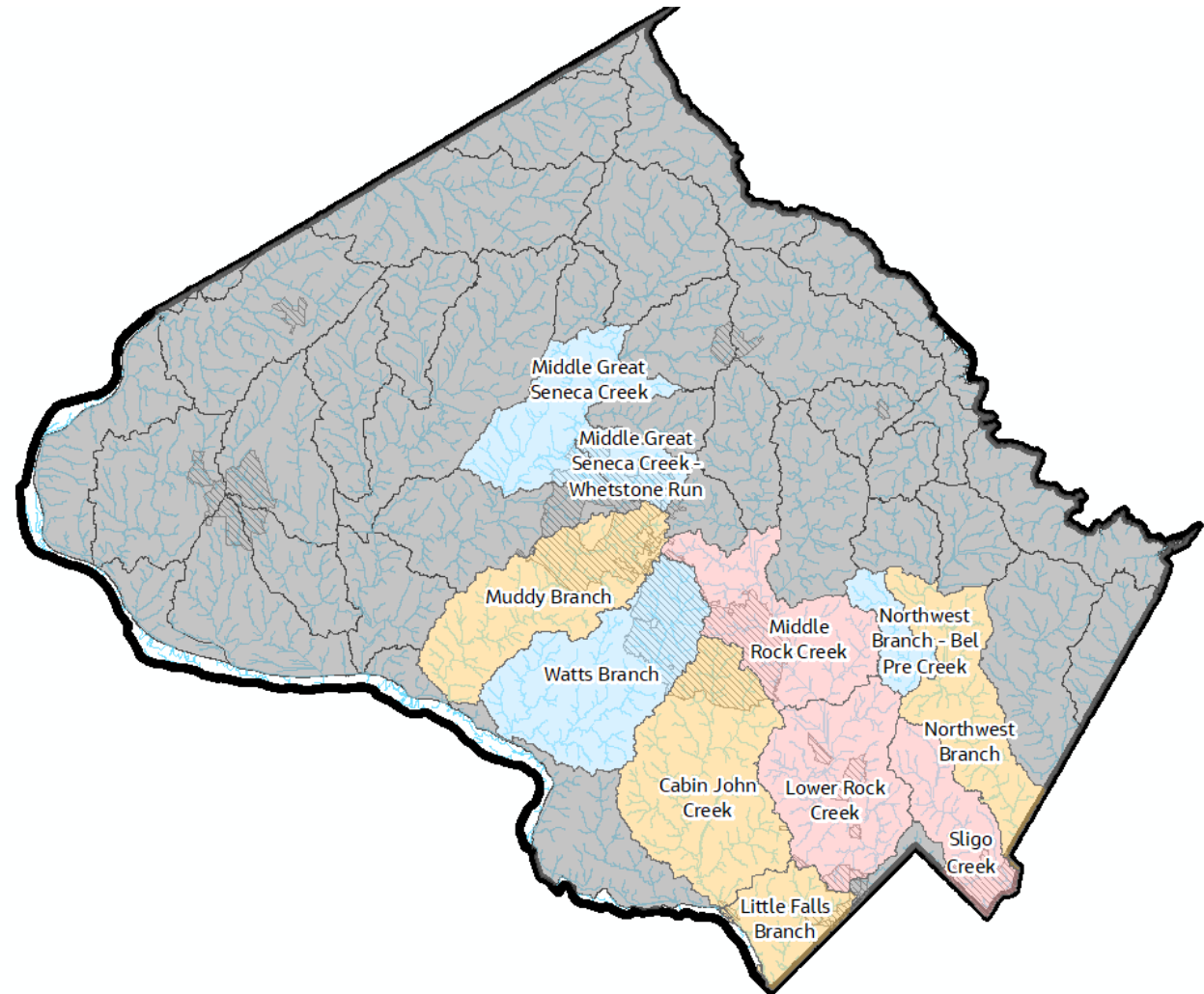
Phase 2

- Ongoing FY24 to FY27
- Conduct engineering assessments in the priority watersheds identified in Phase 1
- Develop, and begin to implement, program and policy recommendations to address flooding

Phase 3

- FY27 & Beyond
- Implementation of prioritized flood mitigation alternatives in the priority watersheds
- Continue to develop and implement program and policy recommendations to address flooding

- Eleven watersheds should be modeled by 2027. Sligo in 2024, Rock Creek (Lower & Middle) in 2025, and the others in 2026.
- Models will show flood risk of 10-year to 500-year storms.
- Models will be created for now, 2050, and 2100.
- These models have updated assumptions about precipitation and impervious area.

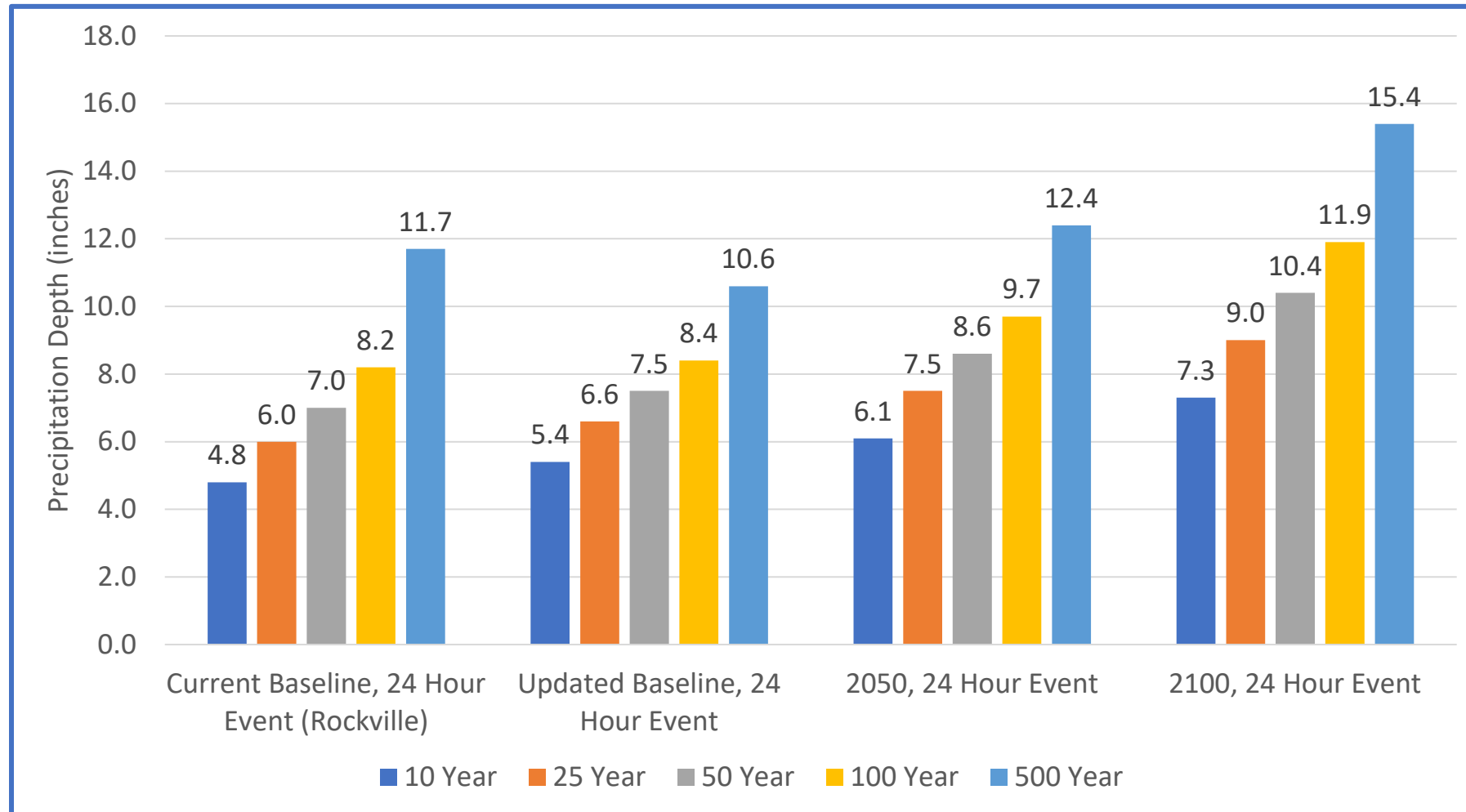


Watershed Attributes

Tier	Watershed	Area (Acres)	Estimated Population	Estimated Population in Areas with SVI > 0.5	% of Population in Areas with SVI > 0.5
1	Middle Rock Creek	10,780	77,117	37,756	49.0%
	Lower Rock Creek	12,005	113,565	26,610	23.4%
	Sligo Creek	6,156	68,817	25,792	37.5%
2	Cabin John Creek	16,303	73,477	5,275	7.2%
	Little Falls Branch	4,821	43,454	0	0.0%
	Northwest Branch	9,706	58,495	21,078	36.0%
	Muddy Branch	12,531	57,984	8,526	14.7%
3	Middle Great Seneca Creek	9,028	58,791	21,503	36.6%
	Middle Great Seneca Creek – Whetstone Run	3,049	44,518	41,154	92.4%
	Northwest Branch – Bel Pre Creek	2,866	27,935	15,919	57.0%
	Watts Branch	14,231	45,036	1,560	3.5%
Total		101,476	669,189	205,173	30.7%

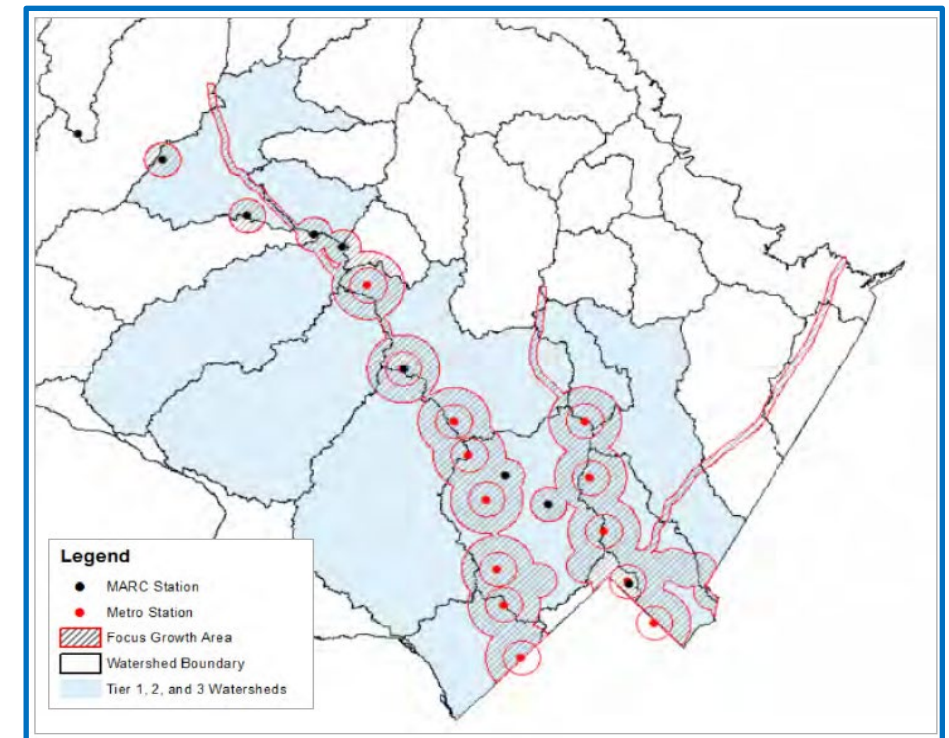
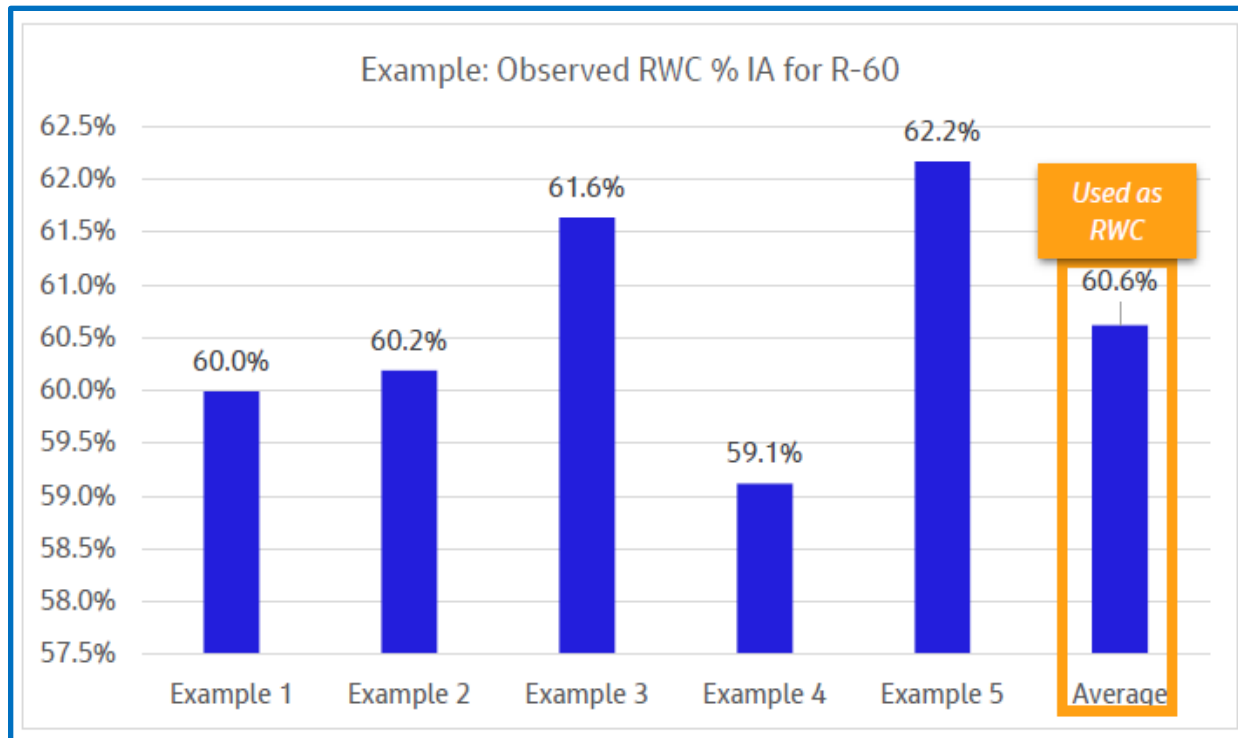
Flood Modeling

Precipitation Assumptions



Impervious Area Assumptions

“Focused Growth Areas” around transit corridors



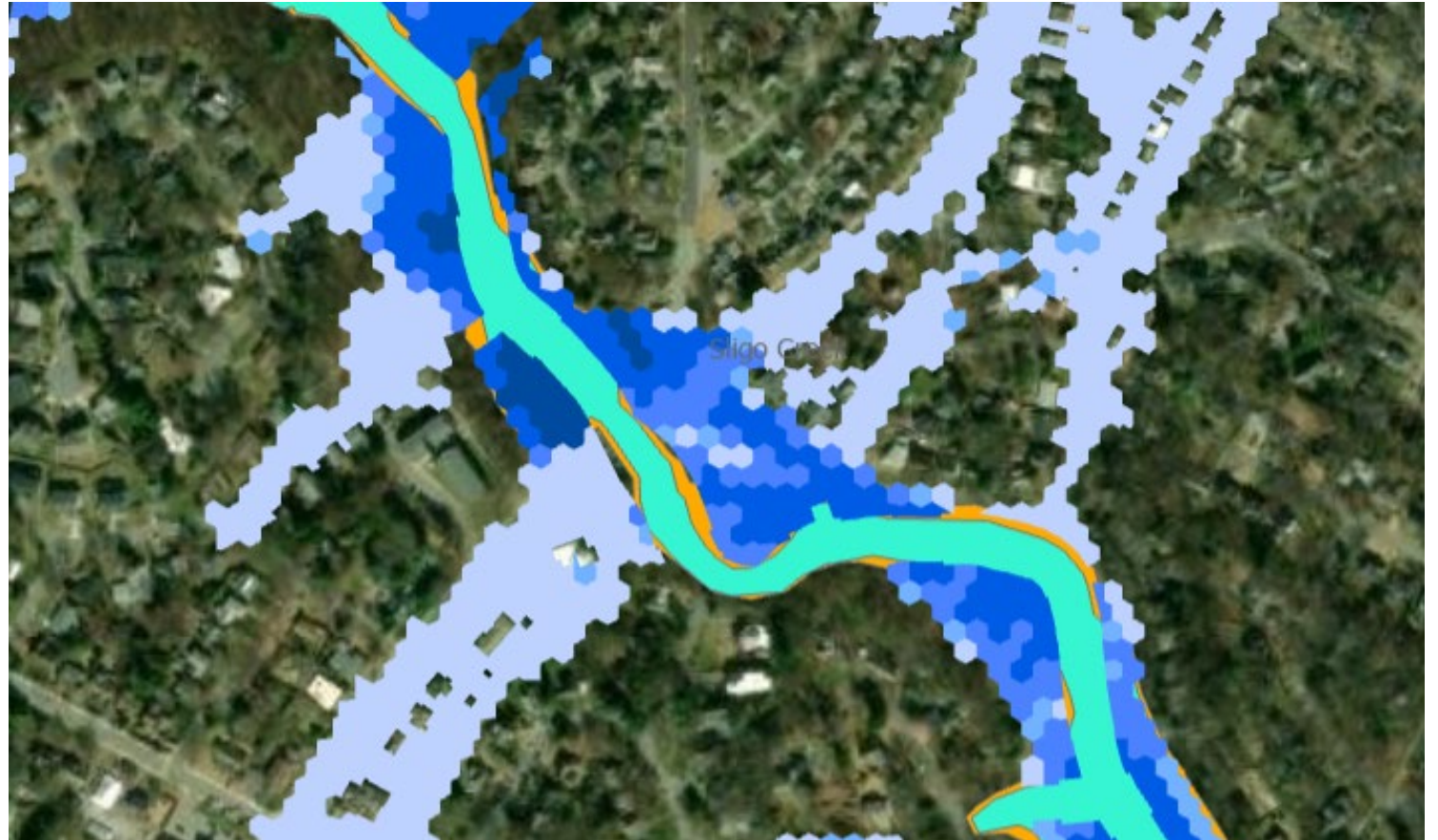
Model Outputs

FEMA Floodplains



Model Outputs

Result of CFMP
Flood Modeling



Next Steps

Capital Improvement Projects

Jacobs will conduct an analysis to identify the most potentially impactful stormwater conveyance and storage projects.

There will be several constraints to consider, including:

- Conveyance infrastructure, e.g., pipes, channels, etc. form a networked system, so all enhancements must consider downstream impacts.
- Utilities and other existing infrastructure may limit or increase the cost of improving or constructing conveyance and storage, particularly in more developed areas.

Planning and Building Code Updates

The County will never be able to mitigate all future flood risk. Thus, it will be important to make decisions that allow us to better live with water. The goal will be to ensure we are building the right kinds of structures in the right places to reduce flood risk in the long-term.

Technical experts from relevant agencies, supported by Jacobs, will be evaluating potential changes to:

- Stormwater management requirements
- Building codes
- Development review processes

Plans are underway for a series of workshops on these issues in 2025.

Homeowner Support

Two activities are underway to help homeowners mitigate the impact of flooding.

1. Creating an interactive map where residents can see the potential flooding resulting from different storm events. This will allow residents to understand their particular risk and plan accordingly.
2. Applying to join the Community Rating System (CRS) program under the National Flood Insurance Program (NFIP). Successful participation in this program reduces flood insurance premiums for ALL county residents.

Community Outreach

The County and Jacobs will work together to establish a multifaceted outreach plan which will include:

- How to view and interpret the flood risk mapping tool
- How to stay safe during major rain events
- The benefits of flood insurance for property owners and renters
- Steps property owners can take to reduce their flood risk