Ann Arbor Comprehensive Stormwater Management Plan
Stormwater Advisory Group (SWAG) Meeting Minutes
Session 8 – April 29th, 2026

Attendees:

The following individuals attended the in-person meeting on April 29th:

Michelle Bennett
Stephen Brown
Don Carpenter
Vince Caruso
Dan Christian
Miekyn Cotton
Katie Dillon
Gretchen Driskell
Omar Gates
Jerry Hancock
Jillian Hesler
Craig Hupy
Kaitlin Knape
Jennifer Lawson
Kelly McCabe
Melissa Menerey
Richard Norton
Peter Stephens
Dean Wozniak

Meeting Agenda:

The meeting consisted of the following components:

1. Welcome and Introductions (8:00 – 8:10)
2. Technical Memo 6 – Flood Preparedness (8:10-8:45)
3. Technical Memo 10 – Prioritization Framework (8:45 – 9:15)
4. Private Stormwater Infrastructure (9:15 – 9:30)
5. Climate Change (9:30 - 9:45)
6. Closing and Adjournment (9:45 – 10:00)

The PowerPoint slides presented to the SWAG have been attached. A summary of current and upcoming action items for SWAG members is available at the end of the meeting minutes section below.

Meeting Minutes:

1. Welcome and Introductions

The meeting began with a quick round of introductions. Verbal approval was conducted for the meeting minutes from the previous session, SWAG 7. The Project Team noted that the end of the project is approaching, and that cumulative capital planning recommendations are in development.

2. Technical Memo 6 – Flood Preparedness

Technical Memo 6 – Flood Preparedness assesses City flood preparedness with the knowledge that flooding cannot be eliminated through infrastructure alone and there are always going to be bigger storms. The memo focuses on planning and coordination as opposed to direct emergency operations.

While the City has a strong emergency management framework and response in place, key areas for possible improvements were identified. More effective utilization of available data and forecasting as well as actionable, coordinated communications prior to storm events could help improve the proactivity of flood preparedness.

Handouts were distributed that included 5 questions for discussion. Attendees were divided into three groups for initial discussion, where each group was encouraged to focus on 2-3 questions that resonated with them before reporting back to the group. Group discussion and individual notes responding to each question are summarized below.

Question 1: How should stormwater system knowledge be used to support preparedness before and during a storm event? Consider models, historical data, known system limitations, and field experience.

- Translating Data to Action
    - While there is a lot of information available in terms of forecasting, monitoring, modeling, etc., there is a need to more effectively translate that data into proactive, tangible pre-storm actions.
- Identified High-Risk or Flood Prone Areas
    - There is a need for additional modeling and mapping of high-risk flood areas, particularly those that are outside of the formally defined floodplain.
    - Implementation of tiered performance standards could help provide additional information on and mapping of flood-prone areas. Additional flood mapping will be incorporated as a recommendation.
    - Looking for opportunities to improve coordination between planning/zoning and stormwater is one area for consideration. There are concerns that current decisions, such as recent zoning updates, may not align with flood risk findings.

- Incorporating New Technology and Data
    - It is worth investigating the feasibility of incorporating 1st Street data.
        - SEMCOG has access so there may be potential for City coordination there.
    - The City could also create a "digital twin," a dynamic, virtual representation of the stormwater system.
    - While the City stormwater system is a large model that takes time to run, the model could be simplified and run continuously on the cloud to inform City staff, helping to provide warnings and set expectations for potentially impacted areas. This continuously run model could be designed to automatically update to the latest NOAA projections.

Question 2: What information should the City provide before a storm to help residents, businesses, and institutions take meaningful action? What would actually change behavior or improve preparedness?

- Location Specific Warnings for Flood-Prone Areas
    - The City could help reduce the number of cars swept away by providing information on when and where to move parked cars.
    - With output from continuous modeling, an opt-in text system for area specific alerts could be developed.
    - Various ways to provide notice in areas with anticipated flooding were discussed. In addition to text, signage, and signage with lights that are set off when flood conditions are likely were mentioned.
- Education and Outreach
    - There is a need, both institutionally and publicly, to build informed expectations on flooding. Discussing and setting shared standards will be crucial for topics such as:
        - Flooding cannot be eliminated through infrastructure alone and there are always going to be bigger storms.
        - When is flooding acceptable or beneficial (i.e. water accumulates on the roadways instead of accumulating in buildings)?
        - When is flooding negative or problematic (i.e. water accumulation prevents transportation on critical routes)?
        - What duration and locations of flooding are acceptable?
    - There may be a need for education and mitigation surrounding trees. Dead trees are more likely to fall in storms, so encouraging proactive clearing of poor quality when severe events are anticipated could be helpful. Information surrounding which trees belong to the City could clarify expectations of when trees need to be cleared personally or if the City needs to be alerted of a tree's condition.
    - Provide information on key actions to take to prepare for a severe storm including clearing catch basins, tree maintenance, etc.

Question 3: What information or capabilities are currently missing that limit the City's ability to prepare for and respond to flooding? This could include data, tools, coordination, or institutional knowledge.

Catch Basin Conditions: Monitoring and Clean Up

- The group noted an opportunity to improve inventory/monitoring of catch basin conditions.
- The City has an adopt-a-storm-drain program and is interested in expanding involvement. Ideas to encourage participation include:
    - Reach out to those closest to drains
    - Incentivize participation (t-shirts, etc.)

Closing the Feedback Loop

- SWAG members noted that post-storm analysis should be directly incorporated into future storm planning. This includes finding additional meaningful ways to use the data that is already available.

Private Basins

- Maintenance of privately owned basins is highly variable and difficult to enforce, there is a need to address the condition of a substantial number of private basins.

Question 4: After a flood event, what information should the City consistently capture to improve future preparedness and recovery? Think about what is observed in the field, reported by the public, or needed for planning and funding.

Feedback Loop Development

- Post storm analyses should be integrated into a continuous feedback loop that informs pre-storm decisions.
- There is an existing post-storm conversation and assessment through the emergency response department that previously did not include the City stormwater team, this meeting will include the stormwater team going forward. This should provide direct information on how the storm system is functioning and what the pinch points are.

Question 5: How should the City distinguish between routine flooding and more serious flood conditions from a preparedness standpoint? What differences matter in terms of communication, coordination, or response?

- Setting clear expectations as to what qualifies as harmful flooding will be important, and establishing a City definition may be beneficial.
- It is easy to view all water accumulation as negative, when sometimes it is necessary to reduce flooding in other vital areas. The City needs to clearly communicate the necessity of and benefits associated with certain types of water accumulation.

3. Technical Memo 10 – Prioritization Framework

Technical Memo 10 – Prioritization Framework evaluates how the City prioritizes stormwater projects. The City must assess a vast, diverse array of needs and associated projects so having a clear, consistent approach to project prioritization is crucial. The City currently applies a structured prioritization framework that allows for project comparison across multiple criteria.

Handouts were distributed that included 4 questions for discussion. Attendees were once again divided into three groups for initial discussion, where each group was encouraged to focus on 2-3 questions that resonated with them before reporting back to the group. Group discussion and individual notes responding to each question are summarized below.

Question 1: What outcomes should matter most when the City decides where to invest in stormwater? Examples may include flood risk reduction, water quality, infrastructure condition, equity, regulatory requirements, or long-term resilience. If you have to choose, what matters more?

- Public Safety
    - Public safety was a key consideration. This includes prioritization of both general reductions in hazardous conditions associated with flooding and maintaining transportation access for first responders.
- Asset Management
    - Infrastructure conditions and asset management were discussed, with maintaining the functionality of existing assets as a priority.
- Recurrent and Disproportionate Impacts
    - The frequency of flood impacts was also discussed; areas that are repeatedly impacted by flooding should be addressed.
    - The vulnerability of those impacted was also discussed; consider who faces higher risk in flood conditions or who may have fewer recovery resources.

Question 2: How should the City balance projects that benefit many people across the City versus projects that address severe problems in specific neighborhoods? Some projects may provide broad, system-wide benefits, while others address recurring or high-impact issues in specific areas—how should both be considered?

- The importance of both City-wide and localized measures was noted.
- The existing prioritization framework utilized by the City takes the scale of benefits (i.e., ranging from individual to community) into account, with both the level of localized and community wide benefit incorporated into decision making.
- Comparison through cost benefit analysis was discussed.
- Utilization and coordination with model results was also discussed. Aligning zoning and expectations with knowledge of frequently flooded areas is important.

- It was noted that sometimes issues with the most attention brought to them can become prioritized regardless of other qualifications. Following CIP prioritization standards helps to ensure consistency and clarity in decision making.
- The group also discussed an upcoming rate study. The study will include an assessment of GSI financing.

Question 3: How should the City balance fixing visible, recurring problems today with investing in less visible long-term risks? Some issues are highly visible and frequently reported, while others relate to long-term system performance, resilience, or future conditions—how should the City approach this tradeoff?

- The group agreed that decision making should reflect the importance of both immediate and long-term issues.
- Communication is crucial. The decision-making process and benefits must be clear to the public. There is a need to more effectively communicate the benefits of longer term, lower visibility projects. Where possible, finding ways to make abstract or invisible benefits clear was encouraged.
- Accountability is also important, and this is also supported by clearly communicating decision-making procedures. While the City's CIP prioritization is accessible and transparent, there is an opportunity to better communicate the CIP decision process.
- Hazard mitigation is another crucial consideration. The relative timing and severity of impacts should be assessed for both immediate and anticipated hazards.

Question 4: What makes a stormwater investment decision feel fair or reasonable? Think about transparency, consistency, and how decisions are communicated—what would help build understanding and trust?

- Thinking about the long-term implications of current decisions was brought up - "would my great grandchild benefit from this" and "am I creating a better community" were guiding questions that arose in discussion.
- Attention from council members can sometimes place unwarranted priority on certain issues. It was noted that a clearer procedure for collaboration and potential disagreements with council priorities should be discussed.
- Ensuring City leadership understands the cost benefit analysis and prioritization frameworks that go into stormwater decision making will be vital. Aligning institutionally on how these decisions are made will also make it easier to relay this information to constituents who want to understand why and how decisions are made.
- The need for transparency and clarity was reinforced.

4. <u>Private Stormwater Infrastructure</u>

There are over 500 private detention basins in the City, with many private systems feeding directly into the City system. In addition to being undersized, many neighborhood ponds are not functioning as intended. Many ponds were established through agreements with HOAs that

disbanded or never formed, and, furthermore, many HOA's and homeowners do not have a strong understanding of stormwater system maintenance. The City is considering establishing a voluntary program where the City would agree to maintain some of these features that meet key conditions. The conditions under which the City would agree to maintain a neighborhood pond need to be discussed and established. The following two questions were provided to prompt discussion:

Question 1: Under what conditions, if any, should the City consider accepting ownership or maintenance responsibility for privately owned detention basins?

Question 2: What concerns or risks should the City address before creating this type of program?

While the group was generally in favor of the City overseeing maintenance for key private assets that are currently underperforming, many points were identified for additional consideration.

Key points that were discussed include:

- The ability to enforce maintenance standards is limited. There is little systematic support for enforcement, and, furthermore, enforcement of maintenance expectations could hold individuals responsible who had no knowledge or say in the establishment of these features and their maintenance agreements.
- Stormwater assets are associated with rate reductions. Communities who are no longer maintaining these features should not continue to receive rate reductions if the City steps in and takes over maintenance responsibility.
- Benefits associated with the system should be clearly relayed, including both stormwater and utility rate reductions currently in place.
- In addition to holistic considerations of maintenance, cost considerations should include materials. A lot of these private assets are not to specification and/or are inaccessible and materials will be needed to correct for this.
- The group also recommended a review of current standards to ensure that this issue is not continuing to be propagated. The City should consider what needs to be included in current practices to facilitate meaningful stewardship of private assets that are being developed and redeveloped now.
- The group noted that retrofitting opportunities were a compelling reason to take over maintenance of existing private systems.

5. <u>Climate Change</u>

Stormwater infrastructure is typically designed with an expectation lifespan of 30 to 100+ years, with design assumptions changing due to increasing frequency and magnitude of high precipitation events. To address this, one potential approach is to design using future precipitation conditions based on the asset's anticipated lifespan. The idea is to provide a structured process to define asset life and rainfall data while building flexibility into the system

to account for new approaches and special cases. The following two questions were provided to prompt discussion:

Question 1: Under what circumstances should the City consider modifying or not fully implementing a future-condition design approach?

Question 2: What concerns or challenges do you see with using future rainfall conditions as the default design approach?

- The group was generally in favor of future-condition design.
- Cost was identified as a potential obstacle to implementation, with increased design rainfall driving costs higher.
- The future rainfall dataset to be applied for future-condition design should prioritize both accuracy and the ability to implement standards broadly. There may be pushback depending on which dataset(s) are used for design. Atlas 15 should become available in 2026.
- It was noted that this would not change the general workflow for engineering designs, just the values applied.
- In some cases, designs are restricted by space. The goal is to incorporate flexibility while ensuring people do what they can, realistically, to manage stormwater.

6. Closing and Adjournment

General programming updates include:

- The City-wide stormwater survey is in progress.
- There is an upcoming public event for Huron River Day at Ann Arbor's Riverside Park where information about this project and the survey will be available.
- The next and final SWAG meeting will take place on June 10th, 2026.

Action Items:

Current action items include the following:

- For Ann Arbor residents: take the City-wide stormwater survey.

Upcoming action items include:

- The final SWAG session will take place on June 10th.