

# ENVIRONMENT COMMITTEE AGENDA

August 21, 2014 – North Conference Room

21630 11<sup>th</sup> Avenue South – Des Moines 98198

**5:30P – 7:00P**

1. Approve minutes of 7-17-2014 meeting
2. Surface Water Management Comprehensive Plan (SWCP) Update
  - *Staff will provide a brief update on the results of the SWCP Open House meetings.*
  - *Staff is seeking direction on three significant policy questions in order to complete the Draft SWCP to be consistent with the Committee's expectations. These policy questions are detailed on the attached materials.*
  - *Staff will also provide an update on the project schedule and the next steps.*

## **DRAFT MINUTES - ENVIRONMENTAL COUNCIL COMMITTEE MEETING 7.17.2014**

The meeting was called to order @ 6:04 PM, Thursday, July 17, 2014, in the Council Chambers @ 21630 11<sup>th</sup> Avenue South, Des Moines with the following in attendance:

### **Council Members**

Dave Kaplan, Chair  
Melissa Musser  
Vic Pennington

### **City Staff**

Tony Piasecki, City Manager  
Dan Brewer, Planning, Building & PW Director  
Denise Lathrop, Community Dev Manager  
Peggy Volin, Admin Asst II

### **Guests**

See attached "Sign-in Sheet"

### **AGENDA:**

1. Approve minutes of 4.17.2014 meeting
2. Discussion of Draft Tree Regulations

### **MEETING:**

1. Approve minutes of the April 17, 2014 meeting: Unanimously passed.
2. Discussion of Draft Tree Regulations: Denise Lathrop gave a brief review of the previous direction provided by the Committee at the February 2014 meeting by providing a memo that outlined the direction requested, and an overview the next steps in amending the Des Moines Municipal Code ( Titles 12, 14, 16, 17 and 18) to reflect the policy direction, address areas of ambiguity, remove areas of contradiction, and to provide greater overall clarity on how the City regulates the cutting and maintenance of trees in the City. Staff proposed an alternate approach to move the proposed tree regulations into Title 16 which was supported by the Committee.

She also provided a draft Public Assistance Memo (PAM) relating to tree standards and provided examples of tree regulations from the City's of Shoreline, Bellevue, Mercer Island and Kent.

Staff was directed to prepare a substitute draft Ordinance for Council consideration at a public hearing in September.

Meeting Adjourned @ 7:15 pm

Submitted by: Peggy Volin, Admin Asst II



Environment

# Municipal Facilities Committee Meeting

July 17, 2014



| NAME                       | ADDRESS                                 | EMAIL                                   | PHONE NUMBER   |
|----------------------------|-----------------------------------------|-----------------------------------------|----------------|
| Citizen A. Smith           | 100 S. Main Street, Des Moines WA 98198 | CitizenASmith@gmail.com                 | 206.870.6525   |
| Mike Murrefield            | 96549 10th Ave So                       | mike@artbrassplating.com                | 133-445-7157   |
| Fat Smith                  | 916 S Marine Hills Way                  | badgerwest@comcast.net                  | 253-839-6885   |
| Bud Bohren                 | 9808 S MARINE HILLS WAY                 | lebohrer@comcast.net                    | 253-507-7321   |
| Richard Mitchell           | 27507 12th Pl. So.                      | richmit@juno.com                        | 253-839-4114   |
| Richard Meyers             | 27006 10th Ave So                       | <del>rich</del> Richard 004@Comcast.net | 206-713-4069   |
| Nadira Curtis              | 27319 10th St S. Des Moines             |                                         | 253 941-3047   |
| Richard Curtis             | 27319 10th Pl S Des Moines Wt           |                                         |                |
| Anne Farmer                | 854 S Marine Hills Way Federal Way      |                                         | 206 612 6122   |
| David Toppans              | " "                                     |                                         | 206 679 8658   |
| RITA DWINTERS              | 20805 9th Aves Des Moines WA 98198      |                                         | 206 824-5593   |
| Dwayne Monnett             | 26425 7th Ave S                         |                                         | 253 229 7756   |
| Kathryn & Dale Etkin       | 24207 MVDs Des Moines                   | david212@aol.com                        | 206 794 6993   |
| Marilyn Hess               | 27531 12th Pl. So. Des Moines           | MHess69@gmail.com                       | (253) 946 4761 |
| Siegfried Hess             | " "                                     | Sieghe@comcast.net                      | " "            |
| Mark & Sharon Wilhelm      | 24537 12th Pl. South Des Moines         | m24537@msn.com                          | 206 245-8208   |
| Charles & Heather McCallum | 28504 10th Ave S. Federal Way Wash      | CJM 5919@comcast.net                    | 253 529-4299   |
| Donna DASCENZO             | 24531 7th Ave S. D.M.                   |                                         | 253 839-1912   |
| WILLIAM DR ENGEL           | 28045 13th Aves.                        | WILLIAM ENGEL@HOTMAIL.COM               | 206-601-2364   |
| Alex & Patricia Szabo      | 28045 13th Aves                         |                                         | 206 251-3090   |
| Eileen Jones               | 1119 South 27th Pl                      | lvuisqastor@comcast.net                 | (253) 529-1730 |
| Donna Jones                | " "                                     | " "                                     | " "            |



July 17, 2014

[illegible]

## MEETING AGENDA

LOCATION: Des Moines City Hall

MEETING DATE: August 21, 2014 TIME: 5:30PM

SUBJECT: Surface Water Comp Plan Update and Policy Review

---

### Purpose of the meeting:

We have compiled the feedback and results from our public meetings and are now ready to prepare the DRAFT Surface Water Comprehensive Plan (SWCP). We need your input on a few major policy questions to ensure that the DRAFT SWCP is consistent with your expectations.

### The Policy Questions Are:

1. When we last updated the Committee we asked you for input on criteria that would be used to prioritize projects in the CIP. We have compiled the results including input from the public meetings and our regulatory review. **Does the Committee agree with the compiled results (see attached table)?**
2. Since we last met we have prepared a complete list of projects for the CIP and have used the compiled criteria results to prioritize those projects. **Does the Committee agree in general that the prioritization of these projects are consistent with the City's priorities?**
3. We have begun analyzing the City's current surface water program and have identified a few gaps between the existing level of service and what would be a recommended level of service. **How does the Committee recommend that we address gaps between the recommended level of service and the existing program?**

Finally, we will update the Committee on the project schedule and next steps.

We have attached a more detailed description for each of the policy questions above to aid in your preparation to weigh in on these issues.

## **Policy Question #1 – Does the Committee agree with the compiled prioritization criteria ratings?**

### **Background**

An important piece of the SWCP is a prioritized list of capital improvement projects. In order to complete this task we have held meetings with City staff, the Environment Committee and general public to provide the opportunity for input on the relative importance of various useful criteria that can be used to prioritize the projects in the CIP. We have completed this work and need to confirm the compiled results so that a prioritized CIP can be completed and included in the DRAFT SWCP document.

### **The Issue:**

We have enclosed the tabulated results for each criteria. In particular there are four criteria that were rated High by the general public but were rated medium and/or low by City staff and the Environment Committee.

### **Discussion**

Four of the criteria that were rated High by the general public in contrast to the other groups are Ditch Removal/Replacement (1), Water Quality/Preventing Pollutants (2), Geology (3) and Reduce/Eliminate Flooding (4).

Having attended the public meetings and discussed these and other issues with the attendees, we believe the ratings for ditch replacement and reducing flooding were influenced by the specific drainage issues that motivated these individuals to attend the meeting.

Most individuals that attended the meetings gave geology a high rating. Our discussions with individuals at the meeting regarding geology were primarily motivated by the recent land slide in Oso, WA.

Finally, the general public rated water quality/preventing pollutants with a high rating.

### **Recommendations**

Out of these four criteria we recommend that the Committee consider changing the water quality/preventing pollutants from a medium to a high rating.

| Criteria Rating - wording for workshop and EC Council                                                                        |  | Criteria Rating - wording for Public Meetings                                                                                                                                                                                                                                                                       |              |                         |                                       |            | Compiled Results |                  |
|------------------------------------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------|---------------------------------------|------------|------------------|------------------|
| Funding: spend money where it will result in the largest overall impact                                                      |  | Funding: ... how willing would you be to pay a higher stormwater utility fee if it meant faster and more complete improvements to drainage, water quality, and habitat (streams & wetlands)?                                                                                                                        | Group Rating | City Council EC Results | Public Meeting Aggregate Score        | PMX Rating | Group Rating     | Compiled Results |
| Maintenance/Inspection: improve the existing drainage pipe system                                                            |  | Maintenance/Inspection: ...how important is it that the City spend more time and money maintaining the existing drainage system?                                                                                                                                                                                    | H            | H                       | H (7); M (5); L (10)                  | L          | H                | H                |
| CMP Pipe Replacement                                                                                                         |  | CMP Pipe Replacement: ... the City inherited thousands of feet of corrugated metal pipe that was installed by King County. This pipe is nearing the end of its useable life and many systems may fail in the near future. How important is it that the City spend more time and money to replace this failing pipe? | M/H          | H                       | H (16); M (7)<br>H (18); M (4); L (3) | H          | H                | H                |
| Ditch Removal                                                                                                                |  | Ditch Replacement: ...how important is it that the City spend more time and money to replace roadside ditches that may pose safety risks by either installing pipe and filling them in or by constructing shallower swales to convey runoff?                                                                        | M            | M                       | H (12); M (9); L (2)                  | MH         | M                | M                |
| Preventing Pollutants: Removing pollutants from rainwater runoff                                                             |  | Water Quality: ...how important is it that the City spend more time and money on removing pollutants from rainwater runoff before it is discharged into our streams and Puget Sound?                                                                                                                                | M            | L/M                     | H (13); M (5); L (2)                  | H          | M                | M                |
| Geology: Addressing landslide/ground settling/seepage/erosion problems                                                       |  | Geology: ...how important is it that the City spend more time and money to reduce the risk of landslides, ground settling, seepage, or erosion problems?                                                                                                                                                            | L/M          | M                       | H (24); M (2)                         | LM         | M                | M                |
| Reduce/Eliminate Flooding                                                                                                    |  | Reduce/Eliminate Flooding: ...how important is it that the City spend more time and money to reduce or eliminate flooding?                                                                                                                                                                                          | L/M          | M                       | H (22); M (3); L (2)                  | M          | M                | M                |
| Environmental: Stream enhancements/wildlife habitat/fish access improvements                                                 |  | Environmental: ...how important is it that the City spend more time and money to provide new wildlife habitat, habitat improvements, fish access to stream reaches, or stream enhancements?                                                                                                                         |              | M                       | H (6); M (2); L (10)                  | LM         | L                | L                |
| LID: Use of more "natural-based" approaches to rainwater management (green stormwater infrastructure/low impact development) |  | LID: ...how important is it that the City focus on using a more "natural-based" approach to rainwater management (green stormwater infrastructure/low impact development)?                                                                                                                                          |              | M                       | H (6); M (8); L (6)                   | H          | M                | M                |
| Geographic: Improvements spread throughout the City/at least one project in each neighborhood and/or stream area             |  | Geographic: ...how important is it to you that the City spend time and money to work on surface water issues evenly in each neighborhood/drainage area?                                                                                                                                                             |              | L                       | H (3); M (10); L (3)                  | L          | L                | L                |
| Other Criteria (Added During Workshop):<br>Safety                                                                            |  | Safety: ...how important is it that the City spend more time and money to improve pedestrian or traffic safety to a level beyond what it is now?                                                                                                                                                                    |              | H                       | H (9); M (6); L (5)                   | L          | H                | H                |
| Other Criteria (Added During Workshop):<br>Public Education / Public Involvement                                             |  | Public Education / Public Involvement: ...how important is it that the City spend more time and money to inform the Des Moines citizens about surface water management? (Does the City need to increase public awareness? Do citizens want to get involved?)                                                        |              | M/H                     | H (3); M (10); L (4)                  | H          | M                | M                |
| Other Criteria (Added During Workshop):<br>Regulatory Requirements                                                           |  | Regulatory Requirements: ...how important is it that the City spend more time and money to satisfy surface water legal requirements (State surface water (NPDES) permit for cities, City ordinances, etc.)?                                                                                                         | M            | M                       | H (3); M (6); L (7)                   | H          | M                | M                |



**Policy Question #2 – Does the Committee agree in general that the prioritization of these projects are consistent with the City's priorities?**

**Background**

We have enclosed the list of projects that have been developed as a result of our conversations with City staff and the public. The list is organized by location with the projects grouped by the areas that were delineated based on major drainage basins within the City and correspond to focus areas for the public meetings. The resultant ranking is also included with each project receiving a High (H), Medium (M) or Low (L) priority based up on the criteria ratings previously discussed.

Several potential new projects were generated by participation in the public meetings and include:

Area A – CIP#15 and #38

Area B – CIP #4, #25A and #25B

Area C – CIP #39

Area D – CIP #40 and #41

**The Issue:**

The prioritization of the list may need to be updated if revisions are made as a result of policy question #1.

**Discussion**

None.

**Recommendations**

Update the list accordingly if rankings of prioritization criteria are revised.

| Area A              |                                                                       |                |         |
|---------------------|-----------------------------------------------------------------------|----------------|---------|
| Project No.         | Project Title                                                         | Estimated Cost | Ranking |
| CIP-1               | Des Moines Memorial Drive - S. 212th to S. 213th Pipeline Replacement | \$356,000.00   | H       |
| CIP-2               | 216th Place Culvert Replacement                                       | \$196,500.00   | H       |
| CIP-6               | 199th North Hill Trunkline Upgrade                                    | \$265,720.00   | M       |
| CIP-7               | 1st Avenue Pond Expansion                                             | \$384,100.00   | L       |
| CIP-8               | North Hill NE and 197th Street Trunkline Upgrade                      | \$534,800.00   | L       |
| CIP-10              | 1st Place South (197th to 192nd)                                      | \$229,460.00   | L       |
| CIP-12              | 1st Place South (201st to 204th) Pipe Upgrade                         | \$400,540.00   | L       |
| CIP-13              | 3rd Avenue (206th to 207th) Pipe Project                              | \$159,180.00   | L       |
| CIP-14              | 1st Place South (209th to 210th) Pipe Project                         | \$203,840.00   | H       |
| CIP-15              | 3rd Avenue South (213th to 216th) Pipe Project                        | \$310,800.00   | M       |
| CIP-16              | 5th Avenue South/212th Street Pipe Upgrade                            | \$669,340.00   | H       |
| CIP-17              | 216th Place/Marine View Drive Pipe Upgrade                            | \$249,200.00   | L       |
| CIP-18              | Des Moines Memorial Drive - S. 208th to S. 212th Pipe Project         | \$487,200.00   | L       |
| CIP-19              | 14th Avenue/15th Avenue N/O 215th Place Pipe Project                  | \$106,680.00   | L       |
| CIP-20              | 222nd/223rd 8th Avenue to 11th Avenue Pipe Project                    | \$455,560.00   | M       |
| CIP-22              | 220th Street (15th Ave to SJU Park) Pipe Replacement Project          | \$323,960.00   | M       |
| CIP-38              | 9th Avenue (202nd to 206th) Pipe Project                              | \$179,340.00   | L       |
| Total Basin A Cost: |                                                                       | \$5,512,220.00 |         |

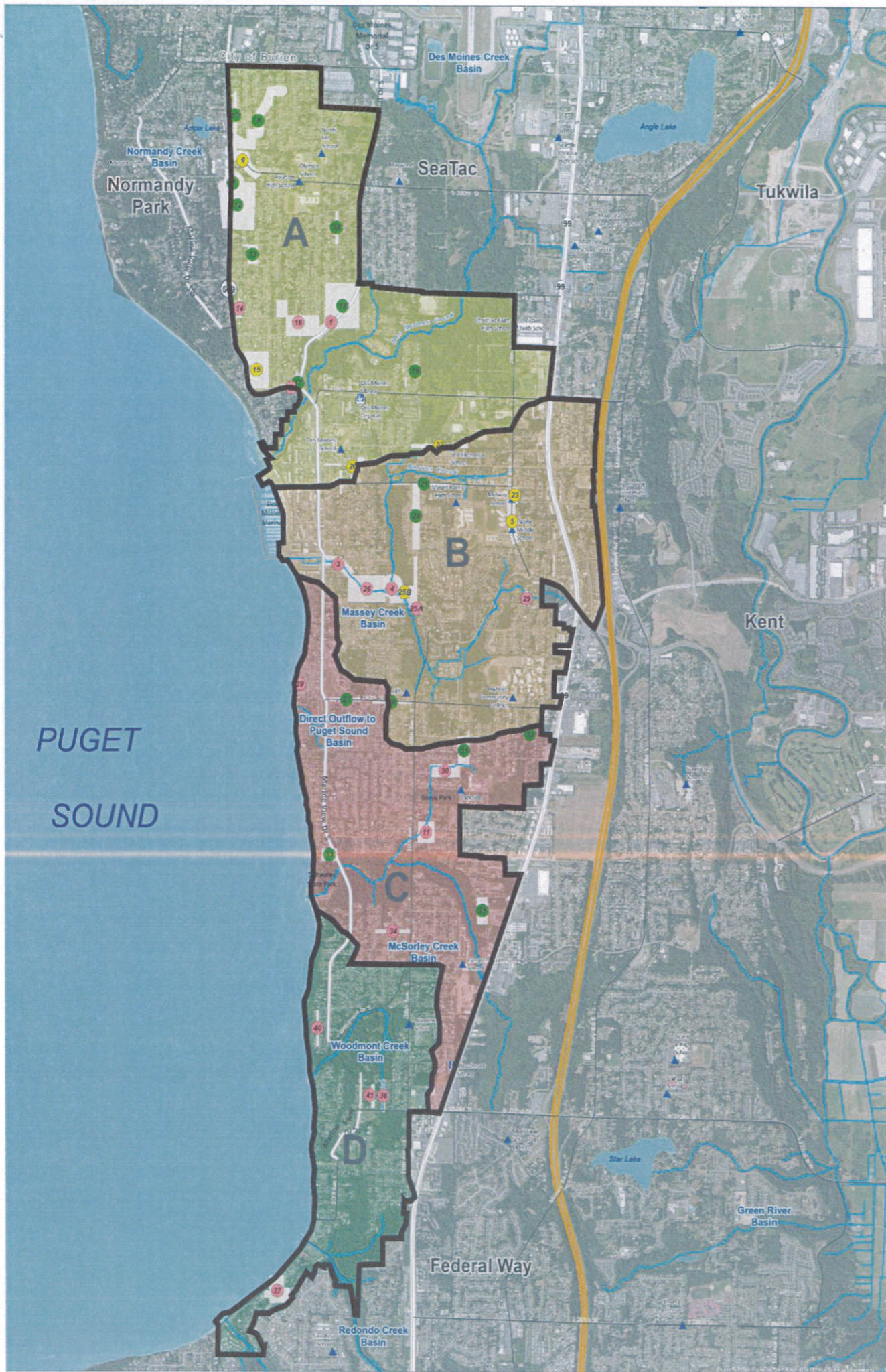
| Area B              |                                                         |                |         |
|---------------------|---------------------------------------------------------|----------------|---------|
| Project No.         | Project Title                                           | Estimated Cost | Ranking |
| CIP-3               | Lower Massey Creek Channel Modifications                | \$1,592,000.00 | H       |
| CIP-4               | Barnes Creek/Kent Des Moines Road Culvert Replacement   | \$1,444,435.00 | H       |
| CIP-5               | 24th Avenue Pipeline Replacement                        | \$242,700.00   | M       |
| CIP-21              | 223rd Street (13th Avenue to 19th Avenue) Pipe Project  | \$282,660.00   | L       |
| CIP-23              | 24th Avenue (223rd to 224th) Pipe Upgrade               | \$218,120.00   | M       |
| CIP-24              | 16th Avenue (224th to 228th) Pipe Project               | \$319,620.00   | L       |
| CIP-25A             | KDM/16th Avenue Pipe Replacement Project                | \$219,100.00   | H       |
| CIP-25B             | KDM/16th Avenue (228th to KDM Rd) Pipe Project          | \$689,220.00   | M       |
| CIP-26              | 232nd Street (10th to 14th) Pipe Project                | \$479,080.00   | H       |
| CIP-28              | 240th Street (13th to 16th Ave) Pipe Project            | \$239,260.00   | L       |
| CIP-29              | 25th Avenue (n/o 232nd Street) Pipe Replacement Project | \$96,180.00    | H       |
| Total Basin B Cost: |                                                         | \$5,822,375.00 |         |

| Area C              |                                                                                      |                |         |
|---------------------|--------------------------------------------------------------------------------------|----------------|---------|
| Project No.         | Project Title                                                                        | Estimated Cost | Ranking |
| CIP-11              | Saltwater Highlands Tract A pond replacement (and/or stabilize adjacent ravine bank) | \$250,000.00   | H       |
| CIP-27              | 240th Street (MVD to 11th Place) Pipe Project                                        | \$331,800.00   | L       |
| CIP-30              | North Fork McSorley Creek Diversion Project                                          | \$359,800.00   | H       |
| CIP-31              | 20th Avenue/243rd Street Pipe Upgrade                                                | \$358,680.00   | L       |
| CIP-32              | 242nd Street (26th Ave to 26th Pl) Pipe Project                                      | \$96,600.00    | L       |
| CIP-33              | 252nd Street/9th Avenue Pipe Project                                                 | \$184,520.00   | L       |
| CIP-34              | 258th Street (13th Pl to 16th Ave) Pipe Project                                      | \$279,440.00   | H       |
| CIP-35              | 22nd Avenue Outfall Project                                                          | \$184,660.00   | L       |
| CIP-39              | 6th Avenue/239th St. Pipe Replacement                                                | \$66,500.00    | H       |
| Total Basin C Cost: |                                                                                      | \$2,112,000.00 |         |

| Area D              |                                                 |                |         |
|---------------------|-------------------------------------------------|----------------|---------|
| Project No.         | Project Title                                   | Estimated Cost | Ranking |
| CIP-36              | 14th Avenue (268th to 272nd) Pipe Upgrade       | \$397,180.00   | H       |
| CIP-37              | 6th Place/287th Street Pipe Replacement Project | \$406,000.00   | H       |
| CIP-40              | 8th Avenue (264th to 265th) Pipe Project        | \$212,100.00   | H       |
| CIP-41              | 12th/13th Avenue (270th to 272nd Street)        | \$478,660.00   | H       |
| Total Basin D Cost: |                                                 | \$1,493,940.00 |         |

| Citywide    |                                                  |                |         |
|-------------|--------------------------------------------------|----------------|---------|
| Project No. | Project Title                                    | Estimated Cost | Ranking |
| CIP-9       | Pipe Replacement Program (unidentified projects) | \$1,312,000.00 | H       |

**TOTAL CIP COST: \$16,252,535.00**



**Policy Question #3 – How does the Committee recommend that we address gaps between the recommended level-of-service and the existing program?**

**Background**

We are in the process of reviewing the City's current surface water program and identifying gaps in the current level-of-service. We are also identifying additional recommendations that would increase the level-of-service.

**The Issue:**

We need to understand how the Committee would recommend that we address gaps between the City's current surface water program and a modest or recommended level of service?

**Discussion**

We are currently in the process of identifying gaps and additional recommendations but we can share a few of these with the Committee to help aid this conversation.

*Capital Improvement Projects*

Our initial prioritization of the Capital Improvement Plan has identified eighteen High priority projects with a total estimated value of \$9 Million dollars. The City's current level-of-service would complete these projects in about 13 years at the current level of funding of approximately \$700 Thousand dollars per year. The City's goals for the plan were to complete High priority projects within 10 years.

Further, the City currently has no program for repair and replacement projects that arise unexpectedly as aging infrastructure deteriorates and fails. We recommend that approximately 20% of the City's current CIP budget be set aside for these unanticipated needs each year. This set aside would, however, further delay completion of the City's High priority projects.

*Inspection and Maintenance*

The City's current resources for inspection and maintenance is thin in a couple of areas. For instance, it is typically expected that all components of the system are inspected annually. Annual inspections may require an additional FTE above current staffing levels.

Also, the City's inspection records need updating and would benefit from a transition to electronic records using the City's current asset management tools. This update could potentially require a short term increase in both capital and labor expenditures but ultimately would result in efficiencies.

Finally, considering the aging infrastructure from areas that were constructed under County jurisdiction it is necessary to perform television inspections of all pipes 12-inches in diameter and larger to identify potential failing or failed systems that may need repair and/or replacement. It is likely that this would be contracted out to save on costs.

## **Recommendations**

We recommend that the City take a three step approach to addressing gaps in a moderate service level. The approach could be to:

1. In addition to identifying gaps in the current program we identify current services that could be reduced or eliminated so that staff and resources can be shifted to address the gaps identified.
2. Should gaps still exist following Step 1, the City could prioritize spending of funds from new development projects to address the gaps.
3. Finally, if Steps 1 and 2 were insufficient to provide a moderate service level we would ask that the City consider modest increases in the rates to provide additional resources to close these final gaps.

**City of Des Moines**  
**2014 Rate Study**  
**Service Level Matrix**

| SERVICE LEVEL                                                                   | PROGRAM ELEMENT                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                               |                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                 | Planning & Engineering                                                                                                                                                                                                                                                                                                                                         | Inspections & Maintenance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | NPDES                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Administration                                                                                                | Capital Improvement Projects                                                                                                                                                                                                                                                                           |
| <b>Description of Expense Activities</b>                                        | Engineering staff salaries, supplies, and specific responsibilities required of the engineering department (stormwater comprehensive plan, annual SWMP update, etc).                                                                                                                                                                                           | Routine system inspections and maintenance (includes NPDES-required); field crew staff salaries, equipment, interfund transfers for repairs, etc.                                                                                                                                                                                                                                                                                                                                                                              | Implementation of NPDES Permit program: monitoring, permit fees, public outreach, and program-specific administration.<br>- SWMP document updates included under Planning & Engineering<br>- Inspections & Maintenance included under I&M Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Non-element-specific support: support staff salaries, state taxes, utility taxes, and miscellaneous expenses. | Large-scale construction, expansion, renovation, or replacement project; purchase of major, long-term use equipment; or major long-term maintenance, repair, or rehabilitation project.                                                                                                                |
| <b>\$14.24</b>                                                                  | <b>\$3.07</b>                                                                                                                                                                                                                                                                                                                                                  | <b>\$5.22</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <b>\$1.61</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>\$0.91</b>                                                                                                 | <b>\$3.43</b>                                                                                                                                                                                                                                                                                          |
| <b>% of Revenue Req.</b>                                                        | <b>22%</b>                                                                                                                                                                                                                                                                                                                                                     | <b>37%</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>11%</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>6%</b>                                                                                                     | <b>24%</b>                                                                                                                                                                                                                                                                                             |
| <b>CURRENT</b>                                                                  | <ul style="list-style-type: none"> <li>2.80 FTE</li> <li>Design and manage CIP projects</li> <li>Permitting plan review.</li> <li>Respond/resolve drainage public drainage complaints</li> <li>Inspect construction projects; review, revise and adopt local development related codes, rules and standards to incorporate LID principles and BMPs.</li> </ul> | <ul style="list-style-type: none"> <li>5.90 FTE</li> <li>City has 4,923 known CBs</li> <li>City has 63 public and 67 private stormwater facilities</li> <li>Maintenance Records Method: paper filing</li> <li>Maint. Schedule: 1 yr for maintenance facilities, 6 mo. for CBs, 2 yrs for maintenance that requires capital construction &lt; \$25K, annual inspection of all treatment and flow control facilities, bi-annual inspection for certain vaults, manholes, and takes under Reduced Frequency Inspection</li> </ul> | <ul style="list-style-type: none"> <li>0.5 FTE Engineer Aide and 0.2 FTE SWM Utility Manager (paid by NPDES Permit Program)</li> <li>1. Public Education: Website info; brochure and City Currents newsletter distribution</li> <li>2. Public Involvement: Website comments; Friends of Des Moines Creek collaboration; WRIA 9 salmon habitat recovery collaboration; public meetings</li> <li>3. IDD: SW system GIS map development/maintenance; identify high priority problem areas; staff training; field screening</li> <li>4. Control Runoff - Inspection and design review per local codes (budget reflected in Planning&amp;Engineering)</li> <li>5. O&amp;M - Ensure operation (planning/engineering) and maintenance activities comply with permit.</li> <li>6 &amp; 7: (These permit elements N/A)</li> <li>8. Monitoring: Annual contributions to Regional Stormwater Management Program (\$7,152 - small streams and marine nearshore status and trends monitoring, \$11,916 - effectiveness studies, and \$1,105 - source identification repository).</li> <li>9. Reporting: annual report preparation and submittal</li> </ul> |                                                                                                               | <ul style="list-style-type: none"> <li>The City performs a minimal amount of capital construction, funded by rates and fund balance.</li> <li>2014 - 2019 has 9 projects being funded by SWM funds</li> </ul>                                                                                          |
| <b>Gaps in Existing Program</b><br><i>(Potential Considerations in Italics)</i> |                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Confirm all components inspected at least annually</li> <li>Bring existing inspection and maintenance records up to date</li> <li>Update maintenance tracking/record keeping to electronic software.</li> <li>CCTV 15% of SD system/annually until complete.</li> <li>Add 1 FTE to maintenance staff</li> </ul>                                                                                                                                                                         | <i>(Full-NPDES program review to be conducted)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                               | <ul style="list-style-type: none"> <li>No current systematic repair and/or replacement of aging capital assets (conveyance system, flow control facilities, and water quality treatment facilities).</li> <li>Add R&amp;R service at 20% of annual capital budget, (min \$141.9 K/annually)</li> </ul> |
| <b>Recommendations</b>                                                          | <ul style="list-style-type: none"> <li>Programmatic SEPA for Surface Water CIPs</li> <li>Prepare Project Management Manual or Project Management training for staff to effectively manage additional Surface Water CIPs</li> </ul>                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                               |                                                                                                                                                                                                                                                                                                        |

# SCHEDULE & NEXT STEPS

