



## REPORT TO CITY COUNCIL

**FROM:** Dorothy Ann David, City Manager

**DATE:** August 9, 2013

**SUBJECT:** STORMWATER MANAGEMENT FOUR-YEAR PROJECT PLAN –  
SS 2013-042

**A. Introduction:** The purpose of this report is to obtain Council input on the Stormwater Management Four-Year Project Plan.

**B. Recommended Action:** Incorporate Council's input into the Stormwater Management Four-Year Project Plan and finalize the Plan.

### **C. Prior Council Action:**

- On October 27, 2009, Council discussed a report on financial options to address flooding in three neighborhoods, which the Finance Department had prepared at Council's request. Council directed staff to provide additional information on stormwater utility fees.
- March 23, 2010, Council Study Session, SS 2010-022, Council directed staff to develop an Expenditure, Revenue, and Billing Plan for a stormwater utility fee.
- June 15, 2010, CB 2010-127, Council established a Stormwater Utility Fee Advisory Committee.
- June 15, 2010, CB 2010-128, Council appointed individuals to the Stormwater Utility Fee Advisory Committee.
- August 3, 2010, CB 2010-168, Council authorized the City Manager to execute a professional services agreement with AMEC Earth and Environmental, Inc. to assist staff with the development of a Stormwater Utility Fee Expenditure, Revenue, and Billing Plan.
- March 29, 2011, Council Study Session, SS 2011-019, Council directed staff to proceed with the completion of the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan.
- August 23, 2011, Council Study Session, SS 2011-054, Council took the following actions on the stormwater utility fee:
  1. Provided input on the Revenue Plan, Credit and Incentive Plan, Billing Plan, and Public Outreach Plan.
  2. Directed staff to incorporate a \$3.2 Expenditure Plan into the Stormwater Utility Fee Expenditure, Revenue, and Billing Plan.
  3. Directed staff to proceed with the Public Outreach Plan.

4. Directed staff to develop a “draft” Stormwater Utility Fee Rate Ordinance.

- February 28, 2012, Council Study Session, SS 2012-012, Council directed staff to finalize the rate ordinance and UCSD billing agreement and schedule these items for Council action at the April 17 meeting.
- April 17, 2012, Council adopted an ordinance that amended the City Code to establish the stormwater utility fee and authorized the City Manager to execute an intergovernmental agreement for stormwater utility fee billing services with the Urbana and Champaign Sanitary District (UCSD).

**D. Summary:**

- The proposed Stormwater Management Four-Year Project Plan is a four-year revenue expenditure plan that details how the revenue made available by the stormwater utility fee will indirectly pay for stormwater management projects.
- Revenue from the stormwater utility fee will pay for operation and maintenance, which frees up existing sales and property taxes to pay for new stormwater management projects.
- Approximately \$2.4 million annually is available from the Stormwater Utility Program, thus the same amount of revenue will be available to pay for new stormwater management projects.
- The recommended Stormwater Management Four-Year Project Plan proposes a pay-as-you-go approach to finance the projects, which utilizes the annual revenue that comes in from the Stormwater Utility Program. Staff does not recommend accelerating completion of projects with debt financing, as part of the plan at this time, because the benefits of doing so are outweighed by the disadvantages, as discussed below.
- Prior Council stormwater management goals included completing the West Washington Street Drainage Improvements (Phase I) and the Boneyard Creek Improvements (Phase III, IV, and V).
- Council has also expressed an interest in completing a drainage study in the Garden Hills Watershed.
- The recommended Stormwater Management Four-Year Project Plan would accomplish the following at a cost of \$7.8 million over the next four years:
  - Constructing the West Washington Street Drainage Improvements – Phase I.
  - Preliminary/final design and property acquisition for the West Washington Street Drainage Improvements – Phase II and Boneyard Improvements Phase III, IV and V.
  - Preliminary design of the Garden Hills Watershed Drainage Study and the West Washington Street Drainage Improvements – Phase III.
- The Stormwater Utility Program has adequate revenue to pay for the \$7.8 million expenditure.
- An update of the Stormwater Management Four-Year Project Plan would be required in late 2016 to prioritize the construction of West Washington Street Drainage Improvements Phases II and III, Boneyard Creek Improvements, and the Garden Hills Watershed Drainage Improvements with other future drainage improvement projects.

## **E. Background:**

**1. Overview.** The implementation phase of the stormwater utility fee was successfully completed in May 2013 and the program is now fully underway with bills going out and revenue coming in on a monthly basis. With the Stormwater Utility Program in place, the focus now turns to the development of a stormwater utility revenue expenditure plan or Stormwater Management Project Plan, which outlines the implementation of key stormwater management projects over the next four years. This report details what projects are included in the recommended Stormwater Management Four-Year Project Plan and how the Stormwater Utility Program will indirectly pay for these projects.

**2. Revenue Pays For Operation and Maintenance.** Revenue from the Stormwater Utility Program does not directly pay for new stormwater management capital projects. Instead, the Stormwater Utility Program was set up so that revenue from the fee would pay for operation and maintenance work, which in turn frees up existing sales and property tax revenues that currently pay for this work. The newly available sales and property tax revenues will then pay for new stormwater management capital improvement projects. The reason for this is that all property owners benefit from system operation and maintenance, which is one of the underlying rationales behind the Stormwater Utility Program.

**3. 2011 Expenditure, Revenue and Billing Plan.** At the August 20, 2011, Study Session, Council directed staff to proceed with the implementation of a \$3.2 million expenditure, revenue, and billing plan for the stormwater utility fee. This plan would set the stormwater utility fee rate at \$1.51 per month for 1,000 square feet of impervious area on a property and estimated revenue from the fee at \$3.2 million annually. Administrative fees (UCSD billing services, staff administrative time, credit/incentives) were estimated at \$679,000 annually, reducing the available revenue from the fee for additional stormwater capital improvement projects to \$2.52 million annually.

**4. Current Expenditure, Revenue and Billing Plan.** The City has implemented the stormwater utility fee. The Ordinance was adopted on April 17, 2012, and set the rate at \$1.51 per month for 1,000 square feet of impervious area on a property. Stormwater utility fee billing started in May 2013. Staff currently estimates the annual revenue from the stormwater utility fee at \$2.7 million annually. This is approximately \$500,000 less than originally estimated by the 2011 expenditure, revenue, and billing plan. The current revenue estimate is lower for the following reasons:

- More accurate and detailed estimates have been made of impervious areas within the City's corporate limits,
- Impervious areas for sidewalks, multi-use paths, and trails used for recreational purposes have been exempted from the stormwater utility fee,
- Gravel surfaces (mostly driveways and parking lots) have been reclassified from impervious surfaces to pervious surfaces, and
- The Direct Discharge Credit has been changed from 50 percent to 100 percent.

Staff currently estimates administrative expenses at \$330,000 annually. Administrative expenses are approximately 50 percent lower than the 2011 original estimate. Staff estimates the stormwater utility fee will provide approximately \$2.4 million annually for stormwater capital improvement projects.

**5. Council Goals.** In 2009, Council expressed a desire to complete several high priority drainage improvement projects in key flood prone watersheds. The projects listed in Table 1, along with the implementation of the Stormwater Utility Program, were established as Council’s primary stormwater management goals between 2009 and 2013. Table 1 below summarizes these goals along with the status of each one.

<b>Table 1 – Council Stormwater Management Goals (2009-2013)</b>	
<b>Stormwater Management Goal</b>	<b>Status</b>
<b>2009-2011 Goals</b>	
1. Fund the John Street and East Washington Street flood abatement projects.	Complete
2. Develop conceptual flood abatement plans for West Washington Street Watershed.	Complete
3. Develop a plan to fund stormwater drainage improvements (Stormwater Utility)	Complete
<b>2011-2013 Goals</b>	
1. Complete construction of the John and East Washington Street Drainage Improvements.	Complete
2. Adopt a dedicated funding source for stormwater improvements (stormwater utility fee adoption).	Complete
3. Complete construction of Phase I of West Washington Street Drainage Improvements.	In Progress
4. Complete construction of Phases III, IV, and V of Boneyard Creek Improvements.	Not Started

As shown on Table 1, five of the seven goals have been completed including the John Street, East Washington Street drainage improvements, and the development/adoption of the Stormwater Utility Program.

The unfinished goals include construction of Phase I of the West Washington Street Drainage Improvements and construction of Phases III, IV, and V of the Boneyard Creek Improvements.

Council Members have also indicated that another high priority project is the study and analysis of drainage problems in the Garden Hills Watershed. The Planning and Neighborhood Services Departments also intend to prepare a neighborhood plan for the Garden Hills area and one component of that plan would be to identify infrastructure deficiencies and make recommendations on improvements. A drainage study in the Garden Hills Watershed would support the infrastructure evaluation for the Garden Hills neighborhood.

**6. Proposed Stormwater Management Four-Year Project Plan.** The proposed Stormwater Management Four-Year Project Plan is shown on Table 2 below and includes the following high

priority projects: 1) West Washington Street Watershed Drainage Improvements Phases I, II, and III, 2) Boneyard Creek Improvements Phases III, IV, and V, and 3) Garden Hills Watershed Drainage Improvements. As detailed on Table 2, each project in the proposed plan has multiple phases and project stages including design, property acquisition and construction. It is initially proposed that the Stormwater Management Four-Year Project Plan should be implemented between 2013 and 2017, on a pay-as-you-go basis as funds become available from the Stormwater Utility Program. A more detailed discussion about project financing is presented in Sections 9 and 10.

<b>Table 2 – Proposed Stormwater Management Four-Year Project Plan (2013-2017)</b>		
<b>Project</b>	<b>Project Stage</b>	<b>Cost (millions)</b>
a-1. West Washington Street Drainage Improvements Phase I	Construction	\$2.5
a-2. West Washington Street Drainage Improvements Phase II	Final Design & Property Acquisition	\$1.8
a-3. West Washington Street Drainage Improvements Phase III	Preliminary Design	\$0.3
b. Boneyard Creek Improvements Phases III, IV, V	Preliminary/ Final Design & Property Acquisition	\$2.9
c. Garden Hills Watershed Drainage Study	Preliminary Design	\$0.3
<b>Total Expenditures</b>		<b>\$7.8</b>

As shown on Table 2, the overall cost to implement the proposed Stormwater Management Four-Year Project Plan is approximately \$7.8 million over the four-year-plan period. A four-year period was selected for the proposed Stormwater Management Project Plan because this allows the projects to get through their preliminary and/or final design phases, which is necessary for accurate construction cost estimates. Since construction costs will not be available until completion of the final designs in late 2016, construction of the improvements is not included in the initial proposed four-year plan. The only exception to this is the construction of Phase I of the West Washington Street Drainage Improvements, which is currently in the final design stage and is a part of this plan.

Exhibit A shows a map of the proposed Stormwater Management Four-Year Project Plan and Exhibit B details the implementation schedule for the proposed plan including the phases and project stages for each project.

An update to the Stormwater Management Four-Year Project Plan would be required in late 2016, once the preliminary and final designs are completed on the proposed projects in this Plan. The updated stormwater management project plan in 2016 would include a plan for the construction of the projects in the recommended Stormwater Management Four-Year Project Plan. This would be the appropriate time to consider whether to finance any of these projects with debt to accelerate their schedule.

A more detailed description of each project is provided in the following paragraphs:

**a. West Washington Street Drainage Improvements (Phases I, II, III).** In 2009, the West Washington Street watershed along with the John Street and East Washington Street watersheds were identified as the top three watersheds in the City with severe flooding problems. Council approved drainage improvements in all three watersheds; however, drainage improvements have not been initiated in the West Washington Street watershed primarily because of budget limitations and the time needed to develop stakeholder consensus on the drainage improvement plan. For these reasons, it was necessary to break the drainage improvements into three phases. Phase I includes the construction of the Robinson Court detention basin. Stakeholder consensus has been reached on Phase I, which allows the construction of this phase to move forward. Phase II includes the construction of two detention basins located along Glenn Park Drive and storm sewer installation along Columbia Avenue or Washington Street that would connect the Robinson Court detention basin to the Glenn Park detention basins. Phase III consists of drainage improvements to help reduce flooding at University Avenue and James Street and along Flora Court. Stakeholder consensus has not been reached on Phase II or Phase III yet. All three phases must be completed to improve the flood protection level in the watershed from a two-year level to the target 40-year level. The total cost for all three phases is approximately \$15 million.

Final design of Phase I of the project, which is the Robinson Court detention basin, is currently underway, and it is anticipated that the design would be completed by the end of 2013. It is proposed that construction of Phase I would start in the spring of 2014 with completion in early 2015. Phase I construction costs are estimated to be approximately \$2.5 million.

Phase II of the project would start in the fall of 2013 with preliminary design work and property negotiations for the Glenn Park detention basin properties. Both of these tasks would be completed by the spring of 2015 and the final design would start in the spring of 2015, immediately after completion of the preliminary design work. A schedule for construction of Phase II could be established, as part of the process to update the four-year plan. The cost estimate for the preliminary and final design work on Phase II is approximately \$700,000. Property acquisition costs for Phase II are approximately \$1.1 million.

Phase III of the project is the final phase of the West Washington Street Drainage Improvements. The goal of Phase III is to alleviate flooding in the University Avenue/James Street area and Flora Court. Under the proposed Stormwater Management Four-Year Project Plan, a preliminary design plan or study would be developed to look at various options to alleviate flooding at these locations. Preliminary design work would start in early 2016 and would be completed by the fall of 2016. The cost for the preliminary design is approximately \$300,000. A schedule for construction could be established, as part of the process to update the four-year plan.

**b. Boneyard Creek Improvements (Phases III, IV, V).** The Lower Boneyard Creek Improvement Plan was finalized in 1999 to address chronic flooding along the Boneyard Creek, which flows through the oldest part of the City. The plan defined six phases of

improvements along the creek and a seventh phase that consisted of tributary storm sewer improvements. Phases I and II are complete. Phase III consists of channel and bridge improvements north of University Avenue to Hill Street to contain the 100-year flood within the channel and associated greenbelt. Phase IV enlarges the Oak-Ash Detention Basin. Phase V consists of channel and culvert improvements upstream of the Oak-Ash Detention Basin to Neil Street. Part of the Phase V improvements are located in Bristol Place.

It is proposed that preliminary design of the Phase III, IV, and V improvements would start in the fall of 2014 with a completion date in the fall of 2015. Property acquisition has been occurring over the last twenty years and is scheduled to be completed in the fall of 2016. Six properties remain to be obtained for these phases on the land acquisition plan: two in Phase III, three in Phase IV, and one in Phase V. However, the preliminary design is likely to indicate the need for additional property easements or acquisitions.

Final design of Phases III, IV, and V is proposed to start in the fall of 2015 and conclude in the fall of 2016. Construction could start in early 2017 to coordinate the Boneyard Creek improvements with the proposed Bristol Place improvements between Bradley Avenue and Market Street. The construction schedule for these Boneyard phases would be finalized during the update of the four-year plan. The cost estimate for the preliminary and final design work is estimated at \$1.7 million. Property acquisition costs are budgeted at \$1.2 million.

**c. Garden Hills Watershed Drainage Study.** There is a long history of drainage problems in the Garden Hills Watershed that includes street and yard flooding along with basement backups. The Garden Hills Watershed is the area roughly defined by Bradley Avenue to Bloomington Road and from Mattis Avenue to Prospect Avenue, as shown on Exhibit A.

Significant surface flooding has been noted along Paula Drive and the Hedge Road area. In some cases, the stormwater along these streets can reach a depth of two feet or more. The flooding is mostly attributed to a lack of adequate storm sewers in the watershed. In some areas within the watershed, there are no storm sewers at all, which means stormwater either ponds or has to flow long distances overland to the nearest outlet.

The first step to reducing flooding in this watershed is to complete a comprehensive watershed drainage study, which would define the drainage problems, their extent and cause, and then identify drainage improvements to reduce the problems. A study would also determine preliminary costs associated with the drainage improvements.

It is proposed that the drainage study in this watershed would start in early 2016 with a completion date in the fall of 2016. The costs of the drainage study would be approximately \$300,000.

**7. Future Stormwater Management Projects.** An update to the Stormwater Management Project Plan, to cover 2018 through 2022, would be required in late 2016 after completion of the initial Stormwater Management Four-Year Project Plan.

A list of possible projects for the updated Stormwater Management Project Plan is outlined in Table 3, which includes construction of the West Washington Street Drainage Improvements

(Phases II, III), construction of the Boneyard Creek Improvements Phases III, IV, V, and final design and construction of the Garden Hills Watershed Drainage Improvements. It is estimated that it will require at least \$80 million to fully implement all of the projects listed in Table 3. As part of the Stormwater Management Project Plan update, all of these projects will be evaluated along with the use of debt financing, as discussed in Section 10.

<b>Table 3 – Future Stormwater Management Projects</b>		
<b>Project</b>	<b>Project Stage</b>	<b>Cost (million)</b>
a. West Washington Street Drainage Improvements Phase II	Construction	\$7.2
b. West Washington Street Drainage Improvements Phase III	Final Design and Construction	\$4.4
c. Boneyard Creek Improvements Phases III, IV, V	Construction	\$12.0
d. Garden Hills Watershed Drainage Improvements	Final Design and Construction	\$12.4
e. Phinney Branch Channel Improvements	Preliminary Design, Property Acquisition, Final Design and Construction	\$10.0
f. Boneyard Creek Phases VI through VII	Final Design and Construction	\$5.0
g. Copper Slough Watershed Drainage Improvements	Property Acquisition , Final Design and Construction	\$16.5
h. Kaskaskia Watershed Master Plan	Drainage Study/Master Plan	\$0.5
i. White Street Drainage Improvements	Preliminary Design, Final Design and Construction	\$5.0
j. Various other City-wide Drainage Improvements	Preliminary Design, Property Acquisition , Final Design and Construction	\$7.0
<b>Total Project Expenditures</b>		<b>\$80</b>

A brief description of each project is provided in the following paragraphs:

**a. West Washington Street Drainage Improvements Phase II (Construction).** This project involves the construction of the Glenn Park detention basins and the new storm system that would connect the Glenn Park detention basins to the Robinson Court detention basin constructed in Phase I.

**b. West Washington Street Drainage Improvements Phase III (Final Design and Construction).** This is the third and final phase of the West Washington Street Drainage Improvements which will reduce flooding problems in the University Avenue and James Street area and along Flora Court. The project includes the final design and construction of the proposed improvements recommended in the preliminary design.

**c. Boneyard Creek Improvements Phases III, IV, V (Construction).** This project involves the construction of Phases III, IV, and V of the Boneyard Creek Improvements that were designed in the proposed Stormwater Management Project Plan.

**d. Garden Hills Watershed Drainage Improvements (Final Design and Construction).** This project involves the final design and construction of the improvements recommended in the drainage study. There are no concepts or cost estimates to present until completion of the initial drainage study in 2016.

**e. Phinney Branch Channel Improvements (Preliminary Design, Property Acquisition, Final Design, and Construction).** Major flooding occurred in the early 1990s along the Phinney Branch Creek in southwest Champaign. In response to this flooding, the City removed a restrictive bridge, participated in over sizing the detention basin at the Ponds of Windsor subdivision to provide detention to the watershed, and developed a drainage master plan. The master plan improvements, which consist of channel and bridge improvements from Windsor Road to Crescent Drive and detention south of Windsor Road, have not been implemented.

The master plan improvements will be implemented in partnership with the Phinney Branch Drainage District. The District is in year 13 of a 20-year special assessment for the improvements and has accrued a balance of \$1.4 million towards their share, which depends on the relative areas of the Drainage District and City, weighted for land use. The Drainage District cost share percentage is being reassessed and was last calculated to be 28 percent.

**f. Boneyard Creek Improvements Phases VI – VII (Final Design and Construction).** Phase VI of the Boneyard Creek Improvements consists of channel and culvert improvements on the West Fork of the Boneyard Creek and is the last phase of the channel improvements on the Boneyard project. Phase VII identifies four storm sewer improvements in the Boneyard basin to improve the drainage to the creek. One of the improvements became the East Washington Street Watershed project. Detention that remains to be constructed as a future phase of the recommended East Washington Street Watershed improvements will be included in the Boneyard Creek Phase VI (West Fork) improvements.

**g. Copper Slough Watershed Drainage Improvements (Property Acquisition, Final Design and Construction).** A drainage master plan was completed on the Copper Slough Watershed in 2007 that recommended \$26 million of drainage improvements in the watershed. This project would implement the unfinished drainage improvements proposed in the drainage master plan.

**h. Kaskaskia Watershed Master Plan (Drainage Study/Master Plan).** The Kaskaskia Watershed is located in the undeveloped area to the west of the City. A drainage master plan is needed in the Kaskaskia Watershed to guide stormwater management decisions in this watershed.

**i. White Street Drainage Improvements (Preliminary Design, Final Design and Construction).** Significant street flooding occurs along White Street between Prospect

Avenue and Randolph Street. The goal of this project is to construct drainage improvements to reduce this flooding.

**j. Various Other City-Wide Drainage Improvements (Preliminary Design, Property Acquisition, Final Design and Construction).** There are many other drainage improvements needed on a City-wide basis, including extension of storm sewers to areas without storm sewer service and finding solutions to reduce isolated local flooding problems.

These projects did not make the initial four-year Stormwater Management Project Plan list because they are either future phases of the initially listed projects or they are not far enough along in the planning stages to implement in the next four years. Implementation of these projects is more likely to happen in the five- to twenty-year range. Prioritization of these projects and the possibility of financing the projects with debt will be discussed in the future update of the Stormwater Management Four-Year Project Plan.

**8. Accelerating the Four-Year Project Plan.** Staff understands that residents in the West Washington, Boneyard Creek, and Garden Hills watersheds have been waiting a long time for drainage improvements, and there is a desire in each watershed for the projects to be implemented more quickly than the proposed four-year plan. Both Council and staff have also expressed interest in moving these projects to their completion as quickly as possible to reduce the flooding and number of service requests brought about by the flooding. While it is desirable to quickly expedite projects, moving through tasks too quickly could have detrimental impacts that may hurt the long-term success of the projects. Staff recommends exercising caution when considering acceleration of the preliminary/final designs and property acquisition on these projects.

Staff has spent a considerable amount of time deliberating the acceleration of the projects ahead of the proposed four-year plan to finish them quickly. There are pros and cons associated with accelerating the projects or sticking with the timeline in the proposed four-year plan. Staff has carefully considered the pros and cons of each plan and come to the conclusion that implementing the projects, as proposed in the four-year plan, has more positive long-term benefits than accelerating the projects. The two primary benefits implementing the proposed four-year plan are 1) it allows staff adequate time to collaborate with the neighborhood groups to develop a solid working partnership and project consensus, and 2) adequate staffing resources are available to manage the projects, which are not available under an accelerated plan. Based on these benefits, staff recommends implementing the proposed four-year plan instead of accelerating the projects.

It is important that the City and the neighborhood groups have coordinated efforts while striving to achieve the project goals. Coordination at this level requires the development of a collaborative and cooperative working partnership between the City and the neighborhood groups, which takes time to build. If done properly, this assures that both groups are working hand-in-hand and pulling in the same direction on the project goals, which is critical for the success of the projects. Implementation of the proposed four-year plan gives staff adequate time to collaborate and develop partnerships with each of the Neighborhood Groups. The ultimate outcome of these partnerships is the development of project consensus among watershed residents. Past projects, such as the John Street, Boneyard Creek Second Street, East Washington Street, and West Washington Street Phase I, have shown that partnerships and consensus building adds value to the projects and transforms the neighborhood groups into advocates for the project.

The lack of City/neighborhood group partnerships would hurt the chances for successful projects. Staff would find it difficult to devote sufficient time to developing partnerships, if the City were to accelerate completion of stormwater projects through debt financing.

Public Works staffing resources are also an important consideration in the decision about whether to accelerate the projects. Under current staffing levels, the proposed four-year plan is manageable. However, to meet an accelerated project timeline 1) staffing resources would have to be added or 2) one or more of the projects would have to be delayed. As an example, more staff resources could be dedicated to completion of all phases of the West Washington Street Drainage Improvements, if Council would like to delay the design of the Boneyard Creek project and Garden Hills study until completion of the West Washington project.

It is anticipated that the partnership building process and staff resource requirements for the proposed four-year plan will take as much time and effort as what was required on the John Street and East Washington Street projects.

**9. Project Financing.** Staff estimates that there are at least \$80 million worth of large scale capital drainage improvements needed in the City at this time. This figure far exceeds the amount of incoming revenue from the Stormwater Utility Program in the near term, which means projects would have to be prioritized and a method of financing selected to pay for them.

The method of financing recommended for the projects in the proposed four-year Stormwater Management Project Plan would be a pay-as-you-go approach that pays for projects as revenue from the Stormwater Utility Program is received. This approach would complete final design for several of the projects by 2016; however, this approach would not have enough funds to move all of these projects into construction. The Stormwater Management Project Plan would have to be reevaluated and updated in late 2016, once construction cost estimates become available for the proposed projects.

**10. Debt Financing.** Financing projects with debt would allow for the completion of multiple projects in a shorter period of time. However, staff does not recommend debt financing at this time for several reasons. First, most of the projects are at a concept level stage and still require final design. This means the construction cost estimates have a very high degree of uncertainty and, therefore, accurate estimates of the funding needs are not available. Second, when a project is financed with debt, funds borrowed have to be spent within two years after the City receives the funds. This means the projects would have to be designed and shovel ready in the near future, probably within a year. All of the projects in the recommended Stormwater Management Four-Year Project Plan, with the exception of Phase I of the West Washington Street Drainage Improvements, would not be shovel ready until at least late 2016, which makes bonding an unrealistic option at this time.

Borrowing a significant amount of funds at this time would also negatively affect the City's fiscal flexibility and perhaps bond rating. Several years ago the City had relatively low debt for an entity of its size and credit rating. However, the amount of the City's outstanding debt is now in the high end of the middle range for such entities, because the City used debt to finance numerous projects during the past ten years, including some large financing such as the 2007 and 2008 bonds to finance the Hill Street Parking Deck, and the 2005 bonds to the new public library.

Given the current debt level, issuing substantial amounts of additional debt could negatively affect the City's credit rating, or at least make it difficult for the City to issue additional debt to finance an unexpected need or opportunity.

Alternatively, pay-as-you-go financing would allow the City to reduce outstanding debt by making payments on existing debt and not issuing new debt. That would provide more flexibility to issue additional debt in the event that the City faced a large financial need (e.g. a major natural disaster) or opportunity (e.g., attracting a major employer).

Additionally, as noted above, project planning takes considerable staff time for several departments, particularly given the City's desire to build partnerships with neighborhoods and others. Issuing debt entails considerable work for the Finance Department as well. The initial work to issue debt entails the most intensive work, particularly for the Finance Director, which makes it difficult to complete other high priority projects including Council goals. In addition, other Finance staff must administer the debt until it is fully paid off, typically 20 years from the date of issuance. Council may also recall that the City will likely issue debt at least once in the near future to refinance the Library bonds to achieve lower interest rates.

#### **F. Alternatives:**

1. Direct staff to incorporate Council's input into the Stormwater Management Four-Year Project Plan and finalize the Plan.
2. Do not direct staff to finalize the Plan and provide further direction to staff.

#### **G. Discussion of Alternatives:**

**Alternative 1** would direct staff to incorporate Council's input into the Stormwater Management Four-Year Project Plan and finalize the Plan.

##### **a. Advantages**

- Would meet Council's Goals for implementing key stormwater management projects.
- Ensures that the appropriate planning work has been done on each project and neighborhood consensus has been built on the design elements before scheduling the timing for construction.
- The Plan would eventually bring drainage improvements to areas that have significant flooding problems.
- Follows through on commitments made to property owners in watersheds that have flooding problems.
- The Plan would indirectly utilize funding made available by the Stormwater Utility Program, which was set up to help pay for new stormwater management projects.
- The Plan would keep a positive cash balance in the Stormwater Utility Fund after completion of the projects listed in the Stormwater Management Four-Year Project Plan.
- Would strengthen the City's fiscal position by reducing the amount of outstanding debt rather than increasing it.

- Could leave more time for Finance Department staff to complete other high priority projects.

**b. Disadvantages**

- The Plan does not address all \$80 million in needed drainage improvements in the City over the next four years.
- Funds would be utilized on the specified drainage improvements that could go towards other stormwater management needs.

**Alternative 2** would not finalize the Stormwater Management Four-Year Project Plan and provides an opportunity for Council to provide direction to staff on how to proceed.

**a. Advantages**

- Provides an opportunity for more significant revisions to the proposed plan based on Council input.
- May identify strategies for accelerating implementation activities from the early design work by adding resources or adjusting scope.
- Depending on Council action, there could be other advantages.

**b. Disadvantages**

- Difficult to identify disadvantages without knowing Council's direction.

**H. Community Input:** There have been numerous Study Sessions and Council Meetings about watershed flooding and drainage issues over the last five years. Property owners and Watershed Steering Committee Members that live in the proposed project areas attended many of these meetings and voiced support for these projects.

Additionally, there have been numerous neighborhood and steering committee meetings to discuss local flooding and drainage problems. City staff participated and provided coordination at many of these meetings. The proposed projects were a direct result of input from property owners at these meetings.

The West Washington Street Watershed Steering Committee and Champaign County Health Care Consumers were provided copies of this report. The public will also have an opportunity to provide input at the Study Session when this topic is presented.

**I. Budget Impact:** As outlined earlier, the Stormwater Utility Program does not directly pay for the new capital projects proposed in the Stormwater Management Four-Year Project Plan. Sales and property taxes freed up by the Stormwater Utility Program will actually pay for the new capital projects.

Under the proposed Stormwater Management Four-Year Project Plan, a total of \$7.8 million would be expended between the fall of 2013 and 2017. The Stormwater Utility Program has adequate funding to indirectly pay for this, while leaving a positive balance after implementation

of all the proposed projects in the Plan, as shown on Exhibit C. This exhibit shows that the fund will start to recover in August 2016 with a starting balance of approximately \$30,000 after completion of the proposed project plan. At that time, reassessment of the Stormwater Management Plan would be needed in order to develop a spending plan for the next five to ten years.

The proposed plan would also have a positive impact on the City's finances by allowing it to reduce the amount of the City's outstanding debt by paying down existing debt without taking on additional debt.

**J. Staffing Impact:** Development of the Stormwater Management Four-Year Project Plan is included in the Engineering workplan and has been included in the FY 12/13 and FY 13/14 budgets. Staff time on the proposed project list has not been determined yet; however, it is anticipated that it will require thousands of hours of staff time to fully implement the projects. Staffing impacts will be reevaluated as the projects progress.

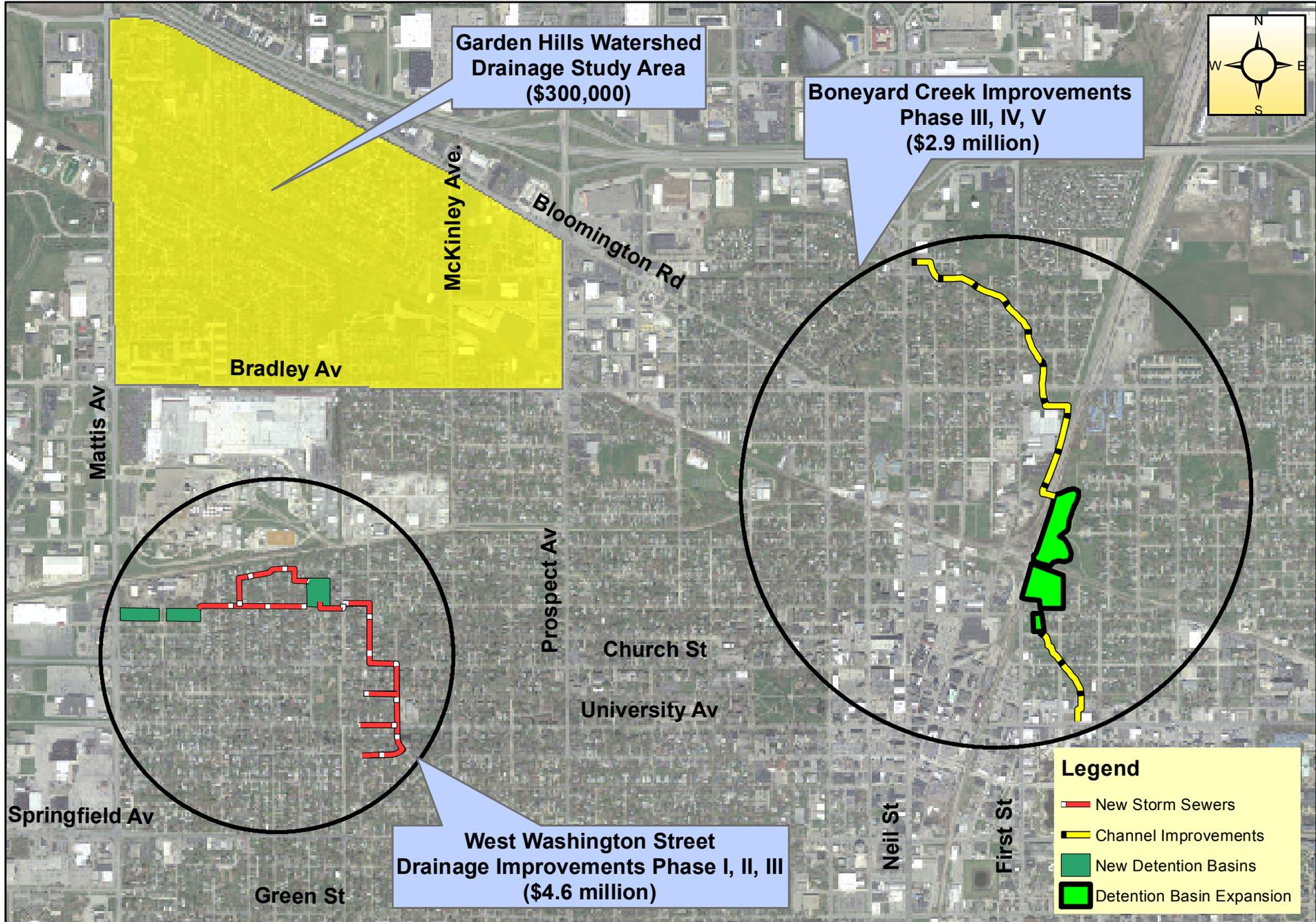
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Reviewed by:

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Dennis Schmidt, PE  
Public Works Director

Attachments: Exhibit A – Map of proposed Stormwater Management Four-Year Project Plan  
Exhibit B – Proposed Stormwater Management Four-Year Project Plan  
Implementation Schedule  
Exhibit C – Proposed Stormwater Management Four-Year Project Plan Cash Flow  
Analysis



**West Washington Street  
Drainage Improvements Phase I, II, III  
(\$4.6 million)**

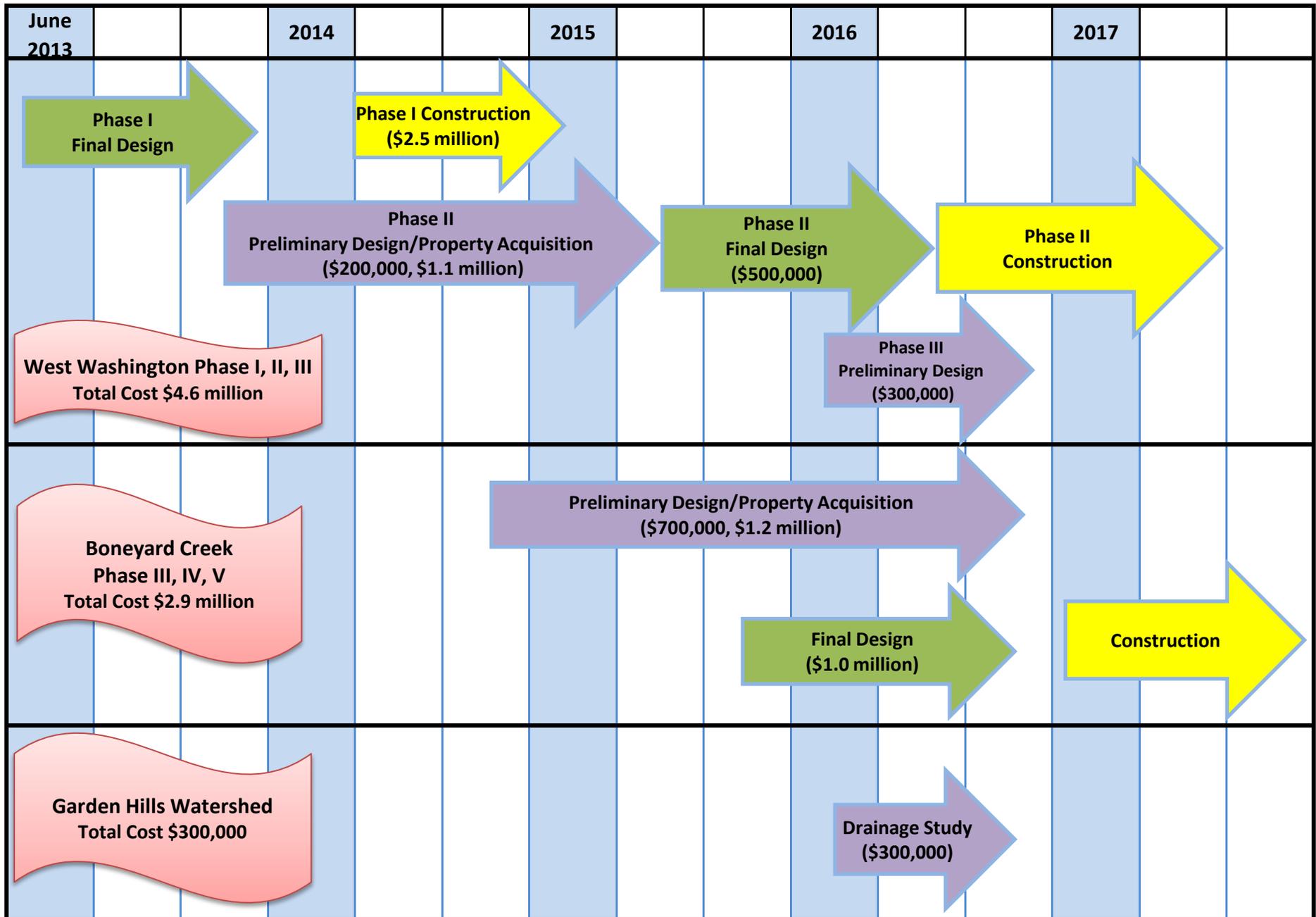
**Garden Hills Watershed  
Drainage Study Area  
(\$300,000)**

**Boneyard Creek Improvements  
Phase III, IV, V  
(\$2.9 million)**

- Legend**
- New Storm Sewers
  - Channel Improvements
  - New Detention Basins
  - Detention Basin Expansion

**- Exhibit A -  
Map of Proposed Stormwater  
Management 4-Year Project Plan**

## Exhibit B - Stormwater Management 4-Year Project Plan (2013 - 2017)



# Exhibit C - Stormwater Management 4-Year Project Plan Cash Flow

## Analysis

