



# City of Pullman Final Stormwater Program Funding Alternatives and Financial Plan



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January 13, 2009



## Acknowledgements

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**Table of Contents**  
Final Stormwater Program Funding Alternatives and Financial Plan

**Sections**

Section 1—Summary..... 1

Section 2—Revenue Needs..... 2

Section 3—Evaluation of Current Funding Mechanisms ..... 6

Section 4—Financial Alternatives and Potential Funding  
Mechanisms ..... 7

Section 5—Recommended Stormwater Funding Mechanisms..... 11

Section 6—Recommended Preliminary Stormwater Utility  
Rates ..... 12

Section 7—Management Suggestions ..... 16

**Tables**

Table 2.1—Summary of Estimated Annual Program Revenue  
Needs and Sources—5 Year Program ..... 4

Table 2.2—Summary of Estimated Annual Program Revenue  
Needs and Sources—3 Year Program ..... 5

Table 6.1—Preliminary Stormwater Utility Rates ..... 14

## Section I—Summary

The following financial plan supports the development and implementation of an enhanced stormwater management program for the City of Pullman (City). The funding plan addresses each element of the City's stormwater management program, including current stormwater regulatory compliance requirements, capital project needs, and operation and maintenance of existing stormwater management functions, as detailed in the City's Stormwater Program Implementation Plan.

Funding alternatives have been developed to illustrate various ways that the program can be financed and implemented. Approximate stormwater utility rates have been estimated, based on recent impervious surface area (ISA) measurement work, to help the City evaluate whether or not forming a utility (which is the recommended approach) should be undertaken. Ongoing efforts, including refinements to the stormwater program budget and initial utility formation work, will provide the basis for determining final rates for the City. It is important for the City to secure regulatory compliance funding soon, since NPDES Phase II stormwater compliance requirements went into effect in February 2007.

The financial plan developed for the City's proposed Stormwater Management Program consists of the following elements:

- Revenue Needs
- Evaluation of Current Funding Mechanisms
- Financial Alternatives and Potential Funding Mechanisms
- Recommended Stormwater Funding Mechanisms
- Recommended Preliminary Stormwater Utility Rates
- Management Suggestions

## Section 2—Revenue Needs

The approach was to first define the programmatic and capital needs of the City's stormwater management program by conducting a formal regulatory gap analysis. Through this process, information about the City's existing stormwater management activities and priorities were compared to the regulatory requirements to identify the "gap" between what is currently being done and what will need to be done each year to ensure compliance. A detailed gap analysis matrices was created that defines the permit requirements by year, the activities the City is currently performing as related to stormwater, the new or enhanced activities the City will need to perform in order to come into compliance, and the estimated costs associated with performing the new or enhanced activities. The gap analysis and cost estimating process also considered additional activities and resources that will be needed to comply with NPDES Phase II requirements, including funding program establishment and management and build-up of an operating reserve fund. The results of the gap analysis process, including the detailed annual listing of required activities combined with estimates of needed equipment, capital projects, staffing and funding, are included in the City's Stormwater Program Implementation Plan, which was finalized by Otak, Inc. (Otak) in September of 2007.

The estimated annual cost for implementing the City's stormwater program over the five-year term of the permit (2007-2011) is summarized below in Table 2.1. The following information is included in the City's five-year program budget:

- Estimated annual cost for each program area category, total annual program cost, and total five-year cost;
- Breakdown in revenue needed for the following major areas: (1) equipment; (2) capital projects; (3) staff, fees, overhead, and services; and (4) reserve fund build-up; and
- Breakdown in program costs to be covered by the following revenue sources: (1) funding from development permit fees and (2) funding from utility/other sources.

After the City's Stormwater Program Implementation Plan budget was finalized, Otak worked with City staff regarding potential funding alternatives. It became apparent that in order to fund the City's defined stormwater program, a stormwater utility would likely be needed. As a result, the five-year program budget was revised by City staff in an effort to reduce potential user fees under an assumed stormwater utility, while also making progress toward regulatory compliance. The following revisions were made to the City's five-year program budget:

- Three years remain of the five-year permit term; therefore, anticipated costs for permit years 1 and 2 were either absorbed by current City budgets, deferred to later years of the permit, or eliminated altogether;

## Section 2—Revenue Needs Continued

- Existing stormwater related activities (street sweeping and storm drain maintenance) were identified and will continue to be funded by the Street Fund. Cost associated with new/enhanced activities required for permit compliance will be funded by other sources;
- Major equipment costs were deferred to permit year 5;
- Funding for only one capital project was retained (Stadium Way main line replacement project – engineering design only);
- Re-evaluated needs for staffing, fees, overhead, and contracted services and reduced budget accordingly;
- Reserve fund was reduced to the minimum acceptable level (operating reserve only); and
- Development fees associated with site plan review and inspection were reduced to more accurately reflect current estimates.

Based on these revisions, the City’s original five-year program budget has since been updated. The estimated annual cost for implementing the City’s stormwater program over the remaining three years of the first permit term (2009-2011) is summarized below in Table 2.2. Included is a breakdown in program costs to be covered by the following additional revenue sources: (1) funding from grants/other sources and (2) funding from Streets budget.

Based on the three-year program budget shown in Table 2.2, the annual revenue needs for the City’s fully implemented and enhanced stormwater management program, at the end of the first five-year term of the NPDES Phase II Permit, are estimated at:

- For operations: \$571K (existing program costs of \$188K plus new costs of 383K)
- For stormwater capital projects: \$75K
- For stormwater equipment: \$244K (approximate three-year average annual cost)

Therefore, an estimate of the maximum annual cost of enhanced regulatory compliance, along with major equipment needs and capital projects, is approximately \$890K. This estimate assumes that the City takes a “pay-as-you-go” approach to capital projects and equipment rather than funding them over a longer term. The “pay-as-you-go” approach requires the City to begin raising about \$75K in annual capital project funding starting in 2010 and about \$244K (on average) in annual stormwater equipment funding starting in 2009 and continuing through 2011. The annual operational costs, estimated at \$571K in 2011, can begin at a lower level in 2009 and gradually increase as programs are put into place to comply with NPDES Phase II required activities and schedules.

Section 2—Revenue Needs  
Continued

Table 2.1 Summary of Estimated Annual Program Revenue Needs and Sources—5 Year Program						
Program Area	Year 1 Cost 2007	Year 2 Cost 2008	Year 3 Cost 2009	Year 4 Cost 2010	Year 5 Cost 2011	5 Year Total
<b>1. NPDES</b>						
A. General NPDES Requirements	\$5,000	\$5,500	\$5,800	\$6,200	\$6,700	\$29,200
B. Public Education and Outreach	\$0	\$0	\$7,000	\$40,000	\$26,500	\$73,500
C. Public Involvement	\$3,500	\$25,500	\$25,500	\$25,500	\$25,500	\$105,500
D. Illicit Discharge Detection & Elimination	\$15,000	\$43,000	\$47,000	\$122,000	\$66,000	\$293,000
E. Construction Site Stormwater Runoff	\$15,500	\$28,000	\$72,500	\$80,500	\$90,500	\$287,000
F. Post Construction Stormwater Management	\$15,500	\$20,500	\$46,500	\$55,500	\$65,500	\$203,500
G. Pollution Prevent/Good Housekeeping	\$7,000	\$72,000	\$175,500	\$197,000	\$216,500	\$668,000
H. Compliance With Clean-up Plans	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$7,500
I. Monitoring and Program Evaluation	\$1,000	\$2,000	\$6,500	\$6,500	\$2,000	\$18,000
J. Reporting and Record Keeping	\$40,000	\$50,000	\$48,000	\$52,000	\$55,000	\$245,000
K. NPDES Equipment Funds	\$0	\$190,000	\$280,000	\$280,000	\$360,000	\$1,110,000
L. NPDES Capital Project Funds	\$0	\$0	\$91,000	\$225,000	\$315,000	\$631,000
<b>2. STORMWATER PROGRAM FUNDING</b>						
A. Implement Stormwater Utility	\$24,000	\$30,000	\$30,000	\$30,000	\$30,000	\$144,000
B. Implement SW Develop Permit Fees	\$0	\$19,000	\$11,000	\$11,000	\$21,000	\$62,000
C. Stormwater Program Reserve Fund	\$0	\$222,000	\$167,000	\$110,000	\$56,000	\$555,000
<b>Annual Total</b>	<b>\$128,000</b>	<b>\$709,000</b>	<b>\$1,014,800</b>	<b>\$1,242,700</b>	<b>\$1,337,700</b>	<b>\$4,432,200</b>
<b>Revenue Needs</b>						
Equipment	\$0	\$190,000	\$280,000	\$280,000	\$360,000	\$1,110,000
Capital	\$0	\$0	\$91,000	\$225,000	\$315,000	\$631,000
Staff, Fees, Overhead, Services	\$128,000	\$297,000	\$476,800	\$627,700	\$606,700	\$2,136,200
Reserve	\$0	\$222,000	\$167,000	\$110,000	\$56,000	\$555,000
<b>Revenue Sources</b>						
Funding from Development Fees	\$0	\$0	\$124,000	\$141,000	\$171,000	\$436,000
Funding from Utility/Other Sources	\$128,000	\$709,000	\$890,800	\$1,101,700	\$1,166,700	\$3,996,200

Section 2—Revenue Needs  
Continued

Table 2.2 Summary of Estimated Annual Program Revenue Needs and Sources—3 Year Program					
Program Area	Year 3 Cost 2009	Year 4 Cost 2010	Year 5 Cost 2011	3 Year Total	3 Year Avg
<b>1. NPDES</b>					
A. General NPDES Requirements	\$5,800	\$6,200	\$6,700	\$18,700	\$6,233
B. Public Education and Outreach	\$7,000	\$40,000	\$26,500	\$73,500	\$24,500
C. Public Involvement	\$25,500	\$25,500	\$25,500	\$76,500	\$25,500
D. Illicit Discharge Detection & Elimination	\$47,000	\$122,000	\$66,000	\$235,000	\$78,333
E. Construction Site Stormwater Runoff	\$32,500	\$32,100	\$30,300	\$94,900	\$31,633
F. Post Construction Stormwater Management	\$19,050	\$20,000	\$19,500	\$58,550	\$19,517
G. Pollution Prevent/Good Housekeeping	\$204,500	\$226,000	\$245,500	\$676,000	\$225,333
H. Compliance With Clean-up Plans	\$1,500	\$1,500	\$1,500	\$4,500	\$1,500
I. Monitoring and Program Evaluation	\$6,500	\$6,500	\$2,000	\$15,000	\$5,000
J. Reporting and Record Keeping	\$48,000	\$52,000	\$55,000	\$155,000	\$51,667
K. NPDES Equipment Funds	\$114,000	\$114,000	\$499,000	\$727,000	\$242,333
L. NPDES Capital Project Funds	\$0	\$75,000	\$75,000	\$150,000	\$50,000
<b>2. STORMWATER PROGRAM FUNDING</b>					
A. Implement Stormwater Utility	\$30,000	\$30,000	\$30,000	\$90,000	\$30,000
B. Implement SW Develop Permit Fees	\$4,450	\$3,900	\$6,200	\$14,550	\$4,850
C. Stormwater Program Reserve Fund	\$200,000	\$160,000	\$56,000	\$416,000	\$138,667
<b>Annual Total</b>	<b>\$745,800</b>	<b>\$914,700</b>	<b>\$1,144,700</b>	<b>\$2,805,200</b>	<b>\$935,067</b>
<b>Revenue Needs</b>					
Equipment	\$114,000	\$114,000	\$499,000	\$727,000	\$242,333
Capital	\$0	\$75,000	\$75,000	\$150,000	\$50,000
Staff, Fees, Overhead, Services	\$431,800	\$565,700	\$514,700	\$1,512,200	\$504,067
Reserve	\$200,000	\$160,000	\$56,000	\$416,000	\$138,667
<b>Revenue Sources</b>					
Funding from Development Fees	\$50,000	\$50,000	\$50,000	\$150,000	\$50,000
Funding from Grants/Other	\$0	\$0	\$0	\$0	\$0
Funding from Streets Budget (Exist. Activities)	\$188,000	\$188,000	\$188,000	\$564,000	\$188,000
Funding from Stormwater Utility Fees	\$507,800	\$676,700	\$906,700	\$2,091,200	\$697,067

## Section 3—Evaluation of Current Funding Mechanisms

The City of Pullman uses various revenue sources and funding mechanisms to operate its existing stormwater program, which consists of constructing capital improvement projects, on an as needed basis, and conducting annual storm drain maintenance, routine source control activities, development review functions, and other stormwater related activities. Expenses for existing stormwater related activities are currently being paid out of the City's Street Fund. The primary sources of funding for these current activities are the existing City-wide 2% utility tax and the motor vehicle fuel tax with other minor revenue sources (real estate excise tax, transit system maintenance contribution, and grants) making up the difference.

The City currently spends approximately \$188K on street sweeping and storm system operation and maintenance (O&M) functions, and an unspecified amount on stormwater related development review functions. To date, utility taxes have served the City's existing stormwater program and may remain a viable component of the funding needed to address the City's new regulatory compliance, equipment, and capital needs. However, for utility taxes to continue as the primary stormwater revenue source, the annual amount would need to more than quadruple its current allocation to cover new regulatory compliance programs and identified capital project design work. An increase in the utility tax would require an affirmative vote of the citizens of Pullman and given the tight fiscal state of the economy, this option is not likely feasible. Instead, new levels and possibly new sources of annual funding will likely be required to operate the program.

## Section 4—Financial Alternatives and Potential Funding Mechanisms

### Description of Potential Revenue Options

To create the enhanced level of revenue needed to support the City’s stormwater program, several funding mechanisms have been considered ranging from forming a stormwater utility to establishing long-term inter-local cost sharing agreements.

For most municipal agencies, the array of stormwater activities, ranging from storm drain maintenance, to inspection/enforcement, to capital construction, usually requires a diversity of both short-term and long-term revenue sources. The most common revenue sources used by municipal agencies to create adequate primary levels of annual funding for regulatory driven stormwater programs include:

- Stormwater utilities and
- Development service/permit fees.

Other funding mechanisms that the City of Pullman should consider in the future include:

- Grants;
- Loans;
- Revenue bonds;
- Fee in lieu of onsite detention;
- General Facility Charges (GFCs) or System Development Charges (SDCs); and
- Future coordination with other agencies.

Each of these funding mechanisms is briefly described below.

#### Stormwater Utilities

There are currently many Washington counties and cities that have developed and implemented stormwater utilities as their primary source of funding to address the annual financial needs of their stormwater programs (along with development permitting, plan review, and inspection fees). Establishing stormwater utility charges is the most reliable means of financing stormwater programs, particularly as additional water quality and regulatory compliance costs arise. This approach recognizes that the operation of stormwater drainage infrastructure, including related regulatory compliance efforts, is an essential public service and, like water and sewer, needs to be paid for by those who benefit.

Stormwater utility charges are normally based on impervious area per parcel, with fees issued monthly with utility bills or semi-annually with property tax statements. Utility fees may be used to fund stormwater program operations, equipment, and projects; however, sometimes it is necessary to implement “basin specific” fees when expensive capital projects benefit

## Section 4—Financial Alternatives and Potential Funding Mechanisms Continued

property owners in one drainage area more than those in another area or where differences in system operation and maintenance costs differ significantly between service areas. In addition, stormwater utility fees should not be used to subsidize construction development review and inspection program costs. Most fledgling programs implement impervious surface based stormwater utility rates throughout their jurisdiction and then modify the approach (rate structure) over time as more is known about project needs and benefits.

Most municipal agencies eventually choose the formation of a stormwater utility because the amount of revenue available from other available sources of funding (e.g., service fees, General Facility Charges, or General Fund) is too limited, and rarely would provide enough to support all of the needs of a viable and compliant stormwater management program. Should the City continue the \$188K annual allocation from the Street Fund (through the end of the first permit term), then the needs from other revenue sources would be lower. As a result, if a stormwater utility were implemented, then monthly rates would be proportionally lower.

### **Development Service/Permit Fees**

These are fees charged to specific property owners for City development permit review functions (stormwater plan review and technical assistance) and construction site inspections and enforcement efforts. The stormwater review fee is normally a component of a larger overall development permit fee. Service fees should be established based on a cost of service analysis and should attempt to recover the full costs of stormwater development review functions (including training for plan reviewers, inspectors, and enforcement staff). The City's development review related services should be 100 percent development permit fee supported and not subsidized from the City's General Fund or other sources of internal funding, including the agency's stormwater utility revenue.

### **Other Funding and Financing Mechanisms to Consider When/If Appropriate**

Some of the more mature utility-based stormwater management programs have adequate annual revenues and fiscal standing to take advantage of long-term capital project financing options, including bonding for capital needs, loans for special projects, and partnering for cost sharing with other entities and/or developers. Occasionally, opportunities arise that allow an agency to take advantage of additional outside funding sources, including grants and establishing project specific Local Improvement Districts (LIDs). These revenue sources, once established, can augment annual stormwater program revenues, but would be inadequate as a primary source of funding for an entire stormwater program. Other funding mechanisms that the City should consider in the future include:

## Section 4—Financial Alternatives and Potential Funding Mechanisms

Continued

### Grants

The state still operates two grant programs that are available to the City, including the State Centennial Clean Water Fund (CCWF) and Flood Control Assistance Account Program (FCAAP). They are increasingly competitive, but can be a good source of planning and habitat, flood, or water quality project funding. Awards often range up to \$300K per project. The City was recently awarded grant funding from the Department of Ecology for NPDES Phase II program start-up activities. The City should continue to track emerging grant opportunities for stormwater and related work and seek grants when possible.

### Loans

The State's Public Works Trust Fund, State Revolving Fund (SRF) loans, as well as the FCAAP, each contain loan programs for drainage and flood control related projects. Interest rates are usually low (1 to 5 percent). Loans may be a good funding source for projects once stable sources of annual revenues are established to ensure that payment terms can be met.

### Revenue Bonds

Bonding is typically difficult for a new stormwater program until a healthy fiscal standing is attained. It would be especially difficult for the City at the present time since the program has a limited source of annual funding that is not strictly dedicated to the program over the long term. Bonding is also normally limited to capital projects that have already been designed and permitted. However, bonds can be a very useful funding mechanism for capital projects if the utility rates are enacted and are high enough to establish financial stability in the stormwater utility.

Long-term financing options that utilize bonding can contribute a substantial amount to the annual needs of a stormwater management program. These types of revenue sources can address a significant portion of the capital project costs, depending on the annual utility rates, the financial stability of the stormwater utility, and the financial rating and bonding capacity of the municipal agency. These types of revenue sources help prevent fluctuating utility charges that may occur when using a “pay-as-you-go” approach for capital projects. It is important for a utility to have a reasonable operating reserve fund in order to demonstrate solvency and obtain an adequate bond rating. Utility rates must be high enough to allow revenue bonds to be issued for capital projects and there is always an annual payment to service the bond debt (usually about 10 percent of the bonded amount).

### Fee in Lieu of Onsite Detention or Treatment

One possible option for the City to consider is the establishment of a stormwater facility funding program where the developer pays a fee to the City. The City, in turn, accepts and retains peak flows in one or more regional detention/retention facilities or water quality

## Section 4—Financial Alternatives and Potential Funding Mechanisms

Continued

treatment facilities. The amount of the fee would generally be equal to the projected cost of the developer to provide on-site detention and/or treatment. This option is usually used by jurisdictions that want to provide and operate regional facilities to accommodate detention and/or treatment needs of new development while also ensuring a high level of stormwater management and resource protection as development occurs. The jurisdiction usually “fronts” the funds necessary to construct the facility in advance of the development, and then charges new development the “in-lieu of fee” to pay back the costs. This approach must be carefully planned out to ensure that the City has a high certainty of eventually being paid back.

### **General Facility Charges (GFCs) or System Development Charges (SDCs)**

GFCs/SDCs are paid by new developments to reimburse the local government for the cost of constructing additional capacity to downstream drainage facilities. SDCs are often based on impervious area, which is often used as a measure of runoff amount and impact on the drainage system. The amount of revenue raised by GFCs/SDCs is dependent on the amount and type of development that occurs within the City on an annual basis. This revenue source can vary from year-to-year depending on the local economy and building opportunities. While not recommended at this time for the City, this option should be kept in mind for basins where significant development can still occur and where public infrastructure upgrades will be needed to accommodate that growth.

### **Future Coordination Opportunities with Other Agencies**

The City should look for opportunities to collaborate with neighboring jurisdictions and agencies such as WSU on stormwater work in order to: (1) promote efficiency and save money; (2) obtain fair solutions to problems that cross political boundaries; and (3) promote consistency of standards and practices throughout the region. The City should look into coordination opportunities presented by conservation districts, WSU, state and federal agencies, and other local governments. Agencies, such as WSDOT and Whitman County, should be contacted about coordination possibilities. The City should continue its discussions with WSU to identify and implement cooperative programs to collectively meet each jurisdiction’s NPDES Phase II Permit requirements. The City should also continue to participate in regional coordination activities through the work of the 10 Cities group.

## Section 5—Recommended Stormwater Funding Mechanisms

Based on the above review and analysis of various financial alternatives and revenue generating mechanisms, the following sources of new revenue are recommended for near-term implementation by the City:

- Enacting a City-wide stormwater utility with monthly fees;
- Consider continuation of some level of funding from the Street Fund to cover existing baseline stormwater management activities; and
- Reviewing and updating development service/permit fees.

The two primary sources of funding recommended are the formation of a dedicated stormwater utility and continued funding through the City Street Fund for stormwater related activities. If the allocation from the Street Fund is continued, especially for the duration of the five-year permit term, then the rates of a proposed stormwater utility would be proportionally lower. However, if the City chooses, the formation of a stormwater utility is capable of providing nearly all of the needed revenue to support the City's stormwater program. This would allow Street Funds to be allocated to other City projects and priorities in future years.

Development service/permit fees (development review and inspection fees) will serve as an additional source of funding to support the City's stormwater program. It is recommended that the City review current development-related plan review and inspection costs, estimate future cost of services needed to fully comply with NPDES, and update permit fees as needed to cover the cost of enhanced activities.

The preceding review of the City's program, equipment, capital, and regulatory compliance needs suggests that the City will need approximately \$890K per year to fund its fully implemented and enhanced stormwater management program. This is an increase of about \$700K per year over current levels of stormwater funding. To achieve this level of funding, the Street Fund's contribution should be maintained at approximately \$188K per year. The remaining funds (\$702K) would be provided largely by a new stormwater utility, with development service/permit fees to provide additional funds (\$50K). The funds from the stormwater utility would be used to achieve regulatory compliance (\$383K) and to fund identified capital projects (\$75K) and major equipment purchases (\$244K).

In addition to the recommended stormwater funding mechanisms discussed above, the City should also consider other long-term revenue sources, including: GFCs/SDCs, fee in lieu of on-site detention, bonding for capital projects, grants/loans, and cost sharing opportunities with other agencies. These additional revenue sources should be pursued once the City's program is established and as suitable conditions arise.

## Section 6—Recommended Preliminary Stormwater Utility Rates

### Introduction to Stormwater Utility Rate Estimation Process

The objective of this section is to ensure that the operating, equipment, and capital needs, as developed within the City’s Stormwater Program Implementation Plan, can be met, and met in a manner that allows for stormwater utility rates that are reasonable and affordable. In order to determine approximate stormwater utility rates, it is necessary to have a reasonable estimate of:

- Annual stormwater revenue requirements—how much will be spent in each year on regulatory compliance, operation and maintenance, equipment costs, capital projects costs (debt service or “pay-as-you-go”), reserve fund build-up, and miscellaneous external services (legal support, accounting, etc.).
- Non-utility annual stormwater revenue sources—how much money can you count on being provided each year through mechanisms such as sales taxes, general tax funds, street funds, wastewater funds, sewer funds, and development service/permit fees.
- Stormwater utility customer account information—how many customers of different types exist, what will the billing unit be (e.g., Equivalent Residential Unit or ERU), how many billing units are created, what policies are to be used (e.g., rate structure, credits, waivers, etc.).

Once these items are estimated, it is fairly straight forward to estimate annual stormwater utility rates, as well as the charge for a given property. For this section, we will use some simple assumptions and the results from on-going work in order to provide estimates of annual stormwater utility rates.

### Review of Stormwater Utility Revenue Needs

The first step undertaken in this process was to review the City’s revenue requirements. As discussed previously, a Stormwater Program Implementation Plan has been developed for the City that includes a detailed annual listing of required activities combined with estimates of needed equipment, capital projects, staffing, and funding for the five-year term of the permit. The estimated annual revenue for implementing the City’s five-year program is shown above in Table 2.1. Further review and evaluation of the City’s budget resulted in revisions to the original five-year program budget. The resulting three-year program budget is shown in Table 2.2. With the estimated annual stormwater program revenue requirements provided in Table 2.2, it is possible to estimate the City’s stormwater utility fees. However, before making an estimate of stormwater utility fees, it is necessary to mention some of the issues surrounding stormwater utilities, issues that must be addressed in the process of implementing a utility.

## Section 6—Recommended Preliminary Stormwater Utility Rates Continued

### Issues to Address When Forming Stormwater Utilities and Setting Rates

There are a number of background issues and decisions that should be considered in the development and implementation of a stormwater utility and a system of user fees. These generally include the following:

- Determine utility policies (e.g., utility organization; appeal procedures; enforcement of payment; credits, exemptions, and waivers; etc.) and rate structure (i.e., how fees applied to customer classes);
- Determine the billing unit (e.g., Equivalent Residential Unit);
- Determine how fees will be collected (e.g., monthly utility billing);
- Establish a customer account database;
- Determine condition of storm drain infrastructure;
- Establish sound factual basis for fees (e.g., burdens, services, science); and
- Educate the public and key stakeholders.

Initial work associated with the key items listed above was recently performed by Otak as documented through a series of technical memoranda. The first technical memorandum, *Stormwater Utility Rate Structure and Policy Options*, provided a general description and discussion of alternative rate structures and policy options, along with initial consultant recommendations, for consideration by the City. The second technical memorandum, *Summary of Equivalent Residential Units and Utility Database Development Work*, provided an overview of initial impervious surface area measurement work (e.g., ERU definition, ISA measurements for select customer classes, estimates of total City ERUs, etc.) and the development of a preliminary utility customer database. Further details and a summary of major findings can be found in each of the technical memoranda.

### Estimating Approximate Stormwater Utility Rates

Given the revenue needs, utility policies, and a rate structure, the final step of the process is to translate the financial plan into stormwater utility rates.

For this preliminary analysis we will make the following assumptions:

- The number of stormwater utility billing units will be based upon impervious surface area with the ERU set equal to 3,500 square feet based on recent ERU definition work;

## Section 6—Recommended Preliminary Stormwater Utility Rates Continued

- The City has a total of approximately 13,800 ERUs (raw) based on recent ISA measurement work. This estimate will be reduced to approximately 11,500 ERUs for the purpose of estimating utility rates and to allow for uncertainty in ERUs, possible non-payment of fees, credits, and other factors.
- Development permit fees are not included for the purpose of estimating utility rates. In reality, utility rates can likely be lowered slightly if more funding is provided from increased development service/permit fees. In addition, the use of stormwater utility fees to subsidize development review, site inspection, and enforcement costs should be avoided. Therefore, it will be important for the City to track development review costs and adjust permit fees accordingly.

Approximate annual stormwater utility rates are presented in Table 6.1 assuming the revenue needs and distributions associated with the City’s revised three-year program budget, as presented in Table 2.2 (costs shown for “Funding from Stormwater Utility Fees”). The revised program accounts for recent direction provided by the City, specifically that: (1) costs for existing stormwater related activities (street sweeping and storm drain maintenance) will continue to be paid by the Street Fund through the remainder of the first permit term; (2) major equipment cost are to be deferred until permit year 5; and (3) funding will be provided for only one major capital project (engineering design only).

<b>Table 6.1 Preliminary Stormwater Utility Rates</b>				
	<b>Year 3 2009</b>	<b>Year 4 2010</b>	<b>Year 5 2011</b>	<b>3 Year Avg</b>
Estimated Rates (\$/ERU per month)*	\$3.68	\$4.90	\$6.57	\$5.05
<b>Example Monthly Fees</b>				
Single Family Home	\$3.68	\$4.90	\$6.57	\$5.05
Commercial Property with 10 ERUs	\$36.80	\$49.00	\$65.70	\$50.50
Multi-Family Property with 75 ERUs	\$276.00	\$367.50	\$459.90	\$378.75

\*Current proposed rates were rounded to \$3.00 for 2009, \$5.00 for 2010, and \$7.00 for 2011 in order to keep Year 3 (2009) rates as low as possible, giving customers the maximum amount of time to adjust to new utility fee.

## Section 6—Recommended Preliminary Stormwater Utility Rates Continued

Note that the accuracy of these estimated rates depends directly on the validity of the assumptions used. Differences in the actual number of City billing units (ERUs), definition of the ERU, and chosen City stormwater utility policies and rate structure all have an impact on the fee amounts. However, based on work completed to date, the above estimates provide a good foundation from which the City can make important decisions before undertaking the hard work necessary to actually adopt and implement a utility. The program rates are very reasonable when compared to rates used by jurisdictions that have already implemented regulatory stormwater programs. Monthly rates for such programs are commonly well over \$6.00 per ERU, with it becoming more common to see monthly rates over \$15.00 per ERU.

If the City chooses to formally compare proposed rates with those used in other communities, it is important that an “apples to apples” comparison be made. It would not be accurate to compare the City’s estimated, fully implemented regulatory driven program rates to the rates of a community that has not implemented a similar program. Many communities are not subject to NPDES Phase II stormwater requirements, and therefore, have not implemented comprehensive stormwater programs. As such, their utility rates are lower. In addition, how the ERU is defined and how the rate is structured for different classes of customers also has an impact on the final rate for any given customer group within a community.

## Section 7—Management Suggestions

It is recommended that the City establish a City-wide stormwater utility with monthly service fees at an adequate level to fund new stormwater program activities, equipment, and projects over the remaining three years of the first permit term (2009-2011). Once a stable financial rating is obtained, the utility may choose to establish bonding to help pay for its stormwater capital projects over the longer timeframe. Note that it is common for newly established stormwater utilities to use the “pay-as-you-go” approach recommended in this financial plan to fund for capital projects for the first several years.

How soon the City needs to review and modify stormwater utility rates depends on how the City chooses to implement the stormwater utility fee. For instance, if the City chooses to implement a flat fee that will hopefully remain unchanged for the remaining three years, then rates should be reviewed after about two years to ensure consistency with current regulatory permit requirements, expected expenditures, and capital facility needs and priorities. However, if the City chooses to “ramp-up” the rates over three years, then it will be necessary to prepare subsequent year budgets.