The challenges of complying with requirements of the Municipal Storm Water Permit and other surface water quality regulations has been a consistent topic of discussion as regulations continue to be revised and become more stringent. As a result of these regulations, the City’s Storm Water Division, which administers San Diego’s storm water program, has required a significant increase in funding over the last several years. As new requirements are adopted and more funding is necessary for compliance, a greater strain is placed on the General Fund, as it is the primary source of funding for the Division and its activities. The City of San Diego collects a storm drain fee from water and sewer utility customers for the purpose of partially reimbursing the General Fund for storm water activities, however, the revenue from this fee are drastically short of full cost recovery. During the review of the Division’s budget and other storm water discussions, our office and Storm Water staff have raised the issue that increased funding for storm water activities and infrastructure would likely be necessary in the future to finance regulatory requirements.

On May 8, 2013, the new Municipal Storm Water Permit was adopted. The adoption of this new permit by the Regional Water Quality Control Board (RWQCB) effectively consolidates storm water regulations, combining permit compliance and a variety of Total Maximum Daily Load (TMDL) and Areas of Special Biological Significance (ASBS) requirements. The plan for complying with these TMDL and ASBS requirements was outlined in Comprehensive Load Reduction Plans (CLRP) that were submitted to the RWQCB in October 2012. As anticipated, the new permit mandates more stringent regulations which will require a significant increase in municipal costs to address compliance. The projected costs to comply with these regulations were presented to the Natural Resources & Culture (NR&C) Committee on May 15, 2013. The magnitude of these projected costs were estimated at approximately $2.34 billion at the time of the meeting. Committee members expressed great concern over the significant strain that this would place on the General Fund if it were to be responsible for fully funding these requirements.
Using the estimates provided by Storm Water staff, the IBA was requested to estimate how much the current storm drain fee would need to be increased in order to recover the cost of complying with these new regulations.

In IBA Report 09-13, Report 10-29 and various budget monitoring reports, our office has discussed the need for increased funding to address compliance costs. Specifically, IBA Report 09-13 looks to other California cities to gain insight as to what funding methods are utilized to finance their storm water programs. In IBA Report 10-29, our office discusses increasing the storm drain fee as a revenue recovery option, and offered an estimate of an increase to the storm drain fee in order to alleviate the General Fund burden.1 This was further discussed at the March 25, 2010 Citizens Revenue Review and Economic Competitiveness Commission (CRRECC) meeting, as part of a larger conversation about revenue enhancement options.

The IBA has worked with the Storm Water Division to look at their estimated five-year and 18-year outlooks of projected costs associated with compliance and other storm water maintenance and capital requirements. Since the May 15, 2013 NR&C meeting, the CLRP was revised to reflect the most recent estimates for compliance. Additionally, the Storm Water Watershed Asset Management Plan (WAMP) was released in July 2013 and its database updated in September 2013 to include the revised CLRP estimates. The WAMP provides information for the Division to project how much funding is needed for compliance and also includes estimates to address their deferred capital backlog and operations for all storm water activities. Our office worked with Division staff and utilized cost estimates included in the WAMP in order to accurately include all future projected storm water costs. These include new infrastructure needed to comply with the new permit and TMDL and ASBS requirements as outlined and addressed in the CLRP. This also includes flood risk management activities, including the backlog of deferred capital storm drain assets. These cost estimates provided by the Division and the WAMP are the basis of the fiscal impact analysis our office conducted for this report.

FISCAL/POLICY DISCUSSION

Storm Water Division’s FY 2014 Budget

The FY 2014 budget for the Storm Water Division includes $35.1 million of operations and maintenance costs from the General Fund and $25.9 million for Capital Improvement Project (CIP) needs. Of the $25.9 million, $5.0 million was funded from the $35.0 million Bond Issuance (Deferred Capital Bond 2a) and the remaining $20.9 million is proposed for the upcoming DC 3 Bond which is anticipated to be reviewed by the Infrastructure Committee on October 28, 2013.

As previously mentioned, storm drain fee revenue collected for the purpose of offsetting the General Fund contribution is significantly short of full cost recovery. The current rate, which was established in July 1996, is $0.95/month for single family residences and $0.0647 per hundred cubic feet (HCF) of water use for multi-family, commercial, industrial and other types

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1In IBA Report 10-29, our office included an estimate of what the storm drain fee would need to be increased to in order to recover the cost of the FY 2010 operating budget of $37.7 million (excluding bond proceeds used for CIP funding). At that time, it was estimated that the approximate fee would require a payment of $5.49/month for single family residences and about $0.374/HCF for Commercial/Industrial/Multi-Family users to recover the $37.7 million FY 2010 General Fund operating budget.
of utility accounts. This generated approximately $5.7 million in FY 2013, which constitutes about 15.6% of the Division’s operational budget (General Fund) in FY 2013. For FY 2014, Storm Water staff anticipate collections of the fee to remain relatively constant, thus storm drain fee collections projected for FY 2014 represent about 16.2% of the FY 2014 operating budget. The following table illustrates the FY 2013 storm drain fee collections and the break out between the two types of rate structures. Of the total revenue collected, approximately 45.2% is attributable to single family residences and the remaining 54.8% to multi-family, commercial, industrial and other types of utility accounts.

<table>
<thead>
<tr>
<th>Customer Type</th>
<th>Fee Type</th>
<th>Rate</th>
<th>Usage (FY 2013)</th>
<th>Revenue Generated (FY 2013)</th>
<th>Percentage of Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential</td>
<td>Flat fee Per Single Family</td>
<td>$0.95/month</td>
<td>226,955 Customers</td>
<td>$2,587,287</td>
<td>45.2%</td>
</tr>
<tr>
<td>Commercial/Industrial/</td>
<td>Per Hundred Cubic Feet</td>
<td>$0.0647/HCF</td>
<td>48,387,913 HCF</td>
<td>$3,130,698</td>
<td>54.8%</td>
</tr>
<tr>
<td>Multi-Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$5,717,985</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

### Five-Year Outlook for Operations and CIP Needs

As previously discussed, new regulations adopted in the new Municipal Storm Water Permit require additional funding beginning in FY 2015 in order to address compliance needs. In addition, the Storm Water Division also requires funding for flood risk management activities. The Division is able to project total costs for all storm water needs by utilizing their Watershed Asset Management Plan (WAMP). The five-year outlook cost estimates include funding for both compliance activities and infrastructure, as well as for flood risk management including the backlog of deferred capital storm drain assets. The following table represents the estimated need for the Division’s five-year outlook:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Fund</strong></td>
<td>$35,100,865</td>
<td>$44,805,747</td>
<td>$48,832,440</td>
<td>$45,302,152</td>
<td>$49,635,974</td>
<td>$52,123,272</td>
</tr>
<tr>
<td><strong>CIP Needs</strong></td>
<td>$25,960,000</td>
<td>$80,901,958</td>
<td>$94,815,311</td>
<td>$120,899,939</td>
<td>$162,770,345</td>
<td>$182,159,545</td>
</tr>
</tbody>
</table>

The Division’s General Fund budget will need to increase to $44.8 million by next fiscal year, which is a $9.7 million or 27.6% increase over the current operational budget. Additionally, next fiscal year requires approximately $80.9 million in CIP needs. By the fifth year of the outlook, the General Fund is projected to require $52.1 million, a $17 million or 48.4% increase over the current FY 2014 budget. Over the course of the five years, the Division has identified a total of $641.6 million that is needed to address CIP projects required for compliance, flood risk management activities and infrastructure.

The Division has expressed that the need to ramp up funding in FY 2015 for necessary capital projects is in response to upcoming 2018 compliance deadlines for water quality regulations. Staff are concerned that the City would risk non-compliance if these needs are deferred beyond FY 2015. The “Items for Consideration” section of this report addresses potential consequences of non-compliance.

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2 The water quality regulations include Chollas Creek Dissolved Metals TMDL; Bacteria TMDL; Los Peñasquitos Sediment TMDL (estimated approval Winter 2013-2014); ASBS Mission Bay/La Jolla
Our office has analyzed the required increase in the storm drain fee in order to fully recover costs and address the needs presented in the five-year outlook table above. For our analysis we made the following key assumptions:

1. The General Fund will continue to contribute the FY 2014 level of funding at $35.1 million over the outlook period, thus the calculated increase in the storm drain fee only addresses new needs beyond the current FY 2014 General Fund funding level.
2. Parking citation revenue collections will remain constant, based on information from the Department.
3. All annual CIP needs are debt financed.3
4. Currently, there are 226,955 single family residences which are subject to the storm drain fee, and no growth is anticipated over the outlook period. They constitute approximately 45.2% of all storm drain fee collections.
5. Water usage is calculated at 48,387,913 HCF, and no growth is anticipated over the outlook period based on water usage trends. The current rate applied to this usage constitutes approximately 54.8% of all storm drain fee collections.

Using these assumptions and cost projections provided by Storm Water staff, the analysis calculates the General Fund’s increased required contribution over the base year (FY 2014). The required contribution is comprised of both the operational budget increase and the debt service for the bond financed needs that were outlined in the five-year outlook. The table below shows that for FY 2015 the General Fund would need to contribute an additional $15.3 million to address both operational and CIP needs. By FY 2019, the General Fund would need to contribute approximately $61.4 million over the current FY 2014 contribution.

<table>
<thead>
<tr>
<th>ADDITIONAL REQUIRED FUNDING TO REIMBURSE THE GENERAL FUND</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in GF Operational Budget</td>
<td>$ 9,704,882</td>
<td>$ 13,731,575</td>
<td>$ 10,201,287</td>
<td>$ 14,535,109</td>
<td>$ 17,022,407</td>
</tr>
<tr>
<td>GF Debt Service for Bond Financed CIP Needs</td>
<td>$ 5,598,249</td>
<td>$ 12,159,274</td>
<td>$ 20,525,301</td>
<td>$ 31,788,675</td>
<td>$ 44,393,741</td>
</tr>
<tr>
<td>Additional Required Funding (Over FY 2014 Levels)</td>
<td>$ 15,303,132</td>
<td>$ 25,890,849</td>
<td>$ 30,726,588</td>
<td>$ 46,323,784</td>
<td>$ 61,416,148</td>
</tr>
</tbody>
</table>

Storm drain fee revenue that would need to be collected to recover the General Fund contribution is shown in the table on the following page. In FY 2015, to address General Fund needs of about $15.3 million over the base year a single family residential rate would increase by $2.54/month to $3.49/month. In addition, the water usage rate would need to increase by $0.17 per HCF to $0.24 per HCF. These rate increases begin to ramp up significantly by the end of the outlook period as each fiscal year debt issuance for CIP needs are added to the General Fund requirement. By FY 2019, the single family residential rate would need to be increased to

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3 Assumes CIP needs can be debt financed with 30-year lease revenue bonds. Bonds would be issued at an estimated interest rate of 5.6% with level annual debt service payments made semi-annually. Based on information provided by Debt Management, the 20-year historical average borrowing cost for 30 year lease revenue bonds (with single A rating) is approximately 5.6%.
$11.14/month, and the usage rate for commercial, industrial and multi-family users would rise to $0.76 per HCF to collect enough revenue to recover funds to offset the increased General Fund contribution over FY 2014.

<table>
<thead>
<tr>
<th>Additional Annual Funding Required (Over FY 2014 Levels)</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Residential Customer Rates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Customers</td>
<td>226,995</td>
<td>226,995</td>
<td>226,995</td>
<td>226,995</td>
<td>226,995</td>
</tr>
<tr>
<td>Allocation of Required Revenue</td>
<td>$6,917,015</td>
<td>$11,702,664</td>
<td>$13,888,418</td>
<td>$20,938,350</td>
<td>$27,760,099</td>
</tr>
<tr>
<td>Annual Single Family Rate Increase</td>
<td>$30.47</td>
<td>$51.55</td>
<td>$61.18</td>
<td>$92.24</td>
<td>$122.29</td>
</tr>
<tr>
<td>Monthly Single Family Rate Increase</td>
<td>$2.54</td>
<td>$4.30</td>
<td>$5.10</td>
<td>$7.69</td>
<td>$10.19</td>
</tr>
<tr>
<td>Current Rate</td>
<td>$0.95</td>
<td>$0.95</td>
<td>$0.95</td>
<td>$0.95</td>
<td>$0.95</td>
</tr>
<tr>
<td>Total Monthly Rate</td>
<td>$3.49</td>
<td>$5.25</td>
<td>$6.05</td>
<td>$8.64</td>
<td>$11.14</td>
</tr>
<tr>
<td>Commercial/Industrial/Multi-Family Customer Rates</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Water Usage (HCF)</td>
<td>48,387,913</td>
<td>48,387,913</td>
<td>48,387,913</td>
<td>48,387,913</td>
<td>48,387,913</td>
</tr>
<tr>
<td>Allocation of Required Revenue</td>
<td>$8,386,116</td>
<td>$14,188,185</td>
<td>$16,838,170</td>
<td>$25,385,433</td>
<td>$33,656,049</td>
</tr>
<tr>
<td>Rate Increase</td>
<td>$0.17</td>
<td>$0.29</td>
<td>$0.35</td>
<td>$0.52</td>
<td>$0.70</td>
</tr>
<tr>
<td>Current rate</td>
<td>$0.0647</td>
<td>$0.0647</td>
<td>$0.0647</td>
<td>$0.0647</td>
<td>$0.0647</td>
</tr>
<tr>
<td>Total Rate for Water Usage per HCF</td>
<td>$0.24</td>
<td>$0.36</td>
<td>$0.41</td>
<td>$0.59</td>
<td>$0.76</td>
</tr>
</tbody>
</table>

**Future Funding Needs Beyond the Five-Year Outlook**

The Storm Water Division provided our office with 18 years of cost estimates through FY 2031 based on the CLRP cost estimates and the WAMP. Using the same assumptions outlined previously, the need for funding does not decrease in future fiscal years beyond the five-year outlook, as shown in the chart on the following page. At the 10-year mark, the FY 2024 General Fund operating budget is expected to reach $84.2 million, a $49.1 million or about 140% increase of the current FY 2014 level. The Division’s operating budget is expected to reach $107.6 million by the end of the 18-year outlook horizon in FY 2031, and the total CIP need for all years in the outlook range (FY 2015-FY2031) reach $2.7 billion.⁴

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⁴ This estimate is consistent with what the division was projecting during the FY 2014 budget review, as the adoption date of the new permit and TMDL requirements neared. Since the adoption of the permit, the update of the CLRPs and the release of the Division’s WAMP, this $2.7 billion estimate is more refined as projections are continually revised to become more precise.
As these cost estimates rise in future fiscal years, the storm drain fee would need to rise accordingly, as shown in the charts below. At the 10-year mark, the FY 2024 the fee would require a $31.61 monthly payment from single family residences and a water usage rate of $2.16 per HCF for commercial, industrial and multi-family users. By the end of the 18-year outlook in FY 2031, $43.25/month would be required from single family residences and $2.95 per HCF for the commercial, industrial and multi-family users.

**Future Changes to Regulations and Technology**

Although it is evident that future costs for compliance and other storm water activities will be extremely large, the division has stated that beyond the scope of the next five-fiscal years estimates will continue to be revised and could potentially decrease from currently projected...
levels. Regulations and technology are constantly evolving and the Division continues to negotiate for more favorable standards which will be easier to attain and more cost effective in the future.

**Items for Consideration**

*Consequences of Deferring Compliance and Flood Risk Management Activities*

If compliance activities are deferred to later fiscal years, staff has expressed that the City would risk falling into non-compliance, especially as the City comes closer to the interim compliance milestones in FY 2018/2019. Penalties may be assessed for non-compliance which can amount to $10,000 per day per violation from the State, and federal EPA penalties of $27,500 per day per violation. Each storm drain outfall that flows to a receiving water body may be assessed as a separate violation.

Unlike compliance activities, flood risk management does not have regulatory asset requirements. However, continuing to defer these activities creates a higher risk of asset failure, potentially resulting in sinkholes and/or damage to private property when pipes fail. According to staff, when delayed projects become emergencies, construction repair costs are approximately 25% higher than the cost to proactively address the replacement and repair of these assets.

*Implementation Issues for Increasing the Storm Drain Fee*

Proposition 218, approved in November 1996, restricts property-related fees, or those that are imposed “as an incident of property ownership”. As discussed in IBA Report 10-29 and a Memorandum of Law (MOL) from the City Attorney’s Office dated January 11, 2012, as a “property-related fee” any modification to the storm drain fee must meet Proposition 218 requirements. As stated in the MOL, the exceptions in Prop 218 for sewer, water and refuse collection fees do not apply to the storm drain fee, thus subjecting it to voter approval. An increase in the storm drain fee would require approval in an election by either a majority of property owners, or two-thirds of the general electorate.

*Alternative Revenue Sources in Comparable California Cities*

IBA Report 09-13 explored other funding methods employed by comparable California cities to address funding for their storm water programs. The report concluded that the General Fund is not widely utilized as a primary funding source for most storm water programs. While other cities may use a degree of General Fund support for certain components of the broader storm water program, all have dedicated funding sources other than the General Fund. Additionally, the report found that the funding sources varied from city to city. Although some of the funding sources cited in the report may provide insight on potential alternative funding sources for the City of San Diego, many of them have significant hurdles for implementation. Some of the funding sources highlighted in Report 09-13 include:

1. Storm water fees which were already in place prior to Prop 218, most of which were higher than San Diego’s fee
2. Voter approved bonds, property taxes, or other approved taxes which require a two-thirds vote by the electorate
3. Fees collected in conjunction with water/sewer fees that are allowable because those cities have a combined storm and sanitary sewer system
4. Street sweeping activities funded by refuse collection fees, however, in San Diego this would also require voter approval due to the People’s Ordinance

**Addressing Infrastructure Issues Including Storm Water Assets**

*The Backlog of Deferred Capital and Needed New Infrastructure*

The Storm Water forecast significantly increases the City’s infrastructure backlog. Addressing infrastructure issues is one of the City’s highest priorities, but also presents a significant challenge given tight budgetary constraints and valid competing priorities. In February 2012 the City reported an estimated $898 million in deferred capital for streets, facilities, and storm drains—$235 million of this was for storm drain infrastructure, such as corrugated metal pipes. In continuing to assess the condition of these pipes, staff recently determined that a portion of the approximately 40 miles of pipes can be rehabilitated rather than removed and replaced. As a result, as part of the storm water forecast, staff have revised the estimated backlog from $235 million to $146 million.

While the deferred capital backlog for storm drains has been reduced, the Citywide deferred capital backlog is anticipated to significantly increase when the condition assessments for facilities, sidewalks, and park assets are completed, likely in FY 2015-2016. Further, it is important to note that the backlog estimate does not include needed new infrastructure, for example the City needs about $100 million for new fire stations according to the 2011 Citygate Report. The Storm Water five-year forecast increases the City’s needed new infrastructure by about $500 million.

*Five-Year Deferred Capital Funding Plan and Limitations of Lease Revenue Bonds*

The City has a Five-Year Deferred Capital Plan to fund the backlog of deferred capital projects, known as Enhanced Option B, which provides a mix of lease revenue bond and cash funding for both capital projects and ongoing Maintenance & Repair. While this plan did not provide the level of funding desired by Council or necessary to stop the rate of deterioration, it was determined to be the most realistic and fiscally sound approach to begin to address the backlog and provided a significant new investment. The first two Deferred Capital Bonds provided $24.2 million for Storm Water projects, and about $26 million is anticipated to fund Storm Water projects in FY 2014 (via DC 2a and DC 3).

The issuance of lease revenue bonds to fund deferred capital and new infrastructure needs continues to be an important source of funding for the City. However, since revenue bonds are backed by the General Fund and typically issued for a term of 20 to 30 years, each time this type of debt is issued, a long-term obligation is added to the City’s General Fund. Further, there is a limit to the General Fund-backed debt service as a percentage of available revenue—known as lease burden—that the City can carry. Rating agencies consider 10% to be above average or high. Debt Management reported in April 2013 that the City’s lease burden was 4.4%. If the Five-Year Capital Funding Plan is implemented as it was approved by Council in March 2012, the lease burden will grow to about 6%. It is important to consider the long-term impact of this type of debt financing on the General Fund, particularly given that the funding plan does not stop the deterioration of existing assets or include needed new assets.

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5 The Deferred Capital Funding Plan is anticipated to slow the rate of deterioration of assets to 5-10% over the five-year period.
Multi-Year Capital Improvements Plan and Financing Strategy for Infrastructure

The development of a Multi-Year Capital Improvements Plan is an important next step to identify a more comprehensive solution for addressing infrastructure issues. This will provide an overall, transparent view of where the City is with regard to its infrastructure assets, including deferred capital projects for existing assets; and needed new infrastructure. The significant storm water needs identified in the WAMP underscores the importance of a Multi-Year Plan, which ultimately will identify priority needs that lack an existing funding source so that the City can develop a financing strategy for these needs. For example, the City may want to consider a General Obligation Bond program and/or Public Private Partnerships to more comprehensively address infrastructure needs. Given the sheer size of infrastructure problems in the City, tight budgetary constraints, and competing needs, it is critical that the City take a holistic and methodical approach to addressing infrastructure issues.6

The City’s Capacity to Deliver Projects

Effective implementation of an infrastructure program and financing strategy requires strong staff capacity to deliver future projects on time and within budget. Right-sizing is important not only for Public Works/Engineering & Capital Projects, but for other departments involved in the Capital Improvement Program process, including Financial Management, Debt Management, and Equal Opportunity Contracting.

CONCLUSION

As discussed during the May 15, 2013 NR&C meeting and during the Storm Water Division’s budget review, the City will need to find a dedicated funding source for Storm Water activities as mandated regulations become increasingly stringent and costly. If no funding is identified the City’s General Fund will have to continue to contribute increased funding in order to remain in compliance, reducing funding for other priorities and services. If funding is not identified from either a dedicated revenue stream or the General Fund, the City may fall out of compliance which could potentially result in significant penalties assessed by the state and federal government. Additionally, deferring flood risk management exposes assets to an increased risk of failure causing sinkholes, property damage and costly emergency replacement and repair.

This analysis serves as an illustration of the magnitude of future costs and the need for alternative funding sources in order to alleviate the impact to the General Fund. Our office does not recommend solely relying on the storm drain fee to recover additional costs, and we suggest that other revenue options would need to be considered in conjunction with a potential increase in the storm drain fee.

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Fiscal & Policy Analyst

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Independent Budget Analyst