



STORMWATER IN-LIEU FEES AND CREDIT BANKING FEASIBILITY STUDY

CDRPC Planning and Zoning Workshop

March 31, 2016



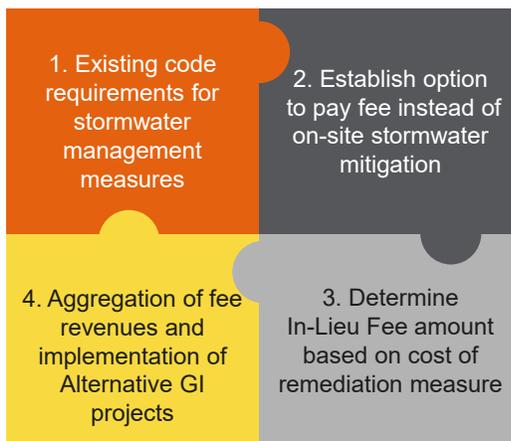
Agenda

1. In-Lieu Fees and Credit Banking
2. Scope of the Research Project
3. Preliminary Findings
4. Next Steps

What are Stormwater In-Lieu Fees and Credit Banking Programs?

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Stormwater In-Lieu Fees – Alternative to on-site mitigation



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Stormwater Retention Credit Banking Alternative to on-site mitigation

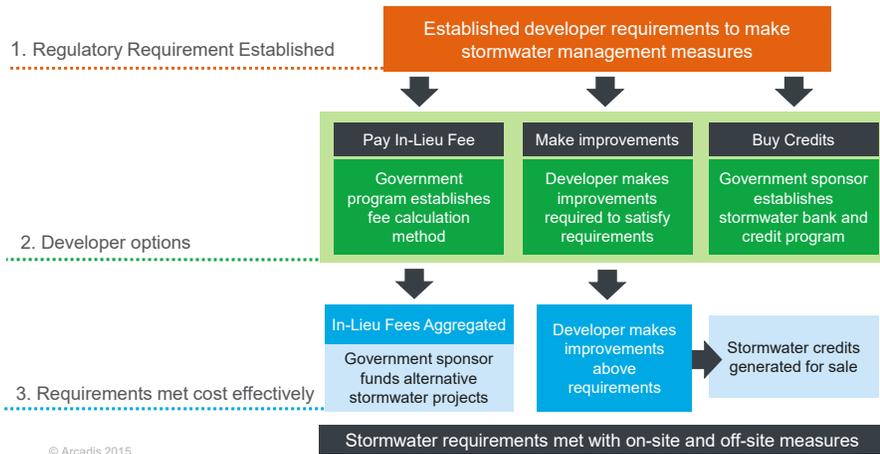
- Exchange of higher-than-required stormwater mitigation by one party to enable a second party to avoid mitigation at its location.
- Private property owners install stormwater best management practices on private lands, and sell excess retention credits to permitted entities.



Stormwater / GI Funding Sources

Traditional	More Innovative
Stormwater utilities and taxing districts	Public agency cost sharing
Water/wastewater revenues	Fee In-lieu of programs
General appropriation revenues	Mitigation banking and credit trading
Developer funding	Public-private partnerships
Private and non profit sources	Miscellaneous sources
Municipal bonds	
Grant and loan programs	

How do In-Lieu Fees and Credit Banking Programs Work Together?



Background and Scope of the Study

Project Background

Albany Pool

A coalition of six local communities that came together to address the environmental impacts of CSOs from their wastewater collection and conveyance facilities

City of Albany

City of Rensselaer

City of Cohoes

City of Watervliet

City of Troy

Village of Green Island

Project Background

Long-Term Control Plan

- Single joint LTCP for the Albany Pool based on Demonstrative Approach using water quality and capture of combined sewage
 - Satellite floatables and disinfection on the largest CSO
 - Limited sewer separation projects
 - Maximize collection system and WWTPs to capture and treat the maximum amount of sewage as possible
 - Seasonal disinfection at WWTPs
 - Implement green infrastructure initiatives (GI)

Project Background

Green Infrastructure Initiatives

- Supplemental to the “gray” infrastructure projects under the LTCP
- Further mitigate the impacts of stormwater runoff on the combined sewer system and encourage sustainable solutions by:
 - Revise municipal codes to include GI practices
 - Develop local technical guidance on GI practices
 - Implement GI demonstration projects throughout the communities
 - Public education and outreach regarding MS4
 - **Assess feasibility of a GI banking and credit system**

Overview of Feasibility Study Project

Task 1: Data Collection and Review

Compile background information on Albany Pool Communities stormwater programs

Task 2: Regulatory Authority and Governance

Identify regulatory and legal factors in to be considered in developing an organizational structure that supports ILF and Banking

Task 3: Research ILF and Credit Banking Programs

Compile information from other established ILF and Credit Banking programs

Task 4: ILF and Credit Banking Concept Workshop

Discuss merits, pitfalls, lessons learned and overall applicability to Albany Pool Communities

Task 5: Feasibility Assessment and Report

Presentation of research findings and the assessment of the feasibility for the Albany Pool Communities

Program Case Studies

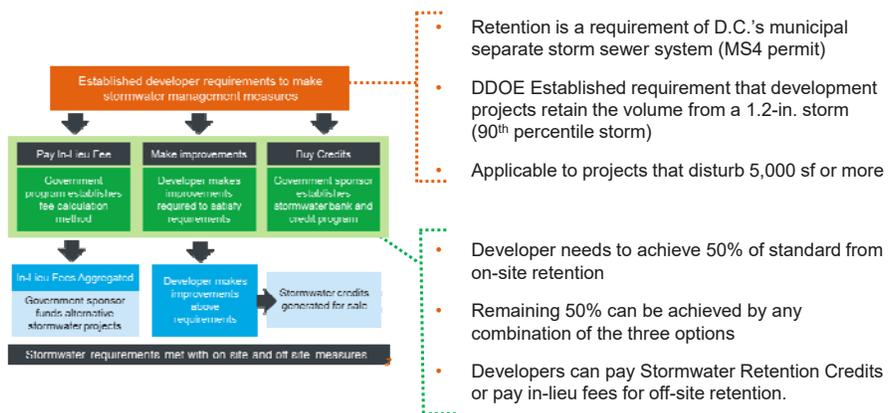
Successful ILF and Credit Banking Programs

Location	Type of Program	Detention or Retention
Washington, DC	Both ILF and Credit Banking	Retention
Aspen, CO	In-Lieu Fee Program	Detention
Park Ridge, IL	In-Lieu Fee Program	Detention
San Antonio, TX	In-Lieu Fee Program	Detention

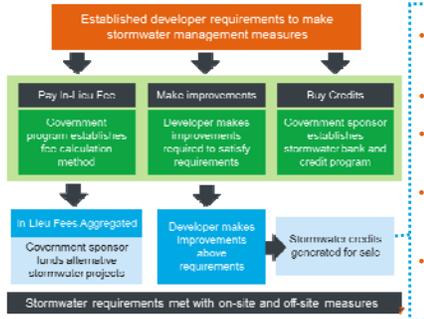
There have also been many successful wetlands mitigation banking programs implemented around the country.

How do they work?

Example: Washington D.C. Department of Environment



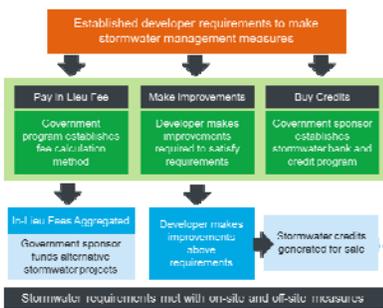
Example: Washington D.C. Department of Environment



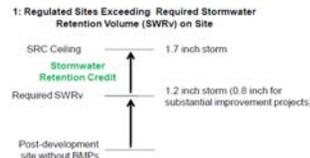
- DDOE Established Stormwater In-Lieu Fee Special Revenue Fund
- In-Lieu Fee = \$3.57 per gallon of off-site retention
- Fund used to install green infrastructure that retains rainfall and reduces runoff and improves water bodies.
- In 2015, DDOE received an ILF payments of \$114,388 for offsite retention of 38,234 gallons.
- Funds used to support a rainwater harvesting system (cistern) at the Brookland Middle School in northwest Washington D.C.



Example: Washington D.C. Department of Environment



Developers can generate Stormwater Credits for exceeding requirements



DDOE established an online marketplace for the buying and selling of stormwater credits



STORMWATER DATABASE

Welcome
Log In

- SRCs for Sale (6) [Print](#) [Export](#)

Contact name	Contact email	Contact phone	Watershed where SRCs are generated	Asking price per SRC	Number of SRCs (tot)
Furbish Company, LLC	MFURBISH@FURBISHCO.COM	(443) 324-5804	Potomac	\$2.55	62,685
Greg DeHaven	GDEHAVEN@LENKIN.COM	(202) 477-9917	Rock Creek	\$2.00	12,948
Lano Parcel 12 LLC c/o CityInterests LLC	LBARDHI@CITYINTERESTS.COM	(202) 944-4729	Anacostia	\$2.55	19,413
Mary Harting	MHARTING@THEWESTCHESTERCORP.COM	(202) 965-1514	Potomac	\$2.25	29,223
Ronan Heritier	RONAN.HERITIER@DIPLOMATIE.GOUV.FR	(202) 944-6196	Potomac	\$2.45	30,495
USP 700 6th Street LLC	MINATHAN@AKRIDGE.COM	(202) 756-3085	Anacostia	\$2.25	8,732
Totals (6 groups)					163,496

In Lieu Fee = \$3.57 per gallon
Credits = \$2.00 - \$2.50 per gallon

Program Comparison Matrix

Program Location	Washington DC	Aspen, CO	Park Ridge, IL	San Antonio, TX
Census Bureau Population	7,170,351 (2015)	6,805 (2014)	37,856 (2014)	1,436,697 (2014)
Program Name	Stormwater Retention Credit (SRC) Trading Program	Fee-in-Lieu Program	Stormwater Detention Fee Program	Fee-In-Lieu (FILO) Program
Start Year	2013	2008	2011	1997
Eligibility Requirements	50% of the required retention must be done onsite. The remaining 50% can be covered by either in lieu fees or credits.	If the project is located in a qualifying area (deemed by City Engineer) and drains to a right of way, it may qualify based on approval of the City Engineer's office.	At a minimum detention must be installed in all feasible locations at the discretion of the City Engineer.	If the development will not cause adverse impacts 2,000 feet downstream (or to the nearest FEMA floodplain, whichever is closest) the FILO can be paid at the discretion of the City Engineer.

Program Comparison Matrix, Continued

Program Location	Washington DC	Aspen, CO	Park Ridge, IL	San Antonio, TX
Annual Revenue	2015: \$114,387.72 2014: No revenue	2015: \$240,050	2012: \$18,622.66 2013: \$106,946.75 2014: \$49,912.25 2015: \$20,000 (budgeted)	Total funds from the Stormwater Utility Fund (includes FILO): 2014: \$4,652,375 2015: \$4,944,570 (budgeted)
Rate Structure	In Lieu Fee: \$3.57 per gallon retention Credits: \$2.00 to \$2.50	In Lieu Fee: \$76.49 per cubic foot of detention	In Lieu Fee: \$30 per cubic foot of detention	In Lieu Fee: \$0.15 to \$0.25 per square foot of impervious cover. The fee reduced by 50% for areas identified as Inner City Reinvestment regions.

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Staffing

- Generally the programs are managed by the City Engineer's office, with existing staff managing the program as a portion of their normal role.
- Programs evaluated had 3 to 5 staff members assisting with administration.

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What are the next steps in the Albany Pool Feasibility Study Project?



Project Schedule

Description	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Task 1: Data Collection and Review										
Project Initiation Meeting										
Gather and collect information										
Memo summarizing APC conditions & requirements										
Task 2: Regulatory Authority and Governance										
Research regulatory/legal authority & structures										
Memo on regulatory/legal authority & structures										
Meeting to discuss legal/regulatory findings										
Task 3: Research ILF and Credit Banking Programs										
Research ILF and Credit Banking programs										
Memo summarizing research findings										
Task 4: ILF and Credit Banking Workshop										
Workshop planning										
Facilitate workshop										
Memo summarizing workshop discussions										
Task 5: Feasibility Assessment and Report										
Prepare draft feasibility assessment report										
Submit draft feasibility assessment report										
Final results meeting										
Address draft report review comments										
Submit Final feasibility assessment report										

Questions/Discussion



Implementing Stormwater User Fees in New York: the Ithaca Experience

Aaron (Ari) Lavine
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Why? Stormwater Policy History

- The City's former stormwater infrastructure funding was provided by property taxes
- This method of funding was characterized by an unfair distribution of costs among those paying, and unfair exemptions from costs for those not paying
- The City determined that it needed a dedicated funding mechanism to subsidize stormwater infrastructure
- Options evaluated: User Fees and Special Benefit Assessments

What? Introducing Ithaca's Stormwater User Fee

- Allows the City to bill each property (including those owned by tax-exempt entities) based on the amount of runoff it creates
- By including more properties in the funding, the amount paid for stormwater infrastructure and services by the average residential property owner is cut roughly in half



Calculating the User Fee

- There are three categories of properties.
 - Lots that contain less than 0.25 ERUs of impervious surface area (currently, 575 square feet) are exempt from the stormwater user fee.
 - One-, two-, and three-family residences are assumed to contain 1 ERU of impervious surface area, and pay a fee of \$12 per quarterly billing cycle (once every three months). Classification of a property as a one-, two-, or three-family residence is determined by the Tompkins County Department of Assessment.
 - All other lots pay a user fee based upon the amount of impervious surface area located on the property. Lots containing 0.25 to 1 ERU pay \$12 per quarter, and lots containing more than 1 ERU pay \$12 per quarter per ERU, assessed in 0.25 ERU increments. (For example, a commercial property with 3,700 square feet of impervious surface area would pay \$21 per quarter ($3,700 / 2,300 = 1.60$, which is rounded up to 1.75.) Owners of these lots may apply for credits against the stormwater user fee for eligible management practices or structures.

What is an “ERU?”

- “Equivalent Residential Unit”
- The City maintains a geographic database of all impervious surface areas located in the City. As of January 1, 2015, the average amount of impervious surface area on a property with a one-, two-, or three-family home is approximately 2,300 square feet. This value is used as an ERU in determining the user fee for all lots that pay a user fee other than one-, two- and three-family homes.

How? Managed Messaging: Cost Benefits for Many, Environmental Benefits for All

- Substantially Decreased average costs for residential property owners, without diminishing stormwater funding.
- Case example: Average Homeowner: ~\$100 in taxes dropped to \$48 in fee. Cornell University paid little to nothing due to its tax-exempt status. It now pays close to \$130,000.
- “cutting edge of municipal sustainability”; a progressive concept that aligns financial incentives with environmental impact.
- Allows City to pursue multiple goals, such as environmental stewardship, regulatory compliance, and flood prevention.



Community Notification

- Included brief explanatory mailer in water bills preceding first stormwater bill
- Maintain extensive FAQ's on City website, available at <http://www.cityofithaca.org/520/Stormwater-User-Fee-FAQs>
- Stormwater law is codified in Chapter 283 of City code, available at <http://www.ecode360.com/IT1348>
- Property owners may challenge their fee amount by filing an application with the Superintendent of Public Works

Who? Involves Efforts of Multiple City Departments

Some of the Departments Involved Include:

- Stormwater Management Officer
- Department of Public Works
- Legal
- GIS
- Controller
- Chamberlain
- Clerk
- Building Department
- Assessment Department

Use of the Stormwater Fees

- Dedicated funds have been used for infrastructure, staff time, and long-term stormwater planning
- The City has funded a capital project for a stormwater modeling consultant to get a clearer picture of the City's complex stormwater needs via a comprehensive analysis of our creeks.

