




Managing Wet Weather with Green Infrastructure

Municipal Handbook

Incentive Mechanisms

Managing Wet Weather with Green Infrastructure

Municipal Handbook

Incentive Mechanisms

The Municipal Handbook is a series of documents
to help local officials implement green infrastructure in their communities.

June 2009

EPA-833-F-09-001

Front Cover Photos

Top: rain garden; permeable pavers; rain barrel; planter; tree boxes.

Large photo: large bioretention in Portland, Oregon

Incentive Mechanisms

Incentives are a creative tool local governments can use to encourage the use of green infrastructure practices on private property. Incentive mechanisms allow municipalities to act beyond the confines of their regulatory authorities to improve wet weather management on properties that may not fall under updated stormwater requirements or other state and municipal policies, codes and ordinances. These incentives can be applied to both new developments and existing developments. For new development projects, incentives can be incorporated into the development processes, such as building permits and stormwater permits or other development codes and requirements, to creatively encourage green infrastructure. In already developed areas, incentives can be designed to encourage private property owners to retrofit their properties to include green infrastructure practices where they do not already exist. Examples of local incentive mechanisms can include stormwater fee discounts, expedited permitting, grants, rebate and installation financing, and awards and recognition.

This chapter includes a list of incentive mechanisms currently being used by municipalities around the United States. The incentives have been organized categorically by type of incentive. The following are the primary types of green infrastructure incentives:

- Stormwater Fee Discount: Require a stormwater fee that is based on impervious surface area. If property owners reduce need for service by reducing impervious area and the volume of runoff discharged from the property, the municipality reduces the fee.

- Development Incentives: Offered to developers during the process of applying for development permits. Examples include: zoning upgrades, expedited permitting, reduced stormwater requirements and increases in floor area ratios.

- Grants: Provide direct funding to property owners and/or community groups for implementing a range of green infrastructure projects and practices.

- Rebates & Installation Financing: Provide funding, tax credits or reimbursements to property owners who install specific practices. Often focused on practices needed in certain areas or neighborhoods

- Awards & Recognition Programs: Provide marketing opportunities and public outreach for exemplary projects. May include monetary awards.

Incentive mechanisms can be easy to implement and afford local decision makers the flexibility and creativity to tailor programs to specific priorities or to particular geographic areas in a community. For example, as seen in Figure 1, Portland's downspout disconnection program is defined by the areas of the City with a combined sewer system. By offering an incentive of $53 to disconnect a downspout, the City of Portland is encouraging private property owners in the defined program area to reduce the runoff that enters the combined sewer system. This geographically-specific approach allows a municipality to focus resources and program efforts on a more manageable scale and can be an opportunity to pilot new incentives to determine the potential for municipality-wide application. Similarly, the City of Seattle's Green Factor

landscaping program is designed to increase the quantity and quality of planted areas in Seattle. The Green Factor is limited to downtown business districts because of the economic development potential of improved green space in the urban core and also because it allows the City to pilot the program in a defined area before applying it to other areas and zoning types in the city. Furthermore, incentive programs are voluntary, which creates less resistance from stakeholder groups and allows policy makers to test and refine programs that may one day develop into mandates or requirements.

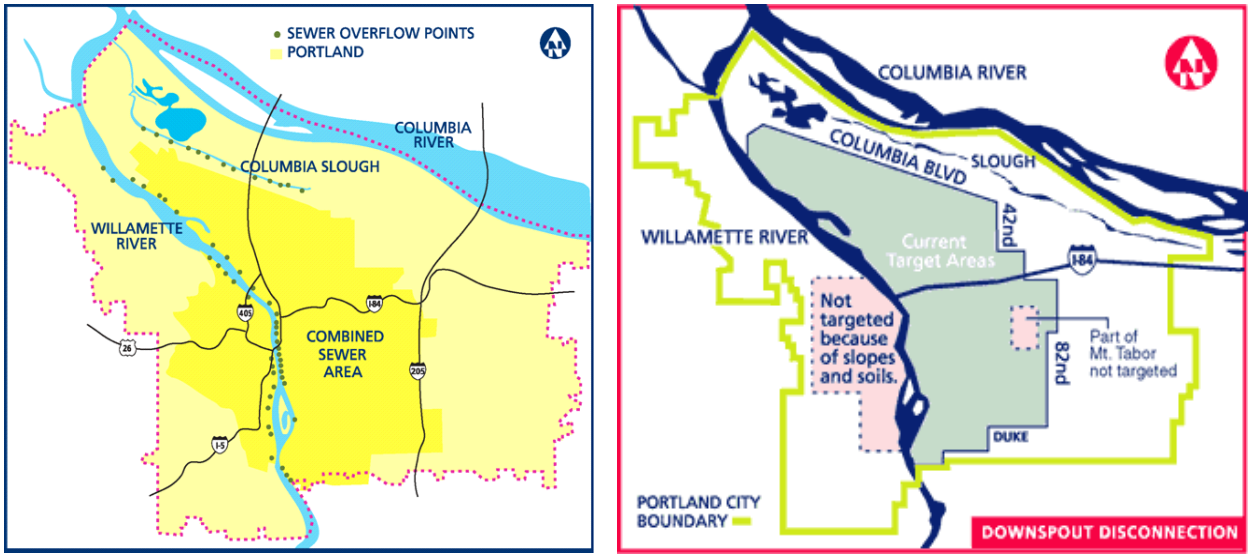


Figure 1: The map on the left shows Portland's combined sewer area and the map on the right shows the same geographic area outlined as neighborhoods targeted to receive incentives for disconnecting downspouts. Directing incentives to specific zones with water quality issues can help achieve measurable results.

Descriptions of Incentive Types

Stormwater Fee Discount

Incentives tied to stormwater fees encourage retrofits of existing properties and implementation of green infrastructure in new developments. In cities of varying sizes across the United States, fee discounts and credits provide an opportunity for property owners to reduce the amount of stormwater fees they pay by decreasing impervious surfaces or by using green infrastructure techniques that reduce the amount of stormwater runoff. In turn, public infrastructure is less burdened when private property owners manage their own stormwater runoff on-site. Discounts also support the fee-for-service system because property owners can reduce the amount they pay by reducing the service received.

Before setting the credit standard or discount, whether for the use of green infrastructure or reductions in impervious surfaces, municipalities should set appropriate management goals and determine how to credit private property owners for whatever action is being incentivized. Table

1 outlines common frameworks for setting goals and developing the process for implementing fee discounts.

Some cities provide a percent discount for level of performance. This discount is primarily given for stormwater quantity reductions and in fewer cases for pollution reduction for water quality purposes. Discounts are also offered for impervious surface reductions, whether for total area or by the square foot. A credit system can be based on the implementation of specific practices, such as rain gardens, green roofs or even tree canopy area. In some cases, credits vary based on the practice and the goals the municipality has for private lands.

Table 1: Framework for Stormwater Fee Discount Programs

Goal of Discount	**Mechanism for Fee Reduction**	**Process for Implementation**
Reduce Imperviousness	• Percent fee reduction • Per-square-foot credit	• Percent reduction in imperviousness • Square feet of pervious surfaces
On-site Management	• Percent fee reduction • Quantity/Quality credits (performance-based)	• List of practices with associated credits • Total area (square feet) managed
Volume Reduction	• Percent fee reduction • Performance-based quantity reduction	• Percent reduction in imperviousness • Performance-based • Total area (square feet) managed • Practices based on pre-assigned performance values
Use of Specific Practices	• Percent fee reduction • One time credit	List of practices with associated credits

Development Incentives

Development incentives apply to private developers that take initiative by using more sustainable site design and green building practices. These incentives are typically provided within the framework of existing land use or development regulations and often remove or decrease fees, requirements, or steps in the permit process. Chicago's Green Permit Program reviews permits much faster, even in as few as 30 days, for projects that meet certain LEED (Leadership in Energy and Environmental Design) criteria that include better stormwater management practices. Portland's Floor Area Ratio (FAR) Bonus increases a building's allowable area in exchange for adding an ecoroof/greenroof. Portland has seen over $225 million in additional private development through this program, and more than 120 ecoroofs have been built in the center city district. These incentives can be used to improve environmental performance and support economic development. Development incentives also can be used to encourage green infrastructure beyond the site scale by encouraging infill development, aesthetically pleasing and walkable neighborhoods, and compact, mixed use community designs.

Grants

Grant programs can be used to disburse money directly to individual homeowners, other property owners and community groups for stormwater-related projects and can help a city or county add green infrastructure projects to the landscape. Grants can be used to encourage both site-specific green infrastructure practices such as rain gardens, street retrofits, green roofs, and cisterns, as well as neighborhood and municipal scale projects such as wetland construction or stream restoration projects. Santa Monica provides $160,000 per year in Landscape Grants to develop sites with native landscaping that reduce water consumption and absorb runoff. Chicago's Green Roof Grant program has helped this former industrial city add over 2.5 million square feet of green roofs across the City. The program grants $5000 awards to residential and small commercial buildings that meet criteria based on location, visibility and environmental benefit. Green infrastructure grant programs provide awards and savings to developers and properties that take extra steps to add greener stormwater management practices to both new and existing sites.

Rebates and Installation Financing

Communities offer rebates and installation financing to provide incentives for property owners to install green infrastructure practices on their property. These rebates and financing opportunities are often targeted to specific areas with the greatest need for green infrastructure, most often combined sewer areas. However, these programs may also be developed to achieve a range of water quality goals and implement community livability initiatives. For example, subsidies might be provided in neighborhoods with a high percentage of imperviousness or limited access to public green space.

Rebates and financing tools are also commonly used to encourage the use of specific practices based on priority environmental and community goals such as cisterns for water conservation, rain gardens to improve groundwater recharge, and green roofs to mitigate urban heat island effects.

Rebates and installation financing are also an effective means of educating the public about the benefits of green infrastructure and how it can be applied to a variety of property types and settings.

Awards and Recognition Programs

Awards and recognition programs highlight successful examples of green infrastructure in a community. Award winners often include businesses and property owners as well as non-profit organizations, community organizations, individuals, schools or government agencies. Awards are provided to recognize innovations in green infrastructure practices and design, and may include projects or plans that focus on water conservation and reuse, stormwater mitigation and management, landscaping and site design, watershed restoration and other sustainable strategies for water quality protection.

Granting awards to local projects gives valuable recognition to innovators that help to drive the field forward. At the same time, awards increase public awareness about local projects and the ways that stormwater can be used as a valuable resource. Adding signage to award-winning projects can help further educate the public and help the public recognize its impacts and connection to the local watershed.

Stormwater Incentive Examples

The following table provides a compendium of known examples of local incentives for green infrastructure organized by municipality and type of incentive. Clicking on the blue check marks will direct the reader to more information about the specific municipal examples, including the program name, description, the incentive beneficiary and a reference for finding out more information.

Table 2: Examples of local incentives for green infrastructure					
	Stormwater Fee Discounts	Development Incentives	Grants	Rebate/ Installation Financing	Awards/ Recognition
CA: Santa Monica			✓	✓	
CA: Palo Alto				✓	
CO: Denver	✓				
DC: Washington				✓	
FL: Gainesville	✓				
FL: Maitland				✓	
FL: Orlando	✓				
FL: Sarasota County		✓			
GA: Gwinnett County	✓				
GA: Henry County	✓				
IL: Chicago		✓	✓	✓	✓
IL: Rock Island				✓	
KS: Wichita	✓				
KY: Louisville/Jefferson County	✓				
KY: Sanitation District No. 1	✓				
MA: Reading	✓				
MD: Montgomery County				✓	
MN: Burnsville				✓	
MN: Maplewood				✓	
MN: Minneapolis	✓			✓	
MN: New Brighton	✓				
MN: Saint Paul	✓				
MO: Kansas City	✓				
NC: Charlotte	✓				
NC: Durham	✓				
NC: Raleigh	✓				
NY: New York		✓			
OH: Columbus	✓				
OH: Cincinnati				✓	
OK: Tulsa	✓				
OR: Portland	✓	✓	✓	✓	✓
OR: Sandy	✓				
PA: Philadelphia	✓	✓			✓
SC: Beaufort County	✓				
TN: Knox County		✓			
TX: Austin	✓			✓	
U.S. Virgin Islands			✓		
VA: Chesapeake	✓				
VA: Prince William County	✓				
WA: Bellevue	✓				
WA: King County	✓		✓		✓
WA: Marysville	✓				
WA: Seattle	✓	✓	✓	✓	

Case Study Examples

Stormwater Fee Discounts

CO: Denver

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater fee equitability

Description: Fees are based on actual impervious area at each site as determined by aerial photography, so the less impervious surface, the lower the fee charged.

Beneficiary: All properties

Reference(s): http://www.semswa.org/fees.htm#surface

FL: Gainesville

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Management Utility Exemption

Description: Gainesville's Stormwater Management Utility reduces monthly fees for nonresidential properties with privately maintained, onsite stormwater management retention systems. The utility's base fee is established according to the property's impervious area and one-half its pervious parking areas. Credits of up to 100% are available based on the volume of onsite retention provided. Detention volume is not considered because that stormwater is discharged. Most credits range from 15% to 35%.

Beneficiary: Nonresidential properties

Reference(s): http://www.cityofgainesville.org/Portals/0/pw/pw_StormWater_MgtUtility.pdf

Doll, A., and G. Lindsey. 1999. Credits Bring Economic Incentives for Onsite Stormwater Management. Watershed and Wet Weather Technical Bulletin, January 1999, Water Environment Federation. http://stormwaterfinance.urbancenter.iupui.edu/PDFs/LindseyDoll.pdf

FL: Orlando

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Utility Discount

Description: Orlando's stormwater utility provides a lower rate for commercial and multi-family residential properties with onsite stormwater management facilities. Properties with approved onsite retention or detention get a 42% credit on the rate charged per equivalent residential unit.

Beneficiary: Commercial and multi-family residential

Reference(s): Overview of Stormwater Utility Fee Billing: http://www.cityoforlando.net/public_works/Stormwater/fee.htm

Flow Chart for Rate Determination: http://www.cityoforlando.net/public_works/Stormwater/Utility%20Fee/FLOWCHART%20FOR%202008%20BILLING%20YEAR.pdf

FAQs: http://www.cityoforlando.net/public_works/Stormwater/faq.htm#04.3

GA: Gwinnett County

Incentive Type: Stormwater Fee Discounts

Program Name: Stormwater Credits Program

Description: The County provides stormwater credit to landowners who install four types of practices: watershed stewardship, water quality, peak flow and channel protection. The total maximum credit for any property is 40%. Watershed stewardship practices include: public participation, low impact parcels, farmland deep tillage, stream restoration / streambank stabilization, watershed improvement project participation, conservation easements, conservation use valuation, assessment (CUVA) properties, county approved training programs, stream buffers that exceed 75' standards, fencing livestock out of streams, rain barrels, automatic sprinkler sensors, direct discharges, septic tank maintenance, and connection to sanitary sewers. Water quality credits of up to 10% are earned by property owners who install facilities that capture pollutants, thereby providing treatment of stormwater before it enters streams. There are several practices to accomplish this available to all property owners. Porous pavement, roof gardens and green roofs are acceptable practices to receive this credit. Residential property owners can install rain gardens to earn this credit. Channel protection credit (maximum 10%) is earned by property owners who provide protection of stream channels from bank and stream bed erosion by detaining and reducing the volume of stormwater from their properties. Peak flow credit (maximum 10%) is earned by property owners who install basins that delay the highest flows from reaching the drainage system, thereby protecting downstream properties.

Beneficiary: Property owner in Gwinnett County.

Reference(s): http://www.gwinnettcounty.com/cgi-bin/gwincty/egov/ep/gcbrowse.do?channelId=-24201&pageTypeId=536880236

GA: Henry County

Incentive Type: Stormwater Fee Discount

Program Name: Utility fee credit

Description: Credits are available for eligible properties that install, alter, or conduct activities that reduce the costs of services provided by the County. A 10% reduction of the stormwater fee is allowed for property owners; a 1% reduction is allowed for each percent of stormwater directed to rain garden. If all stormwater is treated on site, no fee is charged.

Beneficiary: All properties

Reference(s): Contact the Stormwater Management Department at (770) 288-7246 or visit http://www.co.henry.ga.us/Stormwater/FAQs.shtml

KS: Wichita

Incentive Type: Stormwater Fee Discount

Program Name:

Description: Wichita's stormwater utility offers two types of credits only for properties with 50 or more equivalent residential units. Up to a 40% credit is available for detention that equals or exceeds the city's new development standards, which are based on a 100-year storm. An 80% credit is available for retention of all runoff

from the site. Wichita has not issued any credits, because the standards are difficult to achieve.

Beneficiary: Residential

Reference(s): Source: Doll, A., and G. Lindsey. 1999. Credits Bring Economic Incentives for Onsite Stormwater Management. Watershed and Wet Weather Technical Bulletin, January 1999, Water Environment Federation. http://stormwaterfinance.urbancenter.iupui.edu/PDFs/LindseyDoll.pdf

KY: Louisville/Jefferson County

Incentive Type: Stormwater Fee Discount

Program Name: Drainage Charge Credit

Description: The Louisville and Jefferson County Metropolitan Sewer District (MSD) provides credits primarily for commercial properties with onsite detention for controlling peak flows. The credit amount depends on how the detention basin functions. Basins must be sized for 2-, 10-, or 100-year storms, and limit discharges to predevelopment runoff rates. Credits are available for each type of storm, with an 82% maximum credit if all criteria are met. Currently, MSD is evaluating ways to incorporate stormwater quality measures into its credit approach.

Beneficiary: Commercial

Reference(s): http://www.msdlouky.org/pdfs/msdrates09.pdf

KY: Sanitation District No. 1

Incentive Type: Stormwater Fee Discount

Program Name: Storm Water Surcharge Credit

Description: Any non-residential property owner who has either installed an approved on-site post-construction storm water control facility, implemented an approved best management practice (BMP), or developed and implemented an approved education program, may apply for a reduction of the Surcharge applied to that specific parcel. The District will evaluate each case individually in determining the appropriate level of credit. A total maximum of an 80% credit against the Surcharge may be granted:

- The credit is applied by reducing the number of billable equivalent residential units.
- The property parcel can qualify for both water quantity and water quality credits.
- The maximum allowable water quantity credit percentage = 35%.
- The maximum allowable water quality credit percentage = 50%

Beneficiary: Commercial

Reference(s): Stormwater Credit Policy overview: http://www.sd1.org/stormwater/credit.asp

MA: Reading

Incentive Type: Stormwater Fee Discounts

Program Name: Stormwater Enterprise Fund Fee Abatement

Description: The City allows single and two-family residential properties to abate up to 50% of the total fee if they install and maintain infiltration systems or other means to reduce runoff. Commercial/industrial/multi-family properties are allowed this abatement if they install and maintain "state-of-the-art" stormwater treatment and infiltration systems. Typical devices that qualify are drywells, infiltration chambers, detention ponds. Drinking water filtration systems and rain barrels do not qualify. The stormwater abatement continues as long as the impervious surface does not change.

Beneficiary: Property owner in Reading, Massachusetts.

Reference(s): http://www.ci.reading.ma.us/Pages/ReadingMA_Engineering/faq

MN: Minneapolis

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Quality Credit

Description: Residential storm water fee credit determined by the percent of a property's impervious area that drains to a stormwater management tool/practice (BMP). The maximum credit allowed is equal to 50% of the total percentage of impervious area draining to a BMP.

Beneficiary: Residential

Reference(s): Overview:
http://www.ci.minneapolis.mn.us/stormwater/fee/stormwaterQualityCredits.asp

Credit Application Form:
http://www.ci.minneapolis.mn.us/stormwater/docs/Stormwater_QualityChklstApp_Instruct.pdf

MN: Minneapolis

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Quantity Credit

Description: The Standard Quantity Reduction Credit is a 50% credit on a property's stormwater fee, based on a property's stormwater quantity management tools/practices being able to retain the 10-year, 24-hour type II SCS storm event to pre-developed conditions. To qualify for this credit, the property owner must demonstrate that all stormwater from the property is controlled with an on-site BMP. The Additional Quantity Reduction Credit is a 100% credit on a property's stormwater fee if the property's stormwater quantity management tools/practices can retain the 100-year, 24-hour type II SCS storm event to pre-developed conditions.

Beneficiary: Commercial

Reference(s): http://www.ci.minneapolis.mn.us/stormwater/fee/stormwaterQualityCredits.asp

Credit Application Form:
http://www.ci.minneapolis.mn.us/stormwater/docs/Stormwater_QualityChklstApp_Instruct.pdf

MN: New Brighton

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Utility Credits

Description: City allows property owners discounts on utility fee based upon the property's average runoff depth and how that depth compares to the mean depth for the property's class type. For every percentage point the property's runoff depth is below 20% of the average class type flow, the property owner gets a percentage point discount. Additional discounts are given if the property's peak outflow rate is less then predevelopment for the five and 100 year storms, if a property's wet pond meets Nationwide Urban Runoff Program (NURP) standards, or if a residential property owner installs and maintains a biorention/raingarden.

Beneficiary: Property owner in New Brighton, Minnesota.

Reference(s): City Code

http://www.ci.new-brighton.mn.us/index.asp?Type=B_BASIC&SEC={935DAF6C-8103-4A58-832F-26F917416992}&DE={0196EBC2-26B7-4AFA-8692-73F29EF10707}

MN: Saint Paul

Incentive Type: Stormwater Fee Discount

Program Name: Rate of Discharge Credit

Description: St. Paul provides a rate of discharge credit for nonresidential properties, which is based on parcel acreage and a standardized peak runoff rate determined for selected land-use classifications. Where the peak stormwater runoff rate from a parcel is limited by onsite facilities such as detention ponds owned and maintained by the property owner, a credit of up to 25% is available. A 10% credit is given for parcels that provide onsite storage for 5-year storms and also limit discharge to a maximum of 0.11 m3/ha/s (1.64 ft3/ac/s). An additional 15% credit is allowed for parcels that provide onsite storage for 100-year storms and limit discharge to a maximum of 0.11 m3/ha/s (1.64 ft3/ac/s). Both new developments and redevelopment projects may apply for the credit. Existing nonresidential properties can retrofit their systems to provide onsite storage for 5-year storms for a 10% credit. Most credits were provided in the first few years after the program was established. Currently, approximately three to four credits are approved annually. In St. Paul, the credit approach increased the political acceptability of the storm sewer system charge.

Beneficiary: Nonresidential properties

Reference(s): Source: Doll, A., and G. Lindsey. 1999. Credits Bring Economic Incentives for Onsite Stormwater Management. Watershed and Wet Weather Technical Bulletin, January 1999, Water Environment Federation. http://stormwaterfinance.urbancenter.iupui.edu/PDFs/LindseyDoll.pdf

MO: Kansas City

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Fee Ratio Credit

Description: Properties with a large amount of pervious area (e.g. grass, gravel), when compared to the amount of impervious area, may qualify. The Ratio Credit is a 50% credit that is granted to parcels where the ratio of the Total Parcel Area to

the Runoff Surface area is at least 30: 1. Property owners do not need to apply for this credit as it is automatically determined and applied by computer processes.

Beneficiary: Residential

Reference(s): http://www.kcmo.org/water.nsf/web/ordinances?opendocument

MO: Kansas City

Incentive Type: Stormwater Fee Discount

Program Name: Detention Basin Credit

Description: Properties served by a privately owned, and properly maintained, detention structure will be granted a stormwater fee credit. A 10% credit of the monthly stormwater fee is allowed if greater than 50% of the stormwater runoff from impervious surfaces is detained in the detention basin. 50% credit is the maximum allowable, only if 100% of stormwater runoff is detained in detention basin.

Beneficiary: Residential and Commercial

Reference(s): http://www.kcmo.org/water.nsf/web/ordinances?opendocument

NC: Charlotte

Incentive Type: Stormwater Fee Discount

Program Name: Storm Water Services Credit

Description: A credit toward reducing a ratepayer's storm water user fee. The storm water fee is proportional to the amount of impervious area on a given property. The credit is also developed to be proportional to the effective reduction in impervious area. The credit is allowed for all properties except single-family residential properties, except in extraordinary situations. Credit will only be allowed for properties that maintain their structural controls in fully functional condition and according to maintenance criteria and BMP standards. Credit will be allowed for previously constructed controls. A maximum of 100 percent of the user fee can be granted in credit with a maximum of 40% for peak reduction and 60% for volume reduction.

Beneficiary: Commercial and Some Residential

Reference(s): http://www.charmeck.org/Departments/StormWater/Storm+Water+Fee/Can+I+reduce+my+storm+water+fee%3f.htm

Fee Credit Manual:
http://www.charmeck.org/NR/rdonlyres/ez47jvb2blxko5opj7tx2d5ok7wwdl45ydx7invbiiert5nzr3kqcgaf6v3knodp27k7fv54gyisgbajiszvxladiwd/FeeCreditManualJune2008.pdf

NC: Charlotte

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Credit Fee

Description: Charlotte provides one or more credits to commercial, industrial, institutional, and multifamily residential properties and homeowner associations that provide stormwater management measures. Eligibility for credits is proportional to the extent that the measures address the impacts of peak discharge, total runoff

volume, and annual pollutant loading from the site. Up to 100% credit is available as follows:

- Up to 50% credit for reducing peak discharge from a 10-year, 6-hour storm;
- Up to 25% credit for reducing total runoff volume from a 2-year, 6-hour storm; and
- Up to 25% credit for reducing annual pollutant loading.

Each credit is conditional on continued compliance with the Charlotte-Mecklenburg Land Development Standards Manual and may be rescinded for noncompliance with those standards.

Beneficiary: Commercial, industrial, institutional, multifamily residential

Reference(s): http://www.charmeck.org/Departments/StormWater/Storm+Water+Fee/Can+I+reduce+my+storm+water+fee%3f.htm

Fee Credit Manual: http://www.charmeck.org/NR/rdonlyres/ez47jvb2blxko5opj7tx2d5ok7wwdl45ydx7invbiiert5nzr3kqcgaf6v3knodp27k7fv54gyisgbajiszvxladiwd/FeeCreditManualJune2008.pdf

NC: Durham

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater credit

Description: Durham provides up to a 25% pollution credit for selected structural stormwater controls on nonresidential properties. The city first offered credits for onsite retention basins based on the pool volume for retention. Later, the city offered credits for onsite extended detention and extended detention-retention basins based on drawdown time. Currently, the maximum pollution credit goes to standard basin designs that achieve maximum pollutant removal efficiency under North Carolina's performance standards. For other structural controls listed in the state's standards, the city's pollution credit is linearly variable, with a maximum 25% credit for a removal efficiency of 85% of total suspended solids. The city recently approved the use of sand filters in addition to approved onsite basin designs, but no pollution credits have been established yet for their use. Durham receives few applications for credits.

Beneficiary: Nonresidential properties

Reference(s): Source: Doll, A., and G. Lindsey. 1999. Credits Bring Economic Incentives for Onsite Stormwater Management. Watershed and Wet Weather Technical Bulletin, January 1999, Water Environment Federation. http://stormwaterfinance.urbancenter.iupui.edu/PDFs/LindseyDoll.pdf

NC: Raleigh

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Facility Credit

Description: A maximum 50% credit against stormwater fees for installing Stormwater Facilities exceeding City requirements specified in the Stormwater Ordinance. To qualify, customers must demonstrate that their existing Stormwater or New Stormwater Facility manages stormwater generated from their immediate property and/or upstream tributary areas.

Beneficiary: Commercial

Reference(s): http://www.raleighnc.gov/portal/server.pt/gateway/PTARGS_0_2_306_202_0_43/http%3B/pt03/DIG_Web_Content/category/Resident/Stormwater/Utility_Information/Cat-FAQ-20041129-154204-Stormwater_Fee_Credit.html

NC: Raleigh

Incentive Type: Stormwater Fee Discount

Program Name: NPDES Credit

Description: Customers holding National Pollution Discharge Elimination System (NPDES) MS4 permits are eligible for a Credit of an amount to be determined by the City on a case-by-case basis and not to exceed 15%. The Credit will be determined based on a comparison between the City's NPDES program and the Customer's NPDES program. Credit will be given for elements of the programs that are similar to those offered by the City.

Beneficiary: Commercial

Reference(s): http://www.raleighnc.gov/portal/server.pt/gateway/PTARGS_0_2_306_202_0_43/http%3B/pt03/DIG_Web_Content/category/Resident/Stormwater/Utility_Information/Cat-FAQ-20041129-154204-Stormwater_Fee_Credit.html

OH: Columbus

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Peak Flow Credit

Description: A reduction in a portion of stormwater service fees available by reducing the peak flow of runoff from your property through the use of stormwater detention or retention. The credit ranges from 20% to 80% of the stormwater fee.

Beneficiary: Commercial

Reference(s): Source: Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio, Cincinnati, Ohio, and their respective Legal Counsel. 2007. Green infrastructure program: A report evaluating the concept of a major storm water minimization program, utilizing green infrastructure and related methods. http://www.msdgc.org/wetweather/greenreport.htm.

OH: Columbus

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Maintenance Credit

Description: A reduction in a portion of stormwater service fees available by performing your own maintenance on the part of the public, open channel stormwater system that goes through your property. The credit is given on a dollar per linear foot per year basis of two channel types and cannot exceed 100% of the fee.

Beneficiary: Commercial

Reference(s): Source: Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio, Cincinnati, Ohio, and their respective Legal Counsel. 2007. Green infrastructure program: A report evaluating the concept of a major storm water minimization program, utilizing green infrastructure and related methods. http://www.msdgc.org/wetweather/greenreport.htm.

OK: Tulsa

Incentive Type: Stormwater Fee Discount

Program Name:

Description: Tulsa's stormwater drainage system service charge incorporates credits for private maintenance of approved onsite detention or retention facilities. The credit amount varies depending on what the estimated cost would be to the city to provide maintenance. The maximum credit is 60%, because approximately that percentage of Tulsa's stormwater utility budget goes to maintenance. To be approved, an onsite facility must provide at least 50% more detention than required by the city. If an onsite facility is found to be performing inadequately, the property owner must pay the typical stormwater drainage service charge.

Beneficiary:

Reference(s): http://www.cityoftulsa.org/media/17773/Title11A_000.pdf

OR: Portland

Incentive Type: Stormwater Fee Discount

Program Name: Clean River Rewards Incentive and Discount Program

Description: Provides financial incentives to property owners who manage stormwater on their site through a discount on their monthly stormwater utility charge. The Portland City Council instituted a two-part rate—35% of the charge for providing drainage services to the property and 65% of the charge to provide drainage services to the public right of way that served the property. Not only did the charge breakdown reinforce that street drainage is an issue the City must deal with, it also allowed a portion of the rate to be discounted for properties providing onsite stormwater management. So with 35% of the stormwater rate up for a potential discount, some properties could be encouraged to make retrofit changes. The CRID has a simplified discount program for residential properties based on volume control, and a more complex commercial property program that requires water quality and flow control for the full discount.

Beneficiary: Residential and Commercial

Reference(s): http://www.portlandonline.com/BES/index.cfm?c=41976

OR: Sandy

Incentive Type: Stormwater Fee Discount

Program Name: Credit Program

Description: Sandy's incentive program is intended to encourage property owners to utilize source control facilities on new development or redevelopment, or to make improvements to existing properties to mitigate stormwater discharges. Credits under the incentive program are given on the basis of Equivalent Residential Units (ERUs) mitigated. The maximum credit allowed is 1/3 (33%) of the total number of ERUs. Additional credits may be available for property owners that completely eliminate impervious surfaces on their property.

Beneficiary: Commercial, industrial, and multi-family properties

Reference(s): http://www.ci.sandy.or.us/index.asp?Type=B_BASIC&SEC={A9D3CDDE-3BA0-42DE-BE30-4E321A155AA8}

PA: Philadelphia

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Fee Reduction and Retrofit Assistance

Description: Yet to be adopted. A 50% discount would be offered for residents and businesses to decrease directly connected impervious areas using rain gardens, porous asphalt and sidewalks, swales, and green roofs.

Beneficiary: Residential and commercial properties

Reference(s): http://ddoe.dc.gov/ddoe/frames.asp?doc=/ddoe/lib/ddoe/stormwaterdiv/Phila._Water_Dep.pdf, see slide 64 of 75

SC: Beaufort County

Incentive Type: Stormwater Fee Discounts

Program Name: User Fee Credit Program

Description: The County provides six options for property owners to get credits towards reducing stormwater user fees – 1) The Integrated Non-Structural BMP Program Credit: A 10% credit adjustment may be applied if 6 of the 9 BMPs have been met on the site - Educational Program, On-Site Refuse Control Program, On-Site Stormwater System Maintenance and Cleaning Program, Paved Area Sweeping Program, Used Motor Oil Recycling Program, Sanitary Sewer/Storm Sewer Cross-Connection Inventory, Landscaping for Run-Off Rate Control and Water Quality, Storm Drain Stenciling Program, and Designated Vehicle Washing Area. 2) NPDES Industrial Stormwater Permit Credit: A 5% credit adjustment may be applied at a non-residential facility if that facility is covered by a NPDES industrial stormwater permit, is in compliance with all permit requirements and discharges wastewater which is 10% below all applicable effluent discharge limits. The sample results must be submitted to the County. 3) Other Non-Structural BMP Credit: A maximum of 5% credit may be given to nonresidential customers who implement a unique approach to improving water quality. 4) Education Credit: Schools can be given credit for providing education to students and employees in water quality awareness and protection. 5) Stormwater Quality Control Structural BMP Credit: Credit (up to 20%) can be given for the installation of approved BMPs to treat stormwater. 6) Stormwater Volume Control Credit: Credit may be given for the installation of approved BMPs or the preservation of vegetated open spaces to reduce stormwater volume at a site.

Beneficiary: Non-residential property owners and other privately owned stormwater facility operators in Beaufort County, South Carolina.

Reference(s): **Manual**

http://www.bcgov.net/Stormwater/documents/AdjustmentandCreditManaul9-5-07.pdf

TX: Austin

Incentive Type: Stormwater Fee Discount

Program Name: Reduced Drainage Charge

Description: Austin's Drainage Utility provides a 50% credit to commercial property owners that construct and maintain approved onsite detention facilities. The user of a non-residential benefited property with an on-site detention or water-quality pond

that receives storm water runoff from the property must register the pond to be entitled to request a reduced drainage charge. The city inspects these onsite facilities annually to ensure proper maintenance.

Beneficiary: Nonresidential property

Reference(s): http://www.amlegal.com/nxt/gateway.dll/Texas/austin/thecodeofthecityofaustintexas?f=templates$fn=default.htm$3.0$vid=amlegal: austin_tx$anc=

VA: Chesapeake

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Utility Credit

Description: Stormwater utility fee credits are available by providing water quality improvements and/or water quantity improvements (reduced peak discharge). In order to qualify for one or both of these credits, an application form must be submitted which shows compliance with this policy. The credit system consists of a two-part credit where each part allows for a 20% reduction in the stormwater utility fee for privately owned and operated systems. Any credits provided, water quality or water quantity, shall be reduced by half (50%) if a public facility is used to accomplish the reduction. This reduction in credit is necessary since the City must maintain the system. The 50% reduction applies only to the credit and not the total stormwater fee. The percentage of credit for both quantity and quality varies based on the contribution to the City's stormwater system as determined by the City's Drainage Engineer based on information contained in the application.

Beneficiary: Non-residential property owners, although multi-family residential properties are included

Reference(s): http://www.chesapeake.va.us/services/depart/pub-wrks/pdffiles/BMP-Credit-App.pdf

VA: Prince William County

Incentive Type: Stormwater Fee Discounts

Program Name: Partners for Water Quality

Description: The County’s Department of Public Works presents quarterly stormwater management educational sessions and by enrolling annually in the program, businesses and non-profits can earn a 10 percent rebate on their previous year's storm water management bill. Businesses and non-profits can earn an additional 10% for providing proof of implementation of a Great 'Scapes Nutrient Management Plan from Virginia Cooperative Extension and conduct parking lot or common area clean-up once a year. Another 10% can be deducted for conducting a site clean-up in cooperation with agencies such as Prince William Soil and Water Conservation District (Adopt-a-Stream), Clean Community Council (Adopt-a-Spot), or other pre-approved site clean-ups in the community.

Beneficiary: Businesses or non-profits in Prince William County, Virginia.

Reference(s): http://www.pwcgov.org/default.aspx?topic=020008001920001183

WA: Bellevue

Incentive Type: Stormwater Fee Discount

Program Name:

Description: Bellevue's Storm and Surface Water Utility's rate structure classifies each property according to its percentage of developed land. A reduction of one development classification is given for installation and maintenance of approved onsite detention facilities. The approach has worked well to get approved detention facilities built on large residential and commercial plats.

Beneficiary:

Reference(s): Source: Doll, A., and G. Lindsey. 1999. Credits Bring Economic Incentives for Onsite Stormwater Management. Watershed and Wet Weather Technical Bulletin, January 1999, Water Environment Federation. http://stormwaterfinance.urbancenter.iupui.edu/PDFs/LindseyDoll.pdf

WA: King County

Incentive Type: Stormwater Fee Discount

Program Name: Stormwater Facility Discount

Description: Surface Water Mgmt. fee reduction to one rate category lower for operating one or more stormwater flow control or water quality treatment facilities approved to be functioning properly within County standards. Facility inspection occurs annually by engineers. Residential parcels meeting this condition will receive a discount equal to half the residential fee, or $51.00. Both residential and commercial properties are eligible. Discount may not be combined with other runoff mitigation discounts.

Beneficiary: Residential / Commercial

Reference(s): http://www.kingcounty.gov/environment/wlr/surface-water-mgt-fee/discount.aspx

WA: King County

Incentive Type: Stormwater Fee Discount

Program Name: Sixty-Five-Ten Discount

Description: Discount on fee assessment if your property is at least 65% forested, has no more than 10% effective impervious area and BMP for dispersing and infiltrating runoff are being met. Other conditions may apply and at least one site visit will be required for approval, but qualification for this discount would lower your assessment by one-rate category. Residential parcels meeting this condition will receive a discount equal to half the residential fee, or $51.00. Both residential and commercial properties are eligible. This discount may not be combined with other runoff mitigation discounts

Beneficiary: Residential / Commercial

Reference(s): http://www.kingcounty.gov/environment/wlr/surface-water-mgt-fee/discount.aspx

WA: King County

Incentive Type: Stormwater Fee Discount

Program Name: Pervious Surface Absorption Discount

Description: 25% discount on fee assessment if implement county-approved flow control BMPs and at least 10% of the impervious surface is served by these practices. Not eligible for discount if already receive another runoff mitigation discount. Only commercial properties are eligible.

Beneficiary: Commercial

Reference(s): http://www.kingcounty.gov/environment/wlr/surface-water-mgt-fee/discount.aspx

WA: Marysville

Incentive Type: Stormwater Fee Discount

Program Name: Surface Water Utility Reductions

Description: The surface water utility rate can be reduced by a minimum of 10 percent for any new or remodeled commercial building that uses a permissive rainwater harvesting system properly sized to use the available roof surface of the building. Rate reductions in excess of 10 percent will be considered dependent upon the amount of rainwater harvested divided by the mean annual runoff volume generated by the total impervious surface area at the parcel. Additionally, properties using low impact development techniques as recommended in the Marysville Municipal Code may be eligible for a reduction in their surface water utility rate.

Beneficiary: Commercial properties

Reference(s): Chapter 14.19.080 of http://www.codepublishing.com/wa/marysville/

WA: Seattle

Incentive Type: Stormwater Fee Discount

Program Name: Rainwise Incentive Program

Description: The City of Seattle is currently working on an incentive program called Rainwise, which would offer drainage rate reductions for owners who use sustainable stormwater management techniques. While this program is not yet implemented, developers who are putting in infrastructure now can benefit from the rate reductions in the future.

Beneficiary: Property owners

Reference(s): http://www.seattle.gov/dpd/cms/groups/pan/@pan/@plan/@proj/documents/Web_Informational/cos_005050.pdf

Development Incentives

FL: Sarasota County

Incentive Type: Development Incentives

Program Name: Green Building and Green Development Program

Description: Green buildings or green developments shall qualify for expedited permitting and priority inspections. Green buildings and developments shall be defined and certified as appropriate by the U.S. Green Building Council (i.e. Leadership in Energy and Environmental Design (LEED) certification) or the Florida Green Building Coalition. The County discontinued the permit fee rebate previously offered to these projects as well on December 28, 2007.

Beneficiary: Qualified developer in Sarasota County.

Reference(s): https://building.scgov.net/OSG/Sarasota/Green%20Building/GreenBuilding.htm

IL: Chicago

Incentive Type: Development Incentives

Program Name: Green Permit Program

Description: Chicago's Department of Construction and Permits (DCAP) has created an incentive that encourages inclusion of environmentally conscious design elements by promising developers savings of both time and money. Architects, developers and building owners can be part of an expedited permit process by adding elements of green building strategies and technologies from a menu of items created by DCAP. Projects admitted into the Green Permit Program can receive permits in less than 30 business days as opposed to the 60 to 90 that are normally allotted for permit issuance. Participants that display a particularly high level of green strategy can possibly have consultant code review fees waived as well. A team of green building design experts compiled by the city help applicants navigate the permit process to ensure timely implementation of these technologies.

Beneficiary: Architects, developers, and building owners

Reference(s): http://www.chicagocodes.com/display_news.cfm?news_id=252

IL: Chicago

Incentive Type: Development Incentives

Program Name: Zoning Bonus Ordinance

Description: The Chicago Department of Zoning states, "A floor area premium shall be granted for a roof that is covered with plants that reduce the 'urban heat island' effect and storm-water runoff of buildings in the central business district. To qualify for a floor area premium, a minimum of 50 % of the roof area at the level of the green roof or a minimum of 2000 square feet (whichever is greater) shall be covered by vegetation and shall meet..." certain standards.

Beneficiary: High-density districts in the downtown area

Reference(s): Source: http://www.greenroofs.com/Greenroofs101/industry_support.htm

NY: New York

Incentive Type: Development Incentive

Program Name: Green Roof Tax Abatement

Description: Building owners in New York City can apply for a one-time tax credit of up to $100,000 for the installation of a green roof. The green roof must be on at least 50% of available rooftop space. The credit would be equal to $4.50 per square foot of roof area that is planted with vegetation. It is a state program for New York City residents only and is administered by the city. The program sunsets in 2013 unless extended by the state legislature. The program will begin accepting applications on January 1, 2009.

Beneficiary: Building owners in New York City, New York.

Reference(s): Not yet available.

PA: Philadelphia

Incentive Type: Development Incentives

Program Name: Green Roofs Tax Credit

Description: Business owners may receive a credit for a green roof covering at least fifty percent (50%) of the building's rooftop or seventy-five percent (75%) of eligible roof top space. They may claim a tax credit of twenty-five percent (25%) of all costs actually incurred to construct the green roof, provided that total tax credits for a green roof do not exceed $100,000. The tax credit is applied against the applicant's total business privilege tax liability for the Tax Year during which the applicant certifies completion of the green roof, provided that any unused credits may be carried forward until fully used.

Beneficiary: Commercial businesses

Reference(s): http://webapps.phila.gov/council/attachments/3533.pdf

OR: Portland

Incentive Type: Development Incentives

Program Name: Floor Area Ratio Bonus

Description: Projects that install ecoroofs in the Central City Plan District are eligible for a floor area ratio bonus, which increases the building's allowable area, and can use ecoroofs to conform to the Central City Design Guidelines. Buildings can receive bonus FAR based on three ranges of ecoroof coverage in relation to the building's footprint: 10-30%, 30-60% and 60% or greater earns one, two and three square feet of additional floor area per square foot of ecoroof respectively.

Beneficiary: Commercial buildings in the Central City area of Portland.

Reference(s): http://www.portlandonline.com/osd/index.cfm?a=114728&c=42113

http://www.portlandonline.com/shared/cfm/image.cfm?id=53363, see 510-28

TN: Knox County

Incentive Type: Development Incentives

Program Name: Stream and Vegetated Buffers Credit

Description: Credit may be granted when stormwater runoff is effectively treated by a stream buffer or other vegetated buffer. Effective treatment constitutes treating runoff as overland sheet flow through an appropriately vegetated and forested buffer.

Beneficiary: Developer

Reference(s): http://www.knoxcounty.org/stormwater/pdfs/vol2/5-2%20Water%20Quality%20Volume%20Credits.pdf

TN: Knox County

Incentive Type: Development Incentives

Program Name: Use of Vegetated Channels

Description: This credit may be granted when vegetated (grass) channels are used for water quality treatment. Site designers will be able to subtract the areas draining to a grass channel and the channel area itself from the total site area when computing water quality volume requirements.

Beneficiary: Developer

Reference(s): http://www.knoxcounty.org/stormwater/pdfs/vol2/5-2%20Water%20Quality%20Volume%20Credits.pdf

TN: Knox County

Incentive Type: Development Incentives

Program Name: Impervious Area Disconnection

Description: This credit may be granted when impervious areas are disconnected from the stormwater control system via overland flow filtration/infiltration (i.e., pervious) zones. These pervious areas are incorporated into the site design to receive runoff from rooftops or other small impervious areas. If impervious areas are adequately disconnected in accordance with the criteria listed below, they can be deducted from the total site area when computing the water quality volume requirements.

Beneficiary: Developer

Reference(s): http://www.knoxcounty.org/stormwater/pdfs/vol2/5-2%20Water%20Quality%20Volume%20Credits.pdf

TN: Knox County

Incentive Type: Development Incentives

Program Name: Water Quality Volume Credits (General term for all specific credits)

Description: Allows for a reduction in the water quality treatment volume (WQv). The credit system directly translates into cost savings to the developer by reducing the size of structural stormwater control and conveyance facilities. If a developer incorporates one or more of the credited practices in the design of the site, the requirement for capture and treatment of the WQv will be reduced. Site designers are encouraged to utilize as many credits as they can on a site. Greater reductions in stormwater storage volumes can be achieved when many credits are combined (e.g., disconnecting rooftops and protecting natural conservation areas).

Beneficiary: Developer

Reference(s): http://www.knoxcounty.org/stormwater/pdfs/vol2/5-2%20Water%20Quality%20Volume%20Credits.pdf

WA: Seattle

Incentive Type: Development Incentives

Program Name: Density Bonus Incentive

Description: The Density Bonus incentive offers downtown commercial, residential and mixed-use developments greater height and/or floor area if a green building standard of LEED Silver or higher is met.

Beneficiary: Commercial

Reference(s): http://www.seattle.gov/dpd/GreenBuilding/OurProgram/PublicPolicyInitiatives/DevelopmentIncentives/

Grants

CA: Santa Monica

Incentive Type: Grants

Program Name: Sustainable Landscape Grant Program

Description: Grants are awarded for up to 50% of the cost of the project, not to exceed $5,000, including a maximum of $3,500 for qualified irrigation equipment and a

maximum of $1,500 for climate-appropriate plants defined as very low, low, and medium water use plants. No turf or high water using plants or invasive plants will be funded. In addition to the $5,000, applicants may also apply for rebates for specific irrigation equipment including weather-based irrigation controllers, rotary nozzles for sprinklers and synthetic turf. The grant is a reimbursement grant, paid upon completion of the approved project. Invoices to substantiate costs will be required for all reimbursements. This grant is a first come, first served program available until funds run out. Projects in the parkway will receive priority funding. Projects must be completed within 180 days of grant award to receive funding. Partial funding for incomplete projects will not be permitted.

Beneficiary: Individuals, property owners, businesses, non-governmental organizations and public agencies who are water customers in Santa Monica; new construction and major remodel projects are not eligible.

Reference(s): http://www.smgov.net/epd/residents/Water/Landscape_Grant.htm

IL: Chicago

Incentive Type: Grants

Program Name: Green Roof Improvement Fund

Description: A one year pilot redevelopment program to provide financial assistance for the installation of Green Roofs on certain eligible commercial facilities. Eligible Applicants can receive a grant for up to 50% of Eligible Costs, with a maximum assistance of $100,000 per project and per applicant. All grants shall be in the form of reimbursement funding to be awarded only after the Green Roof is installed and all other requirements for funding are met.

Beneficiary: Commercial

Reference(s): http://egov.cityofchicago.org/city/webportal/portalContentItemAction.do?contentOID=536943451andcontenTypeName=COC_EDITORIALandtopChannelName=DeptandchannelId=0andprogramId=0andentityName=Planning+And+DevelopmentanddeptMainCategoryOID=-536884767

OR: Portland

Incentive Type: Grants

Program Name: Ecoroof Grant Program

Description: The City of Portland offers grants as incentives to property owners and developers to add more ecoroofs. The incentive program is part of Portland's Grey to Green initiative to increase sustainable stormwater management practices, control non-native, invasive plants, and protect sensitive natural areas. The grants fund up to $5 per square foot of an ecoroof project. Installation costs for ecoroofs in Portland range from $5 to $20 per square foot.

Beneficiary: Property owners and developers

Reference(s): http://www.portlandonline.com/bes/index.cfm?c=48724

OR: Portland

Incentive Type: Grants

Program Name: Community Watershed Stewardship Grants

Description: Watershed stewardship grants provide up to $10,000 to schools, churches, businesses and other community organizations for projects that protect and enhance watershed health at the local level. Groups can use grant money for supplies, materials, equipment, room rentals, feasibility studies or technical assistance. Past projects include education and monitoring, ecoroofs, stormwater features, restoration, and naturescaping.

Beneficiary: Community organizations

Reference(s): http://www.portlandonline.com/BES/index.cfm?c=43077

OR: Portland

Incentive Type: Grants

Program Name: Willamette Stormwater Control Program

Description: Provides technical and financial assistance for a limited number of pilot projects that control stormwater runoff. Funded 15 demonstration projects to retrofit existing sites in targeted areas. Up to $30,000 was available for design and construction for projects that were part of an existing development, located in the city's combined sewer target area, and removed runoff from at least 10,000 ft^2 of paved or roof area.

Beneficiary: Commercial

Reference(s): http://www.nrdc.org/water/pollution/storm/chap12.asp

U.S. Virgin Islands

Incentive Type: Grants

Program Name: Non-Point Source Pollution Conservation Schools

Description: Through the program, "Youth Putting a LID On Non-Point Source Pollution," schools are encouraged to manage resources on their school grounds and surrounding areas, in ways that will help mitigate Non-Point Source Pollution through Low Impact Development. The objective of the program is to increase the level of environmental awareness among public schools and the community at large. Grants may be awarded to schools willing to participate in the program. Awards of $1,000 to $4,000 will be available to schools or individual classes. Schools that participate will be considered as a "NPS Pollution Conservation School."

Beneficiary: Schools

Reference(s): http://www.dpnr.gov.vi/dep/pubs/2005_9_18_nps_schools.htm

WA: King County

Incentive Type: Grants

Program Name: Impervious Surface Cost Share and Credit Program

Description: As an incentive to reduce impervious surface, the county is making funds available for sharing the costs of converting impervious surface to (1) native-vegetated landscape, (2) compost-amended lawn or (3) grassed, modular-grid pavement. To qualify, a plot plan, technical information and description must be submitted to county engineers who will work with the customer to develop the plan. 50% of costs up to $20K will be reimbursed after the job is complete and

inspected. Reducing impervious surface could potentially place the property into a lower rate category, reducing the surface water fee.

Beneficiary: Commercial

Reference(s): http://dnr.metrokc.gov/wlr/surface-water-mgt-fee/swm-discount.htm

WA: King County

Incentive Type: Grants

Program Name: King County Green Building Grants

Description: The King County LEED Grants Program provides funding to projects built in King County, outside of the City of Seattle, that meet stringent criteria for resource conservation, and help educate the public about the importance of green building. Public, private, and not-for-profit organizations seeking LEED certification for building projects are eligible and encouraged to apply. Grant awards range from $20,000 to $30,000 depending on performance level achieved.

Beneficiary: Commercial

Reference(s): http://your.kingcounty.gov/solidwaste/greenbuilding/incentives/commercial.asp

WA: Seattle

Incentive Type: Grants

Program Name: Aquatic Habitat Matching Grant

Description: Seattle Public Utilities provides matching grants for individuals or groups to help improve Seattle's aquatic habitat along creeks and shorelines. Award amounts begin at $2,000 per project, with $300,000 in total awards available. Projects require a one-to-one match. Projects considered are those that improve, preserve, and/or restore aquatic habitat and/or ecological diversity and enhancement; address water flow and/or quality; or improve/prevent impacts from the City's drainage system.

Beneficiary: Individuals or groups

Reference(s): http://www.seattle.gov/util/Services/Drainage_&_Sewer/Get_Involved/Aquatic_Habitat_Grants/index.asp

WA: Seattle

Incentive Type: Grants

Program Name: Environmental Grants (Neighborhood Improvement Grants, etc)

Description: The Watershed Climate Action Grant will provide volunteer groups one to three weeks of support by EarthCorps, a service organization that engages young adults in restoring key ecological sites around Puget Sound. They will provide tailored support to your volunteer group that could include removing invasive plants, providing plants and mulch, and planting and caring for new trees.

Beneficiary: Volunteer groups

Reference(s): http://www.seattle.gov/util/Services/Drainage_&_Sewer/Get_Involved/Environmental_Grants/index.asp

Rebate/Installation Financing

CA: Santa Monica

Incentive Type: Rebate/Installation Financing

Program Name: Rain Gutter Downspout Redirect Rebate, Rain Barrel Rebate, Cistern Rebate

Description: 1. Rain Gutter Downspout Redirect Rebate (rainwater percolation): Up to $40 per qualified rain gutter downspout (up to and including all downspouts on one's property), includes labor and materials. Rebates are available for the cost of redirecting rain gutter downspouts to permeable surfaces, such as landscaped areas.

2. Rain Barrel Rebate (rainwater storage): Rebates up to $100 per barrel (limited to 125 gallon maximum capacity), includes design, labor and materials.

3. Cistern Rebate (rainwater storage): Up to $500 per cistern (limited to cisterns over 500 gallons each), includes design, labor and materials.

Beneficiary: Any property owner (resident, institution or business) in the City of Santa Monica and any tenant of said property with the permission of the owner.

Reference(s): http://www.smgov.net/epd/residents/Urban_Runoff/rain_harvest_rebates.htm

CA: Palo Alto

Incentive Type: Rebate/Installation Financing

Program Name: City of Palo Alto Innovative Stormwater Measures Rebate Program

Description: 1. Rain Barrel Rebate: $50 rebate for purchase and installation of a rain barrel to collect and harvest rainwater runoff from rooftops.

2. Permeable Pavement Rebate: Rebate of $1.50 per square foot for installation of permeable pavement (porous asphalt concrete, pervious Portland cement concrete, or permeable interlocking concrete pavers) to reduce storm water runoff from driveways, walkways, patios, and parking lots.

3. Cistern Rebate: Rebate of 15 cents per gallon for purchase and installation of a cistern to collect and harvest rainwater runoff from rooftops and site runoff

4. Green Roof Rebate: Rebate of $1.50 per square foot for the installation of a green (vegetated) roof to minimize storm runoff from rooftops.

Rebates are limited to a maximum of $1,000 per single-family residential property and $10,000 for commercial/industrial and multi-family residential properties.

Beneficiary: Residential, commercial, or governmental property owner in the City of Palo Alto, California.

Reference(s): http://www.cityofpaloalto.org/stormwater

DC: Washington

Incentive Type: Rebate/Installation Financing

Program Name: River Smart Homes

Description: This program offers incentives to homeowners interested in reducing stormwater pollution from their properties. Homeowners receive up to $1,200 to adopt one or

more landscape enhancements, including shade trees, above-ground cisterns/rain barrels, permeable/porous pavers, rain gardens, and BayScaping.

Beneficiary: Residential properties

Reference(s): http://ddoe.dc.gov/ddoe/cwp/view,a,1209,q,497794.asp

FL: Maitland

Incentive Type: Rebate/Installation Financing

Program Name: City of Maitland Incentive Programs

Description: The City has three stormwater/water quality incentive programs. Through the Shoreline Revegatation Program, the City will reimburse qualified residents up to 50% of the cost to purchase and install aquatic plants along their property shoreline. A maximum one-time reimbursement of $200 is being offered. The Wetland Tree Planting Program provides lakefrond homeowners up to three, 8-10 foot tall, bald cypress trees at a cost of only $25 per tree. A City representative works with the homeowner to establish the ideal location for the trees to ensure that the trees will benefit the lake and the shoreline. Finally the City has an Environmental Swale Program which pays for 20% of the cost to grade and sod a swale, or $500 per property whichever is less. A City representative helps establish the best location for the swale to ensure that the lakes/canals have maximum water quality benefit.

Beneficiary: Property owner in Maitland, Florida

Reference(s): http://www.ci.maitland.fl.us/pubworks_lakesFaq.asp

IL: Chicago

Incentive Type: Rebate/Installation Financing

Program Name: Green Roof Grants

Description: Residential and small commercial building owners can qualify for $5,000 for a green roof project.

Beneficiary: Residential and commercial properties

Reference(s): http://www.cityofchicago.org/city/webportal/portalContentItemAction.do?BV_SessionID=@@@@1021838484.1229132155@@@@&BV_EngineID=ccccadefmdlgmfecefecelldffhdfif.0&contentOID=536932287&contenTypeName=COC_EDITORIAL&topChannelName=Dept&blockName=Environment%2FGreen+Roof+%26+Cool+Roof+Grants+Programs%2FI+Want+To&context=dept&channelId=0&programId=0&entityName=Environment&deptMainCategoryOID=-536887205

IL: Chicago

Incentive Type: Rebate/Installation Financing

Program Name: Roll Out the Barrel Events

Description: Events held where rain barrels sold at discounted prices ($15 - $20) to residents. Barrels were built by the City's ex-offender job training program by retrofitting recycled 55-gallon plastic barrels. City provided information on installing and maintaining rain barrels, as well as information on stormwater management and water conservation. Pilot program cost ~$40K excluding city labor.

Beneficiary: Residential

Reference(s): http://www.cityofchicago.org/city/webportal/portalContentItemAction.do?blockName=Conserve+Chicago+Together%2f2004%2fI+Want+ToanddeptMainCategoryOID=-536890176andchannelId=0andprogramId=0andentityName=Conserve+Chicago+TogetherandtopChannelName=SubAgencyandcontentOID=536913711andFailed_Reason=Invalid+timestamp,+engine+has+been+restartedandcontenTypeName=COC_EDITORIALandcom.broadvision.session.new=YesandFailed_Page=%2fwebportal%2fportalContentItemAction.doandcontext=dept

IL: Rock Island

Incentive Type: Rebate/Installation Financing

Program Name: Rain Gardens for Rock Island

Description: City reimburses residents $4/square foot of rain garden space and if a rain is incorporated into the design the City will supply one for free. The City must approve the design prior to installation and inspect the rain garden upon completion prior to paying the incentive payment.

Beneficiary: Residential property owner in Rock Island, Illinois.

Reference(s): http://www.rigov.org/citydepartments/publicworks/raingarden.html

MD: Montgomery County

Incentive Type: Rebate/Installation Financing

Program Name: RainScapes Rewards

Description: Up to $1,200 is offered per single-family lot or up to $5,000 per multi-family or commercial lot for installation of rain gardens, cisterns green roofs, native plants, shade trees and permeable pavement.

Beneficiary: Residential and commercial properties

Reference(s): http://www.stormwaterpartners.org/PDF/RainScapesRewardsApplication.pdf

MN: Burnsville

Incentive Type: Rebate/Installation Financing

Program Name: Rain Garden Retrofit Project

Description: $150K project to target homeowners in a specific neighborhood near Crystal Lake in an effort to compel residents to build rain gardens in their yards to reduce stormwater runoff. An architect met w/ residents free of charge to design the gardens and residents helped to build them. The city installed 6-ft. curb cuts w/ 2-ft. tapering sections on either side to direct stormwater off the streets and into the gardens. The project reduced runoff by 90% compared to neighboring control area. Homeowners maintain gardens w/ city assistance if needed.

Beneficiary: Residential

Reference(s): Source: Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio, Cincinnati, Ohio, and their respective Legal Counsel. 2007. Green infrastructure program: A report evaluating the concept of a major storm water minimization program, utilizing green infrastructure and related methods. http://www.msdgc.org/wetweather/greenreport.htm.

MN: Maplewood

Incentive Type: Rebate/Installation Financing

Program Name: Street Redesign and Reconstruction

Description: As part of large-scale redesign of existing streets and utilities, the City offered to construct standard-size rain gardens in the public boulevard right-of-way on the front edge of residential properties. These gardens handle drainage from yards, rooftops, driveways and some runoff from the street. Residents volunteer to have the garden built by the City and are responsible for planting the provided plants and maintaining the gardens with free technical assistance from the City.

Beneficiary: Residential

Reference(s): http://www.ci.maplewood.mn.us/DocumentView.asp?DID=246

RESOLVE. 2007. Public Funding Incentives for Private Residential and Commercial Watershed Protection Projects: Report on Key Case Studies and Community Workshop. http://www.resolv.org/rainscapesworkshop/Report.pdf.

MN: Minneapolis

Incentive Type: Rebate/Installation Financing

Program Name: Rain Barrel Discount Program

Description: 2,000 rain barrels made available to Minneapolis households at a reduced cost ($45). Barrels made available thanks to a $100,000 grant from the EPA's Region 5 Great Cities Program and in partnership w/ Minnesota/Metro Blooms and the Green Institute.

Beneficiary: Residential

Reference(s): Source: Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio, Cincinnati, Ohio, and their respective Legal Counsel. 2007. Green infrastructure program: A report evaluating the concept of a major storm water minimization program, utilizing green infrastructure and related methods. http://www.msdgc.org/wetweather/greenreport.htm.

MN: Minneapolis

Incentive Type: Rebate/Installation Financing

Program Name: Ramsey-Washington Metro Watershed's BMP Cost Share Program

Description: The Ramsey-Washington Metro Watershed District (RWMWD) BMP Cost Share Program offers financial assistance to efforts that protect and improve water and natural resources within the watershed. BMP Cost Share assistance may be used by public or private landowners implementing programs and projects that (1) Promote actions that prevent flooding or lessens the effect of drought; (2) Improve water quality or increases the capacity of the watershed to store water; (3) Preserve, protect, and restore native plant and wildlife communities, especially lakes, rivers and wetlands; (4) Protect and preserves groundwater quality and quantity; and/or (5) Treat the natural environment as intrinsically valuable in land use decisions.

The RWMWD has allocated $250,000 for the BMP Cost Share program and projects for 2009. The RWMWD will provide applications year round until funds are depleted for the year. The minimum grant amount available is $100.00. The

maximum grant amount is residential: $2,000.00, commercial and government: $30,000.00. Funds are a reimbursement of 50% match for materials and labor. The funds must be used within one year of receiving grant approval.

Beneficiary: Residential, commercial, and government properties

Reference(s): http://www.rwmwd.org/index.asp?Type=B_BASIC&SEC={E5745966-78DF-4558-8C39-431D6D450673}&DE=

OH: Cincinnati

Incentive Type: Rebate/Installation Financing

Program Name: Mt. Airy Rain Catchers

Description: Reverse auction to encourage the installation of rain barrels and rain gardens. Bids were received from qualified residents which outlined what rain catcher projects they agreed to have installed and the incentive payment they requested to do so. The bids were selected based upon the project(s) they agreed to install, their scoring within an Environment Benefit Index and the amount of the incentive payment requested. The selected project(s) were installed for free and the residents were paid the bid amount as a one-time incentive payment. The first round of the reverse auction in 2007 resulted in 50 rain gardens and 100 rain barrels installed at 67 of the approximately 350 residential properties in the watershed. In 2008, the auction was repeated and an additional 35 rain gardens and 74 rain barrels were installed.

Beneficiary: Residential property owner in the Shepherd Creek watershed.

Reference(s): http://www.epa.gov/nrmrl/pubs/600r08129/600r08129.htm

OR: Portland

Incentive Type: Rebate/Installation Financing

Program Name: Downspout Disconnection Program

Description: Targets property owners to disconnect roof downspouts onto lawns and flowerbeds, or use onsite stormwater mgmt. facilities such as drywells and soakage trenches. The City's Plumbing division works directly with homeowners to disconnect downspouts without the homeowner having to get a plumbing permit. A target area of CSO basins is selected and Disconnection Program staff go to work, door-to-door canvassing to get voluntary agreement from property owners to complete the disconnection. Owners then complete the disconnection themselves and receive a $53 per downspout incentive, or have the City complete the disconnection for them free of charge. The program is funded primarily by a mixture of capital and operating funds due to this ability to remove enough stormwater from the CSO system, that collection pipes may be able to be downsized providing significant pipe construction cost savings.

Beneficiary: Residential

Reference(s): http://www.portlandonline.com/bes/index.cfm?c=43081

TX: Austin

Incentive Type: Rebate/Installation Financing

Program Name: Rain Barrel Sales Program

Description: City of Austin water customers may purchase rain barrels from Austin Water Conservation at a discounted price of $61 per barrel.

Beneficiary: Residential

Reference(s): http://www.ci.austin.tx.us/watercon/rbsales.htm

TX: Austin

Incentive Type: Rebate/Installation Financing

Program Name: Rainwater Harvesting Rebates

Description: The City offers a rebate of up to $500 on the cost of installing a larger capacity rainwater harvesting system (over 300 gallons). Rainwater harvesting systems must collect a minimum of 300 gallons. Life expectancy of the system should be a minimum of 20 years. Applicants must agree to open the site to the public if so requested.

Beneficiary: Applicants must receive 100% of their water from the Austin Water Utility or qualifying municipal utility.

Reference(s): Contact: Department of Water Quality at (512) 974-2550 or visit http://www.ci.austin.tx.us/watercon/rwrebates.htm

WA: Seattle

Incentive Type: Rebate/Installation Financing

Program Name: Seattle Rain Barrels

Description: The Seattle Conservation Corps (SSC), a work-training program for homeless adults, and Seattle Public Utilities (SPU) partner to offer SPU customers discounted rain barrels. SSC piloted the program in 2003, selling 1,500 barrels in just a few hours. The Corps subsequently formed a partnership with SPU to establish an ongoing program, which SPU advertises on its Website. The Corps assembles the rain barrels out of shipping containers (usually for olives or peppers from the Mediterranean) sent to them from packing plants around the U.S. and handles all sales. SPU and SCC handle marketing jointly. The current program offers homeowners in SPU's direct service area the opportunity to buy rain barrels at a cost of $59, about $20 less than barrels of comparable quality sold elsewhere. SCC sells the rain barrels for $69, but SPU customers pay $59 and SPU pays $10 as a subsidy for their customers, to encourage participation by keeping customer costs low. Residents call the SCC to order a barrel and either pick up the barrel(s) at a central location, or can have barrels delivered for an additional fee of $15 for the first barrel, and $5 for each additional barrel. SPU offers discounts on barrel purchases and delivery to low-income families. There is no limit on barrel purchases. The program sold approximately 5,000 barrels in 2005, and about 1,500 in 2006.

Beneficiary: Residents

Reference(s): http://www.seattle.gov/util/Services/Yard/Natural_Lawn_&_Garden_Care/BuyCompostBinsRainBarrels/index.htm

Awards/Recognition

IL: Chicago

Incentive Type: Awards and Recognition Programs

Program Name: Mayor Daley's GreenWorks Awards

Description: Mayor Daley's GreenWorks Awards promote a green city by recognizing businesses, non-profits, schools and government agencies whose buildings, practices, and products or services are environmentally responsible. The GreenWorks Awards are presented annually.

Beneficiary: Projects/buildings must be located in the city of Chicago. The award program is open to businesses, non-profits, schools, and government agencies.

Reference(s): http://www.cityofchicago.org/city/webportal/portalDeptCategoryAction.do?BV_SessionID=@@@@1791384520.1225235751@@@@&BV_EngineID=cccdadefieleijdcefecelldffhdfhk.0&deptCategoryOID=-536895154&contentType=COC_EDITORIAL&topChannelName=Dept&entityName=Environment&deptMainCategoryOID=-536887204

OR: Portland

Incentive Type: Awards and Recognition Programs

Program Name: Businesses for an Environmentally Sustainable Tomorrow (BEST)

Description: Since 1993, the BEST Awards have been presented annually to Portland area companies demonstrating excellence in business practices that promote economic growth and environmental benefits. The BEST Awards recognize businesses with significant and unique achievements in the following categories: (1) BEST Practices for Sustainability for Small, Medium and Large companies, (2) Sustainable Products or Services, (3) Innovations in Resource Conservation, (4) Green Building, and (4) Sustainable Food Systems.

Beneficiary: Local businesses

Reference(s): http://www.portlandonline.com/OSD/index.cfm?c=41891

OR: Portland

Incentive Type: Awards/Recognition

Program Name: Eco-logical Business Program

Description: A certification and recognition program to highlight environmentally friendly businesses. After a certification visit, participating shops receive a shop display package, press coverage, listing on the program web site, and promotion on the radio and at public events.

Beneficiary: Commercial

Reference(s): http://www.ecobiz.org/

PA: Philadelphia

Incentive Type: Awards and Recognition Programs

Program Name: Philadelphia Sustainability Awards

Description: Projects are granted recognition awards for sustainability in a variety of categories, including water efficiency/conservation, pollution prevention,

landscaping/greening, habitat protection, best management practices, stormwater management, and green building elements, among many others.

Beneficiary: Businesses, non-profits, community organizations, individuals, schools and government agencies in the Greater Philadelphia region

Reference(s): http://www.philadelphiasustainabilityawards.org/

PA: Philadelphia

Incentive Type: Awards and Recognition Programs

Program Name: Stormwater BMP Recognition Program

Description: The BMP Recognition Program recognizes innovative stormwater Best Management Practices (BMPs) in the southeastern region of Pennsylvania. The program is looking for projects such as rain gardens, green roofs, infiltration swales, and treatment wetlands. Those who are recognized will receive a certificate and/or award from top officials of the Department of Environmental Protection (DEP) and the City of Philadelphia; recognition at an awards ceremony; and region-wide media exposure, such as in partner newsletters and the PWD newsletter, which reaches over half a million households and businesses in the region, in addition to acknowledgment on the PWD website.

Beneficiary: Landscape architects, engineers, developers, university students, neighborhood residents and others

Reference(s): http://www.stormwaterbmp.org/stormwaterbmp/

WA: King County

Incentive Type: Awards/Recognition

Program Name: Businesses for Clean Water

Description: The Businesses for Clean Water program recognizes companies that successfully prevent storm water pollution at their sites.

Beneficiary: Commercial

Reference(s): http://www.envirostars.com/news/articles/detail.cfm?Article=3andCategory=4andList=30,16,26,25,9,3

WA: King County

Incentive Type: Awards and Recognition Programs

Program Name: Greening In Place Awards

Description: Annual awards that honor the planning and design teams of public facilities that reflect environmental sustainability.

Beneficiary: Planning and design teams

Reference(s): http://www.estormwater.com/King-County-Wash-Presents-Greening-in-Place-Awards-newsPiece16766