



## Regulatory and Incentive Systems

Municipalities have implemented a wide range of “carrot” (incentive) and “stick” (regulatory requirement) approaches to encourage implementation of smart and sustainable water management practices. A community’s decision to choose a regulatory approach, use incentives, or combine both approaches will be based on its existing procedures and requirements governing new development and redevelopment, as well as its general philosophy toward working with developers. While regulatory requirements for certain types of stormwater management might be a straightforward way to achieve a community’s goals, incentives can be used to garner support and good will from the development community because they offer tangible benefits that positively impact bottom lines. A combination of requirements and incentives can ensure that minimum expectations for stormwater BMPs are clearly stated while offering rewards for developers who want go the extra mile.

### What kind of regulatory approaches are possible?

Communities typically have development codes, and many have ordinances that deal specifically with stormwater management, particularly with regards to National Pollutant Discharge Elimination System Phase I and Phase II Stormwater Rules. Communities can modify these requirements to include more detailed design standards that go beyond sizing criteria. For example, a community can require developers to consider a set of “desirable” BMPs first or to incorporate specific “desirable” features.

To bring about such changes, municipal planners can work with stakeholders such as planning commissions, citizen groups, city councils, and other decision-making bodies to identify what “desirable” means for their community. In some areas, this may be a requirement to install vegetated BMPs, favoring a bioengineered approach over hardened structures wherever possible. Other communities might favor BMPs that have a recreational or public use feature. Communities in arid regions might emphasize xeriscaping and minimal maintenance features. Other communities might require the use of native plants. The use of “green” BMPs can be required for all projects unless developers can show that such an approach is not feasible because of site constraints or engineering limitations, in which case they would be granted a waiver (both [Portland](#) and [Philadelphia](#) have waiver options, though they are used infrequently).

Because developers will be required to comply with new design standards once they are in place, communities should make every effort to assist their designers and engineers with the transition to new standards, offering timely feedback on plan submissions and possibly waiving fees for resubmissions. As an incentive and where possible, plan review departments can offer accelerated reviews for plans that include green technology.

To help fund innovative projects, communities can direct developers, businesses, and individuals to funding that is available for “green” projects or demonstrations of new technologies and designs that would not be available for standard engineering projects.

## What might stand in the way of establishing requirements for greener infrastructure?

One possible stumbling block is that existing development codes could prohibit the use of some low impact development or green infrastructure techniques, such as removing curbs and gutters, disconnecting roof downspouts, reducing impervious surfaces with narrower streets and shorter setbacks, using porous pavement, etc. Municipalities should perform a detailed evaluation of all ordinances, zoning codes, plumbing and drainage codes, and other relevant standards to identify incompatibilities with a greener stormwater management approach. The Center for Watershed Protection developed a “Code and Ordinance Worksheet” to perform just such an evaluation in [Better Site Design: A Handbook for Changing Development Rules in Your Community](#).

Communities should be wary of setting the bar too low when specifying standards. The “least common denominator” should still meet the community’s goals for BMP success and acceptance and offer enough flexibility to allow designers to innovate and try out new approaches. Establishing minimum performance standards in ordinances and code language while maintaining flexibility in terms of design and function is one approach to ensuring that new requirements will encourage innovation and not limit creativity.

## What incentives can communities offer to encourage BMP implementation?

### ***Speed development reviews***

One of the myths surrounding stormwater management is that if a developer submits a plan that has something “new” or “innovative,” the project will be held up in the development review stage, delaying construction and costing the developer money. Communities can assure developers that this will not be the case by guaranteeing timely plan reviews for projects that include innovative practices, or they can go a step further by offering accelerated reviews as an incentive to choose innovative BMPs. Chicago’s Green permit program is an example of how municipalities can offer accelerated review as an incentive for “going green.” As the saying goes, “time is money,” particularly in the construction industry where delays and setbacks have a significant effect on the bottom line.

Communities can also provide easy-to-use technical guidance manuals to engineers and designers that ease calculations and provide examples of how sizing and performance information should be presented in plan submittals. This type of guidance will encourage consistency among submittals and help to ease the burden of plan reviewers in checking calculations.

### ***Offer financial incentives***

Communities can offer a variety of financial incentives to encourage the use of green technology. For example, a community can reduce or waive fees for stormwater management if a stormwater utility is in place. Reductions can be based on a flat rate or can be proportional to stormwater management performance. If a community does not have a stormwater utility, it can evaluate the possibility of reducing other fees it charges for new developments, such as plan review fees, impact fees, etc. Tax incentives can also be offered.

### ***Offer density bonuses***

Oftentimes the use of green infrastructure in lieu of traditional stormwater controls results in enhanced stormwater management performance and provides land savings that free up space for additional development density. Communities should be open to flexible site plans that may result in higher densities if a developer’s integrated stormwater controls perform as well as or better than if the site were developed using standard densities and traditional stormwater controls. In highly urban areas where infill development is common, increasing density in urban centers can be beneficial to the community and will utilize existing infrastructure rather than having that density shifted to suburban areas, which contributes

to sprawl. The additional density will generate more tax revenue and bring more business to neighborhoods that are well-equipped to handle it. Both [Chicago](#) and [Portland](#) offer a density bonus to developers who install ecoroofs.

### ***Offer recognition for innovation***

Communities can establish certification or recognition programs to provide “good press” for developers, property owners, or business owners who exceed minimum performance requirements, develop innovative solutions to stormwater or other environmental challenges, and/or incorporate added values and benefits to their projects. For example, a community could promote as “green” those projects that meet [Leadership in Energy and Environmental Design \(LEED\)](#) or [LEED for Neighborhood Development](#) green building standards, or they could develop their own criteria based on local priorities.

Some achievements meriting recognition include:

- ♦ Designing or installing an innovative stormwater BMP or system.
- ♦ Restoring predevelopment hydrology to a redevelopment site.
- ♦ Creating or enhancing open space for recreation.
- ♦ Providing community amenities (playgrounds, a civic center, etc.).

Recognition could come in the form of press releases, listings in a “green business” directory, or a certificate, sticker, or plaque to be posted at a business location. An awards ceremony (with associated press coverage) can be held periodically to recognize green business leaders. [Chicago’s GreenWorks](#) program showcases projects with innovative site and building design, for example.

### ***Set an example through demonstration projects***

In general, local government investment and leadership in good BMP implementation has led to greater stormwater program success. One type of investment is to implement demonstration projects showing that certain technologies and designs can be successful in local conditions and will meet regulatory approval. Active municipal leadership in BMP implementation serves to set the bar higher for private industry by refuting misconceptions that green technology is risky and ineffective.

### **External links:**

Better Site Design: A Handbook for Changing Development Rules in Your Community:

<http://www.cwp.org/PublicationStore/bsd.htm>

Leadership in Energy and Environmental Design (LEED): <http://www.usgbc.org/leed/>

LEED for Neighborhood Development: <http://www.usgbc.org/leed/nd>

### **You may also be interested in:**

[When Green Infrastructure Makes Sense  
Models for Governance, Management, Maintenance and Financing  
What Makes a Project Successful?](#)

### **Case studies cited above:**

- [Chicago, IL](#)
- [Philadelphia, PA](#)
- [Portland, OR](#)