

Get Flood Insurance Discounts with Low Impact Development, Open Space Protection Plans, and Stormwater Management Regulations

EPA promotes the use of Low Impact Development (LID) and Green Infrastructure (GI) as a stormwater management approach that provides many community benefits and that can supplement flood protection. LID/GI projects may allow a community to claim points under the Community Rating System (CRS) developed by the Federal Emergency Management Agency (FEMA).

FEMA's NFIP Program Rewards Protection of Streams

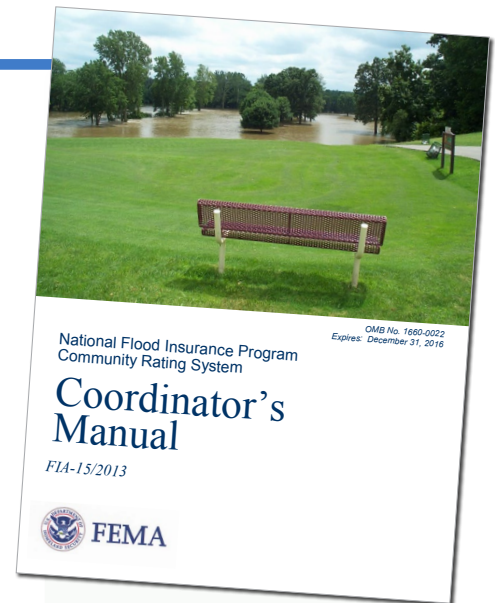
The National Flood Insurance Program (NFIP), administered by FEMA, offers insurance to homeowners, renters, and business owners in participating communities that adopt ordinances compliant with federal requirements to reduce flood risk.

The CRS is an incentive program to encourage floodplain management that exceeds the minimum requirements. A point-based structure determines a community's class rating, which results in a discount for policy holders. For every 500 points earned, owners of structures in the 100-year floodplain receive a discount of 5%. Accrual of additional points can reduce rates up to 45%. Thus, the CRS rewards communities that enhance their resilience to flooding. LID/GI ultimately protect streams and floodplains and EPA encourages communities to take advantage of the discounts available from FEMA for these types of projects.

CRS Encourages Natural Resource Protection

In the past, the main goal to manage stormwater was to drain it as quickly as possible. With the advent of LID/GI, rainwater is treated as a resource and not as a waste product. This approach reduces the impact of development on receiving streams and on increasing flood risk. LID/GI uses natural features and engineered controls to reduce runoff volume through infiltration, evapotranspiration, or rainwater harvesting. Also, stream buffer plantings slow down and infiltrate runoff, keeping streambanks stable. Healthy vegetation, groundwater recharge, and wildlife habitat are side benefits that create more livable communities. In addition to flood protection measures, the CRS also rewards the water quality and stream protection benefits of LID/GI and other measures that protect floodplains, streambanks, and natural areas that absorb runoff.

Watershed plans that integrate LID/GI approaches can help reduce flood risk for community residents and for others downstream, and thereby may lower insurance rates. Your local floodplain manager, stormwater program officer, or elected community officials can start the process of requesting these insurance premium discounts through participation in the CRS program. The following table summarizes LID/GI-related activities that can earn these discounts.



Activities that earn CRS credits

Communities that protect streams should consider implementing these creditable activities:

- Adopting erosion and sediment control regulations for land disturbed during development.
- Establishing a library of flood risk data, which can contain LID and green space information.
- Maintaining a flood protection website that can include relevant LID/GI information.
- Prohibiting fill in the 100-year floodplain.
- Adopting a building code that contains LID/GI requirements and practices.
- Using dedicated funding for new or retrofit LID/GI projects in a capital improvement plan.
- Conducting outreach that may include LID/GI and stream protection information.
- Prohibiting dumping of yard waste and trash in streams and enforcing compliance.

CRS activity (Activity number)	Description of some of the elements in the activity
Open space preservation (422 a, c, and e)	This activity prevents flood damage by keeping floodprone areas undeveloped and by protecting and enhancing natural functions of floodplains. A green infrastructure plan involving open space, wetlands, floodplains, and woodlands can earn points. Additional credit is available for support of natural floodplain functions within the open space; for example, natural flood control, water quality protection, and habitat preservation. The area must remain as open space in perpetuity. Regulatory instruments to preserve the land include conservation subdivision design, cluster development, transfer of development rights, and planned unit development. The maximum credit is 1,450 points for open space and 350 for protection of natural floodplain functions ¹ .
Natural channel and shoreline protection (422 g)	Preservation or restoration of stream, riverine, and coastal shorelines to allow natural processes, such as channel meandering and natural floodwater storage, earns up to 120 points. Leveed, concrete-lined, and rip rap sections are not eligible, but programs restoring floodplains are credited. The credit is based on the fraction of protected shoreline in the community ¹ .
Stormwater management regulation (452 a, d)	Credit is given to development regulations that, on an individual site basis, require the peak flows and runoff volumes after development to be no greater than before development. This activity earns a maximum of 380 points ¹ . When the volume of all runoff is controlled, 50% extra credit can be claimed. Up to 25 points can be obtained by adopting LID/GI for all development. In addition, 20 points can be earned for adopting stormwater management regulations that specify measures to protect water quality.
Watershed master plan (452 b)	Up to 315 points ¹ can be earned if a community adopts a watershed master plan that regulates development on the basis of the combined effects of existing and future development. The plan must call for management of both future peak flow and volume so that they do not increase over values for existing conditions. The plan and regulations must be re-evaluated every five years. Full credit can be claimed if the plan identifies existing wetlands or other natural runoff attenuation features, prohibits modification of natural channels, requires the use of soft techniques for channel improvements rather than riprap or concrete, and if the community has a dedicated source of funding to implement the recommendations in the plan.
Natural floodplain functions plan (512 c)	Adopting a plan that protects one or more natural functions within the community's floodplain can earn up to 100 points ¹ . Examples include habitat conservation plans that protect rare, threatened, or endangered species; a "green infrastructure" plan of open-space corridors or connected wetlands, woodlands, floodplains, and other areas that support native species and maintain ecological processes; or a community plan that inventories ecological attributes of the watershed or floodplain and recommends enforceable actions for protection. The plan must be updated every 10 years.

¹ It is important to note that points for many activities are often reduced based on an impact adjustment reflecting the activity's influence on the community and watershed. Factors may include the number of structures affected, geographic reach, construction limitations, the affected fraction of the floodplain, or other actions impacting the extent of the activity.

Resources

- National Flood Insurance Program Community Rating System: **Coordinator's Manual, FIA15/2013**
- CRS Resources: <http://www.crsresources.org>
- Low Impact Development: <http://water.epa.gov/polwaste/green/index.cfm>
- Green Infrastructure: http://water.epa.gov/infrastructure/greeninfrastructure/gi_what.cfm

Contact information:

Local governments participating in the NFIP would decide whether to also participate in the Community Rating System program to obtain discounts for policy holders such as homeowners. Contact your local government officials.