

Action

Use green infrastructure and other nature-based approaches (e.g., floodplain restoration) to reduce the vulnerability of buildings to flooding, with particular focus on critical facilities. (BE 5- 5)

Introduction

Reducing building vulnerability to flooding is an important Building & Energy action for climate resilience. It supports the Climate Action Plan's strategy to increase the resilience of community-wide building stock to the impacts of climate change.

Cost

Staff would have to estimate time commitment or cost for contracted services. There are flood hazard mitigation funds from the Federal and State governments. The city or consultant could work with landowners to qualify for grants and loans.

Work Sequence

- A. Identify critical facilities that could be at risk.
- B. Rank facilities by risk and importance.
- C. Research case studies of green infrastructure and other nature-based solutions.
- D. Select suitable solutions for top-ranking facilities.
- E. Identify potential funding sources.

Lead

Stormwater Utility

Support

FEMA, WI DNR, engineering firms, Fire Dept., Planning Dept,

Complementary Actions

- I. Require and/or incentivize the use of green infrastructure such as bioswales, permeable pavement, rain gardens, rainwater catchment areas, and other pervious surface strategies to reduce flood risk and minimize sediment entry into creeks from trails and roads. (BE 5-5)
- II. Increase the use of permeable pavement and other green infrastructure (e.g., swales, rain gardens, urban tree canopies) to reduce overland flow and increase detention and infiltration that address stormwater before it enters the sewer system and prioritize the use of these strategies in areas at higher risk of flooding. (W 3-1)
- III. Establish incentives to encourage the use of green infrastructure and greenspace by property owners, while ensuring that these policies do not conflict with efforts to increase the city's density. (GS 1-11)

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- IV. Promote and require urban design and redevelopment approaches that incorporate natural systems and green infrastructure into site improvements, rights of way, green corridors, and other infrastructure facilities. (GS 3-2)