

# NATURAL INFRASTRUCTURE SOLUTIONS TO FLOODING

Natural infrastructure and land-use change can help protect Iowa communities from flooding and improve water quality



## WHAT IS NATURAL INFRASTRUCTURE?

Natural infrastructure is the use of natural features such as wetlands and floodplains to promote, restore, or emulate natural ecological functions, such as floodwater control and water quality improvement.

## BUILDING CLIMATE CHANGE RESILIENCY

Land-use change and natural infrastructure solutions can help us mitigate and adapt to climate change, which increases the risk of flooding by rising sea levels and increases in extreme weather conditions such as precipitation. Natural infrastructure can protect communities from the impact of flooding and reduce water pollution. Protecting and restoring Iowa's natural landscapes, such as prairies and wetlands, also provides wildlife habitat and recreation opportunities.

## LIMITING FLOOD HARM

Flooding increases water pollution, harms communities, has a deep economic cost and more. Natural infrastructure solutions hold water in a safe area and reduce floodwater downstream.



## STRUCTURES BENEFICIAL FOR IOWANS

Not only can these natural structures help reduce the severity of floods, but they also improve air, water, and land quality.

- Flood repairs and damages cost Iowans over \$480 million in home damages in 2019. The current way of mitigating flooding isn't cost-effective or resilient to climate change<sup>1</sup>. Implementing natural infrastructure in flood-prone areas is a cost-effective way to reduce flood impact and protect communities.
- Wetlands assist in removing pollutants from surface water and studies find that prairie restoration can reduce nitrate concentrations, improving water quality.<sup>2</sup>

## NEXT STEPS?

take action to advocate for natural infrastructure.

There are a few actions Iowans can take to support this approach and their community.



1. Contact your legislator and ask for increased funding and support for communities and watersheds. Check out: <https://iaenvironment.org/legislative>
2. Support organizations such as the Iowa Environmental Council that are calling for these changes in land use to help mitigate climate change effects.
3. Help or volunteer on protection and restoration projects of Iowa's natural landscapes. Get involved with watershed management authorities or watershed coordinators.
4. Write an op-ed or editorial in your local paper supporting these steps

### RESOURCES:

1. <https://apnews.com/article/cc5a796b2eab4784900e853f1ba8d854>
2. <https://www.ars.usda.gov/news-events/news/research-news/2012/prairie-restoration-also-helps-restore-water-quality/>