

# The Iowa Watershed Approach

## Perennial Cover

### What is perennial cover?

Perennial cover includes establishing and maintaining permanent vegetation, such as native or introduced grasses, legumes and forbs. The enhanced root system increases water infiltration, reduces and slows surface runoff, and **decreases the downstream flooding risk by reducing the streamflow by 40%**. Perennial cover also **prevents soil erosion and sedimentation**. Aboveground biomass and root production builds soil organic matter and **improves soil health**. Permanent vegetation stabilizes excess nutrients, **decreasing the nitrate-nitrogen load by 85%** and the **phosphorus load by 75%**. The vegetation provides a food source and protective cover for wildlife as well as habitat for pollinator species and beneficial insects. In some cases, periodic removal, or harvest, of high value trees, herbs, nuts and fruit may be permitted.

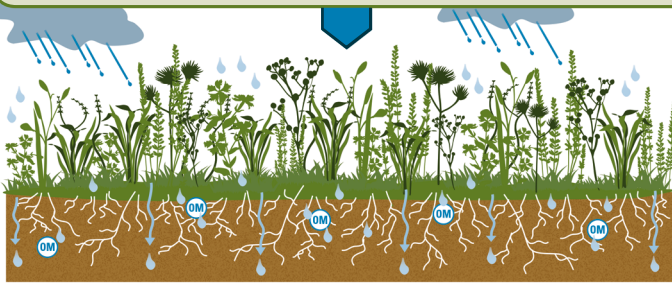




## Perennial Cover and Flood Reduction

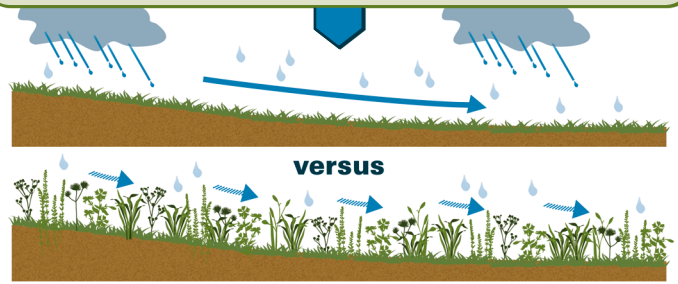
### THEIR IMPACT

1. Reduces overland flow and streamflow by 40%.



An enhanced root system, greater soil organic matter and increased vegetative water use cause more water infiltration, better soil water holding capacity and less surface ponding.

2. Reduces runoff rate.

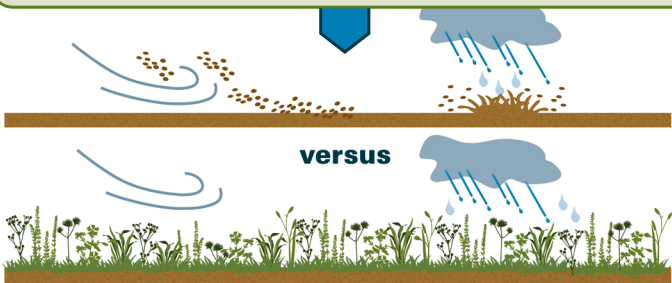


Vegetative cover obstructs and slows surface runoff.

## Perennial Cover and Water Quality

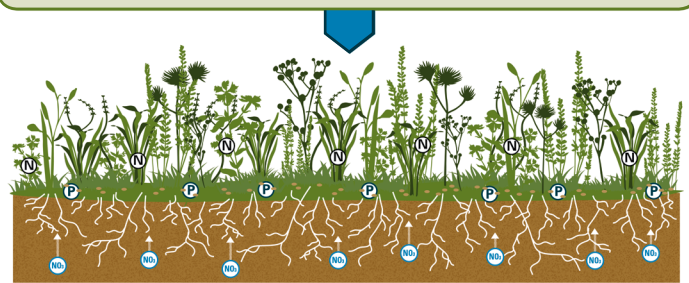
### THEIR IMPACT

1. Prevents soil erosion and downstream sedimentation.



Soil detachment by water and wind is prevented with reduced surface runoff and increased vegetative cover. This also reduces concentrated flow and gully erosion.

2. Reduces nitrate-N and phosphorus loads by 85% and 75%.



Permanent vegetation converts excess nutrients to stable organic forms within biomass. Additionally, phosphorus-laden sediment remains in the field with reduced erosion.

## Financial Incentives of Perennial Cover

The **Iowa Watershed Approach** provides **90% cost share** for perennial cover. See your Soil and Water Conservation District or Natural Resources Conservation Service for other cost share opportunities.



## Additional Benefits of Perennial Cover

- ▶ Removes carbon dioxide, a greenhouse gas, from the air and stores it as carbon in the plants and soil.
- ▶ Greatly improves soil health.
- ▶ Enhances the biodiversity of the landscape.
- ▶ Provides a food source and nesting, winter and brood cover for wildlife.
- ▶ Creates habitat for pollinator species and beneficial organisms and insects.
- ▶ Periodic removal, or harvest, of high value trees, herbs, nuts and fruit may be permitted.
- ▶ Provides competition for noxious weeds.
- ▶ Can serve as a snow trap or barrier.

For more information on the Iowa Watershed Approach visit: [www.iowawatershedapproach.org](http://www.iowawatershedapproach.org)

[www.extension.iastate.edu/waterquality](http://www.extension.iastate.edu/waterquality)

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This project is supported by the Iowa Nutrient Research Center.

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