

# The Iowa Watershed Approach

## Floodplain Restoration

### What is floodplain restoration?

Floodplain restoration involves reconnecting a river or stream to its natural floodplain, giving rivers more room to safely accommodate flood water. Floodplains spread out and slow down flood water and surface runoff, **reducing streamflow by 20%**, recharging groundwater, and **reducing the flooding risk to riverside and downstream communities**. Restored floodplains act as filters for nutrients and other pollutants and **reduce the sediment load** by decreasing the erosion potential of flood water.

Floodplains provide recreational space and habitat for fish and birds. Protecting regularly inundated areas reduces the costs associated with flooding, such as loss of life, structures and crops, as well as the costs to maintain flood control infrastructure.

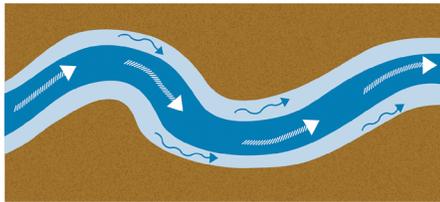


## Floodplain Restoration and Flood Reduction

### THEIR IMPACT

1. Provides floodwater storage.

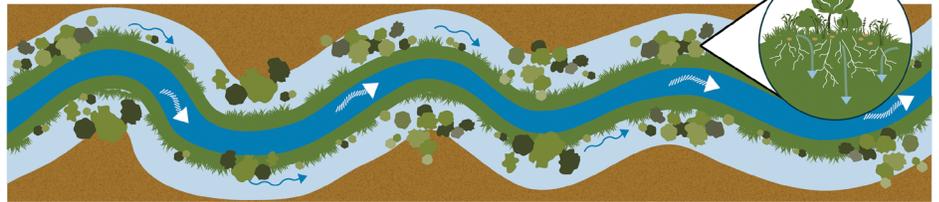
Before



Restoring the natural floodplain gives flood water a place to spread out and slow down, temporarily detaining flood water.

2. Reduces peak flow rate.

After



As floodplains convey and detain flood water, they slow the velocity of the river and delay the timing of downstream flood peaks.

3. Reduces the streamflow by 20%.

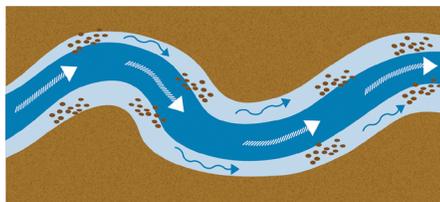
Floodplains allow flood water and surface runoff to infiltrate and recharge groundwater sources.

## Floodplain Restoration and Water Quality

### THEIR IMPACT

1. Prevents erosion.

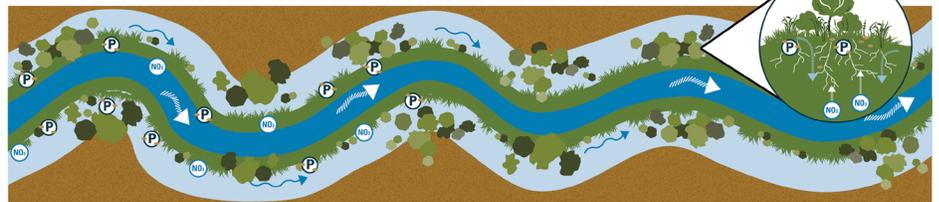
Before



By slowing the velocity of the river and the rate of surface runoff, erosive forces are reduced on the river bed and banks and over the landscape.

2. Reduces the sediment load.

After



Sediment carried in surface runoff or flood water settles out when detained in a floodplain.

Filtration and biological processes filter out nutrients and pathogens from flood water.

## Financial Incentives of Floodplain Restoration

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

## Additional Benefits of Floodplain Restoration

- ▶ Conserves topsoil and agricultural land by preventing scouring during flood events.
- ▶ Provide wildlife benefits, such as:
  - Habitat and spawning ground for fish.
  - Critical rest and foraging area for migratory birds and waterfowl.
- ▶ Recreational opportunities within the floodplain's typically flat and open space.
- ▶ Seasonable wetland habitat during wet periods of the year.
- ▶ Flooding controls overgrowth of invasive species, increasing biodiversity.
- ▶ Floodplain soils have high fertility by retaining nutrients filtered out of flood water.
- ▶ Reduces the cost of flooding by taking land at risk of flooding out of production.
- ▶ Reduces the pressure on flood protection infrastructure, such as levees and dams.

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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