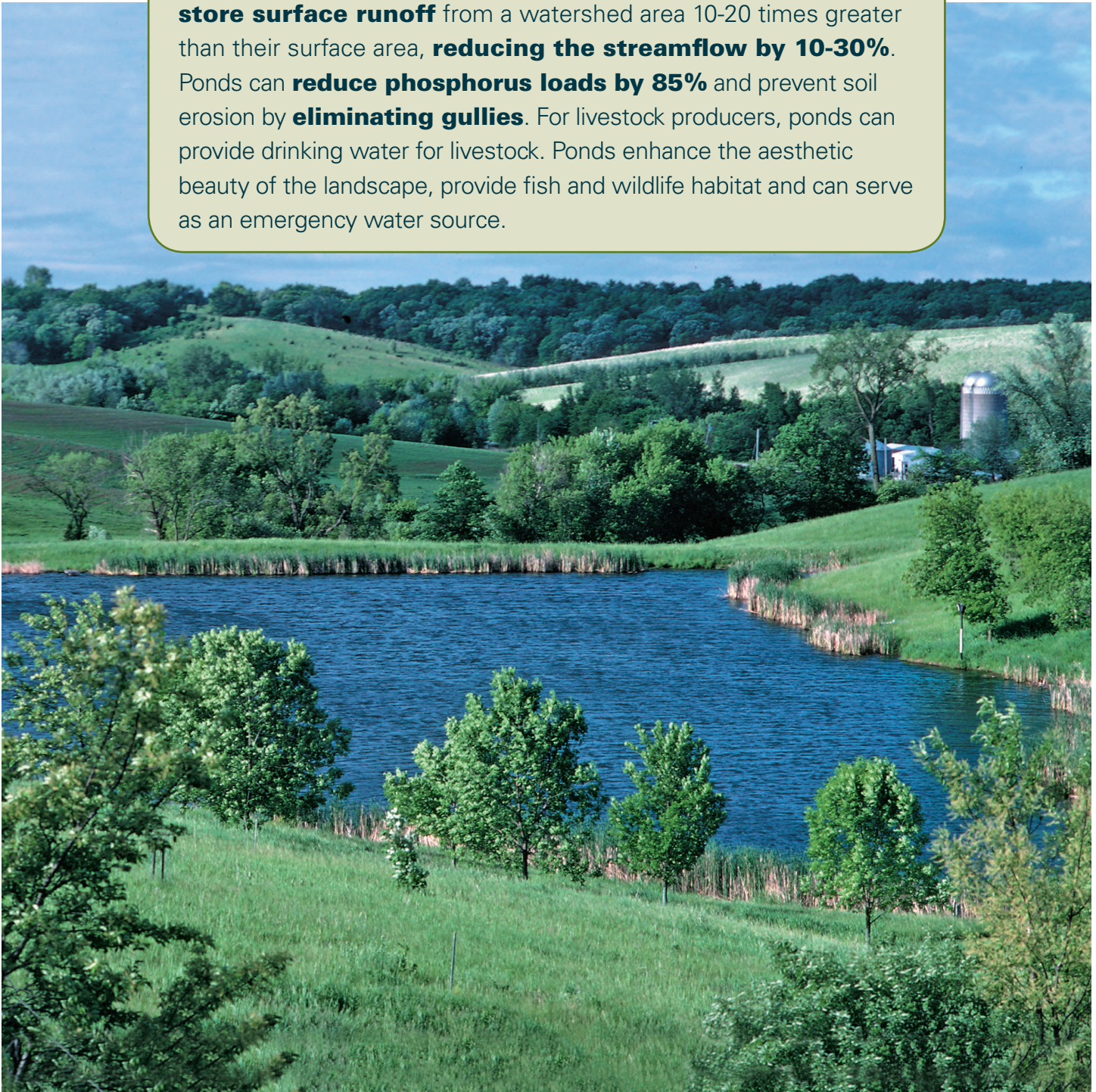


# The Iowa Watershed Approach

## Farm Ponds

### What is a farm pond?

Farm ponds are pools of water that are constructed using either a dam (embankment pond) or a pit (excavation pond). They **collect and store surface runoff** from a watershed area 10-20 times greater than their surface area, **reducing the streamflow by 10-30%**. Ponds can **reduce phosphorus loads by 85%** and prevent soil erosion by **eliminating gullies**. For livestock producers, ponds can provide drinking water for livestock. Ponds enhance the aesthetic beauty of the landscape, provide fish and wildlife habitat and can serve as an emergency water source.



## Farm Ponds and Flood Reduction

### THEIR IMPACT

1. Provides floodwater storage.



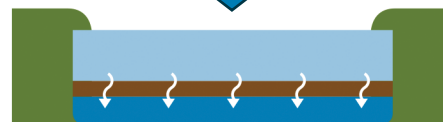
Ponds intercept precipitation runoff and provide temporary storage.

2. Reduces peak streamflow after a storm event by 10-30%.



With temporary storage provided in ponds, the volume and timing of downstream flood peaks are reduced.

3. Promotes groundwater recharge.



Seepage through the bottom of the pond converts surface water into groundwater.

## Farm Ponds and Water Quality

### THEIR IMPACT

1. Sediment is deposited into ponds before it can be carried to streams and lakes.



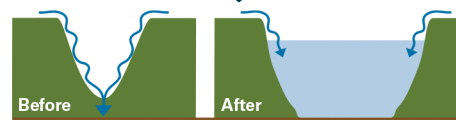
Sediment falls out of runoff when the water is slowed within the pond.

2. 85% phosphorus load reduction.

85% P ↓

Phosphorus carried with sediment is deposited and stored within the pond as runoff is intercepted.

3. Reduces gully erosion soil loss.



Reduced runoff prevents gully formation and subsequent soil erosion.

## Financial Incentives of Farm Ponds

The **Iowa Watershed Approach** provides **90% cost share** for installing farm ponds. See your Soil and Water Conservation District of Natural Resources Conservation Service for other cost share opportunities.

- ▶ The Farm Pond Program through Iowa Department Natural Resources will stock ponds meeting certain criteria for \$25/acre.

## Additional Benefits of Farm Ponds

- ▶ Provides wildlife benefits:
  - Provides habitat fish.
  - Pond buffer vegetation provides cover for wildlife and offers a location to incorporate pollinator species.
  - Increases populations of turtles and muskrat that eat pond plants.
- ▶ Can provide a water source for livestock.
- ▶ Improves the aesthetic beauty of the landscape and offers recreation opportunities.
- ▶ Water stored in ponds can be used as an emergency water supply.

For more information on the Iowa Watershed Approach visit: <http://www.iihr.uiowa.edu/iwa/>

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

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