



STORMWATER MAZE

Building a Stormwater Wetland

Deeper Pools

Create habitat, allows dirt to settle and cools the water

Forebays

Designed for the easy removal of Sediment.

Microtopography

Increases the distance water has to travel. This "stormwater maze" forces water to weave slowly through the wetland promoting pollutant removal.

Outlet

The Wetland is intentionally designed to release water slowly to improve downstream environmental conditions.

Varying depths

Varying depths of water increase plant diversity, promote growth and removal of pollutants.

This Wetland Helps Achieve These Four Goals:

1

Slows Down Stormwater

Instead of rapidly flowing directly into river, stormwater from Webster City now slowly flows through the wetland before reaching the Boone River providing temporary water storage, habitat and other benefits.

2

Settling Pollutants

The wetland removes suspended solids, hydrocarbons, and other pollutants/trash associated with urban runoff.

3

Uptake of Pollutants

Plants present in the wetland have special chemical and biological functions that can help remove nutrients such as phosphorus and nitrate.

4

Supports Wildlife and Habitat

Wetlands support a wide variety of plant and animal life. Typical wetland species have sturdy stems, leaves, and flowers that provide a great habitat for birds, animals, and invertebrates.

What animals and plants can you identify/find?



Dragonfly



Crayfish



Monarch



Heron



Frog



Buttonbush
(Cephalanthus occidentalis)



Water Plantain
(Alisma subcordatum)



Softstem Bulrush
(Schoenoplectus tabernaemontani)



Sweet flag (Acorus calamus)



Cattails (Typha sp.)

Plant illustrations drawn by Mark Mueller. Photographs provided by Impact 7G. Cross section provided by the Iowa Department of Agriculture and Land Stewardship