

## **Buffy the Nutrient Slayer**

This hero is based on a <u>buffer strip</u>. These areas are normally planted in farm fields near waterways and may contain native prairie grasses or other types of grasses. The purpose of a buffer strip is to slow water that runs off a field to utilize the root system. As the water is slowed down, the roots are provided time to absorb varying nutrients (such as phosphorus and nitrates) that are in the field soil, preventing these nutrients from entering waterways. Buffer strips also help to hold soil in place to prevent erosion of topsoil, which can cause waterways to decrease in light transparency or dam up waterways if too much soil is caught in one area.



### Nectravore

This hero is based on a <u>pollinator garden</u>. Pollinators such as bees, moths, birds, and other animals are important to our food supply. We depend on pollinators for many of our fruits and vegetables and honey. If you plant a pollinator garden, new habitat is created and animals that help with pollination are encouraged to fulfill their niche. Pollinator gardens also help water quality by slowing down the flow of water, covering soil to prevent erosion, and providing educational opportunities.



## **Cropidash Radish**

This hero is based on <u>cover crops</u>. The use of this conservation practice allows farmers to cover their land in the winter which aids in storing nutrients while increasing biomatter in their fields. By planting a crop in the off-season, farmers reduce the erosion of topsoil and prevent sediment in the waterways. Cover crops such as winter radishes are known as trap crops, meaning they absorb and store nutrients which reduces the risk of these nutrients leaching or running off into water.



#### Phoenixflare

This hero is based on controlled burns which help with <u>prairie restoration, grazing</u> areas for livestock, and <u>oil spills</u>. When a controlled burn, or prescribed burn, is used in prairie land, or on rangeland, it provides an opportunity for wanted species to grow while reducing the number of unwanted species. This creates habitats for many species and fresh grass for livestock. Prairie lands are also known to help with decreasing greenhouse gases which are contributors to climate change. Increasing healthy prairies reduces greenhouse gases. Controlled burns also help with the cleanup of oil spills to reduce damage to the environment.



## HydroMax

This hero is based on the need to <u>wash and properly manage</u> aquatic equipment and recreational gear after use. Many organisms live in waterways, and they are always looking for a place to hide. By washing watercrafts and other water equipment, such as swimsuits and flotation devices, before leaving a designated water area, an individual can reduce the spread of aquatic invasive species.



# **Righteous Azoto**

This hero is based on a <u>bioreactor</u>. This conservation farming practice is long-term and happens beneath the surface as water exits a field. Within a bioreactor, there are wood chips and cultures of bacteria. The water that is exiting a field goes through the bioreactor and the bacteria use a process known as denitrification to convert nitrates into di-nitrogen gas, reducing the number of nitrates that enter the water systems.