## PROGRESS TOWARD NUTRIENT REDUCTION STRATEGY GOALS



The lowa Nutrient Reduction Strategy (NRS) is a plan to reduce nutrient pollution in Iowa's water. The plan was adopted by the state in 2013 and provides a framework for reducing pollution using a variety of scenarios to meet reduction goals. The framework includes point sources (e.g. industries, wastewater treatment plants) and nonpoint sources (e.g. agriculture). The NRS is completely voluntary for nonpoint sources. This analysis depicts Scenario 1 as identified in the NRS.

## COVER CROPS

NRS Scenario 1 Goal: 12.6 million acres 2017 Achieved: 760,000 acres WE STILL NEED: 11,840,000 ACRES



At current pace it will take



to reach this goal for cover crops.

## WETLANDS

NRS Scenario 1 Goal: 7.7 million acres treated 2017 Achieved: 104,000 acres treated WE STILL NEED: 7,596,000 ACRES TREATED



At current pace it will take

913 YEARS

to reach this goal for wetlands.

## BIOREACTORS

NRS Scenario 1 Goal: 6 million acres treated 2017 Achieved: 1,250 acres treated WE STILL NEED: 5,998,750 ACRES TREATED



At current pace it will take 31,103 YEARS

to reach this goal for bioreactors.

# NUTRIENT REDUCTION STRATEGY PROGRESS: COVER CROPS





Cover crops are crops planted between cash crop seasons to keep a living cover on the landscape.

NRS Scenario 1 Goal: 12.6 million acres 2017 Achieved: 760,000 acres WE STILL NEED: 11,840,000 ACRES



At current pace it will take

93 YEARS to reach this goal for cover crops.

**Cover Crop Installation Rate Increase** 



#### **Projected Timeline to Reach Scenario 1 Cover Crop Goal**



Source: Annual Progress Reports, Iowa Nutrient Reduction Strategy, 2016-2017 and 2017-2018

# NUTRIENT REDUCTION STRATEGY PROGRESS: WETLANDS





Wetlands improve water quality on tiledrained land. The Iowa Conservation Reserve Enhancement Program (CREP) provides landowner incentives to install wetlands.

#### NRS Scenario 1 Goal: 7.7 million acres treated 2017 Achieved: 104,000 acres treated WE STILL NEED: 7,596,000 ACRES TREATED



At current pace it will take

**913 YEARS** 

to reach this goal for wetlands.



### **New Acres Treated by Wetlands**



The rate of new acres treated each year has slowed since the NRS was adopted in 2013\*.

## **Projected Timeline to Reach Scenario 1 Wetlands Goal**



# NUTRIENT REDUCTION STRATEGY PROGRESS: **BIOREACTORS**



## BIOREACTORS

Tile-drained water is redirected to an underground bed of wood chips where nitrate is removed naturally by microorganisms.

#### NRS Scenario 1 Goal: 6 million acres treated 2017 Achieved: 1,250 acres treated

WE STILL NEED: 5,998,750 ACRES TREATED



At current pace it will take 31,103 YEARS

to reach this goal for bioreactors.



### **New Bioreactors Constructed**



The rate of bioreactor installation is flat.

### **Projected Timeline to Reach Scenario 1 Bioreactor Goal**

