



Rock County Land Conservation Department

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YAHARA RIVER WATERSHED ADAPTIVE MANAGEMENT ROCK COUNTY – 2018 ANNUAL REPORT

- **Best Management Practices Implemented in 2018:**

- 2 Harvestable buffers totaling 13.1 acres were planted to a perennial forage mix consisting of grasses and legumes (not to exceed 50% legumes). The buffers are located along the Yahara River. Modeling (Snap-Plus) determined **144.3 pounds of phosphorus was reduced from entering the river.**
- 11 acres of cropland was planted to perennial forage mix consisting of grasses and legumes (not to exceed 50% legumes). The field is located upland of Badfish Creek. Modeling (Snap-Plus) determined **182.6 pounds of phosphorus was reduced from entering the river.**

- **2018 Planning and Design Activities:**

- 1 Upland Water Basin to collect storm water runoff shall have a 900 feet long Underground Outlet to deliver the collected water to a 60 feet wide by 600 feet long Infiltration Basin for the purpose of infiltrating the water into the soil. The project will **prevent 2,000 feet of gully erosion.** A 30 feet wide harvestable buffer (.2 acre) will surround the Upland Water Basin to filter storm water as it enters the Upland Water Basin. The project will **annually prevent 283 pounds of phosphorus** from entering a tributary of the Yahara River.
- 7 harvestable buffers totaling 36.5 acres were planned and designed to be planted in 2019 and 2020 to perennial forage mixes consisting of introduced grasses and legumes. The legume amount will not exceed 50% of the mix. Modeling (Snap-Plus) has estimated **380.9 pounds of phosphorus will be annually prevented from entering the Yahara River.**
- 52 acres of cropland were planned and designed to be planted in 2019 and 2020 to perennial forage mix consisting of grasses and legumes (not to exceed 50% legumes). The fields are located upland of Badfish Creek and the Yahara River. Modeling (Snap-Plus) estimated **365 pounds of phosphorus will be annually reduced** from entering the river system.

- **Educational Activities in 2018**

- Personal visits to 24 landowners were made for the purpose of informing the landowners about the Rock County Yahara River Watershed Adaptive Management Program. **Seventeen of the landowners showed interest in participating in the program.**

- **Summary of Program Activities to Date (2017-2018)**

- 26.6 acres of harvestable buffers installed.
- 11.1 acres of cropland seeded to perennial forages.
- 321 feet of streambank restoration.
- 921.9 pounds of phosphorus prevented from entering Yahara River.
- Calculated Cost Per Pound of Phosphorus (P) for 15 Year Period for Projects Installed to Date
 - 921.9 pounds P per year X 15 years = 13,828.5 pounds
 - Total cost of projects = \$280,625.00
 - $\$280,625.00 / 13,828.5 \text{ pounds} = \mathbf{\$20.29 \text{ per pound of P reduced}}$