

# 1. Executive Summary

The Redwood River Watershed (RRW) is located in southwestern Minnesota, with land spanning across the counties of Redwood, Yellow Medicine, Lyon, Lincoln, Pipestone, and Murray. Major cities within RRW include Redwood Falls and Marshall. The watershed area is made up of the drainage area of the Redwood River and its tributaries Coon Creek, Three Mile Creek, Clear Creek, and Ramsey Creek.

The RRW is a host to many outdoor recreational activities including swimming, hunting, and fishing through over 8,000 acres of lakes and thousands of miles of streams. Prior to development, the RRW was covered in tallgrass prairies with natural waterways following the Minnesota River. Now, the landscape is predominantly agricultural, featuring productive cropland with vast networks of ground tile and open ditches to assist in supporting agricultural practices across the watershed.

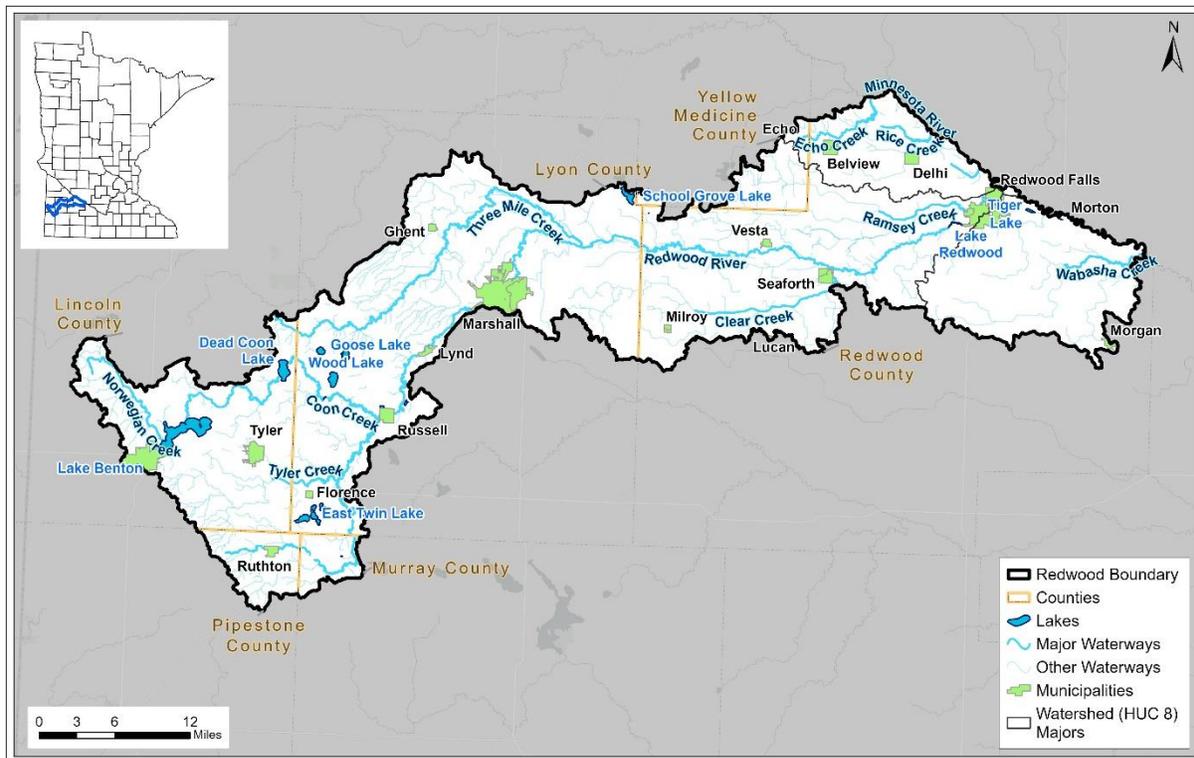


Figure 1-1. RRW Plan Area



Left to Right: Ramsey-Cansayapi Park; Lake Benton; Agricultural Field in Redwood County

# The Plan

This Redwood River Watershed Comprehensive Watershed Management Plan (CWMP) was developed from 2024-2025 through the Minnesota Board of Water and Soil Resources (BWSR) One Watershed, One Plan (1W1P) program. 1W1P was created to transition water planning in Minnesota to be along watershed boundaries rather than jurisdictional and political ones. This CWMP creates a guiding framework that can be used by its partnering Local Government Units (LGUs) to implement actions and meet shared goals for managing water and natural resources.

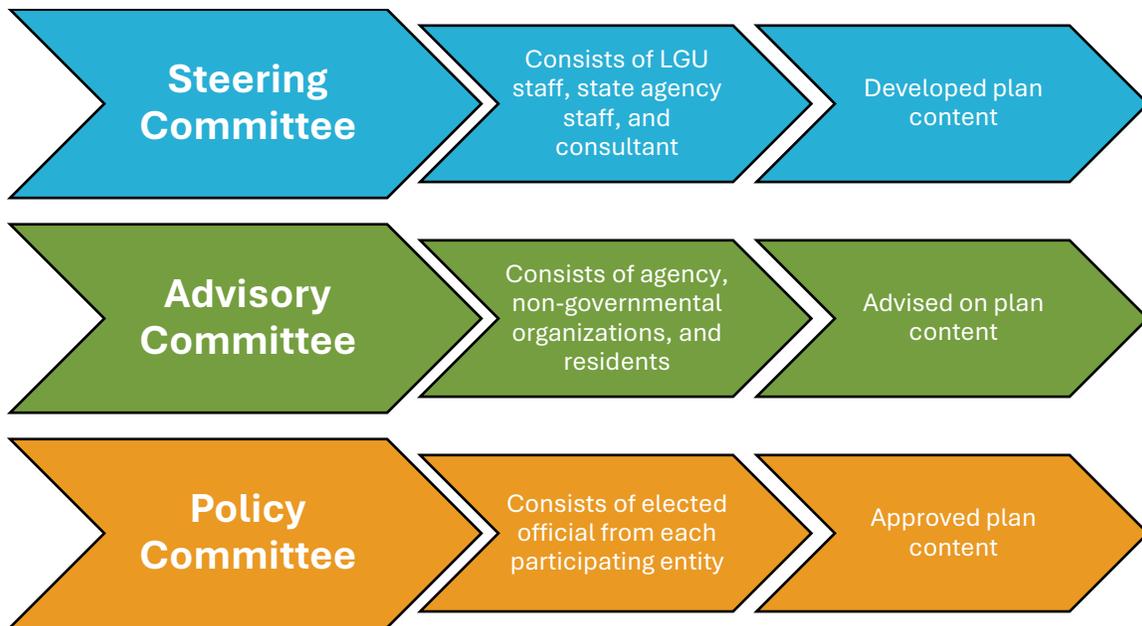
This plan identifies watershed priority issues, sets 10-year measurable goals, and plans specific actions to make progress towards those goals. This CWMP is active from 2026-2035, at which point the issues, goals, and actions will be reevaluated. Progress will be assessed on an annual basis along with a mid-point evaluation.



Comprehensive Watershed Management Plan

# Planning Partners

The RRW CWMP planning process began with a planning Memorandum of Agreement (MOA) (**Appendix A**), between Lincoln County and Soil and Water Conservation District (SWCD), Lyon County and SWCD, Murray County, Pipestone County and SWCD, Redwood County and SWCD, the City of Marshall, the City of Redwood Falls, the City of Ghent, the Redwood-Cottonwood Rivers Control Area (RCRCA) and Area II Minnesota River Basin Projects (Area II). Due to the limited area in the planning boundary, Murray SWCD and Yellow Medicine County and SWCD opted out of the planning process. The planning process was guided through decisions made by three committees: the Steering Committee, the Advisory Committee, and the Policy Committee.



The RRW CWMP will be implemented through RCRCA's Joint Powers Agreement (JPA). Entities involved in the JPA include the counties and SWCDs of Brown, Cottonwood, Lincoln, Lyon, Murray, Pipestone, Redwood and Yellow Medicine. While not part of the JPA, Ghent, Marshall, Redwood Falls, and Area II will work through RCRCA during implementation.

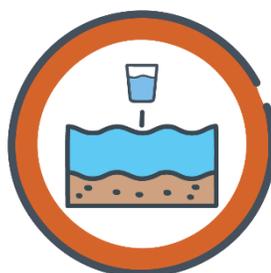
# Issues and Goals

Planning partners prioritized starting the planning process off with as much public feedback as possible. As such, three public kickoff events were held in June of 2024 in Lake Benton, Marshall, and Redwood Falls. The events were attended by around 60 community members. At each event, community members learned about the 1W1P process, discussed priority and problem areas in the watershed, and provided feedback on issues that should be the focus of the RRW plan.

Issues impacting natural resources in the RRW were identified by reviewing existing data and reports, soliciting letters from relevant state agencies, and receiving feedback both planning committees and the community from public kickoff events. In total, 13 issues were identified. The identified issues were organized into one of four resource categories, reflecting the resource most affected by that issue. The RRW resource categories are: Surface Water Quality, Groundwater/Drinking Water, Water Quantity and Hydrology, and Land Use and Urban Areas.



Surface Water Quality



Groundwater/  
Drinking Water



Water Quantity and  
Hydrology



Land Use and Urban Areas

Public opinion, state agency and local priority letters, survey results, existing reports, and committee expertise were utilized to develop a list of high, medium, and low priority issues facing the RRW. All high (**Table 1-1**) and medium (**Table 1-2**) priority issues have goals and actions assigned to them in the plan. Low priority issues do not have specific goals and actions addressing them in this plan due to the necessity of limiting goals based on what is achievable. Summaries of low priority issues can be found in **Section 3-Priority Issues**.

Measurable and quantifiable 10-year goals are an essential part of effective watershed planning and resource management. Planning partners developed nine measurable goals to address all high and medium priority issues. They are summarized for high priority issues in **Table 1-1**, and medium priority issues in **Table 1-2**.



Ramsey-Cansayapi Park Swayback Bridge



Camden State Park

Table 1-1: High priority issues and goals for the RRW.

	Issue	Issue Statement	10-Year Goal
High Priority Issues	 <b>Soil Health and Working Lands</b>	There is a need for conservation practices on working lands such as cover crops, perennial cover, reduced tillage, and pasture management, which would improve soil health, decrease upland sediment loss, and increase water storage.	Implement <b>22,500 acres</b> of soil health practices
	 <b>Nutrients and Bacteria</b>	Excess nutrients (phosphorus and nitrogen) delivered to surface waters leads to eutrophication which is a primary stressor to aquatic life.	Reduce total phosphorus loading by <b>7%</b> (or <b>13,800 lbs/year</b> ) and total nitrogen loading by <b>7%</b> (or <b>251,700 lbs/year</b> )
	 <b>Protection and Restoration</b>	Protection and restoration of high-recreational use waters and waters that are nearly or barely impaired to benefit aquatic life and recreational opportunities.	Implement <b>18,000 acres</b> of land in temporary or permanent easements, prioritizing areas contributing to priority resources
	 <b>Contamination</b>	Anthropogenic (e.g., nitrate, pesticides) and geogenic (e.g., arsenic, manganese) groundwater contaminants have been detected in some groundwater, posing a health threat through their potential presence in drinking water.	Protect drinking water from contamination by sealing <b>15 wells</b> per year or <b>150</b> over the 10-year plan
	 <b>Water Storage/Flooding</b>	The watershed has lost capacity for water storage in the landscape due to land use change and extensive public (103E) drainage, which decreases infiltration, increases stream flow, and can result in excessive flooding. Excess flow can also be a source of increased sediment and nutrients loading.	Add <b>4,000 ac-ft</b> of temporary or permanent storage to the landscape  Restore or create <b>100 acres</b> of wetlands

Table 1-2: Medium priority issues and goals for the RRW.

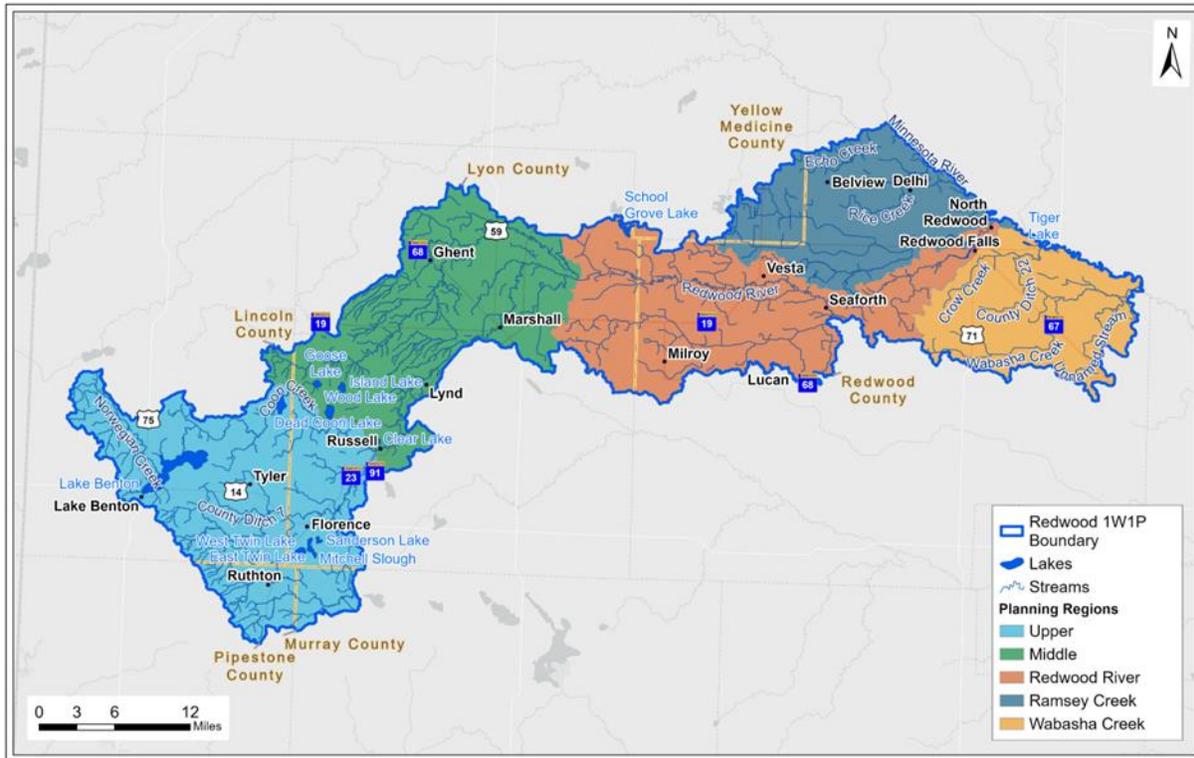
	Issue	Issue Statement	10-Year Goal
Medium Priority Issues	 <b>Bank Erosion</b>	Bank erosion is widespread in streams and rivers from unstable streambanks and high flows, acting as a source of sediment in those waters.	Stabilize or enhance <b>2,000 feet</b> of streambank and ravines
	 <b>Riparian and Shoreline Management</b>	There is a lack of vegetative protection along shoreline, ditches, streams, and rivers, causing an excess of erosion and degrading aquatic habitat.	Improve vegetation on <b>3,000 feet</b> of riparian streambanks or shoreline
	 <b>Groundwater Quantity</b>	Groundwater recharge is impacted by land use changes that have decreased infiltration, threatening future groundwater supplies.	Implement <b>22,500 acres</b> of soil health practices <i>(Same as Soil Health and Working Lands)</i>
	 <b>Barriers to Fish Passage</b>	Barriers such as dams, impoundments, and improperly sized culverts occur throughout the watershed, impeding fish passage.	Address <b>4 barriers</b> (such as dams, impoundments, and culverts) to fish passage
	 <b>Stormwater</b>	Stormwater runoff occurs in urban and rural developed areas, acting as a source of pollutants such as sediment, nutrients, chloride, metals, and debris to receiving surface waters.	Implement stormwater BMPs to treat <b>25 acres</b> of rural or urban developed land



Twin Lakes County Park

# Targeting Actions

The RRW spans over half a million acres of land that is a part of six different counties. Because of the large area, the issues impacting resources (and importance of those issues) can vary from the western to eastern extents of the watershed. In order to address these issues most effectively, the RRW watershed has been organized into five planning regions to prioritize actions where they are most needed and relevant.

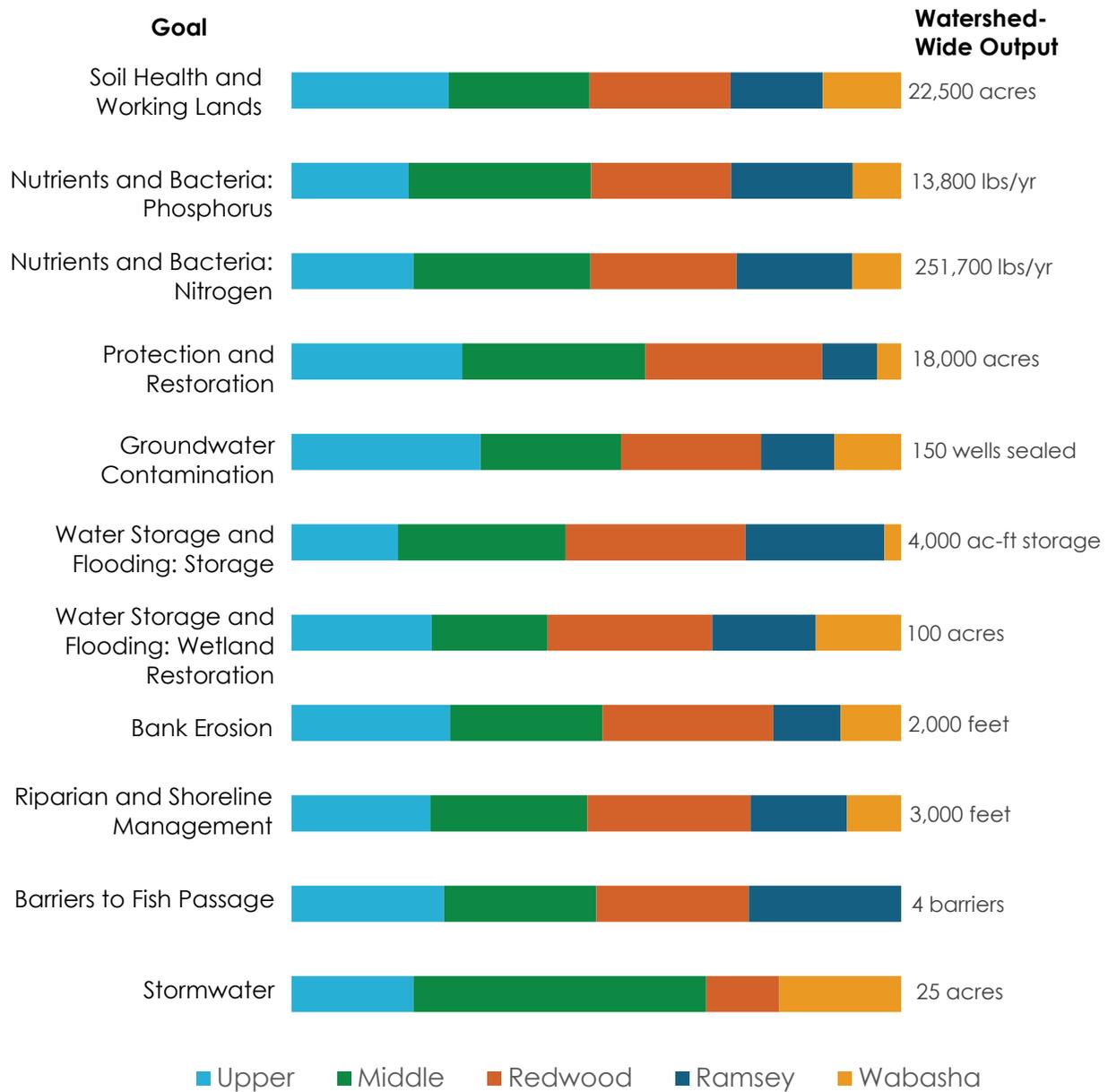


**Figure 1-2: Planning regions in the RRW.**

To aid in effectively addressing issues, each goal has been assigned ‘focus areas’ to pinpoint where actions will occur. **Section 4- Measurable Goals** contains maps for each of the goals detailing where work is the most needed to help reach the RRW plan goals. This section of the plan also identifies priority resources for protection and restoration efforts. These waterbodies are summarized below.

High Recreational Use and Value	Nearly Impaired	Barely Impaired
<ul style="list-style-type: none"> <li>• Lake Benton</li> <li>• Norwegian Creek</li> <li>• Redwood River</li> <li>• Lower Ramsey Creek</li> <li>• Lake Redwood</li> </ul>	<ul style="list-style-type: none"> <li>• East Twin Lake</li> <li>• Sanderson Lake</li> </ul>	<ul style="list-style-type: none"> <li>• Three Mile Creek</li> <li>• Clear Creek</li> <li>• School Grove Lake</li> </ul>

**Figure 1-3** visually summarizes how work towards each goal is split amongst the five RRW planning regions. This milestone chart shows the watershed-wide goal on the right, with each bar demonstrating the extent to which progress will be made in a given planning region, following focus area maps. Planning regions that have a larger milestone contribution for a goal indicate that the issue is more prominent in that particular area.



**Figure 1-3: Progress towards goals made within planning regions.**

# Implementation

Progress towards the goals within the plan will be achieved through the implementation of specific actions. These actions are summarized in action tables, which include information about each action's cost, timeline, focus area, implementation responsibility, and the goals they will help achieve. Action tables are organized by implementation programs, as shown in **Figure 1-4**. A full summary of actions can be found in **Section 5 – Targeted Implementation** within action tables at both the watershed-wide and planning region scales.



Figure 1-4: RRW implementation programs with example actions

## Implementation Cost and Benefits

Success of progress towards goals within the RRW plan is dependent upon the amount of reliable funding available throughout the duration of the 10-year plan. To create a realistic approach to the number of actions that can be accomplished with the predicted state and local funding, this plan includes an estimated scope of the current projected “Local 10-Year Plan Cost” that will be needed to implement the plan, as seen in **Table 1-3**.



Prairie Marshes Wildlife Management Area

It is recognized that in order to make progress towards the RRW goals, actions will be funded or pursued by partnering entities

(e.g., Minnesota Pollution Control Agency [MPCA], Department of Natural Resources [DNR], United States Fish and Wildlife Service [USFWS], The Nature Conservancy [TNC]), federal dollars (e.g. Conservation Reserve Program [CRP], Conservation Reserve Enhancement Program [CREP], or other competitive funding programs. These funds and actions are represented in the action tables as “Partner/Federal 10-year Plan Cost” to account for all the funding needed to implement the goals of this plan. A full scope of implementation funding is illustrated in **Table 1-3**.

**Table 1-3: Cost of Implementing the RRW CWMP.**

Program	Local 10-Year Plan Cost	Partner/Federal 10-Year Plan Cost
<b>Projects and Practices</b>	<b>\$6,075,000</b>	<b>\$50,560,000</b>
<b>Project Development</b>	<b>\$1,397,000</b>	<b>\$140,000</b>
<b>Technical Assistance</b>	<b>\$1,147,000</b>	<b>\$115,000</b>
<b>Education and Outreach</b>	<b>\$449,000</b>	<b>In-kind staff time</b>
<b>Research and Data Gaps</b>	<b>\$419,000</b>	<b>\$20,000</b>
<b>Local Controls</b>	<b>\$932,000</b>	<b>N/A</b>
<b>Capital Improvements</b>	<b>\$1,700,000</b>	<b>\$800,000</b>
<b>Operations and Maintenance</b>	<b>\$2,215,000</b>	<b>N/A</b>
<b>Plan Administration</b>	<b>\$600,000</b>	<b>N/A</b>
<b>Total:</b>	<b>\$14,934,000</b>	<b>\$51,635,000</b>

Figure 1-5 below shows the value of meeting the plan goals through the implementation actions in this plan.

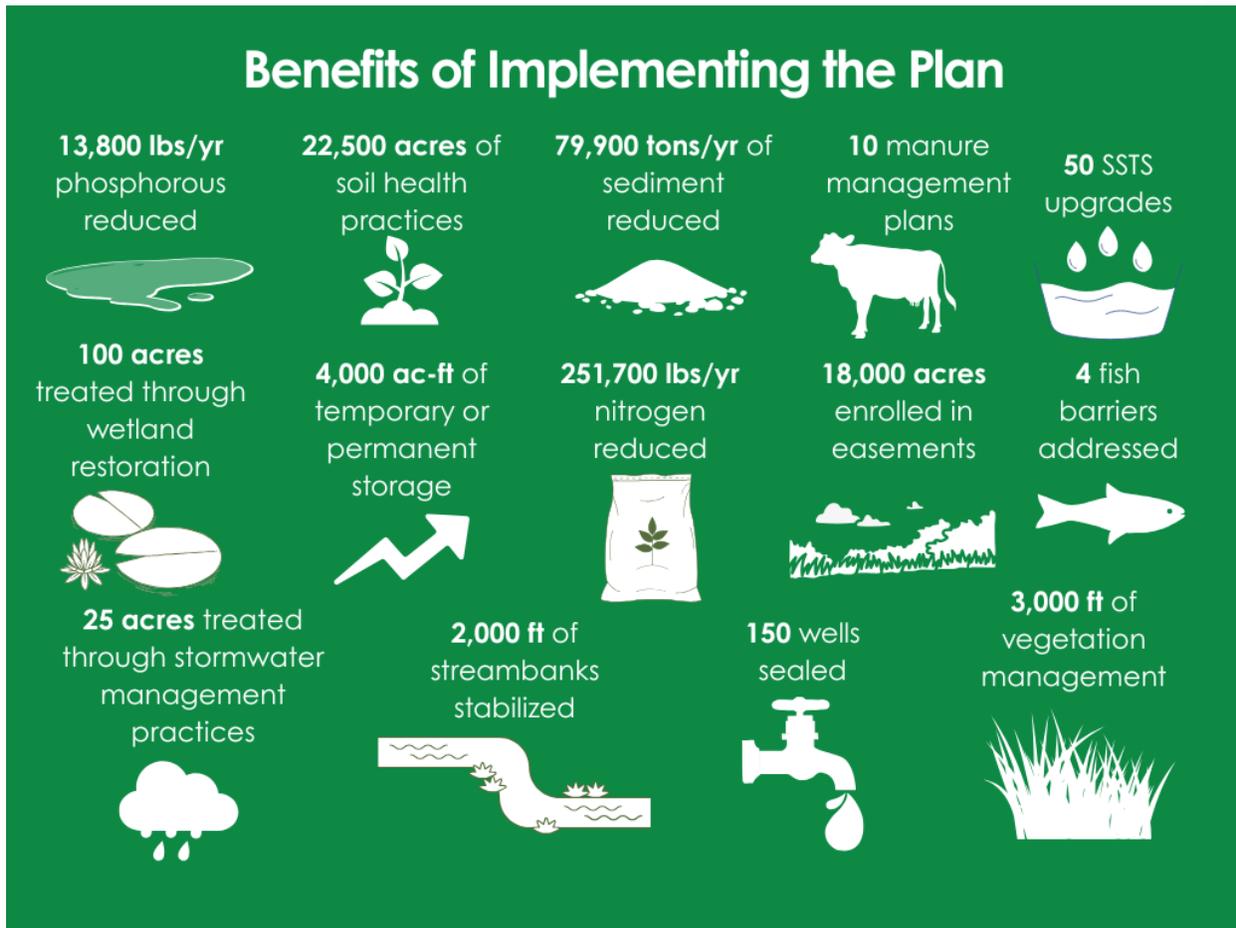


Figure 1-5: Benefits of implementing the RRW CWMP.