Nutrient Loss Reduction Strategy

DRAFT Objectives

These draft objectives were developed by the Interagency Water Quality Workgroup tasked with developing a new Nutrient Loss Reduction Strategy. The workgroup includes representatives from the Wisconsin Department of Natural Resources; Wisconsin Department of Agriculture, Trade and Consumer Protection, Wisconsin Land & Water, UW-Madison, Division of Extension; the Natural Resources Conservation Service; US Geological Survey, and Dane County Land and Water Conservation Department.

There are three sets of objectives, Environmental, Social and Economic, and Institutional/Organizational. There are **Ends Objectives** (What are we trying to accomplish with the Strategy?) and **Means Objectives** (What needs to happen in order to accomplish the Ends Objectives?).

To be clear, these are **DRAFT** Objectives. The Interagency Water Quality Workgroup will be seeking input from stakeholders to refine and prioritize these objectives. If you have questions or suggestions, please feel free to share them with Joe Bonnell, Nutrient Reduction Strategy Coordinator in the Office of Agriculture and Water Quality at the Wisconsin Department of Natural Resources (joseph.bonnell@wisconsin.gov).

Environmental	
Ends Objectives	Means Objectives
E.1 - Reduce nutrient loads in surface water in order to achieve water quality objectives.	E.1.a - Increase the quality and resilience of aquatic ecosystems. E.1.b - Reduce excess nutrient loss to surface water from agricultural land. E.1.c - Reduce excess nutrient loss to surface water from urban stormwater runoff. E.1.d - Reduce the impacts of hydrologic modification that contribute to nutrient loads in surface waters. E.1.e - Maximize the adoption and efficacy of nutrient management practices and agronomic systems that reduce nutrient loss from any land where nutrients are applied. E.1.f - Increase the functionality of watersheds to restore ecosystem services that reduce and mediate nutrient loss. E.1.g - Increase understanding of the causes of and solutions to excess nutrient loads in surface water. E.1.h - Increase understanding of the impact of a changing climate on the mechanisms that contribute to and mediate nutrient loads to surface water.
E.2. – Reduce nutrient loads in groundwater.	E.2.a – Reduce excess nutrient loss to groundwater from agricultural land. E.2.b - Maximize the adoption and efficacy of nutrient management practices and agronomic systems that reduce nutrient loss from any land where nutrients are applied.

	E.2.c - Increase the functionality of watersheds to restore ecosystem services that reduce and mediate nutrient loss. E.2.d - Increase understanding of the causes of and solutions to excess nutrient loads in groundwater. E.2.e - Increase understanding of the impact of a changing climate on the mechanisms that contribute to and mediate nutrient loads to groundwater.

Social and Economic	
Ends Objectives	Means Objectives
S.1 - Increase knowledge, awareness, and motivations among key stakeholder groups to address causes of nutrient loss to surface and groundwater.	S.1.a - Increase awareness of the value of quality water and healthy aquatic ecosystems. S.1.b - Increase awareness of the costs of excess nutrients in surface and groundwater. S.1.c - Increase awareness and motivations to adopt practices and nutrient management systems that reduce nutrient loss to surface and groundwater. S.1.d – Increase adoption of practices that reduce nutrient loss.
S.2 - Increase opportunities for individuals and communities to contribute to developing and implementing watershed scale plans.	S.2.a - Reduce the barriers to local stakeholder engagement in watershed planning. S.2.b - Increase understanding of the incentives and barriers to implementation of watershed plans.
S.3 - Minimize the risks to human health associated with nutrient loss to surface and groundwater.	S.3.a - Increase knowledge and awareness of the relationship between land use, nutrient loss, and human health.
S.4 - Maximize economic benefits and minimize costs associated with implementation of nutrient loss reduction strategies.	S.4.a - Increase knowledge and awareness of the economic costs and benefits of nutrient loss reduction strategies and practices.

Institutional/Organizational	
Ends Objectives	Means Objectives

I.1 - Increase the utilization of water quality related plans to identify effective nutrient loss reduction strategies.	I.1.a - Increase technical and financial support for watershed and water resource management planning at the watershed, county, and regional scale. I.1.b - Increase awareness and motivation among local leaders, partners, and stakeholders to develop and implement watershed and water resource management plans. I.1.c – Increase integration of water quality related plans across institutions and scales.
I.2 - Increase the implementation of existing watershed and water resource management plans.	I.2.a - Increase understanding of the barriers (institutional, social, technical) to implementation. I.2.b - Maximize the efficacy (e.g., targeting and access) of existing funding mechanisms to support implementation.
I.3 - Maximize coordination among public and private conservation partners and key stakeholder groups to implement nutrient loss reduction strategies.	I.3.a - Maximize the use of existing communication & coordination structures to identify barriers to effective implementation of nutrient loss reduction strategies and policies and successful implementation paths. I.3.b - Increase coordination and communication among conservation partners to measure and evaluate implementation of nutrient loss strategies and policies. I.3.c - Increase support for and development of structures and processes that facilitate stakeholder engagement in the development and implementation of nutrient loss reduction strategies.
I.4 - Increase institutional capacity to implement nutrient reduction strategies.	I.4.a - Increase knowledge, awareness, and support among elected officials for policies and programs that support nutrient loss reduction strategies. I.4.b - Increase institutional resources for implementation of programs and policies that support nutrient loss reduction strategies. I.4.c - Increase and improve recruitment and retention of staff who play a role in implementation of nutrient loss reduction strategies and policies. I.4.d - Increase capacity (knowledge, skills) of agency staff to effectively implement nutrient loss reduction strategies and policies.