

# Strategies for Nutrient Reduction

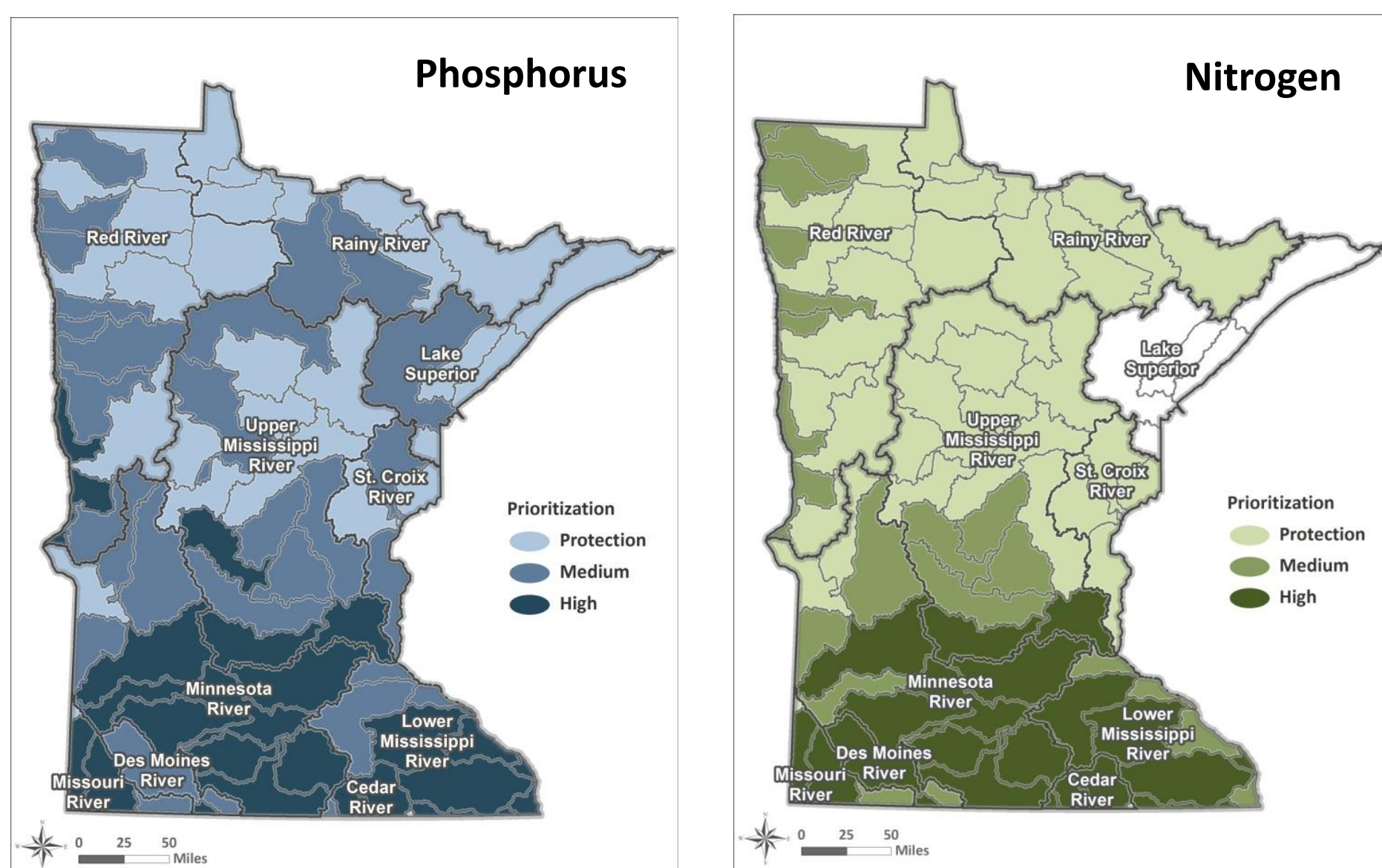
## Overarching Strategies

- Create accountability team and coordinating mechanism
- Develop a statewide nutrient reduction strategy education/outreach campaign
- Integrate basin reduction goals with watershed planning efforts
- Integrate nutrient reduction strategy tracking considerations into key program databases and tracking tools
- Create effective statewide nutrient reduction incentives for voluntary or industry-led BMP adoption
- Develop mechanisms to improve state agency and federal agency data sharing and coordination
- Commit to an adaptive management plan for the Strategy

## Priority Sources

Basin	Priority phosphorus sources	Priority nitrogen sources
Mississippi River	Cropland runoff, permitted point sources, and streambank erosion	Agricultural tile drainage and cropland groundwater
Lake Superior	Nonagricultural rural runoff, permitted point sources, and streambank erosion	Permitted point sources
Lake Winnipeg	Cropland runoff and nonagricultural rural runoff	Cropland groundwater

## Priority Watersheds



## Key Programs to Support Strategies

Agency	Program (date of program initiation)
Metropolitan Council	<ul style="list-style-type: none"> <li>• Point Source Reduction Activities (1967)</li> <li>• Nonpoint Source Pollution Management</li> <li>• Water Quality Monitoring and Assessment (since 1930s)</li> </ul>
MN Board of Water and Soil Resources	<ul style="list-style-type: none"> <li>• Clean Water Land and Legacy Program (2008)</li> <li>• Erosion Control and Water Management Program/State Cost-Share Program (1978)</li> <li>• Feedlot Water Quality Management Grant Program (2010)</li> <li>• Regional and Local Resource Management and Planning Programs (1982, 1989)</li> <li>• Reinvest in Minnesota (RIM) Reserve Program (1986)</li> </ul>
MN Department of Agriculture	<ul style="list-style-type: none"> <li>• Agricultural BMP Loan Program (1995)</li> <li>• Nitrogen Fertilizer Management Plan (1990, 2013)</li> <li>• Phosphorus Lawn Fertilizer Law (2002/2005/2007)</li> <li>• Certified Animal Waste Technician Licensing (2000)</li> </ul>
MN Department of Health	<ul style="list-style-type: none"> <li>• Source Water Protection Program (Triggered by 1986 Safe Drinking Water Act amendments)</li> </ul>
MN Pollution Control Agency	<ul style="list-style-type: none"> <li>• Feedlot Program (Rules revised in 2000)</li> <li>• Septic Systems or Subsurface Sewage Treatment System Program (1996)</li> <li>• Industrial/Municipal Wastewater NPDES Permitting</li> <li>• NPDES/SDS Regulated Stormwater (1994/2005)</li> <li>• Nonpoint Source Management Program, Section 319 (1988)</li> <li>• Phosphorus Strategy (2000)</li> <li>• Impaired Waters/TMDL Program (1998)</li> <li>• Watershed Management Program (2007)</li> <li>• Water Quality Standards</li> </ul>
MN Department of Natural Resources	<ul style="list-style-type: none"> <li>• Programs within Divisions of Fish &amp; Wildlife and Ecological and Water Resources</li> </ul>
Farm Service Agency	<ul style="list-style-type: none"> <li>• Conservation Reserve Program (CRP) (1986)</li> <li>• Conservation Reserve Enhancement Program (CREP) (1998)</li> </ul>
Natural Resources Conservation Service	<ul style="list-style-type: none"> <li>• Conservation Security Program (CSP) (2004)</li> <li>• Conservation Stewardship Program (CStP) (2008)</li> <li>• Environmental Quality Incentives Program (EQIP) (1996)</li> <li>• Wetland Reserve Program (WRP) (1990)</li> </ul>
Collaborative Plans/Initiatives	<ul style="list-style-type: none"> <li>• Minnesota Agricultural Water Quality Certification Program (In development)</li> <li>• One Watershed One Plan (In development)</li> </ul>