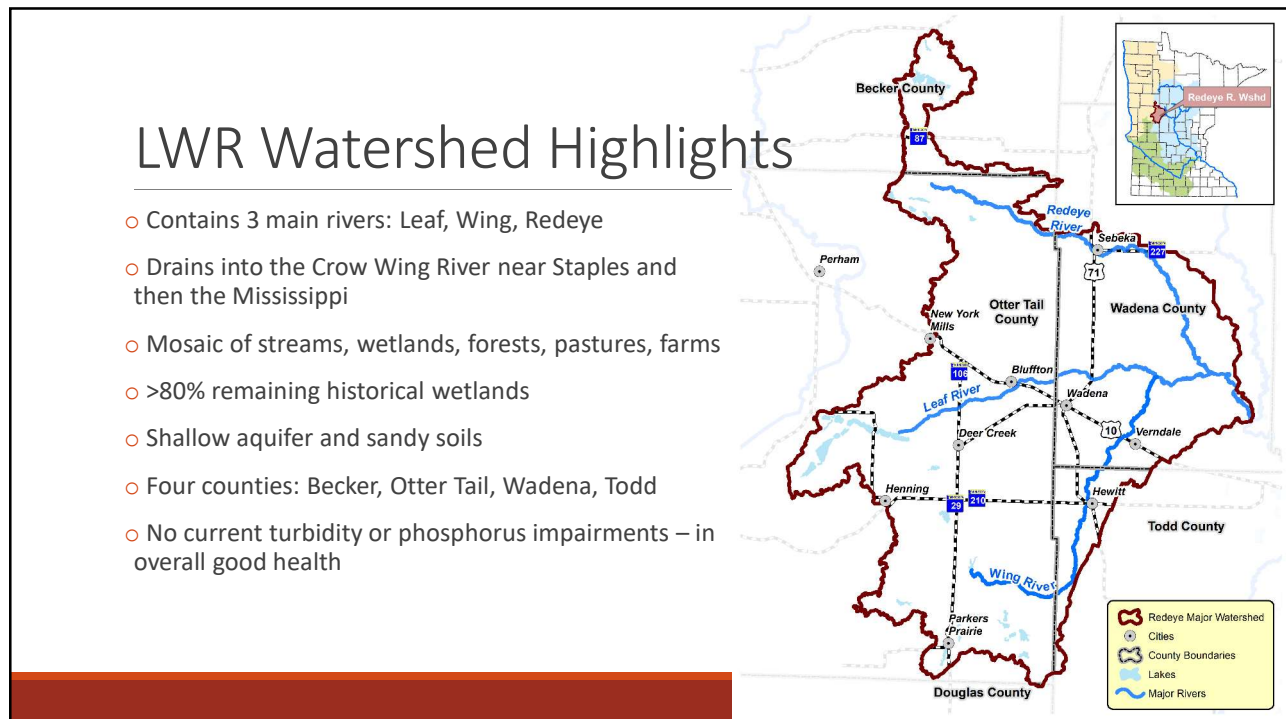




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2

LWR One Watershed One Plan

Memorandum of Agreement between 5 entities

- East Otter Tail SWCD
- Otter Tail County
- Wadena SWCD
- Wadena County
- Becker SWCD



Becker
Soil & Water
Conservation District



3

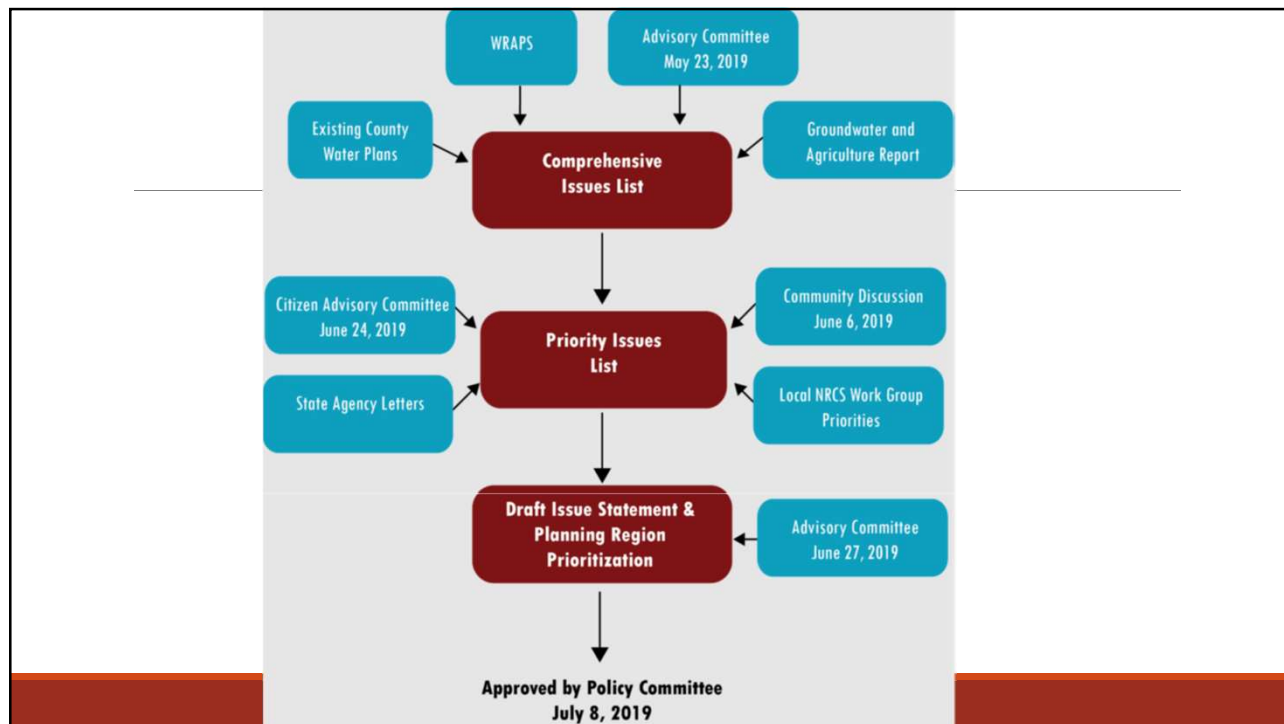
Plan Highlights



- Includes a land management prioritization that gives credit for current BMPs on the landscape and prioritizes areas for additional management practices
- Contains three groundwater goals
- Incorporated both PTMApp for measuring source reduction; and
- Landscape Stewardship Plan for prioritizing forest management and land protection
- Draft completed within one year



4



5

Category	Resource	Issue Statement
Tier 1 Issue Statements		
	Drinking water	Shallow groundwater is highly vulnerable to contamination from numerous sources.
	Streams, Lakes	Soil erosion and runoff can cause sediment and nutrient enrichment and low dissolved oxygen in lakes and streams.
	Streams	<i>E.coli</i> impairments in streams can make them unsafe for recreation.
	Lakes	Projected development pressure and conversion of seasonal properties to fulltime homes has the potential to negatively affect lake water quality and riparian habitat.
	Agricultural land	Soil health has the potential to impact agricultural productivity and water-holding capacity.
	Forests, Grasslands	Fragmentation and degradation of upland habitat by changes in land use can cause a loss of perennial vegetative cover and impact land resilience, habitat, surface, and ground water quality.
Tier 2 Issue Statements		
	Wetlands	Wetlands are in continued need of protection, which helps with precipitation storage, maintaining lake water levels, and habitat.
	Shallow lakes	Lakes with identified high phosphorus sensitivity, outstanding biological significance, wild rice, and shallow depths may not be sufficiently protected with standardized lake management practices, which affects fish and wildlife habitat quality.
	Streams	Connectivity barriers in streams (culverts & dams) are impacting fish habitat and stream geomorphology.
	Streams	Altered hydrology associated with a change in the water quantity, timing, and variability of flow in water courses can impact stream geomorphology, channel stability, and cause streambank erosion.
	Aquifer	Groundwater sustainability is vulnerable in the face of increased irrigation withdrawal.

6

Plan Focus Areas

-  **Groundwater**
-  **Surface Water**
-  **Habitat**
-  **Land Stewardship**



7

Groundwater



Goals

- Protecting drinking water
- Minimizing nitrates
- Increasing understanding of sustainable groundwater use

Examples of How

- Well Sealing
- Nutrient Management
- Irrigation Water Management



8



Surface Water

Goals

- Maintaining current wetland cover
- Enhance water quality in Leaf Lake Chain
- Address *E.coli* impairments

Examples of How

- WCA Enforcement
- Septic System Maintenance
- Rain Gardens
- Livestock Exclusion and Watering Facilities



9



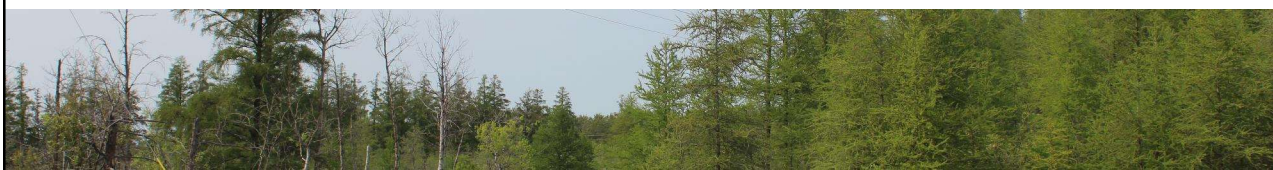
Habitat

Goals

- Enhancing Riparian Vegetation
- Improving Stream Connectivity
- Enhancing Forests

Examples of How

- Shoreline/Riparian Restoration
- Fixing Culverts and Dams
- Forest Management



10



Land Stewardship

Goals

- Increasing land best management practices on cultivated land, pasture, and forest

Examples of How

- Cover Crops
- Reduced Tillage
- Sustainable Grazing
- Forest Enhancement and Protection



11

Planning Regions



Redeye

- Redeye River and tributaries
- City of Sebeka



Wing

- Wing River, Lower Leaf River, and pour point
- Parkers Prairie, Hewitt, and Verndale.



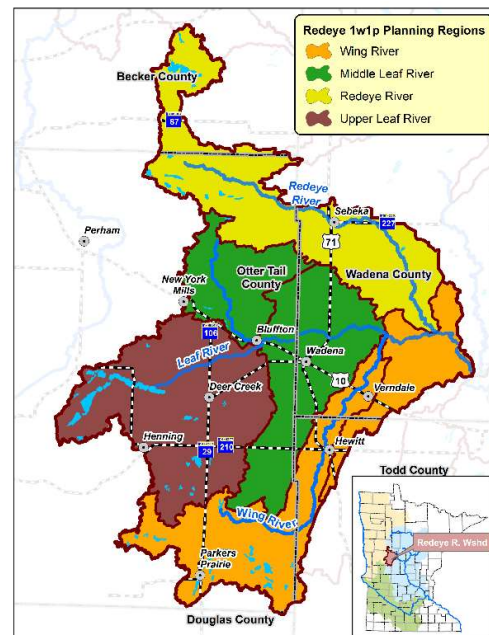
Middle Leaf

- Bluff Creek and Leaf River
- New York Mills, Bluffton, and Wadena.



Upper Leaf

- Leaf Lake Chain and the headwaters of Leaf River
- Henning and Deer Creek



12

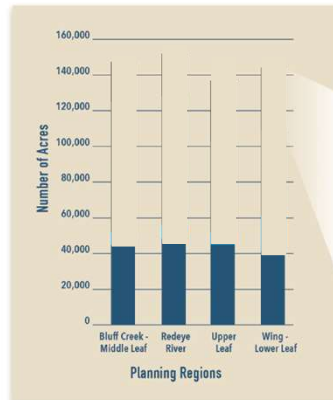
Land Prioritization

Where to target new land management practices

Acres of land within our watershed fall in these **4** categories:



PROTECTED LAND
Protected land is simply land that is preserved from future development (Wetlands, Public Water, Public Land, Easements, SFIA, or Buffers)



13

Land Prioritization

Where to target new land management practices

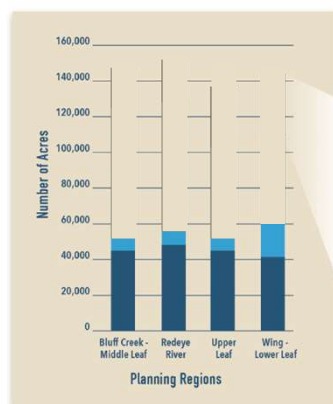
Acres of land within our watershed fall in these **4** categories:



KNOWN MANAGEMENT
Land with known implementation of conservation best management practices.



PROTECTED LAND
Protected land is simply land that is preserved from future development (Wetlands, Public Water, Public Land, Easements, SFIA, or Buffers)

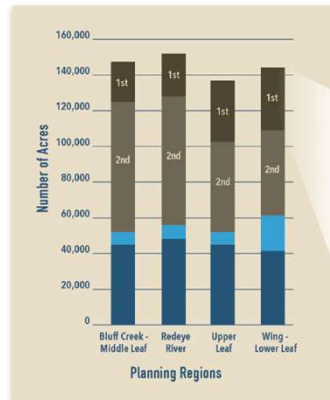


14

Land Prioritization

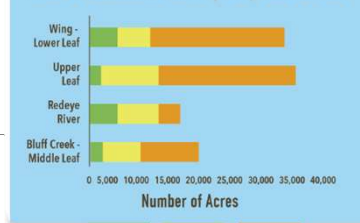
Where to target new land management practices

Acres of land within our watershed fall in these **4** categories:



15

Land use breakdown of the 1st priority Unknown Acres



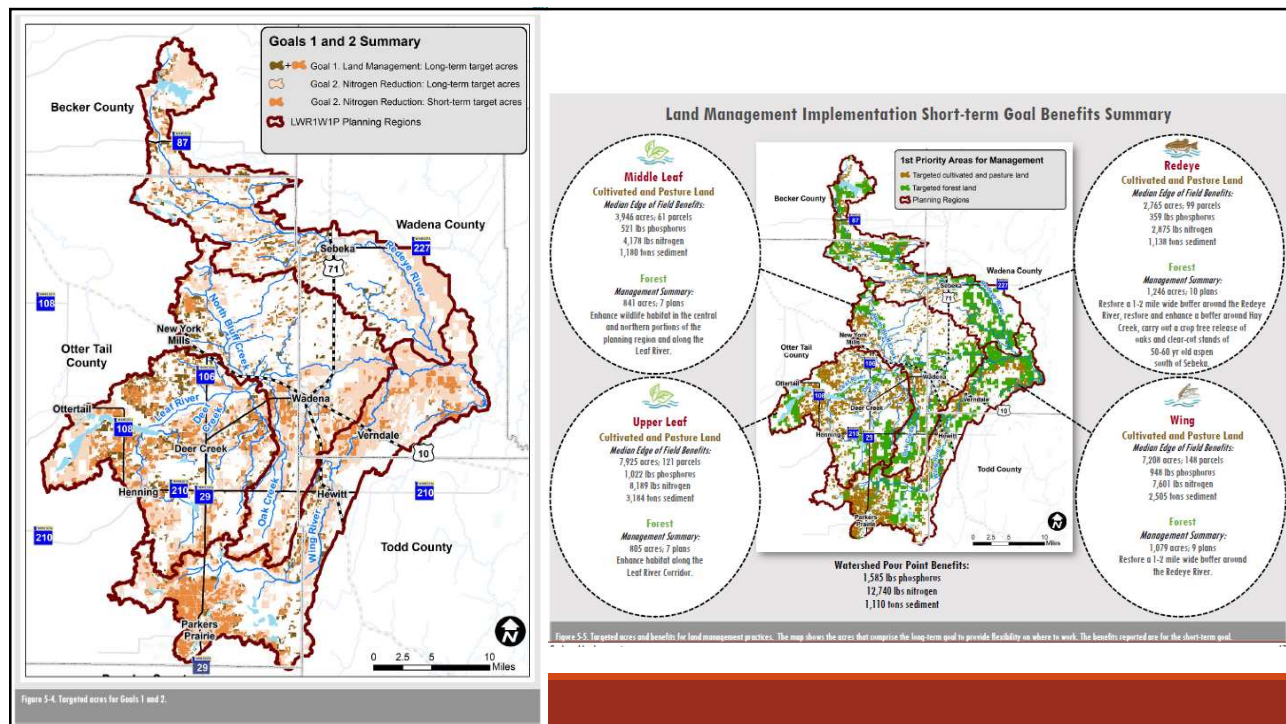
- Forest Stewardship Plans
- SFIA Contracts
- 2C Managed Forests
- Easements
- Acquisitions

- Livestock Exclusion
- Watering Facilities
- Prescribed Grazing
- Land Retirement Programs

- Cover Crops
- Conservation Tillage
- Crop Rotations
- Nutrient Management
- Irrigation Management
- Precision Ag Technology
- Land Retirement Programs

Implementation

16



17

Funding Levels

This plan will be implemented to the degree that funding is acquired, and at a locally determined pace of progress. Implementation of the actions in this plan is voluntary.

Funding Level	Description
1	Current Baseline Programs
2	Obtain additional grant and capacity funding
3	Partner Funding: CRP, DNR, TNC, SFIA, Lessard Sams...
Total	

18

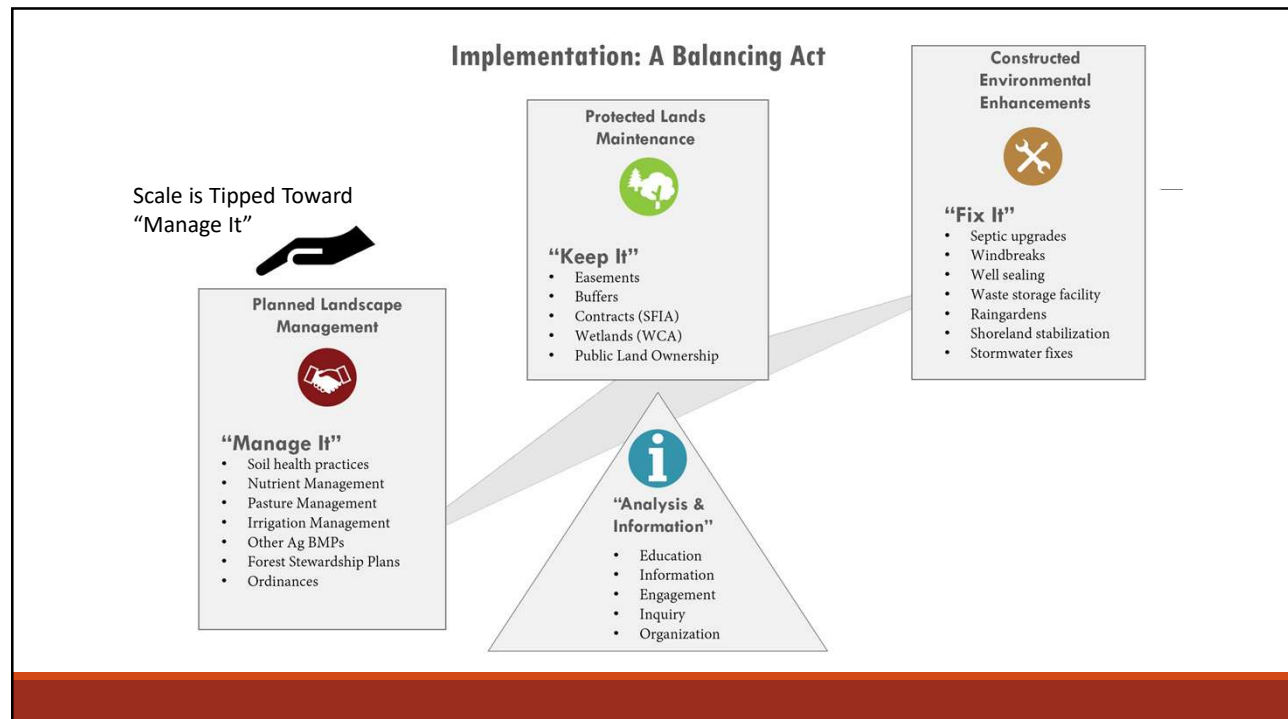
Funding

This plan will be implemented to the degree that funding is acquired, and at a locally determined pace of progress. Implementation of the actions in this plan is voluntary.

Funding Level	Description	Annual	10-Year Total
1	Current Baseline Programs	\$400,000	\$4,000,000
2	Obtain additional grant and capacity funding	\$490,000	\$4,900,000
3	Partner Funding: CRP, DNR, TNC, SFIA, Lessard Sams...	\$680,000	\$6,800,000
Total		\$1,570,000	\$15,700,000

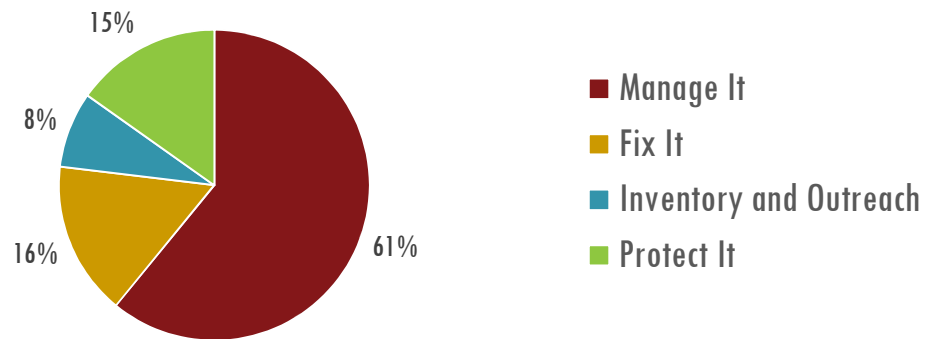
~\$1 Million/year

19



20

Funding Summary per Program



21

Plan Administration



This plan will be implemented through a Memorandum of Agreement between:

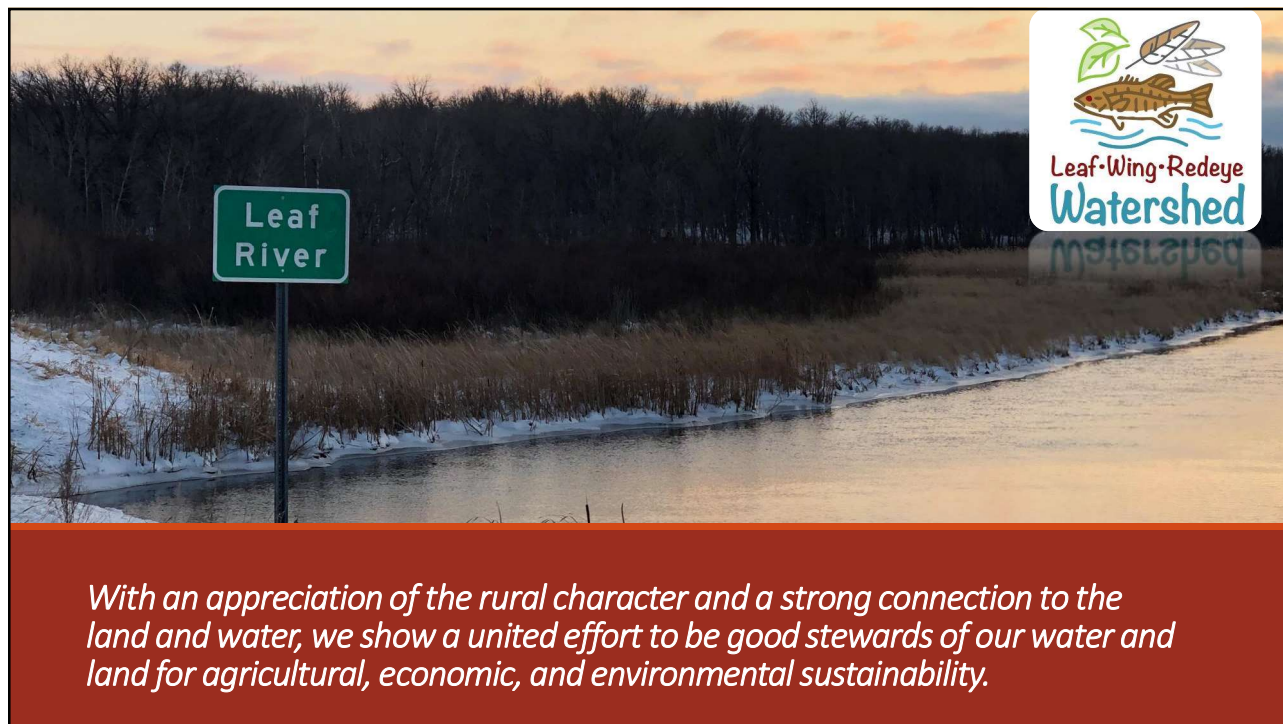
- East Otter Tail SWCD
- Otter Tail County
- Wadena SWCD
- Wadena County
- Becker SWCD
- Todd SWCD
- Becker County



BECKER COUNTY, MN



22



23

Thank you for your time and attention!

24