MCGRégor AREA
COMMUNITY DESIGN STRATEGY

FINAL REPORT

October 2002
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The Final Report, along with background information on the planning process, is also available online at the Center for Rural Design website <http://ruraldesign.coafes.umn.edu/mcgregor.htm>

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Executive Summary

The Process

Small communities like McGregor, constrained by budget and other resources, can benefit from partnering with others on land use planning. McGregor area citizens addressed water quality and growth management questions facing them, embarking on a planning process that also involved the Watershed District, the City of McGregor and surrounding townships, lakeshore associations and business interests, federal, state and county agencies. A history of ditching and drainage, combined with damaging increases in phosphorous levels in the Big Sandy Area Lakes system, focused the issues. Allowing development while protecting the rich mosaic of wetlands and waterways in this Mississippi River sub-watershed became the challenge.

A team led by the Center for Rural Design (Design Team, hereafter) undertook the task of visualizing where and how development could occur. The underlying goal was to improve the McGregor area community’s economic interest and promote the region’s ecological health. Proposals that emerged from this visualization process will help prevent future loss of the scenic value and natural resource base unique to the area.

The planning process:

· Identified areas where development pressures are forcing physical change to sensitive natural resources, to understand how land use decisions aligned with the goals of the County’s comprehensive plan.
· Produced a series of land use scenarios for potential development areas, to illustrate the issues to be considered and to demonstrate community design principles as a guide to land use decisions.
· Recommended an implementation program prioritized for managing growth that is project-based and incremental in nature and capitalizes on the natural resource wealth and citizen energy that characterize the region.
· Documented the process in a format that accurately tracks the evolution of this citizen-based strategy for sustaining the McGregor area community’s diversity and vitality.

Early in the process, the citizens’ committee adopted a formal identity as the McGregor Area Community (Core Group, hereafter), with the following definition:

“We are connected by roads and communications networks, governance and services, cultural and natural resources. We are based in social ties to each other and with ties to this place. We are bound together by a concern for managing change that ensures quality of life for the whole community.”

The Product

This Design Strategy is a framework for addressing issues related to water quality and quality of life in three areas of change: the City of McGregor, area lakeshores, and the recreational landscape of the Big Sandy Area Lakes region.

Such a planning framework is not a land use plan, rather it offers an integrated approach to making decisions about growth and development, grounded in a comprehensive understand-
ing of the Big Sandy Area lakes region and built on citizens’ knowledge and personal experience as well as agencies’ expertise to picture a sustainable future for the McGregor area.

A citizen-based planning framework produced a set of agreed upon community design principles the community can use to shape future development. The McGregor Area community design principles are:

- Maintain McGregor as the center of this sub-region.
- Minimize disturbance to natural resources from development.
- Utilize existing infrastructure to locate new development.
- Integrate wastewater and storm water systems into a green space system.
- Preserve and restore wetlands and habitat corridors.
- Connect towns to lakes with recreational trails along natural features.
- Improve water quality value and quality of life with all development.
- Make the planning process visible.
- Create a communication structure for collaborative decision-making on future development.

The principles promote three general goals that translated into three planning task areas:

- Sustain McGregor as a vital sub-regional center
- Visualize sustainable lakeshore development
- Build a stewardship relationship with water resources through recreation

**Recommendations**

Main recommendations are as follows:

- Adopt this Strategy as a planning framework to complement Aitkin County’s Comprehensive Plan and support the Big Sandy Area Lake Watershed Management Project (BSALWMP) Management Plan.
- Amend zoning and other regulatory tools to accommodate the community design principles espoused by the Design Strategy.
- Move forward on the recommended priority projects as funding becomes available and, where possible, as part of larger funded initiatives.
- Use the design principles to evaluate proposed developments and for proposing new development.
- Continue to make the planning process visible and inclusive.

In addition, this Design Strategy document outlines implementation recommendations for each of the planning task areas.
Introduction

**Document Format**

This document tracks a community planning process that addressed growth management in the McGregor region of Minnesota and sets a strategy for realizing specific community goals. Its focus is based in part on the Big Sandy Area Lakes Watershed Management Project (BSALWMP) mandate to “provide a local mechanism to encourage equal partnership among all stakeholders”, partly on the sustainable development goals of Aitkin County’s Comprehensive Plan (2000), but largely on citizens’ interest in seeing growth managed to preserve quality of life in the area.

The document begins with a summary of the issues and goals that initiated the need for a regional design strategy and this project. Next, the planning process is described – who was involved and how interaction happened – along with an outline of the planning tools used. The community design principles that evolved during the planning process are described, as are the three physical planning areas to which the principles were applied:

- City of McGregor
- Residential lakeshores
- McGregor area recreational water resources

These principles and planning areas are followed by a series of design scenarios, also organized by planning task area. Each set of scenarios is introduced with specific planning issues and design assumptions and accompanied by recommendations for implementation.

A summary of priority initiatives for implementation concludes the design strategy main document. The appendices contain a list of technical and funding resources as well as all the meeting notes and the photos and maps created for the project.

While this document is city/township driven in its response to local concerns, it is intended to complement the Aitkin County Comprehensive Plan and support the mission of the Big Sandy Area Lakes Watershed Management Plan.

**Goals and Need for a Regional Design Strategy**

The City of McGregor sewage treatment facility failed in 1999, and discharged effluent directly into the Big Sandy River system. The City’s response was immediate in correcting the problem, but the incident raised concern about water quality control in this fast-developing region and suggested the need for a broader examination of development patterns. Other issues included the conversion of lake homes to year-round residences, the increasing number of senior in the region, and the need for affordable housing and rental properties. In late 2000, the Big Sandy Area Lakes Watershed Management Project joined with Aitkin County and the Minnesota Pollution Control Agency to offer planning assistance to the Greater McGregor Area Development Council (later called the McGregor Area Community Core Group), a citizens’ group formed for the purpose of encouraging sustainable development in the McGregor region. In this region dominated by lakes and wetlands, the protection of water quality as well as preservation of quality of life needs to guide development and change. This concern became the focus of this project.

The McGregor Area Development Council met with the Design Team in the fall of 2000 to discuss the planning issues and opportunities related to environmental concerns in the...
region. The study area was defined early in the planning process as the City of McGregor and the immediate eight townships adjoining the City and Big Sandy Lake including the Townships of Libby, Turner, Workman, Shamrock, Jevne, McGregor, Unorganized and Spalding. In early 2001, the citizens’ group approved the planning proposal and process with funding and in-kind contributions from various jurisdictional interests and volunteer service groups.

Goals of the Study

The goals of the study were to:
- Create a structure for constructive dialogue about the future for the Greater McGregor area
- Develop a set of agreed upon planning principles rooted in an ecosystem-based understanding of the region
- Capitalize on the system of lakes, wetlands and waterways as a community amenities, rather than impediments to development
- Outline work areas that can direct and sustain the dialogue after completion of this project
- Make this planning process a community building effort

Planning Process

The Design Team began its process by meeting with representatives of the Greater McGregor Area Development Council (Core Group, hereafter) to define issues and understand development patterns. A series of digital Geographic Information Systems (GIS) maps was produced to show the land use, land cover, hydrological, wetlands and habitat characteristics of the region. These maps were then overlaid with current property ownership and zoning to compare current development initiatives and existing physical conditions against sustainable community goals such as promoting a diverse economy, protecting natural systems diversity and building community.

The conditions and issues of the region were documented within three task areas where development is impacting water quality and quality of life: the City of McGregor, the residential lakeshores, and recreational lands surrounding Big Sandy Area Lakes. Within each area, the strategic advantages and perceived impediments to development were organized into planning assumptions to inform the process.

As a next step, an exhibit was produced for the 2001 annual Wild Rice Days event in McGregor to garner broader community input on the physical planning issues facing the region and invite the public to the first of three community workshops held throughout the planning process. The fall workshop was held at the McGregor Community Center, led by the Design Team, and facilitated by the Core Group. Upwards of 60 people attended including a wide range of civic interests and both permanent and seasonal residents.
Students in the McGregor School produced maps and images of their daily experiences and favorite places in the area. These maps became part of the analysis of the sense of place this region evokes for residents.

A set of community design principles, proposed by the Design Team and endorsed by the Core Group, guided production of a series of development scenarios that would become the focus of subsequent workshops for the three task areas.

With supportive coverage by area newspapers and promotion by the Core Group, the workshops became an important forum for community debate involving over 100 citizens through the year-long process. All workshop responses and meeting summaries were circulated to the Core Group and posted to the Center for Rural Design (CRD) website as the project progressed.

**Planning Tools/Approach**

The community workshops led by the Design Team encouraged as many people as were interested to participate in the McGregor area project. Other tools included a 3-D tactile model at 1" = 200’ scale of the immediate McGregor area with ‘cut out’ pieces showing different design scenarios and digital (GIS) maps to reveal the physical dimensions of and relationships between elements of the region. A series of aerial photos illustrated current land use issues and areas of change that were the focus of this project.

Snapshots of the workshops, along with the maps, drawings, diagrams and photos of the 3-D model are placed in this document to illustrate the design strategy and capture the essence of the community planning process. Meeting minutes and notes from the community workshops are included in Appendix 2.
**General Planning Issues**

The city of McGregor is at the heart of a larger rural community defined in part by the strategic location of the school in the center of town and partly by its situation at the junction of two railroads and two state highways. Given the expanding retail, industrial and residential demands in surrounding townships, the City has a legitimate need to plan for future development to allow it to continue its important function as regional center.

McGregor is in close proximity to important rivers, lakes and a reservoir system that shapes the Big Sandy Area Lakes Watershed. Given the economic importance of the system as a regional water supply, and with the increasingly intensive recreational use of area lakes and shore lands, the Watershed District needs to be concerned about protecting the volume and quality of the region’s water resources.

Aitkin County is growing rapidly but little of that growth is happening in McGregor. The lack of developable land in the city combined with the changing demographics of the county create pressure on the city to adapt creatively in order to attract new development. At the same time, the city needs to preserve the natural environment and avoid further ditching and drainage.

The planning issues that emerged from an early Core Group meeting were summarized first as a series of questions then translated into goals to be explored as design strategies:

- How can the need for a range of housing opportunities be met without threatening the water quality, wildlife habitat and quality of life that attract people to want to live here?
- How can the existing infrastructure in the City of McGregor be utilized to locate new industry, commercial and housing?
- What types of development need to occur to ensure the city and school remain as the service ‘hub’ for the lakes area?
- How might growth occur to provide the greatest long-term benefit to the city?
- How might developments in the greater McGregor area be designed to either have no new impact or improve water quality for the Big Sandy system and serve as a model for other sub-watersheds?
- How can communication be structured between agencies and with citizens to encourage collaborative decision-making?
- How will decisions be made about implementing the design strategies put forward by this project?

Goals for the project were to:

- Create an integrated decision-making process to guide future development, this process needs to be based in an understanding of the natural resources, the people, and the opportunities that exist to sustain the economic and ecological interests of the Greater McGregor area.
- Utilize existing investment in infrastructure, by extension or infill, to locate new development in McGregor and the Greater McGregor Area.
- Ensure minimal negative impact from development on natural resources, and where possible, improve wildlife habitat, water quality values and landscape and architectural aesthetics with development.
Design Principles and Scenarios

As the planning process evolved, a set of community design principles specific to McGregor and the region’s planning issues was developed. The principles establish the basis for development decisions that will cumulatively define a sustainable McGregor community. The principles are:

· Maintain McGregor as the center of this subregion.
· Minimize disturbance to natural resources from development.
· Utilize existing infrastructure to locate new development.
· Integrate wastewater and storm water systems into a green space system.
· Preserve and restore wetlands and habitat corridors.
· Connect towns to lakes with recreational trails along natural features.
· Improve water quality value and quality of life with all development.
· Make the planning process visible.
· Create a communication structure for collaborative decision-making on future development.

In determining which of the planning issues to model with development scenarios, issues were chosen that the Core Group could agree on and that could demonstrate the design principles to the larger community. The Design Team was charged with the following three scenario building tasks, each with specific goals:

Scenario Building Task 1: Sustaining McGregor as Center of the Sub-region
· Housing scenarios to meet life-cycle housing needs in McGregor
· Commercial and industrial development scenarios to retain families in school district and city area
· Aesthetic improvements to city streets, downtown and city edges

Scenario Building Task 2: Visualizing Lakefront Development Character
· Housing development scenarios for area lakes
· Alternative wastewater and storm water treatment scenarios
· Architecture and landscape design alternatives

Scenario Building Task 3: Building Relationships around Water
· Quality surface water recreation areas and area-wide recreation identified
· Communication structure created between public agencies, agencies and citizens, citizens and developers to encourage collaborative decision-making on implementation of area-wide and specific environmental and civic projects

The scenarios described in the remainder of the document are not development plans but illustrations of how the planning principles might shape future development. The schemes are mainly intended to encourage discussion of the planning goals and principles for each of three task areas and demonstrate the distinct but integrated characters that in total reflect the community’s vision for the McGregor Area.
Sustaining McGregor as Center of Region

Planning Issues

Three main areas of concern were identified in the planning process related to McGregor. These include:

- community character and housing
- economic fabric
- the natural environment.

The need for life-cycle housing poses some of the biggest questions for McGregor. Both physical infrastructure and social services are necessary to support the range of housing types needed from rentals and start-up homes to seniors’ assisted care facilities. As background, the City of McGregor is located in the fastest growing area of Aitkin County. In 2000, McGregor’s population was 404, (a 7% increase in ten years), within a lakes region of 3255 people (a 20% increase in ten years). An Aitkin County housing study anticipates 10+ new households in McGregor by 2006 and 200+ new households in the lakes region of the Big Sandy Area Lakes townships. The need will likely increase for lower maintenance housing options and health care services in McGregor for aging local residents and active seniors wishing to move off the lakes but stay in the region.

Attracting new industry, not just service sector jobs, to the area is another issue. How might growth occur to provide the greatest long-term benefit to the City?

When preserving the water quality of the area is another major issue, the questions become:

- How much development capacity is contained within the existing sewer service area of McGregor?
- How might development in McGregor be designed to either have no new impact on water quality or improve the water quality for the Big Sandy system and serve as a model for other cities in the watershed?
- How can housing and commercial development include the wetlands and waterways that define McGregor’s natural character in site design?

Meeting the City’s goal to promote McGregor as the Gateway to the Lakes region was another design challenge. The slogan “Through Town to the Lakes” on the Highway 8 entrance sign to McGregor became a theme for redesign of the city’s edges, streets and highway entries. The goal of this project is to create a ‘greener’ streetscape that would attract more travellers to and through the city.

Design Assumptions

- Maintain the viability of McGregor as a vibrant socioeconomic center and a recreational destination within the region.
- Utilize existing investment in infrastructure to locate new commercial development.
- Given existing zoning ordinances, maximize available residential sites where sewer and water already exist to leverage that investment.
- Identify best practices to improve water quality with all development.
- Ensure minimal negative impact from development on natural resources, and where possible, improve wildlife habitat and water quality values with development.
- Identify high quality upland areas that could be used for city expansion, allowing natural resource areas to be preserved.
- Design ‘borrow’ ponds to function for wildlife as well as an aesthetic amenity for new development.

**Development Scenarios**

As a way to address the many issues and opportunities, the City should envision McGregor as a model sustainable community within this sub-region, not just a service stop along the highways leading to the lakes. Creating such a place would help resolve the water quality and quality of life issues that generated the need for this study and fulfill the sustainable development goals articulated in the community workshops. These goals include:
- An enhanced civic image, expanding on what’s there today, that would build community pride.
- Commercial and industrial development that would illustrate civic opportunities.
- The creation of new housing that would serve the range of life-cycle needs and promote water quality.

To translate this vision into physical reality, and to address the implementation questions raised by the Core Group, the Design Team prepared a series of scenarios for the City of McGregor that could be worked on separately yet planned as a whole system. The illustrations that follow are a representative sample. All the scenarios are reproduced in the appendix at a more legible scale.

**Scenario: McGregor Civic Opportunities**

With the goal to enhance the civic image and build community pride, the design principles are:
- Create entry signs and markers along Highways 8, 65 and 210 into McGregor.
- Improve trailhead signage along Soo Line Trail.
- Enhance city streets with shade trees and public gardens, at highway entries and in residential and commercial areas to create a ‘greener’ city.

With the goal of encouraging new industry to locate as infill along existing highways, the principles are:
- Maximize available commercial and industrial land and tie development to existing sewer and water system.
- Restore wetlands where feasible and divert water through settling ponds before entering the existing ditch system.
**Scenario: North Gateway to Downtown**

With the goal of illustrating civic opportunities with new commercial development at the north Maddy Street/Highway 210 entrance to downtown, the design principles are:

- Extend downtown character to the edge of the highway.
- Shade parking areas and walkways.
- Create a network of streets and sidewalks.
- Filter stormwater in runoff ponds.

**Scenario: Seniors’ Housing**

With the goal of providing new seniors’ housing in McGregor with existing zoning, the design principles are:

- Build a multi-unit active seniors’ apartment development as infill with existing zoning.
- Ensure apartment views to surrounding wetlands and street activity.
- Filter stormwater runoff in onsite ponds.
- Minimize disturbance to intact habitat areas.

**Scenario: Residential Infill**

With the goal of providing new life-cycle housing, the design principles are:

- Build a mix of single family and multi-unit housing as infill with existing zoning.
- Maximize available residential land and tie development to existing sewer and water system.
- Restore wetlands where feasible and divert water through settling ponds before entering ditch system.
- Through water quality education, minimize runoff from lawns, streets and parking.
Scenario: Commercial/Industrial Infill

With the goal of encouraging new industry to locate as infill along existing highways, the principles are:

- Maximize available commercial and industrial land and tie development to existing sewer and water system.
- Restore wetlands where feasible and divert water through settling ponds before entering ditch system.

Implementation, Policy and Projects

- Begin a civic enhancement program with visible public sites, one project per year. Use the design principles and this strategy document as part of any request for proposals on enhancement projects.
- Leverage new investments, from the school expansion to road improvements and a new water tower, to undertake priority projects.
- Amend zoning ordinances related to setbacks and density to support the residential in-fill housing goals identified in this document.
- Update property ownership map and lot line information to reflect current land use and zoning and existing infrastructure. This information becomes a point of reference to use with soils and natural features data in determining development capacity for the City.
- Develop a formal tree planting strategy, with native species that tolerate wet soils.
- Apply for grants to implement tree planting, park improvements and trails development identified in this document.
- Create a Maddy Street Civic District to oversee installation of trees, benches, awnings and other amenities along the upgraded street.
- Work with the BSALWMP to identify wetland bank sites, to infill lower sites with marginal natural resource value.
- Continue to work with Aitkin County and the BSALWMP to minimize the risk of municipal wastewater discharge into the Big Sandy River system.
- Work with McGregor School and the energy of the 500+ student daily population to develop service, learning, and environmental stewardship programs, through student participation in civic and environmental projects identified in this document.
Potential Projects—Sustaining McGregor as Center of the Sub-region

Gateway Projects
Partners: City of McGregor Chamber of Commerce

Technical or Financial Assistance: Minnesota DOT
Minnesota DNR

Projects:
North Gateway Signage
South Gateway Signage
NE Gateway Signage
Water Tower Logo
Plant Trees
Rest Stop

Timeframe: Short term

Maddy Street Civic District
Partners: City of McGregor Chamber of Commerce

Technical or Financial Assistance: Minnesota DNR

Projects:
Sidewalks
Trees
Benches
Awnings

Timeframe: Immediate

City Park
Partners: City of McGregor
Service Clubs

Technical or Financial Assistance: Minnesota DNR

Projects:
Trees
Garden

Timeframe: Long term
Create Affordable Housing

Partners:
- City of McGregor
- Lakes and Pines Community Action

Technical or Financial Assistance:
- Central Minnesota Housing Partnership
- US Dept of Agriculture Rural Development
- Minnesota Housing Partnership
- Minnesota Housing Finance Agency
- The Dept of Housing and Urban Development
- Greater Minnesota Housing Fund
- The Blandin Foundation
- The Northland Foundation

Projects:
Seek Developer
Finalize Development Plans (Community Approval and Participation)

Timeframe: Seek developer in the short term, finalize plans over long term
Visualizing Lakeshore Development

Planning Issues

Over 1400 seasonal and 300 permanent residences are situated on Big Sandy Lake, twice as many households as 20 years ago. This is typical and predictive of the pressures for residential shoreline developments on all the lakes in the Big Sandy Area. The increased demand for lake lots, coupled with the fact that lakeshore development contributes up to 10% of total lake nutrient load, has resulted in a more urban and mixed residential land use and some failing individual septic systems. The outcome is too much phosphorous in area lakes, with a detectable decline in water quality that ultimately affects real estate values as much as ecological health of the region.

Design Assumptions

- Establish soil suitability for housing and septic system, ideally located on fine sandy loam soils with less than 12% slope to a lake.
- Preserve the natural shoreline for wildlife habitat, views and public access.
- Arrange housing layouts so that steep slopes, natural drainage ways and native vegetation fall into open space.
- Cluster homes to maximize green space.
- Build cluster septic system to minimize land area necessary, protect groundwater and consolidate expenditures and management.
- Locate cluster septic drain field in commonly held open space to function as part of a visual corridor or habitat corridor through the development.
- Ensure community input on market and design for cluster development and cluster septic as a way of building community support for the principles.

Development Scenarios

The following scenarios look at the range of lakeshore residential developments that are possible under existing County zoning and shoreland rules and can showcase cluster housing and cluster septic system concepts. The important question to be answered is what the appropriate mix of systems should be for new developments and existing residential on area lakeshores.

A 38-acre site on the east shore of Big Sandy Lake was chosen to illustrate the principles of sustainable development being explored in this study. This ‘model development area’ was also chosen because it is already platted, shows few existing built structures on aerial photographs, and is located in Shamrock Township, one of the townships participating in this project. The site affords a chance to demonstrate, using a variety of visualization tools including ArcView (GIS) and autocad 3-D modeling, different design scenarios and applied design strategies that could allow proximity to the lake while protecting water quality.
Existing Patterns: Single Family Homes

This scenario provides for 24 new residences and is developed to include the existing eight dwellings in the 38 acre site. Total residences in the site then, would be 32. The pattern of development continues the existing traditional lakeshore development.

Each of the lots adjacent to the lake would have a dock. This dock is only available to the land owner. The addition of eight new docks associated with the new development would bring the total number of docks on this site to 14.

The riparian lot sizes are 100’ x 330 feet to accommodate the bluff condition found on the site. Non-riparian lots are 150’ x 250’.

There are approximately six acres or 15% open space. This open space, however, is privately held and only available to the landowner. The design takes advantage of some existing roads in the area and requires an additional 3,300 feet of new construction. The non-riparian lots are accessed by a new road so that access off the main highway is minimized.

Waste water treatment system:
Each single family dwelling would have its own separate treatment system. There is an opportunity with this design scenario to utilize cluster septic systems. An example of this type of cluster septic system exists on Minnewawa Lake.

Preservation Pattern: Single Family Homes Clustered
This scenario provides for (37) single family homes in addition to the homes that are already there. Lot sizes are 100’ x 200’. This scenario would be accomplished through a Planned Unit Development (P.U.D.) scheme. About 55% open space on the site remains undeveloped. The 100’ strip along the lake is shared by the residences as well as the dock and trail system. The road system is about 4600 feet in length.

Waste water treatment system:
The total septic requirements are 4,300 feet of rock filled trench. This design scenario has two separate trench systems that are shared by two cluster groups. The open space area has more than ample space to provide a site for a second system when the initial site is no longer functional.
Preservation Pattern: Senior Town Homes

This scenario provides for 41 two-bedroom town homes. There is also a communal main building for use by the residents. While providing a large number of town homes, this planned unit development still maintains about 60% of the site in open space for the residents with the potential for conservation easements that would make the open space available for a public trails system and public access to the beach.

This scenario develops the site around the existing dwellings. Other scenarios could be explored whereby some of the existing dwellings could be purchased. The road system is about 3,000 feet in length.

Waste water treatment system:
The total septic requirements are 4,100 feet of rock filled trench. This design scenario has five separate trench systems that are shared by several townhomes. There are many options for aggregating the septic fields. These range from several smaller trench systems as in this design to a scenario where there is one large trench system in the open space area. In any event, the open space area has more than ample space to provide a site for a second system when the initial site is no longer functional.

Implementation, Policy and Projects:

- Create a prototypical lakeshore cluster housing development, with community input to determine market for cluster housing, and a willing developer.
- Work collaboratively with the lakes associations, Townships, Aitkin County, BSALWMP, Association of Area Realtors and Lakes & Pine Community Action Council to create an advisory board on lakeshore development.
- Identify County tax forfeit lands that may be available for development.

Potential Projects—Defining Lakeshore Development
Create Prototypical Lake Shore Cluster Housing Development

Partners: Citizens of Townships
Aitkin County
Lake Associations
Association of Area Realtors
Mille Lacs Band of Ojibwe

Technical or Financial Assistance: Arrowhead Regional Development Commission
Central Minnesota Housing Partnership

Projects:
- With community input, determine who cluster housing is for
- Seek developer
- Seek community input into cluster development

Timeline: Long term
Building Relationships Around Water
Planning Issues

City of McGregor letterhead speaks to the enduring attraction of the Big Sandy Area Lakes region: “Located in Aitkin County, the land of year-round outdoor recreation”. Hunting, fishing, and birding, snow sports and motorized off-road driving compete for some of the same terrain. In fact, the range of outdoor recreational opportunities, both serviced and informal, has increased tensions between different types recreation to the point that the social cohesion of the region suffers. Frequent misuse or overuse of areas endangers the natural resources and puts in question the potentially strong resource-based tourism industry. ‘Weekenders’ vs. permanent residents, snowmobilers vs. ATVers, bicyclists vs hikers, jet skiers vs. canoeists, swimmers vs. power boaters: the list is long and getting longer, suggesting the need for an assessment of community values associated with this place. The lack of a comprehensive regional plan for recreation and natural resources management reflects the underlying question, what is appropriate recreation and for whom in this region?

Priority issues are numerous on the question of best management practices for this highly-valued recreational region. To list the issues most often mentioned in the community workshops:

- Not enough recreation or public swimming beaches exist.
- Not enough enforcement is exercised on ATV and snowmobile trails.
- Too many personal watercraft run on the lakes.
- Year round trails are needed for ATV's, cross-country skiing and bicycles.
- A multi modal trail system is needed, with maintenance built in.
- Personal watercraft need designated areas.
- ‘Weekenders’ need education on wetland and lake water quality values and resource stewardship expectations of recreationists.

Design Assumptions
Opportunities exist to create environmental and civic projects in the recreational region of Big Sandy Area Lakes that would serve to teach about the natural resources values of the region. These include opportunities to:

- Restore wetlands to protect water quality and create civic amenities with educational value and interpretive potential.
- Build a recreational trail system to connect cities with lakes and wetlands.
- Partner with agencies, lakes associations and other community groups to initiate consensus environmental projects.
Development Scenarios

Towns to Lakes Trails System Scenario

An area-wide recreational bicycle and ski trails system will connect towns to lakes to provide year-round recreation for residents and tourists alike. The trails system takes advantage of the significant amount of public land to create trails and assumes negotiations with private property owners for trail easements where links are needed between public land parcels.

The system is really a series of loop trails (5 to 30 mile loops) originating at McGregor and extending west to Rock, Bass and Steamboat Lakes, southwest to Rice Lake, northeast to Round Lake and north to Minnewawa and Big Sandy Lakes. Routes may intersect existing snowmobile and off-road vehicle (ATV) trails, but would be funded and maintained outside the state legislature dedicated monies for snowmobile and ATV trails. The trails system development may be eligible for Minnesota DNR’s Local Trail Connections grant program.

Design Principles:

- Extend existing trails one segment at a time starting with an extended bicycle trail from Rice Lake Wildlife Management Area to city of McGregor or along County Road 40 between Big Sandy and Round Lakes.
- Create a looping system of designated trails where possible to offer a range of short- and longer-distance trail experiences in the same area.
- Designate trail routes with stops at key features in the region, such as historic sites, swimming beaches, wildlife viewing areas, roadside rest stops, resorts and restaurants.
- Add a trail component to public improvement projects as the opportunity arises to extend the trails system, e.g. Highways 65 and 8 upgrades, BSALWMP wetland restorations, McGregor School expansion.
- Inventory all types of existing designated and informal trails for condition and usage to learn about user preferences, underuse, overuse and level of community support.
- Locate trails on public land and road rights-of-way where possible to minimize the need for land acquisition or access agreements with willing private property owners.
- Create a map of the region’s trails and recreational systems as part of a tourism strategy.
- Explore locating an off-road vehicle park in the region to help control environmental damage and promote spending in area resorts, cafes and service centers.

Swimming Access Scenario

State and federal funding is available for boat access and public docks via anglers’ registration fees, but no grant monies are yet available for public beach development. Interagency discussions (U.S. EPA, U.S. Army Corps of Engineers, Minnesota DNR, BSALWMP) will be needed to resolve the question of too few public swimming places in the area.
Design Principles:

A community goal is to create more public access and swimming beaches at area lakes to offset the increasing privatization of area lakeshores. The design principles are:

- Create new swimming beaches at lakes where property owners will cooperate to allow beach development and public use
- Inventory property ownership at desirable swimming lakes to decide the best location for early implementation of a new swimming beach [County Plat maps 57-58]
- Locate swimming beaches so as to minimize conflict with boat access and other surface water use
- Integrate information about new swimming beaches into a regional trails and recreational system map

Minnewawa Creek Restoration Scenario

The community goal is to restore the natural stream flow of Minnewawa Creek in a ditched area at Grayling Wildlife Management Area to demonstrate environmental benefits of collaborative water quality improvement project.
Design Principles:

- Design the project with BSLAWMP, Grayling Wildlife Management Area and area farmers to create a stable stream channel while maintaining enough flow to drain affected agricultural land.
- Plan to monitor the project over time, for changes in nutrient load, soil erosion, wildlife habitat and water quality.
- Ensure public access to the project for residents to monitor and visitors to observe, possibly as part of an interpretive recreational bicycle trail.
- Create an educational brochure that increases public awareness of the region’s water quality issues and shows ways to resolve them through physical design, collaborative partnerships and education.

Implementation Policy and Projects:

- Work with the Minnesota DNR, BSLAWMP, Aitkin County, townships and recreational interest groups to design a regional recreation system that is watershed-based in its management approach. This group must address the multiple, sometimes conflicting, demands for the same recreational resource base.
- Create an inventory of existing and potential recreational resources in the region based on the GIS map data contained in this document. The inventory will account for agency goals and developer interests, e.g. new golf course development and more public swimming access points, to ensure sustainable recreational development occurs.
- Develop a tourism strategy with the Minnesota Extension Service Tourism Center that takes economic development and resource protection goals into consideration and capitalizes on the distinct character of the region.
- Move forward on one of the priority projects to illustrate the value of recreational use as an opportunity for environmental education.

Potential Projects—Building Relationships around Water

Create Lake to Town Trails System

Partners: City of McGregor
           Townships
           Lakes Associations
           Trail User Groups
           Mille Lacs Band of Ojibwe

Technical or Financial Assistance: Minnesota DNR
                                    BSWR
Projects:
- Form collaborative group
- Inventory trails
- Seek funding

Timeframe: Short term (form collaborative group), others are long term projects

Create Public Swimming Beaches
Partners: Shamrock Township
          Lake Associations
          BASLWMP
          City of McGregor
          Mille Lacs Band of Ojibwe

Technical or Financial Assistance: Minnesota DNR

Projects:
- Identify partners
- With community participation, pass resolution at township
- Obtain funding

Timeframe:
Immediately identify partners, pass resolution (short term), obtain long term funding

Wetlands Restoration
Partners: City of McGregor
          Lake Associations
          BASLWMP

Technical or Financial Assistance: Minnesota DNR
                                BSWR

Projects:
- County Ditch 5
- Mudlake
- Minnewawa Creek
Summary Recommendations

While numerous implementation and policy recommendations are made throughout this document, this section is reserved for the main recommendations and priority projects that emerged from the planning process. These recommendations include:

· Adopt this Strategy as a planning framework to complement Aitkin County’s Comprehensive Plan and support the BSALWMP Management Plan.
· Amend zoning and other regulatory tools to accommodate the design principles of integration, restoration and minimal impact on natural resources across the region.
· Carry out the recommended priority projects as funding becomes available and as part of larger initiatives where possible, to showcase the community design principles.
· Use the design principles to evaluate proposed development and for proposing new development.
· Continue to make the planning process visible and inclusive.

Recommendation on Community Organizing

As preface to the priority projects, this section describes an additional set of initiatives under community organizing that support the priority projects and planning goals, so help shape a watershed-based decision-making process. Each community organizing initiative includes a list of partners and possible funding or technical assistance sources.

The priority projects are described following this section that could be implemented within the immediate to near future.

Develop a Regional Plan For Big Sandy Lakes Area

Partners: 

BSALWMP
Townships
MPCA
MN State Planning Agency
Aitkin County
Minnesota DNR
Upper Mississippi River Basin
Lake Associations
Mille Lacs Band of Ojibwe

Photos showing historical points of interest, current water quality conditions and development density along Big Sand Are Lakeshores collectively illustrate land use and water quality issues that focused this study.
**Technical or Financial Assistance:**
Blandin Foundation  
MN State Planning  
Arrowhead Regional Development Commission

**Projects:**
- Form Regional Planning Consortium  
- Consider a moratorium on commercial lakeshore development until regional plan and/or sanitary district is completed  
- Determine development carrying capacity of Big Sandy Lakes Area  
- Form a Regional Recreation Board  
- Seek zoning authority for Big Sandy Lakes Area

**Timeframe:** In the immediate or near future, form a regional planning consortium and propose a lakeshore development moratorium; all other projects are long term goals.

### Form Sanitary District for Big Sandy Lake Area

**Partners:**
- Townships  
- Aitkin County  
- Lakes Associations  
- Uof M Agricultural Extension Service  
- BSALWMP  
- Mille Lacs Band of Ojibwe

**Technical or Financial Assistance:**
- Minnesota Pollution Control Agency  
- BSWR

**Projects:**
- Form Sanitary District  
- Propose a moratorium on commercial lakeshore development until regional plan and/or sanitary district is completed  
- Inventory existing condition of septic systems  
- Determine appropriate mix of sanitary treatment systems  
- Seek funding for systems

**Timeframe:** Immediately form a sanitary district and propose a lakeshore development moratorium. Inventory septic systems in the short term. All other goals are long term.

### Townships To Assess The Need for Five Person Board

**Partners:**
- Citizens of Townships  
- Town Supervisors

**Technical or Financial Assistance:**
- Minnesota Association of Townships

**Projects:**
- Determine need for five person board

**Timeframe:** Immediate project
**Priority Project 1: McGregor Civic Opportunities**

**Design Goal:** Enhance civic image and build community pride

**Design Principles:**
- Create entry signs and markers along Highways 8, 65 and 210 into McGregor
- Improve trailhead sign areas along Soo Line Trail
- ‘Green’ city streets with shade trees and public gardens, at highway entries and in residential and commercial areas

**Projects:**
- North Gateway to Downtown: Commercial development illustrates civic opportunities
- Extend downtown character to edge of highway
- Maximize use of available land
- Shade parking areas and walkways
- Create street and sidewalk network to meet existing
- Filter storm water in run-off ponds
**Priority Project 2: Meeting Seniors’ Housing Needs**

**Design Goal:** Locate new seniors’ housing in McGregor

**Design Principles:**
- Build a multi-unit active seniors’ apartments development as in fill to maximize available land use
- Ensure apartment views to surrounding wetlands and street activity
- Filter storm water in run-off ponds on site
- Minimize disturbance to intact habitat areas

Seniors’ housing development scenarios for McGregor illustrate design principles and help revitalize the community with needed housing type.

Minnesota’s rural heritage is reflected in the porch detail, building materials and architectural style of these seniors’ residential developments (photos courtesy of ESG Architects)
**Priority Project 3: Lakeshore Development**

**Design Goal:**
Showcase sustainable lakeshore development with cluster housing and cluster septic system.

**Design Principles:**
- Establish soil suitability for housing and septic system, ideally locate on fine sandy loam soils with <12% slope to lake.
- Preserve the natural shoreline for wildlife habitat, views and public access.
- Arrange development layout so that steep slopes, natural drainage ways and native vegetation fall into open space.
- Cluster houses to maximize green space.
- Build cluster septic system to minimize land area needed, protect groundwater and consolidate expenditures and management.
- Locate cluster septic drainfield in commonly-held open space to function as part of a visual corridor or habitat corridor through the development.
- Ensure community input on market and design for cluster development and cluster septic as a way of building community support for the principles.

**East Side Big Sandy Lake Residential Development Scenarios**
Illustrate cluster housing concept with cluster septic systems.
Priority Project 4: Swimming Beaches

Design Goal:
Create more public access and swimming beaches at area lakes to offset increasing privatization of lakeshore

Design Principles:
- Create new swimming beaches at lakes where property owners will cooperate to allow beach development and public use
- Inventory property ownership at desirable swimming lakes to decide the best location for early implementation of a new swimming beach
- Locate swimming beaches so as to minimize conflict with boat access and other surface water use
- Integrate information about new swimming beaches into a regional trails and recreational system map
Priority Project 5: Minnewawa Creek Rehabilitation

Design Goal:
Restore the natural stream flow of Minnewawa Creek in ditched area at Grayling Wildlife Management Area to demonstrate environmental benefits of collaborative water quality improvement project.

Design Principles:
- Design the project with BSLAWMP, Grayling Wildlife Management Area and area farmers to create a stable stream channel while maintaining enough flow to drain affected agricultural land.
- Plan to monitor the project over time, for changes in nutrient load, soil erosion, wildlife habitat and water quality.
- Ensure public access to the project for residents to monitor and visitors to observe, possibly as part of an interpretive recreational bicycle trail.
- Create an educational brochure that increases public awareness of the region’s water quality issues and shows ways to resolve them through physical design, collaborative partnerships and education.
**Priority Project 6: Town-to-Lakes Recreational Trail System**

**Design Goal:**
Build a recreational trail system to connect communities to lakes to provide year-round recreation for residents and tourists.

**Design Principles:**
- Extend existing trails – one segment at a time - starting with an extended bicycle trail from Rice Lake Wildlife Management Area to City of McGregor or along County Rd 40 between Big Sandy and Round Lakes.
- Create a looping system of designated trails where possible to offer a range of short- and longer-distance trail experiences in the same area.
- Plan trail routes with stops at key features in the region such as historic sites, swimming beaches, wildlife viewing areas, roadside rest stops, resorts and restaurants.
- Add a trail component to public improvement projects as the opportunity arises, to extend the trails system, e.g. Highways 65 and 8 upgrades, BSLAWMP wetland restorations and McGregor School expansion.
- Inventory all types of existing designated and informal trails for condition and usage to learn about user preferences, under use, overuse and level of community support.
- Locate trails on public land and road rights-of-way where possible to minimize the need for land acquisition or access agreements with willing private property owners.
- Create a map of the region’s trails and recreational systems as part of a tourism strategy.
**Priority Project 7: Building Community Leadership Skills**

**Design Goal:**
Cultivate strong community leaders to move forward with the collaborative decision-making process regarding future growth in the area that is at the heart of the regional design strategy.

**Design Principles:**
- Build on community support for a regional design strategy to complete demonstration projects that showcase the community design principles.
- Form task groups to lead the priority projects identified through this planning process.
- Work with Blandin Foundation and the Arrowhead Regional Development Commission to provide community leadership training for task groups and individuals.
- Set target dates for completing the priority projects beginning with those that have funding and public interest and can be tied to a larger project or event, e.g. new trail design incorporated into County road upgrades or a civic greening project to celebrate the McGregor Centennial.
- Collaborate on projects whenever possible to build community, extend sense of stewardship and enhance quality of life in the McGregor region.