May 7, 2012

To: REGION 5 SUSTAINABILITY PROJECT

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# **Comprehensive Plan and Model Ordinances** for Natural Resource Protection in Region Five

**Introduction:** City and county governments have the authority to control local land use and contribute to natural resource protection. It is important to have a comprehensive plan to help implement policies for the protection of these resources using a regional strategy that the counties can use to execute ordinances and laws, making the region as sustainable as possible.<sup>1</sup> Region Five is made up of five different counties in north-central Minnesota. The counties are looking to come together with comprehensive plan and model ordinance language that is best for the region. The counties are Cass, Morrison, Todd, Wadena, and Crow Wing. The region is made up of rural areas, small towns, and many lakes.

The region is made up of different environments that may call for different model ordinances and comprehensive plan language. Resources are abundant in the region. The water resources include many lakes of all sizes as well as the Mississippi River. There are three different environments in the region: coniferous forest, eastern hardwood forest, and western

<sup>&</sup>lt;sup>1</sup> "Sustainable Use of Resources" can be defined as use of resources so that they are protected both for present and future generations.

plains and prairies. It is the heart of the "lakes region" for which the state of Minnesota is known.

Natural resource protection seeks to preserve the character and heritage of the Region.

**Overall Goal:** To preserve the natural resources and environmental assets of the region, with objectives that preserve waters, water quality, agricultural space, forests, wildlife, and open spaces of land by minimizing negative impacts and disturbances to the water, land, air, and wildlife.

**Findings:** Some counties may not like a shift from local authority to a regional vision. Also, different demographics and geography call for different ordinances in different parts of Region 5. But by making comprehensive plan language that is policy based, the local government may not feel invaded.<sup>2</sup>

A regional identity is important in order for the comprehensive plan to work, especially with regard to natural resource protection. When resource protection is a priority throughout the region, it is more likely that the area will prosper. Language that makes the entire region feel like they are working together when they have common issues is important.<sup>3</sup> This will help the Region to feel unified and part of a larger community. Local governments may tend to only look at their own jurisdiction's needs and forget about a regional picture. By having different ordinances for different parts of the region, while still having a common goal, local needs can still be accomplished.

## **Authority:**

### A. Cities:

The authority given by Minnesota Statute § 462.3535 subd. 1 and 3 authorizes cities to prepare and implement a "community based comprehensive plan" consistent with the goals of

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<sup>&</sup>lt;sup>2</sup> Arthur Naftalin and John Brandl, *Twin Cities Regional Strategy*, Metropolitan Council of the Twin Cities Area, St. Paul (1980)

<sup>&</sup>lt;sup>3</sup> *Id at 18*.

community based planning. Subdivision 1 states that "[a] municipality may carry on comprehensive municipal planning activities for guiding the future development and improvement of the municipality and may prepare, adopt and amend a comprehensive municipal plan and implement such plan by ordinance and other official actions in accordance with the provisions of sections 462.351 to 462.364."

## **B.** Townships:

Similarly, Minnesota Statutes § 366.10 through § 366.181 convey to townships the authority to engage in this kind of planning through approval of the voters of the town.

Townships have the authority to enact zoning regulations, zoning districts, and establish zoning commissions. Any official controls must not be inconsistent with or less restrictive than any adopted official controls of the county within which it belongs. (Minnesota Statute § 394.33).

### **C.** Counties:

Minnesota Statute § 394.21 specifically grants to all counties except Hennepin and Ramsey authority to "carry on county planning and zoning". Minnesota Statutes § 394.23 gives county boards the power and authority to prepare and adopt by ordinance, a comprehensive plan and "a comprehensive plan or plans when adopted by ordinance must be the basis for official controls adopted under the provisions of sections 394.21 to 394.37".

### **D. Joint Planning:**

While each of these units of local government has the authority to plan and implement ordinances, coordination and joint planning is also allowed under Minnesota Statute § 394.232, and under Region Five, could be utilized. To achieve regional planning, under Minnesota Statute § 462.371, "[a]ny two or more counties, cities, or towns may enter into an agreement under Section 471.59 for the conduct of regional planning activities". Under joint exercises of power,

cities and counties may "adopt a single community-based comprehensive plan district." (Minnesota Statute § 462.3535 subd. 3).

## **E.** Authority over Wetlands:

Local units of government are required to follow state and federal laws in wetland protection. However, local units of government are the last protective unit and may have regulations in place that are stricter than either the state or federal protections.<sup>4</sup> The local units of government are responsible for making the initial regulatory determinations for Minnesota's Wetland Conservation Act (WCA).<sup>5</sup> Responsibility for administration of the WCA is shared by both local and state government.

#### F. Watersheds:

Laws that affect Watershed Districts are in Minnesota Statutes § 103D. Watershed districts have been given broad authorities, including the authority to adopt rules with the power of law to regulate, conserve, and control the use of water resources within the district and to contract with units of government and private and public corporations to carry out water resource management projects.

### A. Water:

**Introduction:** The lakes and rivers of the region are considered the most important resource by residents of the region and is a major draw of tourists. The area is known for the lakes and their

<sup>&</sup>lt;sup>4</sup> Federal regulations on wetlands include the Clean Water Act, Section 404 specifically. State regulations include the Wetland Conservation Act. Other important regulators of wetlands include the Endangered Species Act, 16 U.S.C. § 1536, the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321, the Minnesota Environmental Policy Act ("MEPA"), Minn. Stat. ch. 116D, the Minnesota Environmental Rights Act ("MERA"), Minn. Stat. ch. 116B, Watershed District Rules, see Minn. Stat. ch. 103D, Shoreland and Floodplain Ordinances, see Minn. Stat. ch. 103F.

<sup>&</sup>lt;sup>5</sup> The WCA is codified as amended at Minn. Stat. §§ 103G.221-.2372. The basic requirement is that "[w]etlands must not be drained or filled, wholly or partially, unless replaced by restoring or creating wetland areas of at least equal public value under a[n approved] replacement plan." Minn. Stat. § 103G.222, subd. 1(a). Drainage of public waters wetlands is governed by § 103G.221.

preservation is important to the region. In order to protect the waters of the region, these protective ordinances would help keep the waters clean and preserved for the future.

### **Definitions:**

- (a) Agricultural land: Land used for the production of crops, plants, or livestock, dairy, or poultry products that contains at least 25 acres, most of which is devoted to the agricultural use.
  - (b) Basin: An area of land drained by a river and its tributes.
- (c) Buffer: An area of natural or planted vegetation through which stormwater runoff flows in a diffuse manner which provides for filtration of the runoff and the filtering of pollutants.
- (d) Garbage: All animal and vegetable waste resulting from the handling, preparation, cooking and consumption of food.
- (e) Maintenance Plan: A legally recorded document that provides for long-term maintenance of stormwater management facilities and practices.
- (f) Non-Point Source Pollutant: A water pollution source that cannot be defined as originating from discrete points and shall include, but not be limited to, pollutants from agricultural, construction, and urban runoff sources, usually containing sediment and debris.
- (g) Point Source Pollutant: An identifiable source of water pollution confined and discernible, including any pipe, ditch, tunnel, or well. Point source pollutants include discernible, confined conveyances of stormwater.
- (h) Pollution: Contaminating waters by introduction of a pollutant making the water harmful to the public health, or harmful to wildlife and plant life.

- (i) Pollutant: Dredged soil, solid waste, sewage, garbage, chemical waste, biological materials, sand, sediment, debris, and municipal or agricultural waste that is discharged into the waters of the Region, including stormwater discharges.
- (j) Groundwater: Water beneath the surface, stored in layers of soil, sand, and rocks that supplies water for wells that can extract water.<sup>6</sup>
- (k) Interference: A discharge which, alone or in conjunction with discharges by other sources, inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and therefore is a cause of the prevention of sewage sludge use or disposal by the POTW.
- (l) Publicly Owned Treatment Works (POTW): A device and system used for storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes, including any sewers that transport wastewater to the Publicly Owned Treatment Works (POTW) plant, but does not include pipes, sewers, or other conveyances not connected directly or indirectly to a facility providing treatment.
- (m) Sewage: A combination of the water-carried wastes from residences, business buildings, institutions, and industrial establishments. Sewage may incidentally include ground, surface, and storm water.
- (n) Stormwater: Discharge and flow of runoff on the surface of the ground that originates primarily from rain and snow (precipitation) that runs off non-porous surfaces like paved streets, parking lots, and rooftops or is not absorbed into the ground.
- (o) Stormwater Management: the use of structural or non-structural practices that are designed to manage stormwater runoff in order to reduce pollutant loads.

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<sup>&</sup>lt;sup>6</sup> Groundwater is used for drinking by over 50% of people in the Region, most people in rural areas, and is used for irrigating crops.

- (p) Water Supply: sources and their surroundings from which water is supplied for drinking and domestic purposes.
- (q) Watershed: The land area that drains water to a particular stream, river, or lake. It is a land feature that can be identified by tracing a line along the highest elevations between two areas on a map, often a ridge.
- (r) Wetlands: The land that has a predominance of hydric soils, is saturated by ground water, and under normal circumstances supports a prevalence or hydrophytic vegetation typically adapted for life in saturated soil conditions.
- (s) Well: Any artificial excavation constructed by any method for the purpose of extracting water from, or injecting water into, the underground.

### 1) Groundwater:

Overall Purpose and Goal: All of the counties of Region Five have identified the need to protect and/or preserve the quality of the groundwater in the region through ordinances for stormwater management, agricultural runoff, septic system and sewer use, and wells.

## a) Stormwater Management:

Authority: Stormwater management is controlled though the National Pollution

Discharge Elimination System (NPDES), but regional enforcement is necessary to track runoff on a consistent basis. The ordinance can be adopted pursuant to Minnesota Statute §§ 103B, 105, 462, and 497.

Section 1: Purpose and Goals of this Ordinance: Region Five is largely without local stormwater management plans. The purposes and goals of this ordinance are:

 To minimize threats to public health, safety, general welfare and resources in the community.

- To improve and preserve the water resources the Region cares so much about. The threat is that uncontrolled runoff can diminish the capacity of lakes and streams to support wildlife, change wetlands, and pollute groundwater.
- To protect the water resources that all the counties of the region have identified as priorities.<sup>7</sup>
- To prevent nonpoint source pollution, as many pollution problems are a result of nonpoint pollution from stormwater runoff.
- To decrease runoff volume, erosion, frequency and duration of stormwater runoff.
- To minimize soil disturbance in order to protect water and wetlands.
- To track runoff on a consistent basis.
- To require strict compliance with and enforcement of this Ordinance.

Section 2: Typology: The Ordinance will apply at the city level and to buffer areas around wetlands in the Region.

### Section 3: Ordinances:

1A.1: All new development shall be assessed for stormwater quality management.

Applicants must conform to requirements of NPDES permits.

1A.2: All new development should incorporate the use of existing topography. All storm water runoff from impervious surfaces shall be recharged on-site unless in conducting

<sup>&</sup>lt;sup>7</sup> Todd and Cass Counties have identified that they are interested in stormwater management in their comprehensive plans. The other three counties have not addressed stormwater management in their plans. *See* Todd County 2030 Comprehensive Plan at

http://www.co.todd.mn.us/HTML\_Files/Departments/Documentation/ToddCounty2030C omprehensivePlan.pdf and Cass County Comprehensive Plan (2008-2012): http://www.co.cass.mn.us/esd/pdfs/comp\_plan.pdf

development plan review it is determined infeasible because of site conditions or is undesirable because of uncontrollable risks to water quality from such recharge. Such recharge shall be by surface infiltration through vegetated surfaces unless otherwise approved. Surface water shall be collected to avoid puddling.

1A.3: No person shall develop any land for residential, commercial, industrial, or institutional uses without having provided a written stormwater management plan to control and manage stormwater from such developments. Long term stormwater management plans shall include removal of excessive trash and debris and accumulated sediment to maintain function of the stormwater management system.

In addition, a Stormwater Pollution Prevention Plan is required for all projects disturbing 1 acre or more.

1A.3:1. Streets: If streets are to be used as part of the minor or major drainage system, no curb shall not remain flooded for more than eight hours for any event less than or equal to the 100-year event.

1A.4: Soil: To reduce runoff, basins and trenches should be located on soils in areas designated by the U.S. Soil and Water Conservation District when within construction area.

*1A.5:* Vegetation Strips: Native vegetation should be used for vegetation strips around impervious surfaces.

1A.6: The city shall not issue any development permits without first meeting the requirements of this ordinance. Permits must be accompanied by a stormwater management plan and a maintenance agreement.

*1A.6A. Model Application Procedure for Permits:* 

- 1) Applications for land disturbance activity permits must be filed with the Region on any regular business day.
- 2) Permit applications shall include the following: two copies of the stormwater management plan, two copies of the maintenance agreement, and any required review fees.
- 3) Within 30 business days of the receipt of a complete permit application, including all documents as required by this ordinance, the Region shall inform the applicant whether the application, and stormwater management plan are approved or disapproved. If the application is denied, grounds for disapproval shall be stated. If the permit application or stormwater management plan is disapproved, the applicant may revise and resubmit the application.

### b) Agricultural Runoff Prevention:

Section 1: Purpose and Goals:

- To prevent runoff from nonpoint source and point source pollutants into the waters and onto the agricultural lands of the Region.
- To promote and protect agricultural land to be free from pollutants.

Section 2: Typology: County/Regional Level: This ordinance shall be applied at the county or regional level.

### Section 3: Ordinance:

1B.1: All owners of agricultural land shall keep maintenance plans as defined by NPDES. This ordinance should be consistent with stormwater management ordinances of the Region. Although agricultural land is exempt from NPDES regulation, these conservation plans should be used by the Region utilizing NPDES.

## c) Septic Systems, Sewer Use, and Water Treatment:

Section 1: Purpose and Goals:

- To provide for efficient, economic, environmentally safe, and legal operation of the local POTW.
- To prevent the introduction of substances that interfere with the POTW in any way, pass through the POTW to the state's waters and cause contravention of standards for those waters or cause violation of the POTW's NPDES permit, increase the cost or otherwise hamper the disposal of POTW sludge and/or residuals, cause air pollution, or groundwater pollution, directly or indirectly, cause, directly or indirectly, any public nuisance condition.
- To ensure that new sewers and connections are properly constructed.
- To ensure inspection of septic systems for assessment and compliance to make sure systems are maintained properly.

Section 2: Typology: This ordinance shall apply at the county or regional level.

Section 3: Ordinance Language:

1C.1: It shall be unlawful for any person to place, deposit, or permit to be deposited, in any unsanitary manner, on public or private property, within the county, any human or animal excrement, or garbage.

1C.2: No person shall connect a private sewage system so that sewage flows directly into a storm sewer or into a drain intended exclusively for storm water.<sup>8</sup>

1C.3: No person shall discharge sewage into a well.

<sup>&</sup>lt;sup>8</sup> Septic and sewage systems are governed by Minn. Stat. §§ 115.55 and 115.56.

IC.4: Users must comply with Minnesota Pretreatment Standards codified at Minn. Rule 7049.

### **Water Conservation:**

**Introduction:** Widespread use of shallow wells is a problem in the Region Five area. Todd and Cass Counties have already identified Well Protection Plans as a priority to protect groundwater.

## D) Wells<sup>9</sup>:

Section 1: Purpose and Goals:

- To abandon the use of wells within cities. 10
- To protect the health, safety, and welfare Region Five by ensuring that the groundwater of the region will not be polluted or contaminated.
- To promote safety and welfare of the people of Region Five by ensuring that unused wells are not left uncovered.<sup>11</sup>
- Section 2: Typology: This language shall apply at the county or regional level.

### Section 3: Ordinance:

1D.1 Permits: No person shall dig, drill, deepen or modify a well that may intersect groundwater without first proposing the well on a form prescribed by the Minnesota Commissioner of Health and that is filed with the Commissioner along with the filing fee. 12

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<sup>&</sup>lt;sup>9</sup> The Local Authority over wells is covered in Minnesota Statute § 103I.111. The local authority cannot be less restrictive than the state requires.

<sup>&</sup>lt;sup>10</sup> This has been identified as a priority for the counties of the region, but has not been implemented into a plan.

plan.

Subdivision 6 of Minn. Stat. § 103I.111 states that "A well that is required to be sealed under section 103I.301 but is not sealed is a public health nuisance. A county may abate the unsealed well with the same authority of a board of health to abate a public health nuisance under section 145A.04, subdivision 8

<sup>&</sup>lt;sup>12</sup> In Minnesota Statute §103I.208.

Any person who fails to file with the Commissioner before commencing work, if permission is subsequently granted, will pay double the filing fee, unless this conflicts with state law.

1D.2 Inspections: Inspections will be made at the initial drilling of wells as well as once yearly. The purpose of inspection is to determine: If a well is needed, if a well needs relocation, if there are unknown groundwater quality problems, and if there are any abandoned wells on the property.

### 2) Watersheds:

Section 1: Purpose and Goals:

- To protect the watersheds of the Region and preserve their function in the ecosystem.
- To improve floodplain protection, including headwater areas, to protect water quality while reducing erosion and flooding.
- To preserve open space, natural habitats, wildlife habitats, and provide greater connectivity with greenways.

Section 2: Typology: Rural. There are five watersheds in the region, with the major watershed being the Mississippi River Headwaters Drainage Basin. Two Watershed Districts, which are units of government and governed by Minnesota Statutes Chapter 103B, are located in Region Five. 13

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<sup>&</sup>lt;sup>13</sup> Watershed districts have been given broad authorities, including the authority to adopt rules with the power of law to regulate, conserve, and control the use of water resources within the district and to contract with units of government and private and public corporations to carry out water resource management projects.

### 3) Wetland Protection:

Introduction: The overall purpose and goal of wetland protection in Region Five is to preserve and protect the wetlands in the region because they help maintain healthy waters in the region and create wildlife habitat. All the counties in Region Five have identified protection of wetlands as a priority. The following uses are permitted by Minn. Stat. §§ 103G.231 in wetlands provided they do not destroy wetland functions and values or increase flood or erosion hazards on other lands: conservation of soil, vegetation, water fish, and wildlife; outdoor recreation; recreational open space; construction for nature study; and restoring wetlands. The following are Conditional Uses and require a permit: all activities involving excavation, dredging, dumping, grading, or any other alteration or use of a wetland.

### **A) Wetland Protection:**

Section 1: Purpose and Goals:

- To stop erosion of soil into water improving surface and groundwater quality.
- To store stormwater runoff.
- To maintain surface water flow.
- To provide habitat for plant and animal species.

Section 2: Typology: This ordinance shall apply to all the wetlands in the region.

Section 3: Ordinances:

4A.1: A buffer shall be maintained along the edge of wetlands. The buffer strip shall extend landward a minimum of 75 feet from the ordinary highwater mark of a wetland. An

allowance of a smaller extension from the ordinary highwater mark may be allowed by the designated authority of the Region and should not be less than 50 feet.<sup>14</sup>

4A.2: Variances: If the designated authority in the Region (City or County) allows for applications for variances from the wetland buffer requirement, written notice of the variance application along with a description of the scope of proposed project shall be submitted to the relevant watershed district.

Prior to granting a variance from this Ordinance, the City or County must find that the variance:

- 1. Will not result in any detriment to surface or groundwater resources which provide aquifer recharge.
- 2. Will not increase the financial burdens on the community by increasing overflow of water onto other areas.
  - 3. Will not increase or cause danger to life or property.
- 4. Promotes the preservation of the natural land forms, existing trees, native vegetation and wetlands within the County or City.
- 5. Will not result in any development within the minimum allowable buffer of 50 feet.

### B) Minimum Setback from Wetlands and Waterfronts:

**Introduction:** It is possible for local governments to have more stringent wetland and shoreland regulations than the state requires. Because the waters, lakes and rivers of the region are such valued assets, their preservation is important. The counties of the region have addressed the need for shoreland regulation. Crow Wing county is looking at shoreland regulation in anticipation of

<sup>&</sup>lt;sup>14</sup> A designated authority of the Region (like a city or county) has authority under Minnesota Statutes Chapter 462 to regulate development of wetlands. This Ordinance, as well as Minnesota Statutes Chapter 103 and Section 404 0f the Federal Clean Water Act also regulates the development of wetlands.

development; Todd and Morrison counties stated a broader goal of protection of shoreland in their counties.

## Section 1: Purpose and Goals:

- To preserve water quality.
- To prevent disruption or damage to habitat areas.
- To preserve drainage and stormwater management.
- To prevent erosion hazards
- To prevent material detriment to the land of the region.

Section 2: Typology: This language would apply at the regional level.

### Section 3: Ordinance:

- 3B.1: The minimum setback length will be defined as 75 feet from the ordinary high water mark of Department of Natural Resources (DNR) established wetlands. No structure shall be allowed within the minimum buffer area.
- 3.B.2: Minor improvements like bike paths, benches, and docks may be permitted if they do not involve loss of open space or affect the goals and purposes of the ordinance.
- 3.B.3: No sand, gravel, mining extraction or natural ground cover removal is allowed in the waterfront. No application of fertilizer, herbicides, or pesticides is allowed within 50 feet of the highwater mark.
- 3.B.4: Minimum septic and soils absorption system setback. The minimum septic system setback shall be 100 feet from the wetland boundary.
- C) Wetland Restoration: Activities that include shoreline restoration, creates, and enhances wetlands. Mitigation of wetlands can be used when wetlands need to be developed in other areas of the region.

Standards: Replacement criteria: Wetland sequencing and replacement shall be consistent with the Wetland Conservation Act and Section 404 of the federal Clean Water Act.

## B. Land:

### **Definitions:**

- (a) Agricultural land: land used for production of crops, plants, or livestock, dairy, or poultry products.
  - (b) Compost: decaying organic matter, such as leaves to improve soil structure.
- (c) Conservation Design: An alternative to conventional subdivision development. With Conservation design minimum amount of open space is to be set aside in the development for use by the residents or townspeople. The real difference between a Conservation Design subdivision and a conventional subdivision, or even a "cluster" subdivision, lies in the order in which the subdivision is created. The idea of conservation design is to identify the "conservation areas" first, whether they are fields, forests, views, coastal shoreline, historic sites, or whatever is valuable in the area. Then, the home sites are determined. Then the roadways and walkways are laid out. The lot lines come last (as opposed to first in conventional design by an engineer).
- (d) Developed Land: Land that has been converted from its natural state to include things like buildings, driveways, roads, parking spaces, fencing, or other conversion.
  - (e) Non-Developed Land: Land that has not been converted from its natural state.
- (f) Forest: a large area covered with trees and undergrowth generally characterized by a tree density of 100 or more trees per acre. A forest may have been cut (but not cleared).
- (g) Mulching: permeable arrangement of organic materials that help retain soil moisture and suppress weeds.

(h) Open Space: An area of land or water that either remains in its natural state or is used for agriculture. Open space can be publicly or privately owned. It includes agricultural land and forests, undeveloped shore lands, undeveloped lands, cultural and historic resources, and spaces designated as parks for public use. It also includes water bodies such as lakes. The definition of open space depends on the context within the region. In a city, a small park or a narrow corridor for walking or bicycling is open space, though it may be surrounded by developed areas.

(i) Rainwater harvesting: collection and storage of runoff mostly from roofs for later use.

Rainwater harvesting is a way to afford the opportunity to provide irrigation without depleting the potable water supply system.

A. Non-Developed Land: Goal – Protect non developed land from premature or incompatible development.

Introduction: Not all of the counties have plans for the development of land that has not previously been altered from its natural conditions. Todd and Wadena county have identified some priorities. Todd County encourages rural subdivison and urban development to conform to natural limitations and conditions. Similarly, Wadena County would like to identify and classify important natural resources which will be used to plan and direct future development. By using conservation design, designating open spaces and protecting forests, and trees, hopefully these goals could be met.

## 1) Conservation Design for Subdivisions:

Section 1: Purpose and Goals:

- To encourage the preservation of open land for its scenic beauty.
- To enhance agricultural, open space, forestry, and recreational use.
- To protect the natural environment.

- To protect the value of real property.
- To promote more sensitive siting of buildings and better overall site planning in the Region.

Section 2: Typology: This ordinance applies at the city level for development of five or more housing units.

#### Section 3: Ordinances:

A.1: Applications: Applicants shall apply with: A written development plan that includes the topography and wetlands of the area and shall be prepared to demonstrate that these four design steps were followed by their site designers in determining the layout of the open space, housing sites, proposed streets and lot lines.

i. Designating the Open Space. During the first step, the area to remain open space is identified. The open space shall include, to the extent feasible, the most sensitive and noteworthy natural, scenic, and cultural resources on the property.

ii. Location of House Sites. During the second step, potential house sites are tentatively located. House sites should generally be located not closer than 75 feet to wetlands areas, but may be situated within 50 feet of open space areas, in order to preserve views of the latter without negatively impacting the former.

iii. Street Layout. The third step consists of aligning proposed streets to provide vehicular access to each house site in the most reasonable and economical way. When streets are laid out, they shall be located in a way that avoids or at least minimizes adverse impacts on open space. To the greatest extent practicable, wetland crossings and streets traversing existing slopes over 15% shall be strongly discouraged.

iv. Lot Lines. The fourth step is simply to draw in the lot lines (where applicable). These are generally drawn midway between house locations indicating private ownership.

A.2: Open Spaces: The open space shall be established as a lot or lots separate and distinct from the lots intended for residential and accessory uses, and from land dedicated as street rights-of-way.

A.2.1: The minimum amount of required open space area shall be 50% of the gross area of the site. This minimum required area shall be in addition to any open space used for stormwater drainage facilities. No more than 50% of the minimum required open space area shall be devoted to land unsuitable for development as defined in these regulations. <sup>15</sup>

A2.2: All open space shall be protected against further development. At the time of master plan review by the Planning Board, the applicant shall submit a separate open space use plan containing: the general location and area of all proposed open spaces; the general proposed use(s) of the open space; existing topography and existing ground cover of open space areas; the location and nature of any existing buildings, structures, stone walls or other unique natural and/or historic features; areas of open space from which existing vegetation will be removed or altered and areas which are proposed to be harmed or otherwise graded, excavated or altered from their existing natural state; and generalized proposals for the landscaping of proposed disturbed areas.

<sup>&</sup>lt;sup>15</sup> The minimum amount of open space should be locally determined. Some towns have elected to set the minimum at a lower level in the hope of attracting more applicants. If a lower standard is used, it is important to create an incentive to increase density where more open space is voluntarily provided by the developer.

A.2.3: Buffer Areas. All dwellings and structures shall be located a minimum of 50 feet from the lot line of the development, and 100 feet from any adjacent surface waters or wetlands. Buffer areas shall be retained in their natural vegetative state to the maximum extent feasible, except where adjacent to agricultural land.

### 2) Commercial and Institutional Landscapes:

Section 1: Purpose and Goals:

- Water conservation in the region.
- Beautification of the Cities in the Region.

Section 2: Typology: The ordinances for commercial and institutional landscapes will apply at the city level.

Section 3: Ordinances:

2.1: Areas planted with turf grass shall have a minimum of six inches of topsoil depth. The soil shall be blended with compost in a ratio of soil to compost appropriate for the local soil. The compost shall be incorporated into the top two inches of soil.

2.2: All areas of exposed soil shall be covered with two inches of mulching.

2.3: Irrigation of commercial and institutional landscapes shall not occur more than twice a week. Rainwater harvesting may be allowed for landscape irrigation if it conforms to local plumbing codes in the region.

## 3) Agricultural Land:

Section1: Purpose and Goals:

Protect and promote areas of the region used for crop production while
 protecting the region from agricultural activities in unsuitable areas.

Section 2: Typology: The ordinances for agricultural land will apply at the county level, outside the cities and towns in the region.

### Section 3: Ordinances:

A3.1: Dwellings on agricultural land shall be permitted, provided that the owners apply for apply for construction permits, when they are located on most practical and least productive land.

### 4) Forest:

## Section 1: Purpose and Goals:

- To protect the forests of the region.
- To maintain the unique character of the forests that make up the region.
  Retention of woodlands helps to control the velocity and amount of stormwater runoff, thereby reducing flooding; filters sediments and pollutants before they reach streams.
- To promote groundwater recharge.
- To stabilize the soil and reduce soil erosion.
- To improve air quality by filtering pollutants from the air.
- To offer a stable habitat for associated plant species and for animal wildlife.
- To provide shade and windbreaks that help moderate the effects of climate conditions. The retention of woodlands is essential to the scenic quality of a community and helps to preserve the diversity of native plantlife and animal species.

Section 2: Typology: The ordinances for forest protection will apply at the county/regional level, outside of the cities and towns in the region.

#### Section 3: Ordinances:

4.1: Conditional Uses: Temporary housing requires a conditional use permit which shall be granted if the temporary housing takes place on agricultural land of at least twenty-five acres and is used only to house seasonal laborers. At a minimum, the following standards shall be applied when reviewing applications for conditional use permits: The proposed use shall be sited upon lands which are less suitable for agricultural and forest lands than other agricultural or forest lands within the district. The proposed use shall be sited on a parcel in a manner which minimizes the amount of productive agricultural and forest land which is converted to the proposed use. The proposed use shall be located in close proximity to existing buildings whenever possible and appropriate.

## 5) Protection of Trees:

Section 1: Purpose and Goals: To keep the cities and towns of the region beautiful and to enhance property values.

Section 2: Typology: The ordinances for protecting wooded areas will apply at the city and town level.

### Section 3: Tree Removal Ordinances:

5.1: Trees shall be preserved if possible when developing land with improvements such as buildings, driveways and parking lots.

Exception for diseased trees: Individual diseased or hazardous trees must be removed. Trees susceptible to disease may also be removed. Tree replacement need not occur

in these situations. Failure to obey the tree removal ordinances shall be punishable by a fine that can amount to the cost of restoration of the function the trees served once removed.

Section 3: Tree Replacement Ordinances:

5.2: On land that is to be developed within the cities of the region, 50% of trees on the project site should be preserved or replaced.

## C. Wildlife Habitat Protection:

Overall Purpose and Goals: In Region Five, it is a policy that the preservation of wildlife habitat is needed to protect environments for animal species as well as to add to the scenic beauty of the Region. The protection of wildlife habitat means active land management for maintaining species within their preferred habitats and accustomed geographic distribution. By creating and preserving greenways and buffer zones, wildlife is not dislocated, or left without adequate habitat.

### **Definitions:**

- a) Buffer Zone A designated area along the perimeter of a wetland, fish, and wildlife habitat or other critical area that is regulated either on a seasonal or permanent basis to minimize the impact of adjacent activities, such as human related disturbances.
- b) Ecosystem A dynamic and interrelating complex of plant and animal communities and their associated environments and biological processes.
  - c) Native Any species that spends some portion of its life cycle within Minnesota.
- d) Open Space Publicly or privately held undeveloped lands to be used for the preservation or protection of natural resources. Open space also includes greenways which are lands with minimal or minor improvements made for a specific purpose with the improvements

being compatible with surrounding land uses and having a minimal impact on the environment.

Open space and greenways can provide for better habitat for wildlife in the region.

(e) Wildlife: All living things that are not human and are living in an undomesticated state.

### **Protection of Habitat:**

Section 1: Purpose and Goals:

- To protect wildlife habitat where proposed or existing development presents a risk to areas associated with the survival of wildlife species in the Region.
- To allow restoration efforts to take place.
- To provide for connection of isolated habitat areas.
- To minimize, rectify or compensate for impacts arising from land development
  and other activities affecting fish and wildlife habitat in the Region. This will in
  turn help the residents of the Region because of the wildlife's impact on the
  economy, recreation and environment.

Section 2: Typology: 2. This ordinance shall apply at the county/regional level in areas designated are wildlife areas and connections of wildlife areas.

Section 3: Standards: The Region shall identify fish and wildlife habitat and their ecosystems within the county; prevent loss of wildlife habitat; minimize fragmentation of habitat by protecting open space and by maintaining interconnecting corridors to form a continuous network of wildlife habitat and ecosystems; and protect large, contiguous, undisturbed tracts, whenever possible.

The Region shall create greenways throughout the community for trails, connecting habitat, sustaining wildlife, and providing recreation opportunities for residents. Development

and protection decisions need to be based on understanding the inter-relationship of ecosystem components (woodlands, endangered species, wetlands, etc.). The Region shall plan and design land uses and development to be harmonious with wildlife habitat and the species that depend on that habitat, and maintain consistency with state and federal wildlife protection measures.

In order to protect the wildlife habitat, developers of land shall maintain a diversity of habitat by 1) preserving the range of existing foliage height including ground covers, shrubs and trees; 2) incorporating habitat buffers to the designated wildlife area, and 3) identifying provisions for maintaining the habitat buffer over time.

**Habitat Areas** – **Buffers** To retain and protect adequate wildlife habitats, buffers will be established on a case-by-case basis by a designated authority of the Region.

## D. Air:

Findings: Todd and Morrison County have very similar policies regarding air quality.

They both would like to protect the air quality in the County to comply with Minnesota Pollution Control Agency standards. Similarly, Morrison County would like to consider the effect on air quality in review of any new development within the county. Additionally, Morrison County would like to implement air, dust, odor, and noise regulations. Cass, Crow Wing, and Wadena County do not address the issue of air quality.