

GENERAL INFORMATION

Applicant: City of Bloomington

Location: Citywide

Request: Study Item – Low-Density Residential Environmental Standards Review

CHRONOLOGY

Planning Commission 2/01/2024 – Study Item held

City Council 2/12/2024 – Study Item scheduled

DEADLINE FOR AGENCY ACTION

The deadline is not applicable because the City has, as applicant, waived the Agency Action Deadline.

STAFF CONTACT

Michelle Lincoln, Planner
(952) 563-8898
mlincoln@bloomingtonmn.gov

PROPOSAL

The Environmental Standards Review (ESR) aims to study environmental standards for tree preservation, slopes, wildlife and habitat, and landscaping for low-density residential development to ensure that the City is protecting our precious environmental assets while addressing the needs of its residents. This study provides background information and analysis for typical planning interventions, current City interventions, and ecosystem elements to guide the Planning Commission and City Council in determining further direction.

PUBLIC ENGAGEMENT

The public was engaged through a [Let's Talk Bloomington project page](#). One comment was submitted through the submission tool regarding natural and native landscaping and vegetation as im

portant mechanisms for soil stabilization. The engagement summary report for the project is attached as Exhibit F.

BACKGROUND

In conjunction with the deliberation and adoption of City Code amendments for single- and two-family residential standards in May of 2023 ([Case #PL2022-221](#)), the City Council formally amended the 2023 Planning Commission Work Plan to study environmental standards for low-density residential sites and uses.

The City has numerous mechanisms and processes that ensure environmental standards are being followed across various development activities (see Table 1).

Table 1: Summary of Development Interventions

Intervention	Where is it codified?
Building Permit Review	City Code and MN State Building Code determine when permits are required; internal process
Grading Permit Review	City Code
Development Review Committee	City Code; internal process
Plat Applications – Lot Line, Subdivision, Tax Lot Combinations	City Code
Setbacks, Buffers, Easements, Impervious Surface	City Code
Landscaping Plans (new or revised)	City Code
Accessory Structures // Number and Placement	City Code
Fence Permit – over 7 ft, retaining walls	City Code
Zoning and Density Designations	City Code; internal process
District and Area Plans	City Code; internal process
Comprehensive Plan	City Code; State Statute; internal process
Statutory Compliance	State Statute
Regional Authority Compliance	City Code; internal process

Intervention	Where is it codified?
As-Built Survey Requirements, Tree Surveys	City Code; internal process
Parking Studies	City Code; internal process
Park Dedication Fees / Open-Green Space Requirements	City Code
Parking Requirements by Use	City Code
Supplemental Policy Documents	Internal Process
State-Required Environmental Review (e.g. alternative urban areawide reviews (AUARs))	State Statute/State Administrative Rules; internal process

The City Code, policies and processes, and supplemental documents pertaining to environmental protection are effective at intervening and reviewing a very wide assortment of development activity before the activity begins.

Ecosystem Elements for Study

Trees provide significant benefit to the ecosystem by managing stormwater, supporting soil health, providing habitat for wildlife and other plants, remediating urban heat island effects, and increasing wellbeing through improved mental health, air quality, and temperature regulation benefits. Tree Preservation typically covers protection, replacement, and removal activities to ensure that negative impacts are mitigated, and the health and resiliency of the tree canopy is maintained over time.

Tree preservation standards were established in Bloomington's Code in 2006 (Ord. #2006-33) with amendments for clarification for platting adopted in 2011 (Ord. #2011-6), and Code text relocation from Chapter 19 to Chapter 21 in 2021 (Ord. #2021-7). Bloomington's current tree preservation ordinance ([§21.301.14](#)) applies to single- and two-family development for two years after approval of a plat and covers removal, replanting and reforestation, prohibited species ([§18.03](#)), and protection during disturbance activities, like construction and grading.

Tree survey and preservation plans are required for all plat applications for single- and two-family residential lots in R-1, R-1A, and RS-1 Zoning Districts (§21.301.14(g)). For these applications, the City Forester is the authority for surety rates, inspections, and enforcement of the tree preservation plan. Updates to §21.301.14 occurred on May 9, 2022 which made minor adjustments to clarify the intersection between tree preservation and clear view triangle requirements ([Ord. #2022-19](#)).

With an exception for single-family uses, landscaping plans are required for new developments, additions or modifications that impact established landscaping or screening, and changes to existing landscaping and screen plans on file with the City (§21.301.15(b)). Two-family uses have specific landscaping requirements in [§21.302.04](#) which also requires a landscaping plan for new developments.

Tree considerations are reviewed as part of landscaping plans, submitted applications, and permits.

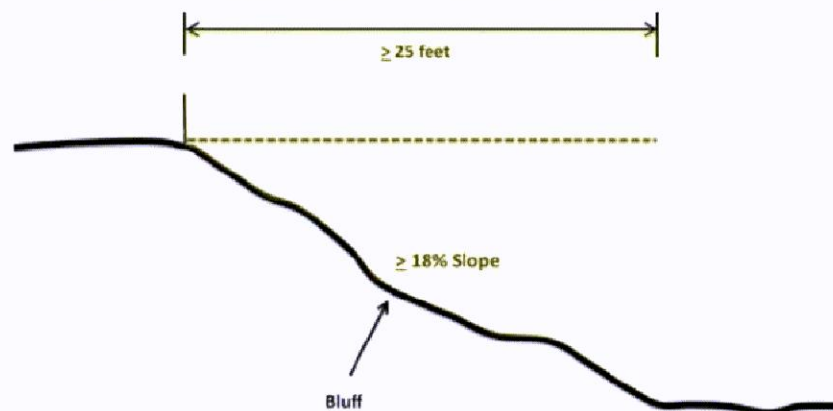
Slopes are unique geological features that provide habitat and direct the flow of water and stormwater to waterbodies and valleys. Steep slopes are highly susceptible to soil erosion and disruption and can be particularly vulnerable to impacts stemming from human activities and development.¹

Protecting slopes typically encompasses preventing increased or concentrated areas of stormwater runoff onto slopes, slope stabilization through techniques like planting vegetation, and minimizing soil disturbance through buffers, grading permits, and development and construction restrictions. Defining slopes and “steep” slopes is important for determining appropriate regulation for any topography. The U.S. Department of Agriculture Web Soil Survey² categorizes slopes as a range of percentages and considers low slopes as less than 15 percent and steeper slopes as greater than 15 percent. Further parsing of slope percentages for regulation is typically left to the governing jurisdiction’s discretion.

Because of Bloomington’s unique environmental features and multi-jurisdictional environmental governance landscape, the Lower Minnesota River Valley and the Nine Mile Creek Lower Valley (from the Minnesota River to 106th Street) bluff areas have distinct protections and regulation from other steep slopes in the city.

The Bluff Protection Overlay District (§21.208.02) regulates properties along the Minnesota River with these unique slope features. The Lower Minnesota River Valley Watershed District (LMRWD) defines steep slopes as slopes that are 18% or greater over a horizontal distance of 25 feet or more. This Code section underwent significant changes that were adopted on June 1, 2020.

Figure 1 Steep Slopes Standard Definition – Bluff Protection Overlay District



¹ Osman, Khan Towhid. “Soils on Steep Slopes.” In *Management of Soil Problems*, edited by Khan Towhid Osman, 185–217. Cham: Springer International Publishing, 2018. https://doi.org/10.1007/978-3-319-75527-4_8.

² Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at the following link: <http://websoilsurvey.sc.egov.usda.gov/>. Accessed 11/21/2023.

Steep slopes for other parts of the city are regulated in [§19.57.01 Steep Slopes](#). This section applies to all properties in R-1, R-1A, and RS-1 zoning designations, and aims to prevent slope soil erosion from surface water run-off through a series of impervious surface calculations starting at 12% average slope. Changes to this section were last made on November 15, 2004 (Ord. #2004-44) as part of broader amendments that focused on landscaping and screening standards.

Figure 2 Impervious Surface Calculations for 12% Average Slope and Greater – Current Standards

<i>Average Slope</i>	<i>Maximum Coverage</i>	<i>Average Slope</i>	<i>Maximum Coverage</i>
12%	34%	22%	24%
13%	33%	23%	23%
14%	32%	24%	22%
15%	31%	25%	21%
16%	30%	26%	20%
17%	29%	27%	19%
18%	28%	28%	18%
19%	27%	29%	17%
20%	26%	30%	16%
21%	25%		

Slope considerations are reviewed as part of submitted applications and permits and addressed where appropriate when answering calls, emails, and counter visits from the public. Planning Division does this by using GIS and other maps, asking follow-up questions about the project or property, counsel with other colleagues, and referring the public to the appropriate internal or external authority (i.e. Public Works, Building and Inspections, Watersheds, utility companies, etc.).

Wildlife and Habitat are important parts of the urban ecosystem. Habitat supports plant species that help with carbon sequestration, stormwater and filtration, pollination, and urban heat island. Wildlife, like insect pollinators and birds, need habitat (trees, grasses, shrubs and bushes) for food, reproduction, and wellbeing. Managing urban ecosystems is a challenging endeavor because of the tremendous human influence and unpredictable weather patterns that can greatly impact the environment. Connected habitat areas are important, but not the only indicator for thriving habitats due to the vast needs of different species, including humans.

Wildlife and habitat standards typically focus on maintaining high-quality nature and habitat areas, creating habitat through things like tree planting programs, native landscaping campaigns, identifying sensitive areas and species for protection, and converting prioritized habitats into public land for conservation. It is a focused effort between tree preservation, slope maintenance, landscaping, and other regulations to support wildlife and habitat ecosystems.

The Minnesota Department of Natural Resources (DNR) has the [Wildlife Action Plan 2015-2025](#), which is used to support wildlife and habitat natural resource restoration planning and prioritization across the state at the regional level. Within this plan is a wildlife corridor map from 2015 (Exhibit B) that creates a general overlay of significant habitat corridors in the state as well as other maps that aim to identify where Species in Greatest Conservation Need (SGCN) may be located or have greatest richness for survival (Exhibit C). Bloomington primarily has areas with 1-5 species. The most abundant wildlife areas are located in the Lower Minnesota River Valley with the largest number of SGCN species on the scale at 11-20 and 21-38 species.

The DNR plan and associated maps and documents are not regulatory in nature, but primarily intended to assist municipalities and land managers in natural resources planning and management and provide high-level technical data to guide the City's objectives, goals, and activities.

The City of Bloomington has numerous policies based on natural resources management, including:

- [2018 Minnesota River Valley Natural and Cultural Systems Plan](#)
- [Natural Resources Prioritization and Management Strategies for Bloomington Parks \(Outside the Minnesota River Valley\)](#)
- [Forward 2040 Comprehensive Plan](#)
- [Surface Water Management Plan](#)
- [Wetland Management and Protection Plan](#)

These plans work in collaboration to support wildlife and habitat on public lands through monitoring, restoration, and maintenance of environmental features.

In [§19.40.10](#) Conservation Districts, principal uses include wildlife management. Conservation Districts have a minimum district size of 40 acres with a minimum district width of 200 feet; residential uses are not permitted or conditional uses within this district.

Wildlife considerations are supported through other policies that support habitat restoration, maintenance, or development, such as landscaping and screening regulations and tree preservation.

Landscaping regulations can encourage the creation of habitat for pollinators, birds, and other species, as well as manage urban heat island effects, stormwater management, carbon sequestration, and increase resiliency to ecosystem changes. Partly in response to recent changes in State Law, native landscaping City Code changes are currently being explored by an interdepartmental team at the City of Bloomington that would support more native landscaping in the community.

Changes to landscaping policies would give guidance to residents on planting and maintaining native landscaping and regulations would clarify standards for enforcement, setbacks, and plant heights, and other specifics. Further information regarding that project will be shared at a later date by the project team led by Public Works and the Sustainability Commission.

ANALYSIS

Analysis began by researching scientific articles to determine typically identified ecological aspects of the environmental features and their unique vulnerabilities. Once feature descriptions and protection characteristics were refined, analysis expanded to include resources that evaluated environmental protections from a land use and zoning perspective. Resources from various publications on the built environment, urban ecology, and planning, like the American Planning Association *Zoning Practice*, were key in identifying the mechanisms used in land-use policy to mitigate negative impact on the environment.

Additionally, ordinances from other Cities and States that have undertaken environmental standards updates and amendments further defined the opportunities available to the City of Bloomington. A City Code comparison was also conducted that included ten cities in the Twin Cities Metro Region (Exhibit D).

The information from the research phase supported collaboration meetings with City staff across divisions and departments to continue to layer in the Bloomington context and shaped the opportunities and recommendations that are documented in this report.

Since these policy and regulation opportunities may impact property rights, it is important to note for all amendments that the more restrictive any new regulation or policy is on a property owner's ability to develop their property, the more likely it is the property owner may make a claim the City is taking their property via regulation. Restrictions of this fashion should be narrowly tailored and based on current scientific or expert analysis. In light of this consideration, a few policy actions that did engage with more restrictive regulations were identified.

The policy options for each environmental feature are arranged to represent what is recommended to what is not recommended based on Staff and the Planning Commission discussion on February 1, 2024. This differs from the Planning Commission Staff Report in which the options were listed in a different order.

Tree Preservation

All the cities compared in the study have some regulations for the maintenance, removing or maintaining trees, planting, or protections during grading and construction. The City of Bloomington Tree Preservation Code is among the more extensive codes of the compared cities. This means that Bloomington City Code provides standards for the main activities (protection, replacement, and removal). Tree preservation is not applicable for activities associated with single-family uses, except for all plats or subdivisions in R-1, RS-1, R1-A. For instances with more than 50% removal in a R-1, RS-1, R1-A zoning districts, a reforestation plan is required when seeking plat approval.

Tree planting in the Public Right-of-Way (ROW) is also an effective way to ensure canopy cover throughout the City. In 2024, Public Works will be developing a three-part Urban Forest Master Plan including Citywide Canopy analysis, Right-of-Way Inventory, and a written plan to guide forestry efforts for the next 20 years. Options for enhanced ROW tree planting will be part of the planning effort. In the judgement of staff, this effort will have a much greater impact in supporting and improving the urban tree canopy than the City's tree preservation requirements.

Policy Options

Text Clean-up for Clarity – no regulation changes

These text changes would not impact the specific standards or regulatory approach and would simply be revised for readability and clarity. For example, the current definition of Significant Trees in §21.301.14(c) includes diameter breast height (DBH) measurements, specifics identification, and prohibited species in sentence form.

A rewritten definition could include this information in table format for readability (Table 2):

Table 2: Revised text and formatting for Significant Tree language

Category	Tree Types	Size
Deciduous Hardwood (General)	All except Prohibited and Exceptions	12" DBH or greater
Deciduous Hardwood (Exceptions)	Oak, sugar maple, ironwood, hickory	6" DBH or greater
Deciduous Hardwood (Prohibited)	Willow, boxelder, aspen, silver maple, multiple stem cottonwood	Prohibited
Coniferous (General)	All except Prohibited	8" DBH or greater
Coniferous (Prohibited)	Multiple stem white cedar	Prohibited
For the purposes of this § 21.301.14, a prohibited tree species identified in §18.03 may be considered a significant tree, unless otherwise specified.		

Other options include generalizing the definition and including the table of specifics in another level of the section. For example: "Significant tree(s): tree(s) that are mature, of a certain size, of a certain amount, and/or in an ecological advantageous location that provide significant ecosystem benefits to the community."

Additionally, the ordinance states that tree protective fencing installation is required before any issuance of grading or building permit (§21.301.14(f)(4)), but tree surveys and tree preservation plans are only listed as required for plat applications. Improved clarity about how tree preservation is incorporated into non-plat applications would help avoid confusion and could further streamline the implementation of the regulations.

The Planning Commission and Staff recommend this option to increase readability and usability of the Code.

Considerations for this option:

- Better readability of the Code for all users.
- Working in partnership with Public Works to ensure that best practices and amended language are accurate.
- Changes likely would not have new equity impacts as the standards would not be changing.
- Further study would not be needed to make the amendments.

Amend Tree Removal Thresholds, Rates of Reforestation, and/or Tree Preservation Applicability

Some threshold requirements may allow opportunities for Cities to use discretion in adjusting for an intended outcome. For example, Burnsville has a removal threshold of 40% for significant trees in the R-1 districts while other residential zoning designations are set at 50% removal (Burnsville [§10-8-9\(B\)](#)). The City of Bloomington's current removal threshold is 50% of significant trees removed must be replaced at a rate of 1.25 caliper inches for every 1 inch removed.

Another potential intervention could be expanding the applicability of tree preservation requirements to building permits for all new single- and two-family dwellings, which could also increase the cost of housing development. While the construction of new single- or two-family dwellings often includes a platting approval action, thereby triggering tree preservation, it is not always the case that a new dwelling requires plat approval. If the applicability was expanded and current rates of low-density residential development continued, staff estimates that approximately five additional projects per year would trigger tree preservation requirements.

The Planning Commission does not recommend this option; Staff considers this option to have potential, but the return of benefit is likely marginal because the Tree Preservation Code is extensive as currently drafted.

Considerations for this option:

- Staff capacity in multiple divisions for the increase in permits would need to be evaluated to identify any resource gaps and confirm that these changes would result in minor impacts to overall processing time. The primary workload impact would be on the City Forester.
- Adjustments in the thresholds and replanting requirements would need solid scientific and policy justifications. The drafting of these justifications is likely to be straightforward, but discovered gaps could add to the timeline.

- Some exploration into the financial impacts on low-density development may be necessary to ensure that required tree surveys or reforestation plans and associated nursery trees do not become a cost that slows housing production. Costs are likely low comparatively, but confirmation further supports justification for amendments.

Draft and Incorporate New Tree Credit System

Brooklyn Park has a “Quantity credits” element that gives additional tree or other vegetation credits based on the size of the vegetation preserved or planted:

Figure 3 Brooklyn Park Credit System Excerpt, [§152.24\(C\)](#)

Figure 152.274.03 Credits		
Vegetation Type	Size	Exchange Credit
Existing trees	2" bb (Caliper)	1 tree
	4" bb (Caliper)	2 trees
New larger trees	4" bb (Caliper) or 14' Coniferous	2 trees
Smaller trees	min. 1½" bb Deciduous	2 smaller trees for 1 overstory tree. Maximum substitution = 50% of required overstory trees
Shrubs (non-residential uses only)		10 shrubs for 1 tree (1½" bb ornamental or 2" bb overstory or 6' coniferous)

A credit system for vegetation like this can be used to incentivize preserving existing vegetation or planting larger, more mature vegetation to meet landscaping requirements. Bloomington’s current landscaping ordinance does not factor in the size or age of existing or proposed material when administering landscaping requirements. Current landscaping standards require trees for new two-family dwellings but not for new single-family dwellings. Amendments to the landscaping standards could add tree requirements for new single-family dwellings, with or without credits for existing trees.

The Planning Commission does not recommend this option; Staff considers this option to have potential, but the benefits are unclear for the predicted level of resources needed to amend regulations and other changes must be completed in tandem to have impact.

Considerations for this option:

- Scientific or professional reasoning and calculations from Public Works and City Forestry may be needed to strengthen the justification for changes. Additional calculations could include tree benefit valuations and best sizes for exchange credits.
- An exchange credit system could give property owners and developers more flexibility in meeting tree preservation or planting requirements.
- For single-family dwellings, the tree credit approach would have no value unless standards are amended to add single-family landscape requirements.

Tree Preservation Standards Review

Recent changes to the Tree Preservation regulations moved the text from Chapter 19 to Chapter 21 and amended language to be in line with the text relocation. In collaboration with Public Works, the Planning Division could perform a more comprehensive evaluation to determine whether current standards and approach represent the current best practices in the field.

This evaluation could include examining diameter breast height thresholds, tree species and planting location best practices, critical root area protections during disturbance activities, threshold triggers for removal, etc. This action represents more of a potential rewrite to the ordinance than making subtle adjustments utilizing the existing approach.

The Planning Commission does not recommend this option; Staff considers this option to have some potential, but the return of benefit is likely marginal because the Tree Preservation Code is extensive as currently drafted and effective in staff's judgment.

Considerations for this option:

- The resources and capacity necessary for staff to undertake a more comprehensive evaluation of regulations and policies may be significant. Post-evaluation results may determine that no or minimal changes are needed.
- Current standards are fairly robust compared to other cities in the region.
- Updated information and guidance could be better served in supplemental documents or materials (e.g. Supplemental Landscape Policy) instead of in Code amendments.
- Updates to standards could possibly need to be in tandem with other changes to ensure text alignment across the Code and provide property owners with flexibility in meeting standards.

Slopes

All reviewed cities have soil erosion and sedimentation protections or investigate slope considerations as part of application or permit review (Exhibit C). Bloomington is the only city in the reviewed cities to have a specific steep slopes Code section.

Table 3 shows the approximate number of potentially impacted residential parcels if Code changes were adopted:

Table 3: Approximate Existing Steep Slope Residential Parcels (Outside of the Bluff Protection Overlay District)

Slope Category	Number of Residential Parcels
Average Slope 12% or Greater (Current Code)	1,416
Average Slope 18% or Greater (Steep Slopes)	308

Exhibit E shows the number of properties impacted by our current regulations, color differentiated by the two slope categories shown above.

Policy Options

Refining and Adding the Definition of Steep Slopes to the Code

Currently, steep slopes are not defined clearly in Chapters 19 and 21. The City has discretion on how to define steep slopes. In review of other cities, slopes greater than 15% are typically identified as steep slopes, and there are more restrictions the greater the percent slope. The Bloomington Bluff Protection Overlay District identifies slopes that are 18% and greater as steep slopes.

Considerations for this option:

- Clearer definitions for steep slopes will provide clarity to residents.
- Refined definitions allow the City to better monitor, evaluate, and regulate parcels with steep slopes.
- Drafted definitions will need to align with other Departments/Divisions in the City and chapters of the Code.

The Planning Commission has no recommendation (2 to 2 vote); Staff recommends this option to improve clarity of the Code and define features that are regulated by the Code.

Add Steep Slope Best Practices

The Bluff Protection (BP) Overlay District includes a Best Management Practices section (§21.208.02(f)) that could be generally applicable to §19.57.01. This section is copied below with strikethrough for non-applicable language and underlined for potential language adjustments.

(f) *Best management practices.* The following best management practices are encouraged to filter, slow, and disperse surface water runoff:

- (1) Minimize stormwater runoff over ~~the Bluff slopes~~.
- (2) Limit or reduce impervious surfaces.
- (3) Direct runoff from impervious surfaces into a storm sewer system or well vegetated area.
- (4) Manage soil erosion.

- (5) Plant bare areas with native seedlings or seeds of native species and mulch.
- (6) Cover bare soils with biodegradable erosion control blankets and/or logs while vegetation becomes established.
- (7) ~~Maintain a healthy, native Bluff environment.~~
- (8) ~~Maintain an unmowed strip, 10 to 20 feet, of vegetation native to the Minnesota River Valley between areas of steep slopes and mowed lawns or paved surfaces.~~

The Planning Commission has no recommendation (2 to 2 vote); Staff recommends this option to provide more flexibility for developers and property owners to manage stormwater and maintain slope stabilization.

Considerations for this option:

- The BP Overlay District Code section was amended in 2020; amendments were drafted in collaboration with the Lower Minnesota River Watershed District, other relevant authorities, and City departments. Code language in this section is likely the most up-to-date information available.
- Not all Code language in the BP Overlay District section can be applied to the whole City because the Bluff and Nine Mile Creek are unique natural features with special considerations for governance.
- Best management practices give property owners and developers more flexibility to mitigate stormwater run-off and slope stabilization beyond impervious surface considerations.

Structure Activity Restrictions Within or Buffers Above Steep Slopes

Slopes are particularly susceptible to erosion and limiting activity within a steep slope area or within a certain distance above a steep slope can prevent slope destabilization. Options could include:

- A build or soil disturbance prohibition within steep slope areas
- A build or soil disturbance prohibition within a certain distance from the top of the steep slope area (e.g. 5 feet, 10 feet, 15 feet, etc.)

The Planning Commission has no recommendation (2 to 2 vote); Staff does not recommend this option.

Considerations for this option:

- Policy options in this category would likely be considered very restrictive, which could have significant impact on property rights and potential development. Return of benefit is unclear without a parcel-by-parcel analysis to understand highest and best use opportunities.

- Build or soil disturbance prohibitions may give rise to arguments from residents that the prohibition constitutes a “taking” of property.
- Properties impacted by potential regulations could have structures within the prohibition or newly regulated areas, making them legally nonconforming and making maintenance activities challenging or impossible if equipment cannot be brought to the repair location and eliminating the opportunity for additions.

Wildlife and Habitat

A review of codes revealed that wildlife and habitat standards are not typical City-level standards. Bloomington and Burnsville have non-residential use conservation districts, and St. Paul has RL, a large lot residential district, with objectives that include protecting wildlife and plant resources.

In Bloomington, approximately 29.7% of land in the Wildlife Action Plan wildlife corridor are zoned R-1, R1-A, RS-1 (residential) and 32.06% is zoned SC (public land). The remaining 38% is a combination of water bodies and non-residential uses. The nearly 30% of land area for R-1, R-1A, and RS-1 represents approximately 6,300 parcels. (Exhibit F)

Because the Wildlife Action Plan (WAP) is intended to be used for high-level, regional resource management and there are no municipal level objectives or actions, using the WAP for granular, parcel-level regulations is not recommended. Additional Bloomington specific data would be necessary to determine the impacts of regulation changes or additions regarding wildlife and habitat standards. The scale of this project is expansive, resource intensive, and likely exceeds the existing expertise necessary on staff to perform an effective evaluation and recommend regulatory amendments. Any regulatory amendments affecting the ability to develop real property based on considerations for habitat or wildlife must be supported by substantial scientific and expert analysis or otherwise could be subject to challenge.

Policy Options

Wildlife and Habitat Education for Low-Density Residential Properties

Creating educational materials and opportunities to increase the rate of private conservation or habitat improvement actions on private land is an adaptable and more cost-effective way to effect change. Materials can be mailed to properties within the MN DNR wildlife habitat corridors, connecting occupants and owners to broader ecological resources, like the University of Minnesota Native Landscaping materials. Materials could also be published on the City website or Bloomington Briefing for broader distribution and align with City documents, like the Supplemental Landscape Policy document, the Comprehensive Plan, the Natural and Cultural Systems Management Plan.

Additionally, there are opportunities to highlight wildlife and habitat benefits in the native landscaping project led by Public Works and the Sustainability Commission. Methods for

education or awareness would be developed in collaboration with the Communications Division and Community Outreach and Engagement Division (COED).

The Planning Commission recommends this option as long as it is implemented with no-cost delivery method to avoid mailing and paper waste. Options discussed included posting in the Bloomington Briefing or posting to the City website. Staff recommends this option with the conditions the Planning Commission discussed.

Considerations for this option:

- The lead/responsible department for document creation and distribution would need to be determined.
- The time, resources, and data necessary to produce and distribute materials would need to be identified.
- Effectiveness of education can vary, but education and information campaigns can possibly shift public perspectives and make supportive ecological actions the norm.
- Because of the opt-in nature of the actions shared in education, residents are able to individually assess capacity and determine whether costs are feasible.

Wildlife Conservation Overlay District

Wildlife Conservation District ordinances, like those currently being considered by [City of Los Angeles \(L.A.\)](#), are used to establish regulations that support ecosystem and ecological health in the urban environment. The City hired consultants to evaluate existing biotic conditions and determine important ecological areas, identify key wildlife movement areas, and provide scientific evidence to the Planning Department for guidance in regulation development. The L.A. process began in 2014 and recommendations and reports were published in 2021. Drafting the ordinance began in 2021 and is currently still in progress for approval. Bloomington has differing ecological needs and significantly less vacant residential land (L.A. has 14% vacant of almost 30,000 parcels).

Considerations for this option:

- Further study is needed to understand the viability of creating additional zoning districts, and applicability to Bloomington's landscape.
- Proposals that restrict real property development based on wildlife or habitat considerations require legal analysis – residents may claim the City is taking their property via a “regulatory taking.”
- There is a possibility that data gaps may not be resolved without significant time, expertise, and funding. Technology also may not be in place to get the city-level data necessary for the policy change. With these challenges, drafting defensible changes will be paramount, and it may take time and funding to develop a best enough policy with the most effective and impactful changes.

The Planning Commission does not recommend this option; Staff do not recommend this option.

Habitat Supportive Regulations for Low-Density Residential Properties

These policies would encourage biodiversity through standards for native landscaping, tree plantings, and water quality, and discourage or prohibit plant species that are detrimental to habitat. Landscaping and screening requirements could also be adapted with wildlife and habitat in mind to support biodiversity or prohibit species that outcompete beneficial species.

The Planning Commission does not recommend this option; Staff do not recommend this option.

Considerations for this option:

- Planning interventions would occur at points prior to and during site development or modifications. If there is continued enforcement, it would likely be tasked to other departments and may be limited based on staff capacity.
- The potential for increased resources burden on property owners who may need money, experts, time, and capability to fulfill requirements could cause equity concerns, especially in a time when the region is working towards increasing homeownership for historically excluded populations and rising housing costs are increasing the barriers to homeownership overall. Equity considerations will need further specific study to evaluate the potential cost burden.
- There are challenges in identifying and designating “habitat” on a parcel level and monitoring on a long-term basis to ensure habitat is maintained. The scientific expertise necessary to make these determinations may not be available or may be cost prohibitive.

Wildlife Supportive Policies for Low-Density Residential Properties

Wildlife supportive policies outside of habitat biodiversity primarily focus on wildlife’s access to continuous habitat for food, reproduction, life cycle activities, and sleeping areas. Options for wildlife supportive policies include:

- Wildlife friendly fences which have specific opacity and ground to fence height requirements to facilitate wildlife movement in critical habitat. Materials like chain-link, plastic netting, and wire could be prohibited to prevent wildlife getting entangled or harmed.
- Setbacks or buffers which prevent structures or fences within a defined area that leave habitat and movement area for wildlife.

The Planning Commission does not recommend this option; Staff do not recommend this option.

Considerations for this option:

- Enforcement and monitoring would be challenging, especially for fences not easily visible (e.g. rear property fences).
- Many structures or fences do not require a permit or development application. Monitoring or enforcing a buffer or setback would be challenging.
- Any new requirements could create legally nonconforming fences or structure placement across the city if not drafted carefully, or it may not be avoided entirely. Tracking of legal nonconformity is also challenging, especially for fences and smaller structures that may not require a permit review.
- For low density residential, the economy of scale is less impactful meaning that additional requirements could create increased costs that could further inequities as housing costs rise and homeownership barriers increase.

PLANNING COMMISSION REVIEW AND RECOMMENDATIONS

The Planning Commission considered this study item at the February 1, 2024, Planning Commission meeting. Each policy option was discussed after a review of each environmental feature and land-use policy background. The Planning Commission prioritized Code simplicity, practicality of options, and low-cost methods to seek improvement.

The Planning Commission **recommends** the following policy options:

- Tree preservation text and readability changes
- Wildlife and Habitat Education for Low-Density Residential Properties, if no-cost options were implemented and Staff engaged with the Sustainability Commission.

The Planning Commission **does not recommend** the following policy options:

- Comprehensive Tree Preservation Standards review.
- Expanding tree preservation applicability (§21.301.14(b)) to include building permits for new single- and two-family dwellings in addition to plats; adjust rates of reforestation and removal threshold standards.
- Draft and incorporate a Tree Credit System
- Wildlife Conservation Overlay District
- Habitat Supportive Regulations for Low-Density Residential Properties
- Wildlife Supportive Policies for Low-Density Residential Properties

The Planning Commission did not reach consensus on the following policy options:

- Refining and adding the definition of steep slopes §19.57.01
- Add best management practice additions to the steep slopes ordinance.
- Add structure activity restrictions within or buffers above steep slopes.

For more information on the Planning Commission review, please refer to the attached meeting minutes.

POLICY SUMMARY

Potential policies or activities that do not likely require robust additional study are Code changes that add clarity or readability:

- Tree preservation readability changes
- Expanding tree preservation applicability (§21.301.14(b)) to include building permits for new single- and two-family dwellings in addition to plats
- Slopes definition clarity and best management practice additions

Potential policies or activities that likely require some additional study as part of a new project to ensure the best practice is implemented:

- Comprehensive Tree Preservation Standards Review
- Draft and Incorporate New Tree Credit System
- Wildlife and Habitat Education for Low-Density Residential Properties

Potential policies or activities that likely require substantial additional study, are sizable individual project opportunities for the future, have potentially prohibitive resource needs, or legal challenges:

- Structure or Activity Prohibitions Within and Buffers Around Steep Slopes
- Wildlife Conservation Overlay District
- Habitat Supportive Regulations for Low-Density Residential Properties
- Wildlife Supportive Policies for Low-Density Residential Properties

RECOMMENDATION

No formal motion is required at this time; staff seeks recommendations and direction from City Council for Code amendments and other potential areas of study or process improvement.

To best improve existing policies while recognizing constraints on resources and minimization of regulatory complexity applicable to new housing creation, Planning Commission and staff recommend pursuit of the activities not likely to require robust study. If minor Code changes are pursued, staff would work to prepare the amendments in advance of future public hearings before the Planning Commission and City Council.

References

Documents and resources that are publicly available are linked within the report or reference list. Other references are available upon request due to distribution rights.

American Planning Association. "APA Policy Guide on Endangered Species and Habitat Protection." American Planning Association, April 26, 1999.
<https://www.planning.org/policy/guides/adopted/endanger.htm>.

BENTLEY, MICHAEL. "A CASE STUDY OF URBAN TREES, PUBLIC HEALTH AND SOCIAL EQUITY." In *Health of People, Places and Planet*, edited by COLIN D. BUTLER, JANE DIXON, and ANTHONY G. CAPON, 493–510. Reflections Based on Tony McMichael's Four Decades of Contribution to Epidemiological Understanding. ANU Press, 2015.
<http://www.jstor.org/stable/j.ctt1729vxt.47>.

BROWN, CAROLINE, and MARCUS GRANT. "Biodiversity and Human Health: What Role for Nature in Healthy Urban Planning?" *Built Environment* (1978-) 31, no. 4 (2005): 326–38.

Brunsdon, Denys, and Richard H. Kesel. "Slope Development on a Mississippi River Bluff in Historic Time." *The Journal of Geology* 81, no. 5 (1973): 576–98.

City of Bloomington. "Natural Resources Prioritization and Management Strategies for Bloomington Parks (Outside the Minnesota River Valley)," July 2022.
https://www.bloomingtonmn.gov/sites/default/files/2022-09/Natural-Resources-Prioritization-and-Management-Strategies_July-2022_WEB.pdf.

Conni Pallini-Tipton and Kat Superfisky. "Planning for Biodiversity in the Face of Climate Change." American Planning Association, May 2, 2023. <https://www.planning.org/blog/9268953/planning-for-biodiversity-in-the-face-of-climate-change/>.

Health of People, Places and Planet. ANU Press, 2015. <http://www.jstor.org/stable/j.ctt1729vxt>.

Jessi Wyatt and Great Plains Institute. "Database of Climate Ordinances Now Available to Planners," February 21, 2021. <https://betterenergy.org/blog/database-of-climate-ordinances-now-available-to-planners/>.

Lepczyk, Christopher A., Myla F. J. Aronson, Karl L. Evans, Mark A. Goddard, Susannah B. Lerman, and J. Scott MacIvor. "Biodiversity in the City: Fundamental Questions for Understanding the Ecology of Urban Green Spaces for Biodiversity Conservation." *BioScience* 67, no. 9 (September 2017): 799–807. <https://doi.org/10.1093/biosci/bix079>.

Lower Minnesota River Watershed District. "Lower Minnesota River Watershed District Adopted Rules," February 19, 2020. <https://mail.lowermnriverwd.org/rules/lmwrd-rules>.

Minnesota Department of Natural Resources. "Minnesota's Wildlife Action Plan 2015-2025." Division of Ecological and Water Resources, Minnesota Department of Natural Resources, 2016.
<https://www.dnr.state.mn.us/mnwap/index.html#:~:text=The%20plan%20addresses%20the%20primary,Climate%20change%20impacts>.

———. "MNWAP Wildlife Action Network," September 14, 2015.
<https://gisdata.mn.gov/dataset/env-mnwap-wildlife-action-netwrk>.

MN Board of Water and Soil Resources. "Design Considerations," n.d.
<https://bwsr.state.mn.us/design-considerations>.

Osman, Khan Towhid. "Soils on Steep Slopes." In *Management of Soil Problems*, edited by Khan Towhid Osman, 185–217. Cham: Springer International Publishing, 2018.
https://doi.org/10.1007/978-3-319-75527-4_8.

Ploetz, Kristen M. "Zoning for Urban Wildlife and Biodiversity." *Zoning Practice* 30, no. 1 (January 2013).

Ross, Brian, and Diane Desotelle. "From Policy to Reality, Updated Model Ordinances for Sustainable Development - Natural Resources Performance Standards." Minnesota GreenStep Cities, n.d. http://www.crplanning.com/_ordinances/natres.pdf.

Schiappacasse, Paulina, and Bernhard Müller. "Planning Green Infrastructure as a Source of Urban and Regional Resilience – Towards Institutional Challenges." *Urbani Izziv* 26, no. supplement (November 2015). <https://doi.org/10.5379/urbani-izziv-en-2015-26-supplement-001>.

Schwab, James C. "Planning the Urban Forest: Ecology, Economy, and Community Development." American Planning Association, January 2009.

"Steep Slope Ordinance," n.d. <https://conservationtools.org/guides/59-steep-slope-ordinance>.

Stokes, Alexia, Grant B. Douglas, Thierry Fourcaud, Filippo Giadrossich, Clayton Gillies, Thomas Hubble, John H. Kim, et al. "Ecological Mitigation of Hillslope Instability: Ten Key Issues Facing Researchers and Practitioners." *Plant and Soil* 377, no. 1–2 (April 2014): 1–23.
<https://doi.org/10.1007/s11104-014-2044-6>.

Treves, Adrian, R. B. Wallace, and S. White. "Participatory Planning of Interventions to Mitigate Human–Wildlife Conflicts." *Conservation Biology* 23, no. 6 (December 2009): 1577–87.
<https://doi.org/10.1111/j.1523-1739.2009.01242.x>.

White, S. Mark. "Coding to Avoid the Takings Trap." *Zoning Practice* 36, no. 5 (May 2019).

EXHIBIT B: Bloomington Wildlife Corridor Map; “MNWAP Wildlife Action Network,” September 14, 2015.

<https://gisdata.mn.gov/dataset/env-mnwap-wildlife-action-netwrk>.

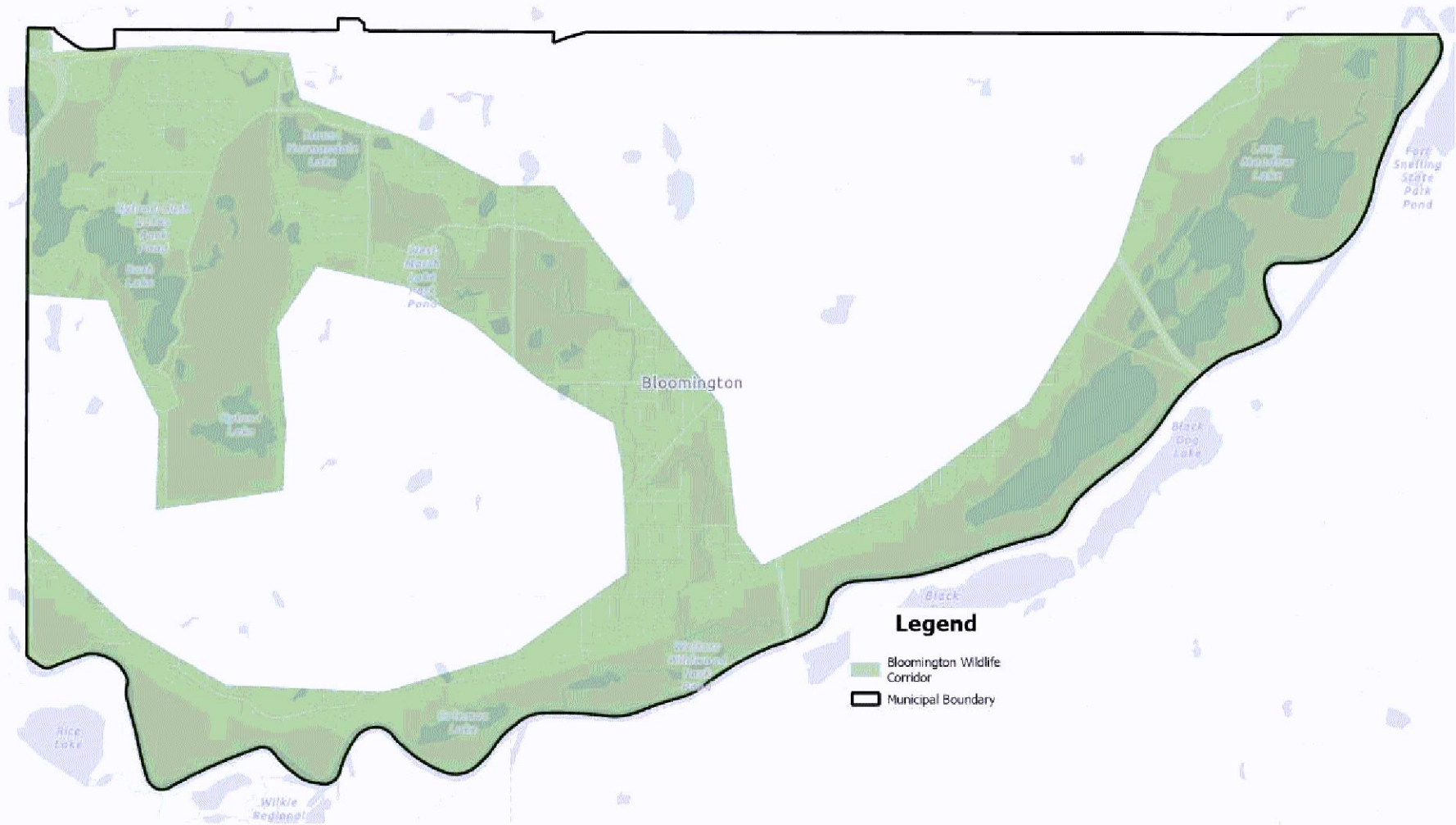


EXHIBIT C: Scored Areas in Bloomington for Species in Greatest Conservation Need (SGCN); Minnesota Department of Natural Resources.
[“Minnesota’s Wildlife Action Plan 2015-2025.”](#) Division of Ecological and Water Resources, Minnesota Department of Natural Resources, 2016.

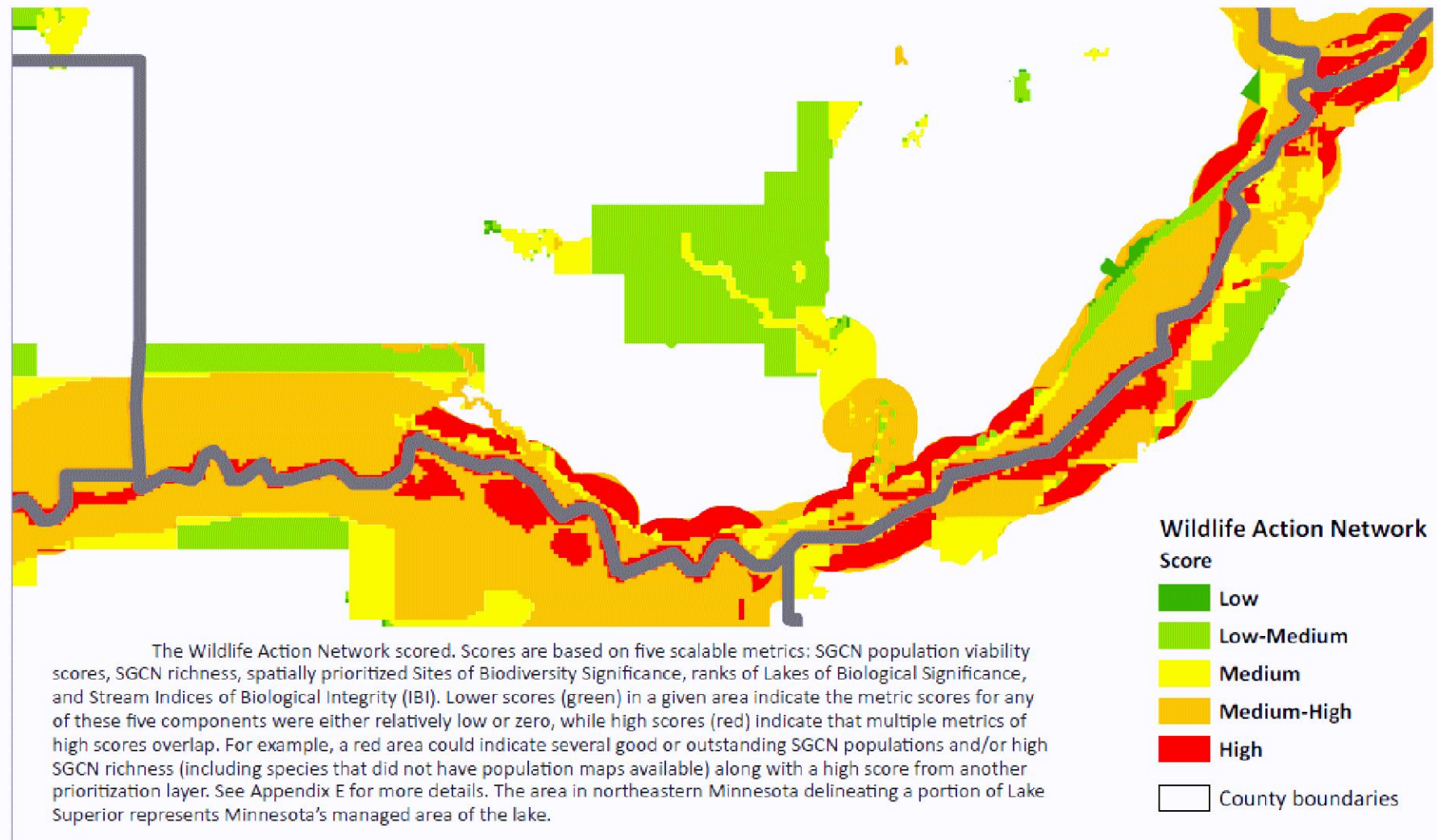


EXHIBIT D: Code Comparison Review for 10 Cities in the Twin Cities Metro Region

	Bloomington	Blaine	Edina	Brooklyn Park	Duluth	Rochester	St. Paul	Burnsville	Eagan	Eden Prairie	Richfield
Tree Preservation	x	x	x	x	x	x	x	x	x	x	x
Slope Protections	x										
Wildlife & Habitat	NR						x	NR			
NR – Non-residential conservation district											

EXHIBIT E: R-1, RS-1, R-1A Parcels (Outside the Bluff Protection District) with Average Slope 12% or Greater and 18% or Greater

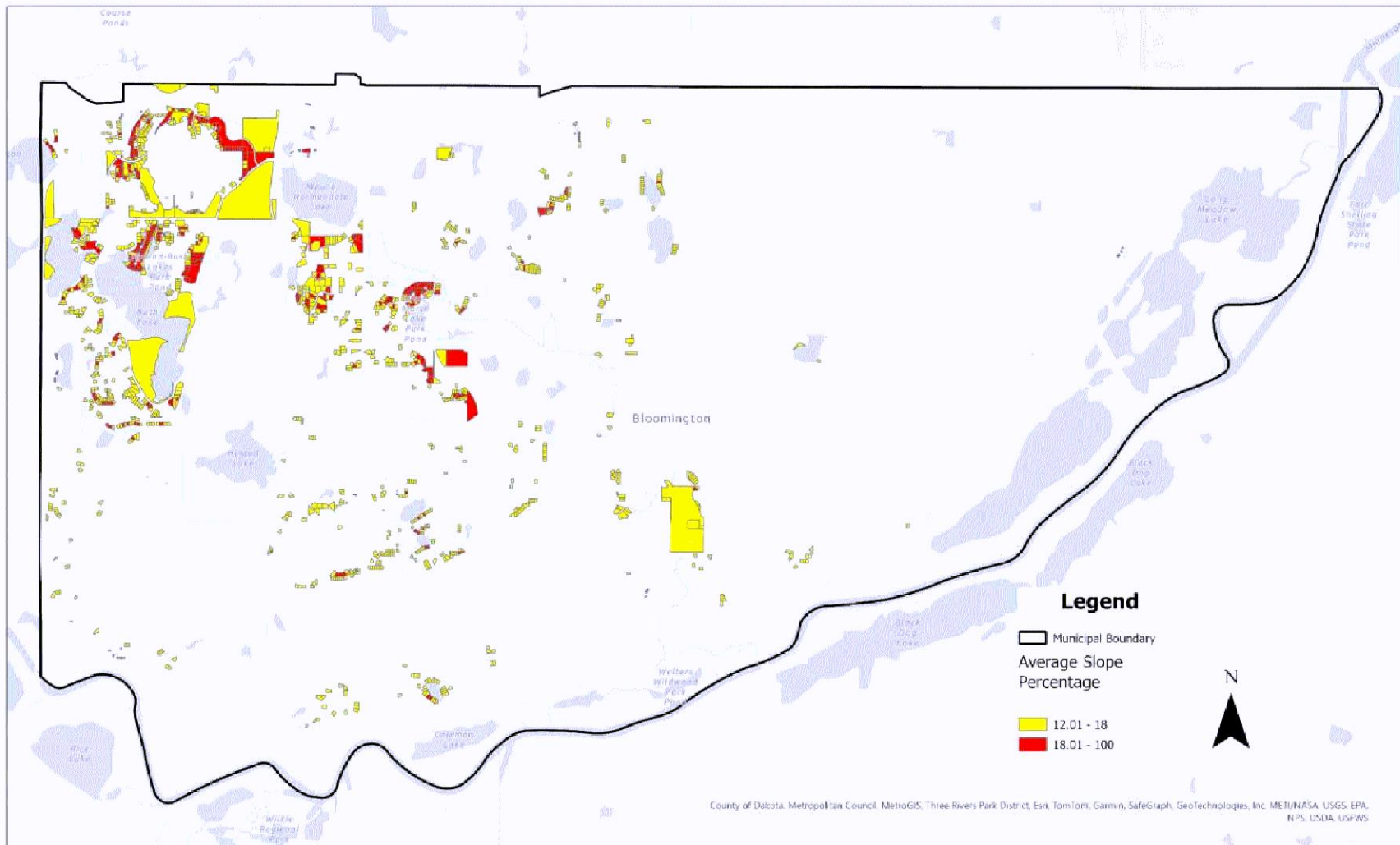


EXHIBIT F: Low-Density Residential Land and Public Lands within MN DNR Wildlife Corridor

