

Section 6: Implementation

Introduction

The Natural Resources Management Plan, as a goal and policy guide to preserve, protect, restore, and enhance Golden Valley's natural resources has little meaning if it is not carried out with well-defined implementing programs and specific action items. This section discusses a number of implementation tools, funding sources, action items, and success criteria.

Implementation Tools

Implementation of the Plan will require obtaining resources, and providing guidance, to ensure that the implementation is completed in a timely and efficient manner. Typically, a combination of tools are used, each used where they are most effective. These may include:

Incentives: Can be used to encourage environmental stewardship on private land by rewarding sustainable natural resource practices. For developers, this may include an efficient and cost effective permitting process, and increased development opportunities (increased density, reduced setbacks, etc.). For businesses, this may include awards and public recognition, reduced business license/fee, etc. for responsible stewardship practices. For residents, this may include vouchers for native plant materials, technical assistance for restoration/enhancement of natural areas on their property, and community recognition for good stewardship.

City practices and programs: City departments share in the management of natural resources in Golden Valley through routine maintenance and best management practices such as street sweeping, storm water treatment and storm water pond maintenance, facilities cleaning, tree planting and trimming, and planting native buffers around storm water ponds. Continuing to promote these type of sound stewardship practices will ensure that Golden Valley's natural resources will remain among the community's most valued assets.

Public outreach, citizen participation and education: Natural resources are not restricted to public land as they extend across public and private properties and beyond the City limits. Getting the public involved in managing natural resources at a holistic level can be achieved through public outreach and educational programs. These can be used to solicit community input and share both positive and negative impacts to natural resources resulting from personal decisions.

The City should continue to share information through the City's website (www.goldenvalleymn.gov), newsletters, brochures, press release distribution to area newspapers, local cable TV, and other forms of social media, i.e., facebook, twitter, etc.

The City should also continue to encourage opportunities for citizen participation at all levels of the natural resource planning and implementation process. This can happen through the appointed citizen commissions and boards, attendance and participation at public meetings, and establishment of additional volunteer opportunities and programs.

A major goal of environmental and natural resources education is to help develop environmental awareness and stewardship in the community. Offering periodic community workshops on invasive species control, selecting and planting native trees and vegetation, or on creating wildlife (including pollinator) habitat, would not only provide an educational opportunity but a social venue for like-minded citizens. Other education methods may include website brochure or video downloads or airing educational videos on cable network, continuing to publish feature and educational articles in the newsletter, and hosting photographic contests specifically related to natural resources and sustainable management practices. Residents also like to come together as a community to celebrate various themes that include food, entertainment, and a cause; one theme could relate to what is of current importance, e.g., "community pollinators" or "the world of bees and butterflies".

Nature Area Expansion/Land and Easement Acquisition: The most effective method of ensuring that natural resources are managed according to City's standards is for the City to acquire easements or available land within the City to create new Nature Areas or expand existing areas if circumstances allow or opportunities arise.

While it would not be practical or economically feasible for the City to purchase and manage all natural resource areas, the City could identify the most ecologically diverse or valuable areas or corridors, prioritize them as most likely candidates, and work with consenting landowners and developers. Once acquired, the City should manage them according to adopted management practices.

Regulations/Enforcement on private and public property: Regulations/enforcement methods are often the most extensively used natural resource management tool used by city government. Common regulations include:

- **Zoning:** Primary regulatory tool used by governmental units to implement planning policies. It also assists in the protection of natural resources while accommodating compatible human uses. The City may want to consider establishing an environmental or green corridor overlay zone to protect highly valued natural resources such as Bassett Creek or the Sweeney Branch of Bassett Creek.
- **Subdivision Ordinances:** Most widely used control mechanism. The purpose of the ordinance is to safeguard the best interest of the City, the homeowner, and the developer, encourage well planned subdivisions by the establishment of design and construction criteria; to improve land records by establishing standards for surveys and plats; and protect Golden Valley's natural resources including water resources and other environmentally sensitive areas of the city.

When combined with public education on property boundaries, rules, and consequences, the effectiveness of a regulatory management tool is increased. Enforcement of regulations should be authorized by City Code, supported by the City Council, and implemented by City Staff.

Funding

Capital Improvements Program

A Capital Improvements Program (CIP) is a capital expenditure plan for a community's infrastructure and may include public buildings, streets/sidewalks/alleys, utilities and storm water systems, park and trail system and possibly the management of natural resources. The CIP may outline key natural resource related projects that the City plans to undertake in the next 5-10 years, and how they may be financed. The CIP is updated every year and anticipates projects and spending for a five year period. The City also has a biennial operating budget which is reviewed and updated every year. The approval process for the budget and CIP should include a review by the City Council to ensure consistency of the projects with other elements of the plan. It is anticipated that implementation of the NRMP may require an increase or reallocation of existing funding in the natural resource sections of the operating budget and CIP.

Park Dedication Fees

The City has a park dedication fee that is required to be paid when developing or platting property in the City. Funds from the collection of these fees could be used for natural and amenity improvements in the nature areas.

Grant Opportunities

Grants provide an important source of funding for natural resources-related projects, and are offered by federal, state, and local agencies and organizations. While funding sources and requirements are relatively fluid over time, following is a list of potential sources of natural resource funding opportunities. The selected sources are those available in 2015, and are anticipated to remain as potential sources for the foreseeable future:

Agency: *Minnesota Department of Natural Resources*

Program: Parks and Trails Legacy Grant Program

Purpose: To provide grants to local units of government to support parks and trails of regional or statewide significance. Funding for this grant program is from the Parks and Trails Fund created by the Minnesota Legislature from the Clean Water, Land and Legacy Amendment.

Eligible projects: Include acquisition, development, improvement, and restoration of park and trail facilities of regional or statewide significance. Significance is determined by a regional setting, high quality opportunity and usage, sufficient length or connectivity to other trails, and within areas that currently lack sufficient trails. All park projects must meet requirements for perpetual outdoor recreational use.

Level of assistance: Grants are reimbursement based up to 100% of the total eligible project costs. Additional consideration in the selection process will be given to applicants that provide a non-state cash match.

Park legacy priorities: Priority for park project funding will be given to projects that address the priorities outlined in the *Parks and Trails Legacy plan*. Consideration will also be given to the design of the proposed project and existing park facilities. Project design should be compatible with the physical characteristics of the site, consistent with

generally accepted engineering and architectural design standards, in accordance with accessibility standards and minimize risk to the health and safety of users.

How to apply: Application are due in September annually. Grant application materials can be found through the programs website

(http://dnr.state.mn.us/grants/recreation/pt_legacy.html)

Program: Conservation Partners Legacy Grant Program

Purpose: The Conservation Partners Legacy Grant Program funds conservation projects that restore, enhance, or protect forests, wetlands, prairies, and habitat for fish, game, and wildlife in Minnesota. Funding for the CPL grant program is from the Outdoor Heritage Fund, created by the people of Minnesota.

Eligible projects: Include projects that restore, enhance, or protect natural resources. This program funds a wide variety of project types, provided they are focused on natural resources.

Level of assistance: The Minnesota Department of Natural Resources manages this reimbursable program to provide competitive matching grants from \$5,000 to \$400,000 to local, regional, state, and national nonprofit organizations, including government entities.

How to apply: There are typically two funding cycles, with the initial cycle receiving application in August and decision making by the end of the calendar year. A second round is dependent upon availability for resources following the initial round of selection. The City is within the Metro grant cycle. Information on the program is available through the program's website (<http://dnr.state.mn.us/grants/habitat/cpl/index.html>).

Agency: Legislative-Citizen Commission on Minnesota Resources (LCCMR)

Program: Legislative-Citizen Commission on Minnesota Resources Grant

Purpose: To provide grants to anyone with innovative ideas for environment and natural resources projects that could provide multiple ecological and other public benefits. Funding for this grant program is from the State of Minnesota Environment and Natural Resources Trust Fund.

Eligible projects: foundational natural resources data and information, water resources, environmental education, aquatic and terrestrial invasive species, air quality, climate change, and renewable energy, methods to protect or restore land, water, and habitat

Level of assistance: The program has no specified minimum or maximum funding requests, but does tend to fund based off of innovation, environmental importance of the project, and eligibility under competing programs.

How to apply: The Request for Applications is usually initiated on the first of January of each year, and are typically due in May of the same year. Grant application materials can be found on the program's website (<http://www.lccmr.leg.mn/>)

Agency: Hennepin County

Program: Natural Resources Grant

- **Purpose:** To provide grant assistance to landowners, local governments and organizations for projects to preserve and restore critical corridors and wildlife habitat, reduce soil erosion and improve water quality.
- **Eligible applicants:** Hennepin County individual landowners, non-profit and non-governmental organizations, local government agencies, and businesses.
- **Eligible project examples:** Projects that implement Best Management Practices (BMPs) to restore native vegetation, reseed pastures, stabilize stream banks, restore wetlands, reduce soil erosion, reduce stormwater runoff volume, and/or increase infiltration, install grass waterways, install vegetated filter strips, construct rain gardens.
- **Level of assistance:** Up to \$50,000. Maximum cost-share is 75% of total eligible project cost. Applicant is responsible for 25% of the cost of project installation. Contribution may be cash and/or in-kind contribution. Available funds may be available as a match for projects where Hennepin County is a partner.
- **How to apply:** Information, funding schedule and grant application materials can be found on the County website (<http://www.hennepin.us/residents/environment/natural-resources-funding>)

Inter-Governmental Cooperation

One of the key Natural Resource Management Plan implementation programs is Golden Valley's cooperation with others including federal, state, and local agencies, non-profit organizations, and adjacent local governments. The reason this is so important is because Natural Resources are not limited by jurisdictional boundaries. Planning and management issues often have regional implications that impact several jurisdictions. Coordination agreements and cooperative decisions must be made to effectively implement the City's Natural Resources Management Plan as well as to help other jurisdictions attain their goals and policies. Key partners include adjacent cities, Minneapolis Park and Recreation Board, Three Rivers Park District, Hennepin County, MnDOT, Robbinsdale and Hopkins School Districts, Perpich Center for Arts Education, Metropolitan Council

Action Items

A final step in the Natural Resources Management planning process is to set priorities for general and specific management strategies for the City's natural resources and specific Nature Areas to achieve its vision, goals, objectives and policies. Just as distinct policies can speak to a given goal, a community can select a range of action items or steps consistent with its policies – to achieve any of its goals. Reaching an understanding of which should be given the highest priority and a given timeframe is a key step in implementing the Natural Resources Management Plan.

Table 6.1 summarizes a list of critical action items to implement the Plan's policies. The action items have been assigned a priority rating of high, medium, or low and assigned a completion timeline in terms of short, medium, or long timeframe that the City should undertake to implement the Plan. Also included are action items that will need to be acted upon on an on-going basis. The recommended action items may require substantial cooperation with other agencies, local governments, interest groups, homeowners, etc. In addition, other local government and agency priorities may affect the completion of these key actions in the time frames presented.

Table 6.1 Natural Resource Implementation Action Item Matrix (update based on indiv area plans in Ch.5)						
	Priority	Short - Term	Medium-Term	Long-Term	On-going	Est. Cost
		(1-5 Years)	(6-10 Years)	(10+ Years)		
General Natural Resource Improvements						
Address encroachment through education, identification, and boundary demarcation	High	X			X	\$25,000
Develop communication/education plan with topics and schedule, deliver using website & new technologies	High	X				\$25,000
Market nature areas, and distinguish them from active parks	Medium		X		X	\$10,000
Expand certain nature areas through agreement, easement, or acquisition as opportunities arise	Medium		X		X	\$5,000 to \$25,000
Develop maintenance schedule for nature areas and open spaces	Medium	X				\$5,000
Complete tree inventory in all nature areas and open spaces	Low		X			\$20,000
Adeline Nature Area						
Remove Buckthorn	High	X			X	\$4,000
Manage Woodland Health	Medium		X			\$5,000
Bassett Creek Nature Area						
Remove/control buckthorn	High	X			X	\$10,000
Remove undesirable trees, establish mixed age-class of oak trees	Medium		X			\$10,000
Regrade erosional channels along the bluff and address concrete fill	Medium	X				\$2,000
Reestablish oak savanna	Low					\$20,000
Briarwood Nature Area						
Remove buckthorn	High	X			X	\$30,000
Controlled burns, herbicide applications, periodic reseeding	High	X		X		\$25,000
Remove damaged trees, plant younger and more diverse trees	Medium		X			\$10,000
General Mills Nature Preserve						
Reed canary grass, purple loosestrife control within wetland bank	High	X			X	\$35,000
Controlled burns, herbicide applications, periodic reseeding	High	X				\$21,000
Remove buckthorn	Low	X			X	\$10,500
Remove damaged trees, plant younger and more diverse trees	Low		X			\$10,000
Golden Ridge Nature Area						
Remove buckthorn	High	X			X	\$8,000
Maintain & plant younger conifers	Medium		X			\$8,000

Laurel Avenue Greenbelt						
Remove buckthorn	High	X			X	\$8,000
Tree Inventory	Low		X			\$6,600
Mary Hills Nature Area						
Remove buckthorn	High	X			X	\$25,000
Remove damaged trees, plant younger and more diverse trees	Medium		X			\$20,000
Pennsylvania Woods Nature Area						
Remove buckthorn	High	X			X	\$8,000
Maintain maple-basswood community, plant younger trees	Medium			X		\$10,000
Rice Lake Nature Area						
Bassett Creek bank stabilization	High		X		X	\$20,000
Herbicide reed canary grass, cattails, and purple loosestrife	Medium	X			X	\$20,000
Remove undesirable trees, establish native woodland communities	Low	X			X	\$10,000
Western Avenue Marsh						
Remove undesirable trees, establish native woodland communities	Medium		X			\$6,000
Remove/control reed canary grass	Medium		X			\$6,500

Note: For total management acreage estimates per strategy, see Specific Nature Area Management Plans in Chapter 5 of this document.

Table 6.2 summarizes a list of critical action items to implement the Plan’s policies related to amenities. These are similarly important to the public value of the nature areas, but reflect the physical aspects of the user’s experience, and less the ecological importance. Like the natural resource improvements, the amenity action items have been assigned a priority rating of high, medium, or low and assigned a completion timeline in terms of short, medium, or long timeframe that the City should undertake to implement the Plan. The majority of the major recommendations overlap the areas, and are part of a process to unify the management and use of the areas.

Table 6.2 Nature Area Amenity Improvement Action Item Matrix

	Priority	Short - Term	Medium-Term	Long-Term	On-going	Est. Cost
		(1-5 Years)	(6-10 Years)	(10+ Years)		
General Amenity Improvements						
Standardize and Install Entrance Signs throughout system	High	X			X	\$100,000
Complete sign and amenity design guidelines	High	X				
Install general wayfinding and educational signage	Medium		X			
Install Trash/Recycling Receptacles	Medium	X			X	\$40,000
Install Pet Waste Receptacles	Low		X		X	\$20,000
Complete field assessment of open space parcels	Low		X			
Specific Nature Area Recommendations						
Adeline Nature Area						
Install benches near entrance and at dock	Medium		X			\$4,500
Remove and maintain tree limbs and shrubs obstructing views	Medium	X			X	\$1,000
Install interpretive sign	Low	X				\$3,000
Install post and cable barrier	Low		X			
Install tunnel under the Union Pacific railroad tracks	Low			X		\$500,000
Bassett Creek Nature Area						
Reroute lower trail, pavement improvements	High	X				\$70,000
Install additional interpretive sign along the creek	Medium	X				\$3,000
Install new benches along the trail at appropriate intervals or at key viewpoints	Medium		X			\$6,000
Briarwood Nature Area						
Obtain agreements, easements, or complete land exchange to formalize social trails for public usage	High		X			\$10,000
Extend trail, possible pavement improvements	High		X			\$95,000
Install benches at regular intervals or at key viewpoints	Medium		X			\$6,000
Install additional interpretive signs along trail	Low	X				\$6,000
Identify and construct canoe access	Low			X		\$5,000

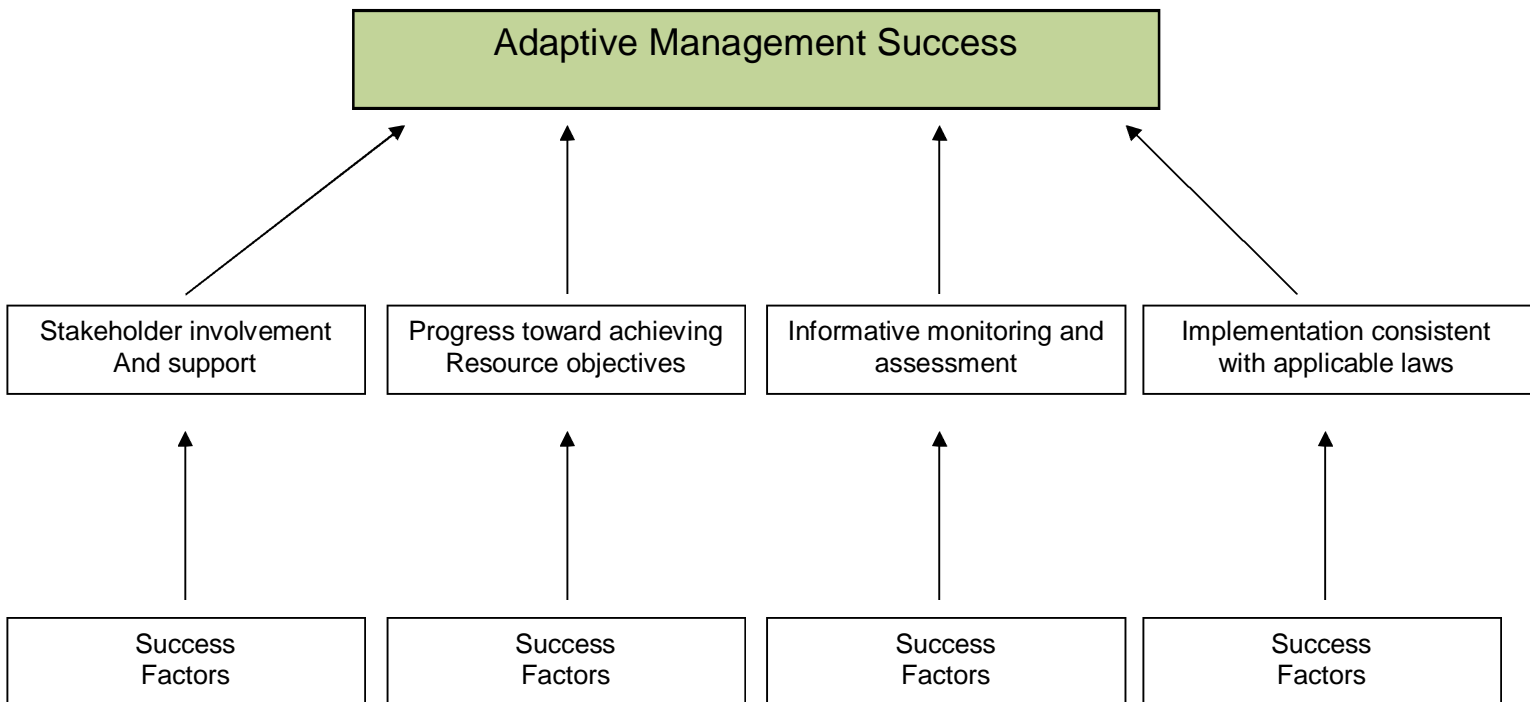
General Mills Nature Preserve						
Maintain trail system	Low			X		\$5,000
Golden Ridge Nature Area						
Install interpretive sign along the trail within the conifer plantation	Low		X			\$3,000
Install new benches along two main trails	Low		X			\$3,000
Laurel Avenue Greenbelt						
Install interpretive sign along trail at key vantage points	Medium		X			\$9,000
Install benches at entry and on deck overlook	Medium		X			\$12,000
Natural surface trail development	Low			X		\$12,000
Pavement improvements (6' wide asphalt trail) revise 8 feet wide	Low			X		\$30,000
Install canoe access for recreation us of the ponds	Low			X		\$10,000
Mary Hills Nature Area						
Collaborate on the Sochacki Park/Mary Hills/Rice Lake Nature Area plan	High	X				\$25,000
Pennsylvania Woods Nature Area						
Maintain culvert maintenance access	High	X				\$8,000
Install 2 types of educational signs	Medium	X				\$6,000
Install new benches along the trail at regular intervals or at key viewpoints	Medium		X			\$6,000
Rice Lake Nature Area						
Collaborate on the Sochacki Park/Mary Hills/Rice Lake Nature Area plan	High	X				\$25,000
Evaluate stability of Bassett Creek span, resurface natural surface trails, repair/replace dock transition	High		X			\$30,000
Install new benches at entry and on deck overlook	Medium		X			\$2,000
Install interpretive sign	Medium			X		\$3,000
Consider canoe access	Low			X		\$5,000
Western Avenue Marsh						
Extend new trail, pavement improvements (6' wide asphalt) 8 feet wide	Medium			X		\$50,000
Install interpretive sign	Medium			X		\$3,000
Install new benches at entry and on deck overlook	Low			X		\$3,000

Adaptive Management Success Criteria

Implementation of natural resource adaptive management is typically defined as successful if progress is made toward achieving its goals through a “learning-based” or adaptive decision making process. Recognizing success in an adaptive management approach are based on four criteria (See Figure 6.1):

- Stakeholders are actively involved and committed to the process.
- Progress is made toward achieving management objectives.
- Results from monitoring and assessment are used to adjust and improve management decisions.
- Implementation is consistent with applicable laws.

Figure 6.1 Adaptive Management Success Model



Source: DOI

Maintaining the Plan

To ensure the Natural Resources Management Plan remains a dynamic and usable document, the City should implement an on-going planning process that uses the Plan to develop annual improvement projects. It should also be reviewed and evaluated periodically to ensure that its goals, objectives, policies, and programs continue to reflect changing needs. To serve as an effective tool, the Plan should be used as part of the day-to-day and monthly planning and management routine by committed elected and appointed officials, City staff members and citizens. The Plan should also be referenced in other planning studies and reports when considering any impacts or improvements to the City's natural resources.

Amending and Updating the Plan

Amending the Plan

While major updates are typically made every ten years, periodic amendments can provide an opportunity for relatively minor plan updates and revisions such as changed conditions – in future land use designations, nature area expansions, implementation actions, and review of the Plan for consistency with ordinances. Process for Amending the Natural Resources Management Plan should be similar to the process used to develop this Plan.

Updating the Plan

The City of Golden Valley should review this Natural Resources Management Plan annually. If there are significant physical changes; changes in community needs, priorities, trends; or significant regulatory changes by adjacent jurisdictions or agencies with oversight, the City should update the Plan accordingly. At a minimum, the City should update this Plan every ten years or in conjunction with the Comprehensive Plan Update. The process for updating the Natural Resources Management Plan should be similar to the process used to develop this Plan.