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1.0 INTRODUCTION

The City of Norway, with the assistance of the Central Upper Peninsula Planning and Development (CUPPAD) Regional Commission, has put together this five year recreational plan. The purpose of this plan is to provide for development of recreational activities, programs, and facilities within the City of Norway. Located in south central Dickinson County, Norway's land area includes approximately 9 square miles inhabited by about 3,000 people. Approximately 15 percent of the land area has been developed, most of it in the southern urban area that is bisected by highway US-2. The cities of Iron Mountain and Kingsford are about 7 miles away. The location of City of Norway can be found on the Location Map found in Appendix A.

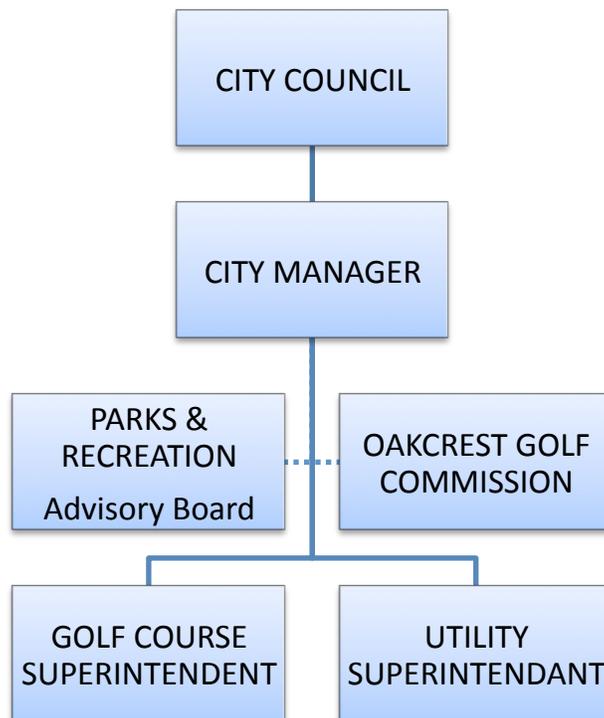
2.0 ADMINISTRATIVE STRUCTURE

Planning for and providing park and recreation services and open space for a community requires staff (or volunteers) and funds to purchase land and open spaces and to develop, operate and maintain them. This section describes how the Norway Parks and Recreation functions are carried out.

2.1 ORGANIZATIONAL STRUCTURE

The City’s current organizational structure is detailed below:

City of Norway Current Organizational Structure



2.2 COMMUNITY VOLUNTEER GROUPS

The City provides and maintains recreational facilities for users but does not provide programming. Those recreational uses that require organizing and scheduling are guided by community volunteers. City officials maintain an oversight role to insure equitable usage among various groups and that timely and necessary maintenance is completed. Facilities are open without fee to the general public within established hours of operation.

The City has had a long and successful relationship with both community and school organizations. Community organizations include the Downtown Development Authority (DDA), Kiwanis, Women's Club, Masonic Lodge, American Legion, VFW, Senior Center, Brackett Fund, Lions Club, Little League, SAY Soccer, Oak Crest Golf Club, Norway Area Community Foundation, the PACT and local Churches. The School partners include the Athletic Boosters, K-Club, Youth Advisory Committee, and various grades and classes through individual projects. The City has also developed an Adopt-A-Park program with these various groups which has been quite successful.

Along with the support from various community groups, the City has received both corporate and individual donations which have been extremely helpful with ongoing activities and projects. There is a tremendous amount of support from the community in our parks and recreation program.

2.3 PARK AND RECREATION BUDGET

The City of Norway allocates money each year for capital improvements at their recreational facilities based on receipts from land sales, timber sales, private donations, and miscellaneous grant opportunities. The City spends roughly \$120,000 per year on operational expenditures.

3.0 RECREATION INVENTORY

Public recreational facilities found within the City's corporate limits, plus those owned by the City in adjacent Norway Township are described below. Combined, these facilities provide park and open space acreage well in excess of standards established by the National Recreation and Park Association (NRPA) for the community's population. Appendix B includes the recommended NRPA standards. Area facilities are listed in [Table 3-1](#) and also identified on the Recreation Map found in Appendix A of this document.

**Table 3-1
Recreation Inventory
City of Norway**

Name	Size (acres)	Description	Accessibility Assessment	Map Legend	DNR Grant History
Norway Hill Park	~1	Small, unfenced playground area features several play apparatuses appropriate for young children	3	5	
Third Ward Park	~1	Unfenced park with paved basketball court, numerous types of play equipment, benches, and a small parking area	4	16	
Strawberry Lake Recreation Area	30	Two accessible fishing piers, an accessible restroom facility, a walking trail, tables and benches, a ball field, BMX track, and a parking area. Knights Kingdom, a specially designed play area for youngsters. Usage is year-round as the trail is utilized for cross-country skiing and an area is flooded for ice skating near the restrooms.	3	6, 7, 8, 9, 10	1990 Project No. TF90-344
Band Shell		Installed bench seating at this open area alongside City Hall can accommodate about 60 persons.	3	20	
Jake Menghini Museum		A variety of historical items are on display at this former stage coach stop log building.	5	2	
Sledding Hill	~1	This area has been used for many years for sledding. Although not designated as a park facility, it has served the community during periods of snow cover for a long period of time. The area used covers several acres	2	4	

**Table 3-1
Recreation Inventory
City of Norway**

Name	Size (acres)	Description	Accessibility Assessment	Map Legend	DNR Grant History
Marion Park	180	Two ball fields, a large picnic area with tables, play equipment for youngsters, two grade-level pavilions, horseshoe courts, four tennis courts, accessible restrooms and a storage building. It is located in the corporate limits in the City of Norway on the east side of US-8. A paved pathway leads to the park along US-8 which connects to the City’s trail loop.	5	13	1977 Project No. 26-00931 1985 Project No. 26-01380
Norway Myr Natural Area	31	Wetland nature area including a creek, plantings and natural wildlife viewing stations.	5	3	
Oak Crest Municipal Golf Course	160	This 18-hole course is adjacent to Marion Park. The facility operates with the revenues it generates from members and guests under the aegis of City administration and City Council. The facility also accommodates a Nordic ski trail and sledding hill during the winter. There is an additional 160 acres of vacant wooded land adjacent to the golf course on the westerly boundary that also provides public access.	5	12	
Snowmobile Trail		Designated Trail #2 is an east-west route that passes through the City just north of the Wisconsin Railroad. A southern branch winds through the City and eventually connects with the Wisconsin system	4		

**Table 3-1
Recreation Inventory
City of Norway**

Name	Size (acres)	Description	Accessibility Assessment	Map Legend	DNR Grant History
Hanbury Lake	28	Hanbury Lake Park features 3,720 feet of lake frontage, a boat launch, picnic amenities, horseshoe courts, play equipment, modern restrooms, a nature trail and a large playfield within its 28 acres.	3	17	1983 Project No. TF718 1986 Project No. 26-01471
Pocket Park (Main Street)		Landscaped area with park benches.	5	11	
Sturgeon Falls Hydroelectric Facility	560	Public access available at the hydro facility for canoe and kayak portage and a boat launch on the Menominee River. 4 primitive camping sites with pit toilet. Public access to wooded property (approximately 80 acres in Mi. and 480 acres in WI.) for hunting, fishing, and non-motorized activities recreational.			
Linear Non-motorized Trail System	3 miles	A paved non-motorized trail system connecting Strawberry Lake with Hanbury Lake and Marion Park with the Norway Myr.			
Norway Spring		A registered historical marker, this natural spring is located next to US 2.	3	1	

Area-wide facilities are listed in Table 3-2 and also identified on the Area Wide Recreation Map found in Appendix A.

**Table 3-2
Recreation Inventory
Norway Area**

Name	Size (acres)	Description	Map Legend	DNR Grant History
Norway-Vulcan Area Schools	30	Community play field including the football field and track	8	
Fumee Falls Roadside Park	~1	Found along the north side of US-2 in Quinnesec, this Michigan Department of Transportation facility features tables, water, primitive toilets and an improved viewing area of the small falls.	6	
Lake Antoine	51	County park features swimming, camping, and picnicking. Other park facilities include a boat launch, play field, concession stand, bathhouse, and tot lot.	4	1973 Project No. 26-00422 1984 Project No. 26-01327
Crystal Lake Community Center (YMCA)		A gymnasium, swimming pool, meeting rooms, game areas, racquet ball courts, and an exercise area provide many recreational opportunities at this county-owned facility in Iron Mountain.	2	1989 Project No. BF89-464 1999 Project No. CM99-043
Mountain View Ice Arena		This facility in Iron Mountain features an indoor artificial ice sheet for hockey, figure and open general recreational ice skating.	3	
Lake Fumee Natural Area	1808	Natural area owned by Dickinson County. Hiking, sightseeing, mountain biking, horseback riding and cross-country skiing activities are the predominant activities in this unique area.	7	1 994 Project No. TF94-265
Pine Mountain Ski Jumping Area	40	This facility includes a 120-meter jump and holds an annual event that attracts internationally renowned jumpers.	1	
House of Yesteryear		More than 3,400 unusual items, some dating back hundreds of years, are found at this private facility along US-2 near the US-141 junction.	5	

**Table 3-2
Recreation Inventory
Norway Area**

Name	Size (acres)	Description	Map Legend	DNR Grant History
Dickinson County Fairgrounds	77	The primary purpose of this facility is for the annual county fair held each September. Site features an arena, covered grandstand, race track, and a number of buildings. Stock car racing is held here through summer months.	9	
Norway Mountain	155	Two double and one triple chair lifts and three service lifts serve the twenty slopes and trails at this private winter sports facility.	10	
Piers Gorge State Park Recreation Area	160	Recognized as one of the most challenging sections of whitewater in the Midwest (class V rapids), this scenic area provides many excellent viewing vantage points.	11	
Norway Reservoir DNR Access	~1	A hard-surfaced boat launch, courtesy pier, parking and pit toilets are provided at this DNR facility on the Sturgeon River.	13	
Iron Mountain Iron Min	60	Located on the north side of US-2 in Vulcan, this private tourist facility offers guided tours via an underground railroad.	12	

4.0 DESCRIPTION OF PLANNING AND PUBLIC INPUT PROCESS

4.1 PLANNING DATA

4.1.1 Population

For any planning endeavor, careful attention must be given to the analysis of population. Such an analysis is necessary to determine existing or future needs based on the characteristics of the area's population. Population analysis assists with determining the direction of local capital improvements and related expenditures. Population data is also useful when applying recreation standard to a community.

**Population Trends
Selected Areas, 1990 – 2010**

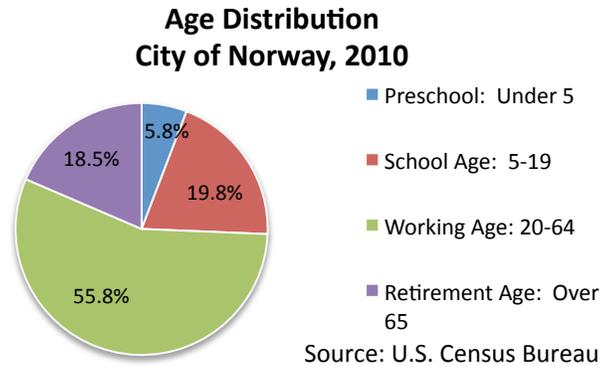
Census Years	1990	2000	2010	Change 1990-2010
City of Norway	2,910	2,959	2,845	-2.2%
Dickinson County	26,831	26,831	26,168	-2.5%
State of Michigan	9,253,298	9,938,444	9,883,640	6.8%

Source: U.S. Census Bureau

Norway's Census 2010 official population was 2,845, of which 51.7 percent are female. The population is concentrated in the City's southeastern section in no particular demographic pattern. Norway's population numbers have decreased since 2000, following County-wide trends.

4.1.2 Age Distribution

The distribution of ages in a population can be useful in determining future recreational needs. The population characteristics of the City of Norway are changing with the national aging trend. The median age in 2010 was recorded at 41.9 years, which is lower than that of the county overall. Over half of the City's population falls into the working age category, with nearly equal numbers of school age and retirement age citizens.



4.1.3 Population with Disabilities

According to the 2000 Census, there are 606 people, or 21.7 percent of the population, who reported having some type of long lasting condition or disability in the City of Norway. Dickinson County has reported 4,921 people with disabilities, which is 19.2 percent of the county's population. Updated disability status data is not available at this time for the City or County.

4.1.4 Employment and the Economy

Norway's median household income according to 2006-2010 Five-Year American Community Survey estimates was \$36,006; the median family income was \$42,526. Per capita income for 2006-2012 was \$18,696. Norway's civilian labor force from 2006-2010 included 656 females and 781 males.

Service, retail and manufacturing sectors employ 77.3 percent of the City's workers. These sectors account for most of the growth in jobs at the City and county level.

While farming remains important to the area's economy, the number of farms is declining as the average age of farmers increases. The regional economy of the area is balanced with considerable diversity and specialization. The vast amount of open land, natural beauty and climate attract a growing number of tourists each year. Major employers in the City include Multicolor, United Kiser, Milwaukee Broach, and Loadmaster, which are all manufacturing entities. Verso Paper, Grede Foundries, Dickinson County Memorial Hospital, and the Veterans Administration Hospital represent the largest area employers.

4.1.5 Topography

Norway contains many hilly areas, some very steep. Elevations range from 938 to 1,278 feet above sea level. A private downhill ski facility, Norway Mountain, is adjacent to the City's eastern boundary. A surface geology map is included in Appendix A.

4.1.6 Water Resources

There are five small lakes within the City's corporate limits. The largest, Strawberry Lake, covers about 9 acres and has been developed by the City as a recreational area. Hanbury Lake Park has been developed along the northwest shore of the 78-acre Hanbury Lake. The park area is within the City's corporate limit. The city has also developed a 40 acre wetland area along White Creek and is called the Norway Myr.

4.1.7 Soils

About 80 percent of the City contains soils of the Pemene-Emmet-Cathro association. These soils are derived of glacial till and vary considerably with regard to slopes and drainage. Soils of the Mancelona-Rubicon association, derived from glacial outwash, are found throughout the remainder of the City.

Sources of known contamination have been identified by the Michigan Department of Environmental Quality. They include the former municipal dump site near the public works facility and leaking underground tanks found in the same general area of industrial activity.

4.1.8 Vegetation

Prime farmland best suited to food, feed, forage, fiber and oilseed crops is common in the northern one-half of the City

4.1.9 Fish and Wildlife Resources

With much of the City being forested or otherwise undeveloped, ample habitat for native wildlife species such as whitetail deer, fox, coyotes, rabbits, grouse, raccoon, and black bear are available. There are three trout streams within the City.

4.1.10 Land Use Patterns

At almost any point in time, land use patterns are heavily influenced by economic conditions. New development is occurring where suitable land is available. However, intensive development is concentrated in an area of about one square mile. The remaining area of the City is predominately low density development with several active farms. A land use map is included in Appendix A.

4.1.11 Zoning

Land use is regulated by a municipal zoning ordinance. The City Manager is responsible for its implementation, the Zoning Board of Appeals hears re-zoning and variance requests. A zoning map is included in Appendix A.

4.1.12 Transportation Systems

Highway US-2 extends through the City in an east-west direction. Most commercial and

industrial development is located along this corridor. US-8 extends from the south and terminates at US-2.

Airport and surface transportation services are available in the county. There is no public transportation system in Dickinson County. However, there are some specialized transportation services available to the disabled and elderly.

4.2 PLANNING METHODS

4.2.1 Standards System

Comparing the existing recreation opportunities in the area to recreation standards can aid in determining deficiencies in the current recreation system. However, it is also important to apply information directly related to the area itself (i.e., age and income distribution, neighborhood structure, and recreation interests of a community). This section includes standards used as an aid in developing this recreation plan.

➤ Suggested Facility Development Standards

The Michigan Department of Natural Resources, Grants Management Division "Guidelines for the Development of Community Park, Recreation, Open Space and Greenway Plans" includes a table of suggested facility development standards which can be found in Appendix B.

➤ Recommended Classification System for Local and Regional Recreation Open Space and Trails

The Michigan Department of Natural Resources, Grants Management Division "Guidelines for the Development of Community Park, Recreation, Open Space and Greenway Plans" includes a table of a recommended classification system for local and regional recreation open space and trails which can be found in Appendix C.

4.2.2 Systems Approach to Planning

The systems approach to planning incorporates information gained from public input and detailed recreation inventories to determine the recreation needs of a community.

➤ The Public Input Process

The Michigan Department of Natural Resources requires that two methods be used to incorporate public input into the recreation planning process. The City of Norway conducted a public hearing on February 18, 2013 at the City Council Meeting. Minutes from the hearing are available in Appendix D. The City Manager also met with focus groups from the Norway High

School and the Vulcan Middle School as well as the Norway Area Planning Commission. Summaries and minutes from the focus group meetings are also available in Appendix D.

4.3 RECREATIONAL NEEDS ASSESSMENT

The City of Norway Parks and Recreation Committee, through the capital improvements schedule, developed a number of necessary and valuable recreation projects to enhance the quality of life for all demographic groups. The Committee has also recognized the need for maintenance improvements to existing facilities that are not specifically reflected in the City's capital plan. These maintenance improvements are performed by City staff with the volunteer assistance from the community and the local school district.

The capital improvements schedule highlights the City's top priorities as follows:

- Priority #1
 - Norway Myr Improvements – The Norway Myr is a 23 acre conservation park developed in 2007 through a US Department of Agriculture Wetland Mitigation Program. The top priority for this park is to develop a parking lot and outdoor educational area for the residents and school groups for field trips. An additional trail extension is required to connect the parking lot with the 23 acre Myr.
 - Public Tennis Court Improvements – The City currently has 4 outdoor public tennis courts located at Marion Park which are in extremely poor condition. Only one of the four courts is playable. The courts are in such disrepair that the High School Tennis Team has not scheduled home meets since 2008.
 - Irrigation to Soccer Fields – The soccer fields were improved in 2007 and irrigation is necessary to ensure good playing surfaces for the soccer teams.
 - Urban Forestry Program – The City completed the first phase of the Urban Forestry Program in 2007 funded in part by the DNR Urban Forestry Grant. The city completed phase 2 of the program by constructing a tree nursery to grow various species of trees to adequate size for boulevard plantings. Future phases of the tree program include annual boulevard tree replacements and an update to the urban forestry plan. The updated plan would include improvements to the interactive nature of the plan for the public along with continued efforts in inventory of our tree stock.
 - Resurface Existing Trail System – The existing trail system has approximately 2 miles of older segments that are in extremely poor condition. The segments of concern are located at Strawberry Lake (approximately 1 mile of trail around the lake), the linear connection between 2nd Avenue and Marion Park (approximately 0.6 miles) and a section of trail along Main Street north of the railroad tracks (approximately 0.4 miles). Repairs are also necessary for a section of trail between US 8 and the Norway Myr near Kimberly road along with boardwalk repairs to the trail alongside the Myr.
 - Hanbury Lake – The existing park which was built in the 1990's through a MDNR Trust Fund Grant needs repairs or reclamation to the original beach. There are also plans to expand the parking area and add 2 or 3 fishing piers.

- Priority #2
 - Trail Extensions – The City owns and operates a municipal golf course near its Marion Park. Plans have been developed to extend a walking trail from the park and golf course to the Piers Gorge Park located on the Menominee River. The Piers Gorge is a class 4 rapids and is the only such rapids in the Midwest. The trail would also provide a single trail connection from Piers Gorge into the City and to the Norway Myr.
 - Tennis Courts – Following the reconstruction of the 4 existing tennis courts and at the request of the Norway Schools, plans are being developed to construct an additional 4 courts. The 8 courts would provide the necessary court layout for tournaments.
 - Hanbury Lake – Additional amenities are planned for the park including primitive camping sites, a pavilion, and tree plantings.

- Other Priorities
 - Construct a pavilion and bathrooms which will service both the tennis courts and soccer fields.
 - Miscellaneous Trail Extensions per the non-motorized trail plan creating a complete loop around the City and connecting with the Dickinson County Bike Path Plan.
 - Other Miscellaneous park improvements to Strawberry Lake, Sledding Hill, etc.
 - Construct a safety net to separate the senior league baseball field and the golf course driving range.

5.0 ACTION PLAN

The following Capital Improvements Schedule details how the City intends to implement this plan:

General Comment: Includes items on maintaining (maintenance) of existing facilities.

City of Norway Recreation Capital Improvements Schedule	
Project Description	Funding Source(s)
<p>Expand linear trail system by segments: (Non-Motorized Transportation Plan)</p> <ul style="list-style-type: none"> • Hanbury Lake Park to NVAS • NVAS to US8 • Norway Myr to Cornerstone (US2) • Cornerstone (US2) to Norway Spring • Norway Spring to Strawberry Lake • Norway Spring to Fumee Lake Natural Area • Marion Park to Piers Gorge State Park • Tree Plantings • Miscellaneous - Benches, Garbage Cans, etc. 	<p>MDOT Enhancement, Brackett Fund, MDNR Trust Fund, MDNR Passport</p>
<p>Marion Park Improvements</p> <ul style="list-style-type: none"> • Expand Irrigation system at Marion Park to include the Senior League baseball field and two (2) soccer fields. • Relocate and reconstruct the (4) existing tennis courts which are failing • Construct (4) new courts • Construct new bathroom and pavilion near soccer field • Construct parking lot near soccer field • Miscellaneous Soccer Field Improvements such as bleachers and scoreboard • Tree Plantings • Miscellaneous – Benches, Tables, etc. 	<p>MDOT Enhancement, MDNR Trust Fund, MDNR Passport, Brackett Fund, WPPI Energy, Memorial Contributions, Local Fund Raising</p>
<p>Hanbury Lake Park</p> <ul style="list-style-type: none"> • Construct Pavilion • Construct (2) fishing piers • Beach Improvements • Tent Camping Area • Parking Lot Improvements • Trails and other natural walking areas • Tree Plantings • Miscellaneous – Benches, Tables, etc. 	<p>MDOT Enhancement, MDNR Trust Fund, MDNR Passport, Brackett Fund, WPPI Energy, Memorial Contributions, Local Fund Raising</p>

**City of Norway
Recreation Capital Improvements Schedule**

<p>Strawberry Lake Park</p> <ul style="list-style-type: none"> • Improvements to Knights Kingdom • New Canoe/Kayak launch • General Park Maintenance/cleanup • New RV Park • Irrigation and Grade Improvements to Softball Field • Covered Pavilion for outdoor ice rink • Clay capping material for improved ice rink conditions • Swimming Area • Tree Plantings 	<p>MDOT Enhancement, MDNR Trust Fund, MDNR Passport, Brackett Fund, WPPI Energy, Memorial Contributions, Local Fund Raising, NVAS</p>
<p>Norway Myr Park</p> <ul style="list-style-type: none"> • New parking lot with outdoor classroom (pavilion) • Miscellaneous Native Plantings • Construct new boardwalk pathways • Viewing Platforms • Interpretive Signage • Native Tree Plantings • Miscellaneous – Benches, etc. 	<p>MDOT Enhancement, MDNR Trust Fund, MDNR Passport, Brackett Fund, WPPI Energy, DDA, Memorial Contributions, Local Fund Raising</p>
<p>Urban Forestry Program</p> <ul style="list-style-type: none"> • Phase 3 plan which includes update to boulevard tree inventory, GIS mapping, and interactive public information • Tree removal and plantings (boulevards & parks) • Tree Nursery Improvements • Tree Nursery Irrigation (pond) 	<p>Local</p>
<p>Miscellaneous Sledding Hill Improvements</p> <ul style="list-style-type: none"> • Tree and stump removal • Acquire Snow Making ability • Establish small children run 	<p>Local</p>
<p>Gateway Signage</p> <ul style="list-style-type: none"> • (3) Entry Signs (2-located on US2 and 1- on located US8) • Wayfinding Signs (Points of Local Interests) 	<p>Brackett Fund, WPPI Energy, DDA, Memorial Contributions, Local Fund Raising</p>
<p>Norway Hill basketball court improvements</p> <ul style="list-style-type: none"> • New Basketball Hoops • Court Resurfacing • Miscellaneous – Benches, Tables, etc. 	<p>Local</p>
<p>Mountain Bike Park/Trail System</p> <ul style="list-style-type: none"> • Establish trails behind Golf Course and 	<p>MDNR, Local</p>

City of Norway Recreation Capital Improvements Schedule	
Norway Mountain	
Complete Streets <ul style="list-style-type: none"> • Support Non-Motorized Transportation Plan • Bike Lanes, Sidewalk Improvements and Lower Speed Limit (US2) • Tree Plantings along Streets and Highway 	MDOT Enhancement,
Miscellaneous Improvements <ul style="list-style-type: none"> • Benches Various Locations (Memorialized Plaques) • Garbage Cans 	DDA, Memorial Contributions, Local Fund Raising
Land purchase to extend and expand conservation efforts in wetland project.	MDNR, Local

APPENDIX A

MAPS

APPENDIX B

**NATIONAL PARK & RECREATION ASSOCIATION
SUGGESTED FACILITY DEVELOPMENT STANDARDS**

**NATIONAL PARK AND RECREATION ASSOCIATION
Suggested Facility Development Standards**

Activity/Facility	Recommended Space Requirements	Recommended size and dimensions	Recommended orientation	No. of units per population	Service Radius	Location Notes
Badminton	1620 sq. ft.	Singles – 17' x 44' Doubles – 20' x 44' With 5' unobstructed area on all sides.	Long axis north – south.	1 per 5000	¼ - ½ mile	Usually in school, recreation center or church facility. Safe walking or biking access.
Basketball						
1. Youth	2400–3036 sq. ft.	46'-50' x 84'	Long axis north – south.	1 per 5000	¼ - ½ mile	Same as badminton. Outdoor courts in neighborhood and community parks, plus active recreation areas in other park settings.
2. High School	5040-7280 sq. ft.	50' x 84'				
3. Collegiate	5600-7980 sq. ft.	50' x 94' with 5' unobstructed space on all sides				
Handball (3-4 wall)	800 sq. ft. for 4-wall 1000 sq. ft. for 3-wall	20' x 40' – Minimum of 10' to rear of 3-wall court. Minimum 20' overhead clearance.	Long axis north-south. Front wall at north end.	1 per 20,000	15-30 minute travel time	4-wall usually indoor as part of multi-purpose facility. 3-wall usually outdoor in park or school setting.
Ice Hockey	22,000 sq. ft. including support area.	Rink 85' x 200' (minimum 85' x 185'. Addition 5000 sq. ft. support area).	Long axis north-south if outdoors.	Indoor- 1 per 100,000 Outdoor- Depends on climate	½ - 1 hour travel time	Climate important consideration affecting number of units. Best as part of multi-purpose facility.
Tennis	Minimum of 7,200 sq. ft. single court. (2 acres for complex.)	36' x 78'. 12' clearance on both sides; 21' clearance on both ends.	Long axis north-south.	1 court per 2000	¼ - ½ mile	Best in batteries of 2-4. Located in neighborhood/ community park or near school site.
Volleyball	Minimum of 4,000 sq. ft.	30' x 60'. Minimum 6' clearance on all sides.	Long axis north-south	1 court per 5000	½ - 1 mile	Same as other court activities (e.g., badminton, basketball, etc.).

**NATIONAL PARK AND RECREATION ASSOCIATION
Suggested Facility Development Standards**

Activity/Facility	Recommended Space Requirements	Recommended size and dimensions	Recommended orientation	No. of units per population	Service Radius	Location Notes
Baseball 1. Official 2. Little League	3.0-3.85 A minimum 1.2 A minimum	<ul style="list-style-type: none"> • Baselines-90' Pitching distance-60.5' Foul lines-min. 320' Center field-400'+ • Baselines-60' Pitching distance-46' Foul lines-200' Center field-200'-250' 	Locate home plate so pitcher throwing across sun and batter not facing it. Line from home plate through pitcher-s mound to run east-northeast.	1 per 5000 Lighted- 1 per 30,000	$\frac{1}{4}$ - $\frac{1}{2}$ mile	Part of neighborhood complex. Lighted fields part of community complex.
Field Hockey	Minimum 1.5A	180' x 300' with a minimum of 10' clearance on all sides.	Fall season-long axis northwest to southeast. For longer periods, north to south.	1 per 20,000	15-30 minutes travel time	Usually part of baseball, football, or soccer complex in community park or adjacent to high school.
Football	Minimum 1.5A	160' x 360' with a minimum of 6' clearance on all sides.	Same as field hockey.	1 per 20,000	15-30 minutes travel time.	Same as field hockey.
Soccer	1.7 to 2.1 A	195' x 225' x 330' to 360', with a 10' minimum clearance on all sides.	Same as field hockey.	1 per 10,000	1-2 miles	Number of units depends on popularity. Youth soccer on smaller fields adjacent to schools or neighborhood parks.
Golf-driving range	13.5 A for minimum of 25 tees	900' x 690' wide. Add 12' width for each additional tee.	Long axis southwest/northeast with golfer driving toward northeast.	1 per 50,000	30 minutes travel time.	Part of golf course complex as a separate unit. May be privately operated.
$\frac{1}{4}$ - Mile Running Track	4.3 A	Overall width – 276' Length – 600' Track width for 8 to 4 lanes is 32'.	Long axis in sector from north to south to northwest/southeast with finish line at northerly end.	1 per 20,000	15-30 minutes travel time.	Usually part of high school or community park complex in combination with football, soccer, etc.

**NATIONAL PARK AND RECREATION ASSOCIATION
Suggested Facility Development Standards**

Activity/Facility	Recommended Space Requirements	Recommended size and dimensions	Recommended orientation	No. of units per population	Service Radius	Location Notes
Softball	1.5 t 2.0 A	Baselines-60' Pitching distance -45' (men), -40' (women). Fast pitch field radius from plate – 225' between foul lines. Slow pitch -275' (men) -250' (women)	Same as baseball.	1 per 5,000 (if also used for youth baseball)	¼ - to ½ - mile	Slight difference in dimensions for 16" slow pitch. May also be used for youth baseball.
Multiple Recreation Court (Basketball, Volleyball, Tennis)	9.840 sq. ft.	120' x 80'	Long axis of courts with primary use north-south	1 per 10,000	1 – 2 miles	In neighborhood or community parks.
Trails	N/A	Well defined head. Capacity- Rural trails – 40 hikers/day/mile. Urban trails – 90 hikers/day/mile.	N/A	1 system per region	N/A	
Archery Range	Minimum 0.65 A	300' length x minimum 10' between targets. Roped clear space on sides of range. Minimum of 30' clear space behind targets. Minimum of 90' x 45' with bunker.	Archer facing north + or + 45 degrees.	1 per 50,000	30 minutes travel time	Part of a regional/ metro park complex.
Combination Skeet and Trap Field (8 station)	Minimum 30 A	All walks and structures occur within an area approximately 130' wide by 115' deep. Minimum cleared area is contained within two superimposed segments with 100-yard radii (4 acres). Shot-fall danger zone is contained within two superimposed segments with 300-yard radii (36 acres).	Center line of length runs northeast/ southwest with shooter facing northeast	1 per 50,000	30 minutes travel time	Part of a regional/ metro park complex.

**NATIONAL PARK AND RECREATION ASSOCIATION
Suggested Facility Development Standards**

Activity/Facility	Recommended Space Requirements	Recommended size and dimensions	Recommended orientation	No. of units per population	Service Radius	Location Notes
Golf 1. Par 3 (18-hole) 2. 9-hole standard 3. 18-hole standard	<ul style="list-style-type: none"> • 50-60 A • Minimum 50 A • Minimum 110 A 	<ul style="list-style-type: none"> • Average length varies-600-2700 yards. • Average length 2250 yards. • Average length 6500 yards. 	Majority of holes on north-south axis.	<ul style="list-style-type: none"> • -- • 1/25,000 • 1/50,000 	½ to 1 hour travel time	9-hole course can accommodate 350 people per day. 18-hole course can accommodate 500-550 people per day. Course may be located in community park or school site.
Swimming Pools	Varies on size of pool and amenities. Usually 1 to 2 A site.	Teaching-minimum of 25 yards x 45' even depth of 3 to 4 feet. Competitive-minimum of 25m x 16m. Minimum of 27 square feet of water surface per swimmer. Ratio of 2:1 deck vs. water.	None-although care must be taken in sighting of lifeguard stations in relation to afternoon sun.	1 per 20,000 (Pools should accommodate 3% to 5% of the total population at a time.)	15 to 30 minutes travel time	Pools for general community use should be planned for teaching, competitive, and recreational purposes with enough depth to accommodate 1 m and 3m diving boards. Located in community park or school site.
Beach Areas	N/A	Beach area should have 50 sq. ft. of land and 50 sq. ft. of water per user. Turnover rate is 3. There should be 3-4 A supporting land per A of beach.	N/A	N/A	½ to 1 hour travel time	Should have sand bottom with slope a maximum of 5 % (flat preferable). Boating areas completely segregated from swimming areas. In regional/ metro parks.

Adapted from:

Lancaster, R.A., Ed. Recreation, Park and Open Space Standards and Guidelines. Alexandria, VA: National Recreation and Park Association, 1983.

Mertes, J.D. and J.R. Hall. Park, Recreation, Open Space and Greenway Guidelines. Alexandria, VA: National Recreation and Park Association, 1995.

APPENDIX C

**NATIONAL RECREATION AND PARK ASSOCIATION
RECOMMENDED CLASSIFICATION SYSTEM FOR LOCAL AND REGIONAL
RECREATION OPEN SPACE AND TRAILS**

**NATIONAL RECREATION AND PARK ASSOCIATION
RECOMMENDED CLASSIFICATION SYSTEM FOR LOCAL AND REGIONAL RECREATION OPEN SPACE AND TRAILS**

Classification	General Description	Location Criteria	Size Criteria
Mini-Park	Used to address limited, isolated or unique recreational needs.	Less than ¼ mile distance in residential setting.	Between 2500 sq. ft. and one acre in size.
Neighborhood Park	Neighborhood park remains the basic unit of the park system and serves as the recreational and social focus of the neighborhood. Focus is on informal active and passive recreation.	¼ - to ½ -mile distance and uninterrupted by non-residential roads and other physical barriers.	5 acres is considered minimum size. 5 to 10 acres is optimal.
School-Park	Depending on circumstances, combining parks with school sites can fulfill the space requirements for other classes of parks, such as neighborhood, community, sports complex and special use.	Determine by location of school district property.	Variable-depends on function.
Community Park	Serves broader purpose than neighborhood park. Focus is on meeting community-based recreation needs, as well as preserving unique landscapes and open spaces.	Determined by the quality and suitability of the site. Usually serves two or more neighborhoods and ½ to 3 mile distance.	As needed to accommodate desired uses. Usually between 30 and 50 acres.
Large Urban Park	Large urban parks serve a broader purpose than community parks and are used when community and neighborhood parks are not adequate to serve the needs of the community. Focus is on meeting community-based recreational needs, as well as preserving unique landscapes and open spaces.	Determined by the quality and suitability of the site. Usually serves the entire community.	As needed to accommodate desired uses. Usually a minimum of 50 acres, with 75 or more acres being optimal.
Natural Resource Areas	Lands set aside for preservation of significant natural resources, remnant landscapes, open space, and visual aesthetics/buffering.	Resource availability and opportunity.	Variable.
Greenways	Effectively tie park system components together to form a continuous park environment.	Resource availability and opportunity.	Variable.

**NATIONAL RECREATION AND PARK ASSOCIATION
RECOMMENDED CLASSIFICATION SYSTEM FOR LOCAL AND REGIONAL RECREATION OPEN SPACE AND TRAILS**

Classification	General Description	Location Criteria	Size Criteria
Sports Complex	Consolidates heavily programmed athletic fields and associated facilities to larger and fewer sites strategically located throughout the community.	Strategically located community-wide facilities.	Determined by projected demand. Usually a minimum of 25 acres, with 40 to 80 acres being optimal.
Special Use	Covers a broad range of parks and recreation facilities oriented toward single- purpose use.	Variable-dependent on specific use.	Variable.
Private Park/Recreation Facility	Parks and recreation facilities that are privately owned yet contribute to the public park and recreation system.	Variable-dependent on specific use.	Variable.
Park Trail	Multipurpose trails located within greenways, parks and natural resource areas. Focus is on recreational value and harmony with natural environment.	<ul style="list-style-type: none"> • Type I: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/ in-line skaters. • Type II: Multipurpose hard-surfaced trails for pedestrians and bicyclists/ in-line skaters. • Type III: Nature trails for pedestrians. May be hard- or soft- surfaced. 	
Connector Trails	Multipurpose trails that emphasize safe travel for pedestrians to and from parks and around the community. Focus is on recreational value and harmony with natural environment.	<ul style="list-style-type: none"> • Type I: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skaters <u>located in independent r.o.w. (e.g., old railroad r.o.w.).</u> • Type II: Separate/single-purpose hard-surfaced trails for pedestrians or bicyclists/in-line skaters. <u>Typically located within road r.o.w.</u> 	
On-Street Bikeways	Paved segments of roadways that serve as a means to safely separate bicyclists from vehicular traffic.	<p>Bike Route: Designated portions of the roadway for the preferential or exclusive use of bicyclists.</p> <p>Bike Lane: Shared portions of the roadway that provide separation between motor vehicles and bicyclists, such as paved shoulders.</p>	

All-Terrain Bike Trail	Off-road trail for all-terrain (mountain) bikes.	Single-purpose loop trails usually located in larger parks and natural resource areas.
Cross-Country Ski Trail	Trails developed for traditional and skate-style cross-country skiing.	Loop trails usually located in larger parks and natural resource areas.
Equestrian Trail	Trails developed for horseback riding.	Loop trails usually located in larger parks and natural resource areas. Sometimes developed as multipurpose with hiking and all-terrain biking where conflicts can be controlled.

Adapted from:

Lancaster, R.A., Ed. Recreation, Park and Open Space Standards and Guidelines. Alexandria, VA: National Recreation and Park Association, 1983.

Mertes, J.D. and J.R. Hall. Park, Recreation, Open Space and Greenway Guidelines. Alexandria, VA: National Recreation and Park Association, 1995.

APPENDIX D
MINUTES FROM PUBLIC HEARING
AND
FOCUS GROUP SUMMARIES

APPENDIX E
ADOPTION RESOLUTION
AND
LETTERS OF ADOPTION