

Draft Copy as of 4/26/16

**SHIAWASSEE COUNTY PARKS, RECREATION and OPEN
SPACE PLAN**

2016–2020

**Shiawassee County Five-Year Parks Recreation and Open Space Plan
2016-2020**

DEDICATION AND ACKNOWLEDGEMENTS

This Parks, Recreation and Open Space Plan is dedicated to the citizens of Shiawassee County and to all the visitors and tourists who wish to engage the outdoors of our country scenic landscape through the use of our County Parks and all of the other spacious and well-equipped public recreational outlets available in our County community.

ACKNOWLEDGEMENTS:

SHIAWASSEE COUNTY BOARD OF COMMISSIONERS

The Shiawassee County Board of Commissioners provided the funding for a new Plan and will oversee the public hearings, adoption and future budgeting processes. The elected members are:

Hartman Aue, Owosso	Chair-District 1
John Horvath, Owosso	District 2
Gary Holzhausen, Owosso/Corunna	District 3
Les Schneider, Durand	District 4
Jeremy Root, Byron	District 5
Jeffrey Bartz, Owosso	Vice Chair-District 6
John Plowman, Perry	District 7

SHIAWASSEE COUNTY PARKS AND RECREATION COMMISSION

The Commission guided the planning process and provided oversight for the public input phase of the project. Year to year the Commission proposes a budget, elects officers, oversees park operations, secures philanthropy and volunteerism, and schedules improvements. The appointed members are:

Cody Baker, Owosso	Chair, At-Large Appointee
Tony Newman, Corunna	Vice-Chair/Shiawassee County Drain Commissioner
Bonnie Reno, Corunna	Secretary, At-Large Appointee
Robert Downer, Bancroft	At-Large Appointee
Jeffrey Bartz, Owosso	County Commissioners Representative
Larry Johnson, Perry	At-Large Appointee (Shiawassee County Health Department)
Chris Klawuhn, Owosso	At-Large Appointee
Tina Tuller	At-Large Appointee
Vacant Position	Planning Commission Representative (formerly Robert Ebmeyer)
Brent Friess, Corunna	Shiawassee County Road Commission
<i>[Note: The above Road Commission appointment is distributed among the three Road Commissioners who alternate attendance at meetings:]</i>	
Mike Constine, Ovid	Shiawassee County Road Commissioner
John Michalec, Owosso	Shiawassee County Road Commissioner
Steve Zemcik, Owosso	Shiawassee County Road Commissioner

CONSULTANTS AND STAFF ASSISTANCE

Principal Consultant:	Phil Hathaway, Town Plans LLC, Owosso
Assisting Consultant:	Doug Schultz, Rowe Professional Services, Flint
Julie Hebert	Executive Assistant, Shiawassee County Board of Commissioners
Tim Hill	Shiawassee County Buildings and Grounds Superintendent

INTRODUCTION TO THE PLAN

On August 20, 2015, the Shiawassee County Board of Commissioners authorized funding for the Shiawassee County Parks and Recreation Commission's preparation of a Parks and Recreation Plan. An adopted plan becomes the template for achieving the goals, objectives and actions stated in the plan. Information gathering and public input is part of the process. Park facilities, conditions and needs will be evaluated in the Plan. To accomplish these plan elements, the Commission has been assisted in the Plan preparation with Town Plans LLC of Owosso and Rowe Engineering of Flint, Michigan.

The timing of the planning process leads to a 2016 adoption date. The discipline of the planning process offers a way to look at the parks with fresh eyes. It has been many years since the County has engaged with parks planning. There is a context for the planning process that identifies five influences:

- 1) Compelling challenges for maintenance precede park system growth.
- 2) Another influence is the pending removal of the remnants of the dam at Shiatown County Park and the resultant return to a natural flow of the Shiawassee River since its first impoundment in 1840. A new site plan is needed to respond to the riverside alterations and other new objectives for that park.
- 3) There is a third interest arising in Shiawassee County and that is the interconnections between all open public and quasi-public spaces. Cities, Villages, State-owned land and non-profits special use areas abound in this 535 square-mile area. A regional perspective assists in the understanding of the existing and potential roles of leisure pursuits in the public realm. An appreciation of the physical connections roadways and trails offer open new perspectives and patterns of open space use for the health and vigor of the area's population.
- 4) A fourth interest is to establish Shiawassee County's eligibility for matching grant programs, principally the Michigan Natural Resources Trust Fund and the federally funded (through the State of Michigan) Land and Water Conservation Fund. The Plan will identify other resources that may become available from the influence of an adopted comprehensive parks and recreation plan. Marketing opportunities for philanthropy and volunteerism will enter into the implementation phase of planning.
- 5) A step back from the details of county park planning offers a vision of a profound resource and that is the river focus of five of the park system's seven parks. The Shiawassee River courses over 41 lineal miles in Shiawassee County. The strategic location of the county parks not only offer rural open space recreation, but provide quality access to the increasingly popular fishing and paddling outings for residents and visitors. The Plan endorses the establishment of a National Park Service designation for a National River Trail. In 2016, Shiawassee County is recognizing the 200th anniversary of the first European-based settlement, an event based on river transportation and resources derived from this accommodating waterway.

A repeating theme in the Plan is to view the parks in many ways for the benefits they offer. Quality of life, for the past 15 years has become a common measure of community sustenance. Parks hold a distinction in cultural economic development, alleviation of social problems, physical and mental health benefits, and environmental/civic stewardship. The Plan will point out these benefits throughout and offer substantial reason for continued support for the role County government and the Shiawassee community of individuals and organizations plays in the well-being of the existing resource and the planned advances of its park system.

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The Shiawassee River rises to prominence in the 2016 Plan.

SECTION I. INTEGRATED COMMUNITY PLANNING

The five-year recreation plan will integrate community planning efforts county-wide to better define the role and opportunities present with the existing and future county park system. With five cities and six villages and three urbanizing townships within Shiawassee County, recreation is widely recognized as part of community life with a number of facilities and open spaces to serve the public. The natural resource that is well-ingrained throughout ten of the County's local municipalities is the Shiawassee River. The River is a credible greenway that is navigable and country scenic in aspect. The watershed for the river is mostly rural with a 60-year recent history of non-farm dispersed commuter settlement. Woodlots, wetlands and farmsteads dominate the landscape. The non-farm settlement is largely on one to five acre lots with some subdivisions interspersed throughout the townships. The commuter era to Lansing, Flint and metro-Detroit job markets has quieted in the past twenty-five years. For now urban pressure on rural areas has abated and offers local planning entities the opportunity to evaluate and preserve greenspace and advocate for green infrastructure improvements.

What this means for the County Park system, in addition to its prime role for river access and recreation facilities, is its responsibility for modeling best watershed management practices (including green infrastructure) and raising public consciousness for the Shiawassee River greenway. The five county parks situated along the banks of the Shiawassee River stretch from the south county area to the north county boundary. These strategic locations, together with urban riverside parks, contribute to equitable access for the health and quality of life of County communities and their residents.

With respect to County park facilities the village and city parks will be assessed for their facilities and needs so as to best define the role of the rural county park system's accommodations. Public access to the planning process will assist in pinpointing those elements where the County Park system is in the best position to offer.

The five-year plan includes a regional review period when other local and regional planning entities may contribute ideas and comments about the plan's emphasis on integration of recreation and greenway plans. Throughout the planning period, public participation has been encouraged and marketed so that the five-year plan reflects ongoing inputs as well as commentary at the public hearing conclusion of the planning effort.

SECTION II. COMMUNITY DESCRIPTION & INFLUENCES ON THE PARKS PLAN

The planning entity is Shiawassee County and its County parks system. Superimposed on the plan is a county-wide recreation plan that integrates all municipal parks, public open spaces, greenways and non-motorized and roadway transportation routes. The principal object of this Plan is to describe the county parks system consisting of seven County parks with five strategically located along the Shiawassee River. There is no county-sponsored recreation programming. Facilities have developed historically as deemed beneficial for the context of the park and the limited role county parks have played since their inception. The park system developed, for the most part, with the passage of the County and Regional Parks Act 261 of 1965. The map on Page 8 illustrates the elongated spatial dimension of the park system. Urban areas are hi-lighted and demonstrate the largely rural dominance of the county landscape.

SECTION II A. Demographic Characteristics. With 69,000 residents and a centrally located urbanized metropolitan area with four other small cities, six villages and sixteen townships, the context for planning a park system is rural/urban with moderate sprawl settings (from the commuter era of 1950-1990) and very little pressure for development in these times. There is sufficient occupancy and settlement density in the county to support a parks and recreation system with a variety of leisure activity options and preservation of open space and natural areas. Demographic conditions are interspersed throughout the Plan wherever they had an influence on particular parks planning themes. The statistical summary and analysis is at Appendix A. Principal influences are the University of Michigan projections for a decline in population through 2040, the aging of the population and supportive State policy for the in-migration of internationals to sustain population levels. For one detail most commonly expressed in planning, this data set stands out: *Percentage population*

growth between 2010 and 2014 for the State (0.3%) is greater than the losses in the County (-2.4%). These conditions are common in counties in the Saginaw Bay area; however, west of Owosso, in Clinton County, their growth rate was 11% in large part those suburban areas near Lansing.

SECTION II B. Physical Characteristics. Shiawassee County is divided roughly in half with respect to landforms. The north 1/2 follows the east-west State Highway M-21. The north county consists of level till plain and level lacustrine plains. The till plain breaks the north ½ line at Corunna and continues southeasterly through Durand to the county line. The balance of the County's south landscape is principally moraines, glacial outwash channels and wetlands. This landscape is picturesque and enjoyed by vast rural settlement patterns on 1 to 10-acre parcels. There are few lake bodies and those that exist are usually 5 to 10 acres in size and highly eutrophic, meaning they are in advanced stages of muck bottom development, dissolved oxygen depletion, water hyacinth, reed canary grass and algae. Hopkins Lake in Owosso is a prime example of this ordinary post-glacial process. Lawn and agricultural fertilizers hasten the process of eutrophication.

There are four river systems in the County with only one being navigable. The Shiawassee River is a credible waterway from Byron to Oakley forming an hour-glass shaped watershed in the central county. The river is very climate responsive with less consistent ground water support that is common in northern Michigan streams. It can reach very low flows for more than a month in the August-September period. The northeast county is drained by the Misteguay Creek which offers a greenway break in the lacustrine plain but without public access or use areas. The Maple River flows east to west in a broad scenic outwash valley that is a mile wide and flanked by moraine uplands. Its headwaters are near Shiatown and the stream exits the County at Ovid. The Looking Glass River is two-branched and drains the Southwest County. Its course includes generous greenway areas and concentrations of forested lowlands. The streamflow itself is minor yet its presence creates a very attractive landscape enjoyed by rural landowners yet with very little public access or use areas. Recreational bicycling routes offer access to this rolling landscape.

See the surface geology map on the next page for a grasp of the natural resource base of Shiawassee County, at least from a surface landform and waterway perspective. The Shiawassee River's course shows three stages of flow alterations all creating fall-lines where the riffles offer evidence of the glacial retreat and new outlets northerly from westerly for this river. The geology is the basis for the extra attraction of the county parks for paddle sports. The fall is significant enough to enjoy the force of the current. In Owosso the river courses northerly at a 90 degree turn where 10-14 thousand years ago, a waterway cut a valley wall upstream to Owosso and captured the river to its lower outlet in Lake Huron. This too created the scenic gorge-like character of steep valley walls and many manageable riffle points between large boulders.

The physical characteristics together with the country scenic settlement pattern, wetland forests, and several destinations establish the baseline for a Plan strategy to elevate the river into the plan's points of emphasis.



The Shiawassee River between Geeck and Shiatown Parks – Pending National Water Trail Nomination

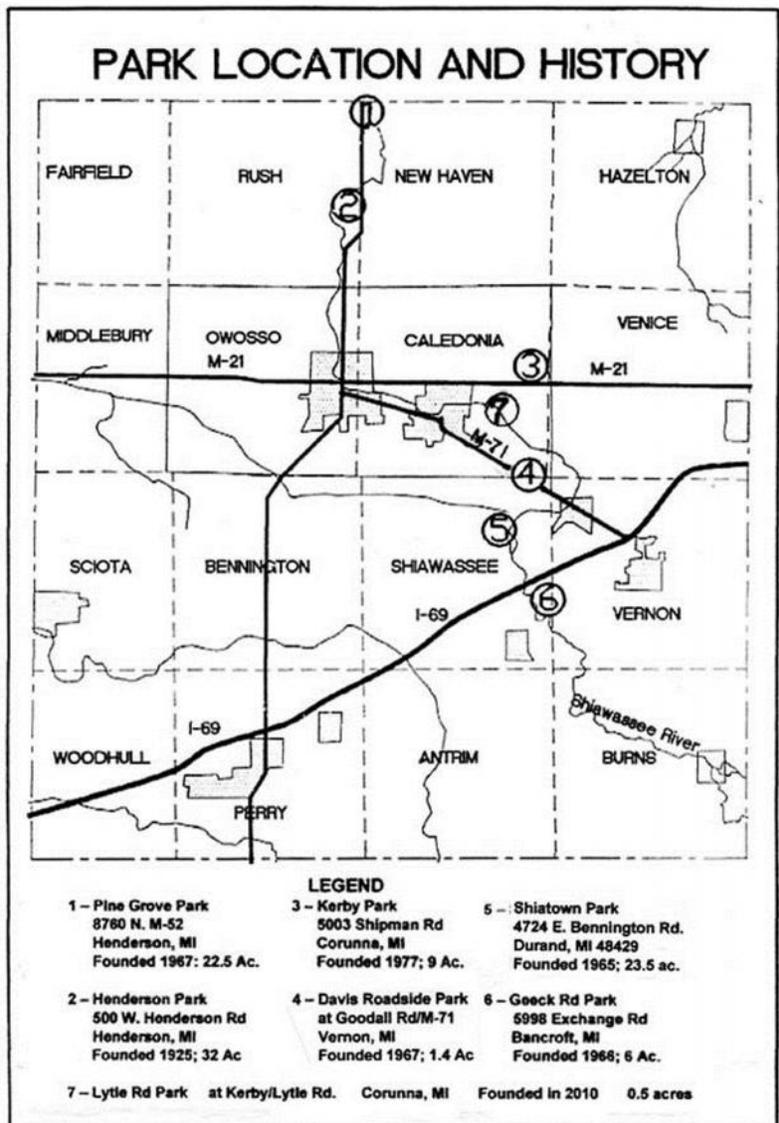
The surface geology map explains much of the qualities of the river-based County Parks system that follows the Shiawassee River waterway. The River flows through all of the glacial landform types present in the County. The glacial history explains the periodic riffles and falls in the river elevation that stirs interest in hikers and paddlers, features that are especially noticeable in Shiatown and Henderson County Parks.

SECTION II C. Transportation Conditions. The County consists of Interstate Highway I-69 (SW to the east County line), State Highways M-21 (east-west), M-71 (Owosso to Durand) and M-52 (bisecting the County east and west and running from Oakley on the north to south of Parry. The county road system features favored routes at Lansing Road that parallels I-69, the N-S State Road from Morrice to Chesaning, Hibbard Road from M-71 to the west County line, and Juddville Road that serves east-west traffic for the north side of the County. Much of the remainder of the County road system consists of narrower asphalt and gravel roads with sloped berms to roadside drains. These roads are less frequently traveled and become the foundation for recreational loop bike tours and destination routes to areas of interest from the parks.

Mention is made of these transportation routes for later utility in Appendix K that demonstrates bicycling non-motorized routes and trails about the parks. Of the routes listed above, Lansing Road represents the best east-west bicycling resource in the south County area. This is a former State Highway built to higher standards with respect to lane widths and paved berms. It is an accommodating and relatively low traffic volume route for bicycling. The route connects many municipalities and open space areas.

Public transportation includes the corporate headquarters for the Indian Trail Bus Company in Owosso, an active AMTRACK station in Durand with destinations east to Port Huron/Canada and west to Chicago. There is a county-wide dial-a-ride bus service. Many agencies, institutions and churches have transit vans for their clientele. There is no taxi service based in the County.

The State Highways and Interstate I-69 are viewed on the county parks locator map below:



SECTION II D. The Local Economy, Social Characteristics, Public Health and Housing. The approach to relating economic and housing information is to highlight contrasts with averages for the State of Michigan. These bullet points summarize the state and local conditions, unless otherwise noted, all in 2014:

- Age of housing in the County for 1939 or earlier built homes is 24.4% versus 15.3% at the State level
- Higher mobility rates is a dynamic of importance to relative health in a local economy. For 2000 to 2014 the percentage of persons who moved into another unit in that time is 60% for the State and only 53% for the County.
- House values in the County were \$108,000. For the same year the State average was \$121,700.
- Educational attainment is significantly less in the County with only 15.1% obtaining a bachelor's degree or higher. The State level is 26.4%.
- Unemployment in was 6.9% in the County with the State at 7%. Job quality remains a concern as well as the high idle population that is not counted as unemployment.
- Per capita income was \$23,206 in the County and \$26,143 at the State level.
- The poverty level in the County was 15.5% and 16.9% for the State.
- Median household income was \$47,723 for the County and \$49,087 for the State.
- Employment by occupation disparities are in Mgmt./Business/Science at 34.7% at the State level and only 27.8% for the County. Shiawassee County is higher for jobs in natural resources, construction, production, transportation and materials movement.
- A significant "employment by industry" disparity is 9.3 % State and only 6.6% County for professionals. Low expectations for population growth through 2040 are directly related to the last two bullet points on this list.

The implications from the above data to the County park system lie in the relative unaffordability of discretionary use of household income for recreation and the public's support of recreation and parks development through voted millage or bond authorizations. A majority of the school systems in the county are far behind in facilities and resources. The economic conditions explain limited expenditures for parks throughout the County. There are no local or County level voted millage or bond issues/revenues for parks.

Public health is gaining importance with public recreation. Owosso's Memorial Health Care conducted a 2005 study on sixth graders and learned that an astonishing 42 percent of the children were considered at risk for obesity. Obesity has caught society flat-footed and responses, together with diet advocacy, the parks, bicycling routes, sidewalks and school parks together with their plans should have ample, far-reaching settings to provide outlets for vigorous exercise.

More recently the Shiawassee County Health Department's 2013 Community Strategic Plan for the County concluded that the decrease of obesity is the #1 objective and issue for public health of the residents. With 64% of the population deemed at risk for obesity and with 33% of the population already obese, recommendations in the plan strategy call for increased access to affordable exercise. The healthy body strategy most directly related to this Plan and the characteristics of county park lands reveals increased opportunities to bike, paddle and walking or hike trails and grounds.

A detailed viewpoints of the positive side of the economic and health influences with parks and trails is found in Exhibit O. There are many findings and statistics that solidify the foundation of support for local parks, open space and trails, especially the natural resource-rich parks with their lower requirement for development funding.

SECTION II E. Greenways, Open Space and Conservation Areas. With respect to environmental values evident in the nature of the riverside county parks, some mention of the natural resource base within the county should address greenways, open space and conservation areas.

Open Space. The entire county, outside of municipalities has been described as country scenic. Over 60% of the county is prime farmland. With deep topsoil and level terrain, there has been a transition from the

smaller farm fields of the 1950's when agricultural policies began to promote a more industrial agricultural setting. Tree-lined (and wildlife habitat) fence rows were removed in favor of more efficient, larger crop fields. This characteristic is concentrated for the northern half of the county with its level and now well-drained landscape. The large field phenomenon is also present on a diagonal from Owosso to Durand and south of Perry and about Byron. While the fence row fields of old had their own attractiveness and importance to wildlife (especially North American ring-necked pheasants, bobolink and quail), there are times of the year with the winter wheat harvest looming in July when this landscape is a colorful blend of straw-colored fields with the green soybean, sugar beet, alfalfa, and soybean crops on endless horizons and big skies. Road and bike tours of farmsteads and these fields can be a refreshing summer pastime. The balance of upland open space in the south county is larger acreage non-farm settlement, some crops, and pastureland on a rolling moraine terrain that is always scenic for bicyclists and road tours. This topography offers a more enclosed view scape with more attention to details of country estates, vegetation, wildlife, waterways and unique terrains. In sum, attention to bicycling safer routes in attractive rural environs is a worthwhile pursuit to quality of life planning and implementation.

Greenways. As described earlier in the plan, there are four river systems in the county that have associated tree-lined courses through lengthy stretches of waterways. The Shiawassee River is the most significant with a 41- mile length within the county. It is the only navigable waterway in the county and is amply provided with public access points. Most of the in-river experience is tree-lined with large expanses of wetland and floodplain sections that are deeply forested. Except for the in-city/village riverside settlements and uses, this river is sufficiently wild with ample current to provide recreational and natural area experiences for a large user population. For a break in the urban settings, the City of Owosso owns 16,000 lineal feet of river frontage, and most of it is public open space and greenways. The Friends of the Shiawassee River are investigating the possibility of a National Water Trail designation with the National Park Service. At the heart of qualifying that designation lies 5 county parks with riverside access facilities. The criteria for the designation are found in Appendix N.

The Maple River flows east to west between Hibbard and Bennington Roads in a glacial spillway valley that is a mile wide. It joins the Grand River in Clinton County. This small stream/drain could not have cut that expansive valley; the valley was the outlet for glacial meltwaters of the larger Lake Erie in that epoch. Gravel pits are found all along this valley along with associated excavated lake areas that are now private ponds, campgrounds, and housing developments. Owing to its fertile, well-drained floodplain soils, the valley is largely farmland with a narrow tree line along its course. Few have described this river as a greenway in the more natural state sense. It still retains some natural qualities at points along its course.

The Looking Glass River is another product of the last receding glacier with its passage starting in Antrim Township on the south county line and arcing towards Laingsburg where it eventually flows onto the City of Portland and its confluence with the Grand River. This river and associated wetlands and tributaries is a credible greenway and natural influence on the preservation of open space. Except for Rose Lake with its Vermillion Creek (the south branch of the Looking Glass River, there is no parkland or publically held property along its course or along its tributaries. Suggested bike routes, detailed later in the plan, will enhance the recreational bicycling access to this area for scenic enjoyment.

Misteguay Creek drains northeast Shiawassee County with a narrowly defined galleria forest (meaning tree-lined) that transitions directly into farmland or open meadow. There are no public lands along this creek. A dry reservoir impoundment enacting only during flood conditions is south of New Lothrop and has not developed into parkland or public access. It plays a small role as a conservation area with little publicity.

Conservation Areas. The only existing conservation lands area, not in a public park, is the DeVries Nature Conservancy on North M-52 a few miles north of Owosso. This is an educational and recreational facility with no-till agriculture, public vegetable garden, natural play areas for children, environmental programming and hiking trails. There is a canoe landing there on the Shiawassee River that offers a rest break and interpretive experience between the lengthier run between Owosso and Henderson County Park. Another area that has scale and natural area characteristics, but not in public ownership, is the four square

mile forested wetlands plain northwest of Bancroft and bisected by State Road. Locals have called this area Rattlesnake Island for the small upland areas within the wetland. No initiatives for public ownership or environmental management have surfaced in many decades.

There is one other area of conservation area significance in the County and its local name is Austin Twin Lakes. This 1.5 mile by 1 mile natural area was locally promoted for state park status in 1975 at the time it was decided to develop Sleepy Hollow State Park to the west. It remains unprotected except for responsible practices of land owners. There is a relic eastern white cedar forest plot from cold spring ground water conditions that creates the northern Michigan ecosystem necessary for its existence. It is not the intent of the Plan to promote a County Park here in the time frame of this Plan. An entirely different development pressure environment and economic growth scenario might elevate the landscape for more serious public involvement. At any time this area would be a credible investment for a non-profit Land Conservancy—a natural area protection method more commonly employed in northern Michigan.

III. ADMINISTRATIVE STRUCTURE

In 1969, the Shiawassee County Board of Supervisors established the Shiawassee County Parks and Recreation Commission under the authority of Michigan Public Acts, P.A. 261 of 1965. The Commission, as the Act directs, consists of 10 members that include a representative of the County Board of Commissioners, the Drain Commission, A County Road Commissioner, and six (6) other members appointed at large. Memberships are rotated on a three-year appointment basis. The Commission has adopted By-Laws that director officers, elections and the process of a meeting. A quorum to conduct business is six members. The County Treasurer, as the Act directs, serves as the Commission's treasurer.

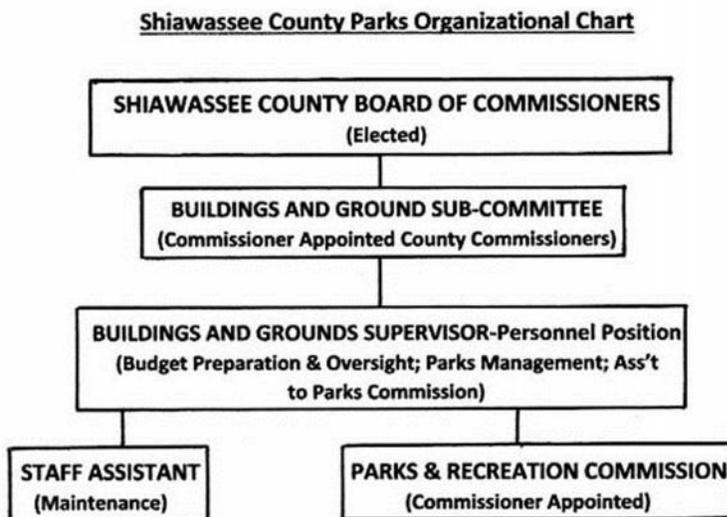
The authority to establish a five-year plan is provided for in the Act. Additionally in August of 2015, the County Board of Commissioners voted a special allocation for the preparation of a Plan for their consideration. The Act also requires that the Plan is filed with the Michigan Department of Natural Resources and that the Plan's content meets the minimum criteria for a qualified plan.

The Commission has a slate of powers and responsibilities enabled within the provisions of Act 261. These include:

- Acquisition of property (there is no sale authorization for Parks Commissions)
- Development and operation of facilities
- Custody of the control and management of all real and personal property acquired by the Commission
- Duty to install park roads and parking facilities
- Allocation of funds that the County government appropriates to the Commission
- Adopt rules for park operations including vehicle control and civil penalties
- Right to contract for police services
- Right to charges and fees for use of county parks and facilities
- Condemnation of property for purposes with the scope of the Act
- Acceptance of gifts and grants-in-aid
- Employment of personnel for parks operations and maintenance

The Parks Commission is a member of the Michigan Association of the County Parks and Recreation Officials (MACPRO) and benefits from educational programs and information sharing with other County Parks Commissions. The other MACPRO members with County settings and scale similar to Shiawassee County include the counties of Clinton (interestingly, the "Green Space Commission"), Gratiot, Ionia, Barry, Cass, Eaton and Lapeer. A cursory scan of these other systems shows a consistent level of attention to their parklands and programs. See Appendix H for a chart on other comparable counties and their park systems.

SECTION III A. Department Services. The County Board of Commissioners oversees a Buildings and Grounds Department that includes maintenance of park facilities and staff assistance to the Parks and Recreation Commission. The Buildings & Grounds department head attends Parks Commission meetings. The authority to delegate policy and levels of maintenance within the parks remains with the County Buildings and Grounds Sub-Committee of the Board of Commissioners.



SECTION III B. Current and Projected Budget. The 2016 Parks Budget is \$42,000 and consists of the administrative time from the Building and Grounds Department, approximately 200 hours per year @\$40.00 for \$8,000, \$6,000 for seasonal help, \$3,000 for repairs and supplies, and \$25,000 for planning and digital upgrades. The source of funding for all activities except Planning is the County General Fund. The Planning allocation is from the Green Program annual donation from the Waste Management Landfill west of the Village of Lennon. The projected annual budget in the term of this plan will average \$35,000. The budget break-down shows \$15,000 from the Waste Management Fund for maintenance and annual allocations for local match with grant-in-aid sources. An additional \$20,000 is for Building and Grounds Park oversight, equipment, and maintenance. There is a significant funding action (dam removal) at Shiatown Park for 2016 that is described in the Inventory section of the Plan. The County does not conduct recreational programs. That activity is conducted by others and relates mostly to special pavilion-centered events and group-based waterfront recreation outings.

SECTION III C. Volunteers. Since the 2008 recession and the reduction of state revenue sharing and property values, the County parks system has relied significantly on volunteers for the most fundamental park maintenance and facility development needs. These include:

- The Durand Am-Vets have adopted Geeck Road Park and together with maintenance, recently constructed a picnic pavilion with barbecue.
- Volunteers conduct an annual parks clean-up.
- Lawns are mowed by volunteers using County mowers
- Park stewards maintain gate openings and general park care
- Modern Woodmen plant trees in parks
- An individual clears and maintains trail at Pine Grove Park
- An individual has maintained Davis County Park.

The estimated value of volunteer hours in 2015 was \$15,000 and that reflects probable levels for the future.

SECTION III D. Relationships with Other Public and Quasi-Public Entities. The County Parks routinely provide the desired space for other entities to conduct events and install improvements. Recent and ongoing activity includes:

- The Durand Am-Vets conduct two events per year at Geeck Road Park.
- Kerby Road Park hosts a motorcycle club event annually
- Chef's Canoe Launch operates a private livery that serves Geeck Road and Shiatown Park.
- The Friends of the Shiawassee River conduct stream sampling activities to track water quality conditions twice a year at Henderson and Shiatown County Parks.
- In 2013, the Friends of the Shiawassee River installed "improved water access locations" (MDNR standard) at Henderson Park, Lytle Road Park and Geeck Road Park—a gift of \$12,000.
- In 2016 the Friends of the Shiawassee River will complete the removal of the condemned Shiatown Park Dam and restore the vicinity with a multi-year investment of approximately \$500,000.
- Caledonia Township allocates resources and funds to the facilities and maintenance at Kerby Road Park. The "Hoot and Holler 4-H Club" volunteers there as well
- The Eagle Scout program has recently sponsored two projects at Henderson Park. This park also enjoys volunteer activity from ABBA's House Men's Group.
- In 2014 the County Road Commission made official its donation of land for the Lytle Road Park.
- The County Parks Commission is a member of the Live Healthy in Shiawassee County Coalition, a group that promotes healthy lifestyles through marketing and information sharing on open space activity and the interconnections between these open spaces.
- The YMCA camp regularly operates canoe outings from its camp near Geeck Road Park to Shiatown County Park.

SECTION IV. INVENTORY OF EXISTING PARKS, NATURAL AREAS AND RECREATION FACILITIES.

A parks inventory lists all parks, natural areas, other public spaces and recreation facilities within or near the County planning area that are used by area residents with an *emphasis* on the county parks. A County-wide map will display park areas in general and other recreation facilities and places that may be mapped at that scale. The planning consultant for the plan conducted the field inventory of all parks in Shiawassee County and the adopted recreation plans.

For the regional inventory, a chart is employed to show the general parks and facilities availability throughout the County. This will be helpful in measuring the national recreation standards against what is offered for this county's population. The inventory helps avoid duplication of services where they are already provided for or planned to be offered in the near future.

To capture a broader scan of leisure time activities the inventory describes what will be called "special recreation facilities and programs". Some require membership or fees. Many are quasi-public that permit facility access under reasonable terms and standards. For example Rose Lake offers the general public 4,000 acres within and along the SW county border as a guest of those who pay fees for hunting and fishing licenses. These payees have privileges but they do not preclude others access to the natural resource areas.

For the County Parks a separate chart of parks facilities will detail the facilities and acreages, and will be accompanied of site layout maps and in the case of Shiatown, a more detailed site plan map. Each park will have a narrative description of conditions and suggested potential improvements or changes to the parks. The planning process will later repeat the site map features into the Objectives and Action Program.

The Inventory then proceeds to accessibility evaluation of the county parks and a plan for compliance with the 2010 ADA standards. That summary is located in Appendix J.

The Plan will proceed to provide a summary of previous, quite limited grant activity. That will be followed by a description of the programming activities in the County parks. Lastly, a resource inventory is provided for select areas in the County slated for County park expansion or specially designated greenspaces or greenway corridors desired for protection by others.

SECTION IV A. Regional Park and Recreation Inventory—Public Parks. The charts at Appendices D and E list all the municipalities in the County with their acreage totals and facilities. Many municipalities have more than one park; however, facilities are summarized to a scan of available recreation outlets to the County population. The chart at Appendix G lists all accessible school parks and inventories facilities and acreage. Two charts at Appendix H and I list types of parks in the municipal and county/state inventory to identify adequacies of the various park type settings that should exist in a region. For a conclusion, broad categories of recreational activity are compared to national standards to ascertain sub-standard conditions for facilities and park types.

By any standard, the charts at Appendices D, E, H & I reveal adequate facilities in Municipal and County parks:

- Baseball and softball fields (60)
- Pavilions (35)
- Picnic Tables with Grills (76)
- Playgrounds and Playfields (90)
- River and Fishing Access (Hopkins Lake and the Shiawassee River w/26 riverside points)
- Benches (75)
- Sledding Hills (9)
- Multi-Use Trails and School Running Tracks (20)
- Urban Forests (12)

When all municipality parks and school parks are coupled, the outdoor activity options for settled municipal areas are plentiful and provide outlets for individuals and associations of all County residents and visitors to pursue leisure time enjoyment. A proliferation of organizations provide volunteer time for programming athletic activity. These programs associated with park facilities enliven the recreational atmosphere of every community with park space.

There are other park facility types in the Suggested Standards that exist in private and quasi-public recreation sites oriented to public access. There one finds the list of campgrounds, golf courses, recreation courts, swimming beaches and running tracks. Campgrounds, golf courses and swimming beaches are described in the next Plan section under “Special Recreation Facilities.” When compared to standards, all three categories are served above the minimum standards and without prohibitive user fees. With respect to recreation courts and running tracks, the open (after-school, weekends, summer and holidays) nature of these grounds offer 4 running tracks and at least 20 recreation courts with good distribution about the County.

The park types at the larger scale are inventoried for area residents’ leisure time opportunities. Appendix H & I offer the revelation of few parks at a larger acreage. The list of Large Urban Parks, Regional/Metro Parks, Natural Resource Areas, and Greenways shows a modest qualification of County parks to the national standards. Acreage is not the measure for those standards but the narrative description of the character of the parks defined in Appendix F defines the qualitative expectation. The needs analysis in Section V-1 of the Plan establishes a local standard for adequacy of park types in the regional context.

The inventory of trails reveals:

- A multi-use trail in the Mid-County that connects the Cities of Owosso and Corunna through Caledonia Township. The trail requires maintenance and is very popular at up to 10,000 yearly user trips.
- Hiking/biking trails in Owosso’s Collamer Park. There are 3 miles of trails maintained by a bike club.
- County trails include pathways under ½ mile each at Pine Grove, Henderson and Shiatown Parks.

- Four miles of interpretive trails open to the public at Mid-County’s DeVries Nature Conservancy.
- Seven (7) miles of trails for equestrians, bikers, cross county skiers and hikers at Rose Lake Wildlife Research Station State Park. There are another nine (9) miles at Rose Lake contiguous to these trails in Clinton County. Equestrian pathways on the County Fairgrounds is only used in conjunction with equestrian events at that site.
- A 0.7 mile paved accessibility trail in Shaftsburg, a Woodhull Township Park.
- Sleepy Hollow State Park (nearby in Clinton County) with 16 miles of multi-purpose trails.
- The new 8-mile rails-to-trails section from Owosso to Ovid in the west central county area that continues for another 112 miles from Ovid in an elongated arc to Alma. (map on Page 19)
- The in-development 1-mile interpretive trail at Byron High School’s riverside land holdings.
- The Shiawassee River offers for a 41-mile paddling trail, named in the Plan as the Shiawassee River Heritage Water Trail with out-of-county connections easterly to Holly and northerly to Saginaw City’s south limits where the River combines with the Tittabawassee to form the Saginaw River.

Detailed description of County Park facilities are offered a few pages from this section. What is described above is featured in a County Public Open Space, Connectivity and Recreation map at Page 28.

Section 4 B. Special Recreation Facilities. Throughout Shiawassee County and at adjacent locales, many leisure time pursuits exist and effectively offer the public recreational options vaster than any municipal park system could provide. The purpose in mentioning these sites is to arrive at a more holistic view and appreciation of recreational outlets. While public parks maintain their stature as the most equitable and accessible way to pursue leisure time activities, other areas, often called “*third person*” recreational providers supplement the lives of those who choose to live active lifestyles. With many of the providers, there is a special benefit of indoor play for the cold weather season. Golf courses and campgrounds are grouped in their respective categories. The remainder of sites are listed by geographic location.

Campgrounds. There are six private campgrounds open to the public. Their value is increased when the consideration of swimming beaches is mentioned. Shiawassee County is the second “driest” county in the State of Michigan with respect to surface water area. Sanilac County, the driest, happens to have 40 miles of Lake Huron shoreline. That statistical technicality essentially isolates Shiawassee County at the bottom of Michigan’s otherwise renowned legacy as the Great Lake state both with inland water bodies and the Great Lakes shorelines. All the campgrounds have swimming beaches; Holiday Shores beach is not public for fee.

Holiday Shores	Durand	600 sites
Myers Lake	Byron*	114 sites
Moon Lake	Perry	60 sites
Walnut Hills	Bancroft/Byron	200 sites
Campgrounds R Us	Owosso/Ovid	122 sites
Sleepy Hollow State Park	Laingsburg*	181 sites

*These two sites are across the County line but are perceived by in-County residents as nearby, frequented facilities. The north ½ of the County has no campgrounds. Campgrounds are not considered out-of-proximity type facilities when 1,277 campsites are up to a half-hour’s drive from the north.½ of the County,



New campground (2015) with public fee-base beach access.

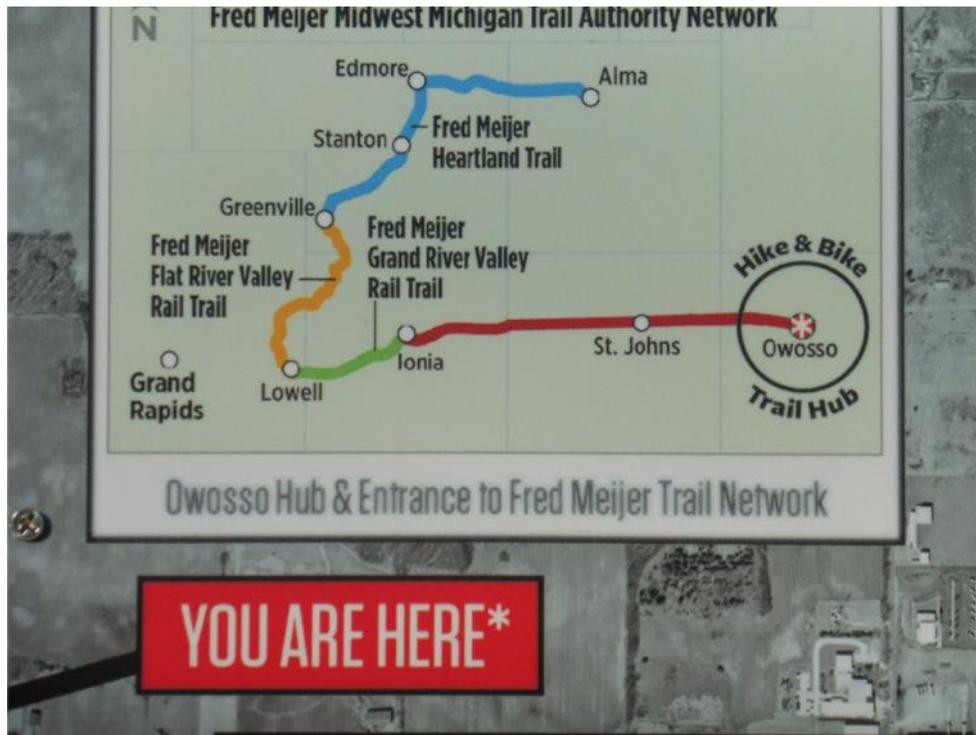
Golf Courses. Despite the closure of two golf courses in Shiawassee County in the past 5 years, there remain six (6) golf facilities in the County. As with campgrounds, the golf courses are in the south half of the County. An exception is the Owosso Country Club five miles north of Owosso that is private. The other courses are public and are:

Pine Hills	Laingsburg	18 Holes
Dutch Hollow	Durand	18 Holes
Holiday Meadows	Durand	9 Holes
Glenbrier	Perry	18 Holes
Corunna Hills	Corunna	9 Holes
Willowbrook	Byron	18 Holes

Other Special Recreational Facilities, including wintertime pursuits—sorted by location

Owosso Area:

YMCA (no pool; all other programming and facilities common to a YMCA)
 DeVries Nature Conservancy—outdoor education, trails and sleigh museum
 Indoor Archery, Oliver St— open to public Fitness Gyms—open to public w/fees
 Martial Arts Center—youth emphasis Lions Ball Field
 Bowling Center—36 lanes; leagues Owosso Motor Sports
 Owosso Speedway Golf Driving Range
 Shiawassee Art Gallery Curwood Castle Historic Site
 1225 Railroad Museum & Grounds Owosso Schools Open Swim
 Shiawassee Historic Museum Roller Skating Rink
 Shepard’s Indoor Go-Kart Track 3 Fraternal Clubs-quasi-public
 Senior Center Owosso Schools Track
 Owosso Schools Walking to Stay Fit (hallways of the high school)
 Owosso Schools Water Aerobics (pool) MUCC Conservation Club (w/archery)
 Kiwanis Acres (60 acres for outdoor education)
 Former Bennington golf course, slated for regional outdoor fitness site



Trail head sign in Owosso Township

- 3) The Voight Family Loop Trail. This one-half mile trail circles the Shiawassee River in central Owosso and is multi-modal in a sense that it serves the 1226 Rail Museum patrons for another recreational option to regional tourism.
- 4) Rose Lake Wildlife Research Area State Park. This public park has around 7 miles of woodland trails in its Shiawassee County portion and another 8 miles of trails, with some meadow walks, in the Clinton County side. All hiking trails are also open to mountain bikers and cross country skiers.
- 5) The DeVries Nature Conservancy, Owosso. This public site has 4 miles of riverside trails and meadow walks for hikers and cross country skiers.
- 6) Sleepy Hollow State Park. A few miles west of Laingsburg, the trail system contains 16 miles of multi-purpose trails through woodlands. Hiking, bicycling and snow-shoeing are most popular.
- 7) Collamer Park, City of Owosso. Walking and mountain biking trails offer two miles of urban forest access.

Non-motorized transportation. Bicycling city, village and county roads has a long and rich history for enthusiasts and some casual users. The Shiawassee Freewheelers Bicycle Club tied closely to Owosso bike shop that opened in 1972 drafted a biking atlas for county roads with several destinations averaging 6 to 100 miles with shorter rides possible on the hi-lighted routes. With a few exceptions, the routes are not signed or paint-striped with designated lanes. With the exception of State Highway M-52, the pavement widths are not adequate for paint-striping and most berms are too sloped and coarsely graveled. In sum bicycling outside city and village limits is primarily for enthusiasts with endurance, all the safety accouterments, and higher performance bicycles. The plan will pose alternatives for more casual outing riders. Within city and village limits with lower traffic volumes, curbed streets and wider lanes, bicycling is more inclusive to users and some family use. Owosso, for example, has 70 miles of sidewalks, and with the exception of the downtown core, these are open to cyclists and especially safer with smaller children. There is no inventory of sidewalks about the County. The County-based Live Healthy Coalition is currently examining these beneficial options for outdoor exercise and will also concentrate on connecting open spaces in a number of ways with higher density communities and settlements.

Later in the plan at Appendix K, there is a sampling of the 37 recreational bicycling routes and destination routes between the county parks and nearby cities and villages, especially for those parks on the Shiawassee River.

The special recreational list does not include the many churches with recreational facilities and programming for their parishioners and guests. In Owosso alone, there are five indoor church site gymnasiums, many with scheduled public play times. These places offer colder weather exercise options. Other commonly attributed church facilities, often in walkable neighborhoods, include open space, pavilions, and playgrounds.

Section 4 C. The County Parks—Description and Facilities Inventory.

There are seven county parks in the Shiawassee County park system. The park distribution has a north-south orientation that follows the Shiawassee River. The parks are on the north-south dividing line of the County or east of it. An earlier map on Page 8 of the Plan shows the distribution of the park system. In Appendix I, there are park map sketches of each of the landscapes with a list of existing and proposed facilities. One park, Shiatown, has a professionally drawn site plan found at Appendix P.

The evolution of the park system started with Henderson County Park in 1925 with later additions occurring in the mid to late 1960's when Act 261 was adopted. The exception, Lytle Road Park, a paddle boat launch site to the River, was formally established two years ago with a land transfer from the Shiawassee County Road Commission.

A special asset of the County parks is their rural location with natural settings. There is an advantage to children for unorganized play spaces where activity is more varied and emotionally stretching than can be experienced in organized sports. Playtime—especially unstructured, imaginative, exploratory play—is increasingly recognized as an essential component of wholesome child development. Studies show that children who played among the trees, rocks and uneven ground of natural play areas tested better for motor fitness, especially in balance and agility. The County parks offer an appealing alternative to its citizenry for the refreshment of being outdoors in natural settings.

At a total of 95 acres, the system is comparatively small when other similarly-situated counties are examined. The table at Appendix H shows the key characteristics of nine other similar-setting county park systems that have a central city of average size and surrounding smaller cities and villages and with mostly rural settlement. Population levels are above and below that of Shiawassee County but close enough to draw some comparisons. These will be detailed in the summary of this section of the plan. At this point each park will be described together with its facilities and planning issues posed for decision making in the planning process of this plan. The parks, from north to south are as follows:

Pine Grove Park. The 22.5 acre park fronting State Highway M-52 on the north county line was established in 1967 from a State grant for the land purchase. The majority of the site (80%) is a white pine plantation from which the park's name is derived. There is frontage on the Shiawassee River but along a steep embankment with only a fraction of access at river level at the base of a hillside leading to a privately owned flood plain parcel of similar size to the park. The chief purpose of the park, based on user practices but not design, has been as a roadside rest area. The principle character of the park is a high quality level landscape with few limitations for park use and improvement. Locations on the river bank, especially in the SE corner of the park show ongoing erosion conditions that are not stabilized. Park improvements are scant but include:

A pavilion-no tables	Water supply	Port-a-john	Forest pathway
Abandoned ball field	Open space meadow	Sheriff's antenna	River frontage

For budgetary reasons the park is de-commissioned at this time with both the port-a-john withdrawn and water supply pump disassembled. Except for the road way along the frontage there is no mowing. Plans for the park

to be resolved in the five-year scope of the Plan include a decision on whether to acquire an interest in the flood plain parcel east of the park, thereby gaining river access as is common with the primary purpose of the remainder of the park system. That interest might include a land trade of a portion of the Park, with the private owner of the flood plain parcel at around 17 acres. Development on the flood plain parcel would focus on paddle boat and fishing access upgrades and walking paths. The ample, steeper hillside has good potential for sledding. Walking trails would be enhanced.



Pine Grove Park trail view over the Shiawassee River

Photo Page of County Park Images



Henderson County Park Pavilion Playground



Shiatown West Park Fishing Access



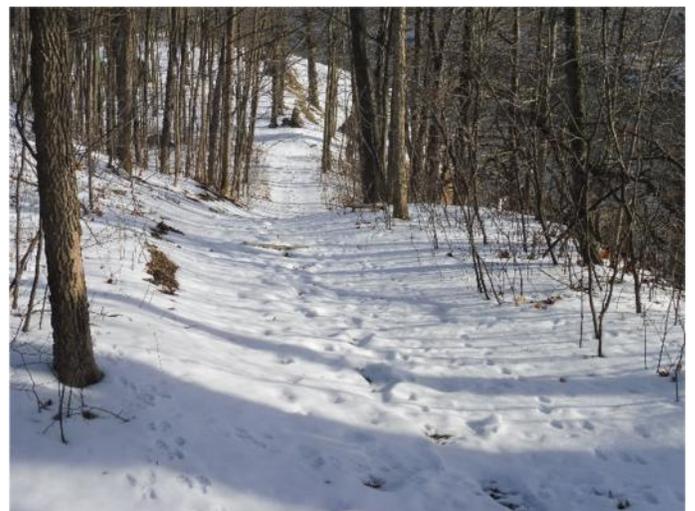
Lytle Park Rotary Club Bench Donation



Geeck Rd Park AmVets Donated Accessible Site



Caledonia Twp Donated Maintenance-Kerby Park



Pine Grove Park Trail to River Access Area

Henderson Park. The senior ‘member’ of the park system, established in 1924, remains a rustic county park landscape. This is a relatively narrow, elongated 32-acre site that stretches east-west along the course of the Shiawassee River. The river boundary is a steep embankment with two lowland river access points at the east and west ends of the park. There are two gate entrances with a connecting interior park roadway. The park is 70% forested. Park facilities include:

- | | | |
|-------------------------|-----------------------------------|-----------------------|
| Three pavilions | Three playgrounds | Volleyball/Horseshoes |
| Two water supplies | Two restrooms | Several Picnic sites |
| New boat launch/landing | Unimproved boat landing-west side | |
| Walking paths | | |



Novel Trail Side Use at Henderson Park



Popular Pavilion A-Henderson Park with Water Supply

The park planning issues and opportunities include many smaller items that will be addressed in the action plan. They relate to barrier free improvements, road repair, drainage repair at select locations, parking supply issue at west pavilion, and facility—especially play equipment—upgrades. An operational feature of the park has been noted by many river access users and that is the locked gate system at the park that closes the park too early in the fall and too late in the spring. The east gate has potential for relocation to direct year-round river access while protecting the remainder of the desired seasonal park closure period.

Kerby Road Park. The only active park in the system that is not on the river is a former country school grounds. The Corunna Public Schools granted this parcel to the County in 1977 with the stipulation that it remains a public parcel for recreational use. Just off State Highway M-21 a few miles east of Corunna, this community park is a mowed field with a school house located south central within this 9-acre parcel. The north 2 acres are deliberately maintained meadow with no park facilities. There is a nice lake, a former borrow pit for marl, just 10 feet from the north boundary with no access rights for park users.

An effective informal agreement exists between the County and Caledonia Township for park maintenance, tree plantings, ballfield maintenance and play area development. That service averages around \$2,000 per

year together with some volunteer time from Caledonia Township maintenance personnel. Kerby and Geeck Road Parks are the best maintained parks in the system. Kerby Park facilities include:

Three rentable pavilions	Volleyball court	Restrooms with pavilion rental
Park equipment storage	Ball diamond	Playground equipment

The park planning issues and opportunities deal with barrier free accommodations, parking supply at Pavilion A, potential for a viewing platform on the north side with walking path, relocated home plate for the ball diamond, replacement of driveway gate on Shipman Road with a fence that includes a walk-through gate. The level character of the park fields might benefit from serpentine fill ridges near play areas. Tree planting opportunities abound at this park.

Lytle Road Park. Located at the intersection of Kerby Road and Lytle Road in Caledonia Township, this special use park was officially entered into the County park system with a land grant from the Shiawassee County Road Commission in 2010. The land was an excess piece and part of the property required to build the Lytle Road Bridge and supportive embankment areas. At 0.6 acres, the park is very small but strategically located for a boat (canoes/kayaks and john boats) landing and launch. It functions effectively as a landing for paddlers departing at Shiatown County Park three hours upstream. Observations of park users include daily roadside rest and enjoyment of the riverside, mostly lunch stops. With two entrances, the park driveway provides ample maneuvering space for group outings with associated boat trailers. The only park facility aside from a new boat launch is a river view bench and picnic table overlooking the river.

Planning issues and opportunities include replacement of the guard rail at the picnic site with a more attractive split rail fence, street trees, handicapper parking designation, and a river users landing sign. The park offers a naming opportunity that might include revenues, a tribute, and/or caretaking for the privilege.

Arthur Davis Roadside County Park. With 437 feet of frontage along State Highway M-71 and Goodall Road, this 1.4 acre undeveloped park north of Vernon Village lends itself to a roadside rest area except for its setting. First, M-71 is an eleven mile long state highway connecting the mid-county to I-69 and the Durand-Vernon area. A highway rest area is not needed for this short highway segment near urban services and parks at each end. Secondly, the park lies in a swale relative to the highway with many poorly drained areas running in a north south orientation the length of the park. With agricultural farmland this site offers a forested break in the landscape that already provides a pleasant drive between Corunna and Durand.

For planning purposes this park provides 666' frontage along the abandoned Ann Arbor Railway, long desired by area interests for a bikeway between Corunna and Durand that eventually will link with the new CIS trail from Owosso Township to Ionia and beyond. The park could serve as a rest stop area for hikers and bikers. There is no need for on-site parking in this park now or in the future. The County does not sign this parcel.

An additional value to the park is for tree plantings from youth projects and nature interests to introduce native species to this landscape. The varying soils already support White Pine, Red Oak and Red Maple growth. Deliberately arranged brush piles offer wildlife habitat and protection. A volunteer has contributed time for site maintenance.

The photographs below show the park landscape and the hoped for rail trail on the former Ann Arbor Railway rail bed.



Arthur Davis Park – general landscape view



A. Davis Park – Ann Arbor Rail Trail Rail Bed

Shiatown County Park. With park heritage quite historical as with Henderson County Park, Shiatown began as a public square in an unincorporated place in 1836. A small settlement and post office ensued and the initial dam and power mill was built in 1840. The anticipated town and state capitol never developed. Prior to European-descendent settlement in the County, American Indians occupied the river landscape and the most significant Indian Village in the region was nearby and south of Shiatown along the river.

What changed the Shiatown settlement was a hydroelectric dam with reservoir in 1904. 1911 ownership and upgrades by Consumer's Power Company established a 15-foot head at the spillway. After Consumer's was finished with the hydroelectric facility the dam and associated real estate was donated to the two townships in 1955 that later transferred the property to the County in 1972. The County actually assumed park operations there in 1965. In 2011 the dam was condemned by the State of Michigan and it has been removed in gradual steps since then. In summer, 2016 the dam will be completely removed and the dam and access rights will be transferred to the County [Note: the dam and some access lands were deeded by the county to a private hydroelectric firm and later tax reverted to the State]. Most importantly the removal process involves restoration riverside work and the park's benefit for improved river access.

As the park is situated in this plan, there are 23.5 acres of land with an east park and west park separated by the river with only Bennington Road connecting the two parcels. A former walkway across the dam connected the parks and a trail was developed for that reason. The two park areas function separately as stand-alone open spaces at this time.

The park can be described as a river-oriented in almost all aspects. The supportive real estate along the river is substantial enough to regard this park as a significant county-wide resource area both in its past usage and future potential. Its uniqueness stems from the strategic location of a fall in the river. The reservoir provided power boat racing recreation throughout the 1940's to the early 1960's. After the 2016 dam removal to nearly riverbed level, it will be apparent that the river drops here to the extent that it exhibits a concentrated area of relatively faster flows. Design considerations for the final phase of dam removal will feature the force of the flow with placement of river boulders. The interest in the prior dam's water action can be replicated to some extent and remain a safe attraction and substantial reason for park visitors.

The West Park is the one-block sized town square of Shiatown together with the land between the square and the river. About 3.5 acres of slightly sloping grounds offer enough parkland for traditional park facilities. The balance of the West Park area, 9 acres, is an adjacent deeply entrenched, forested drain and the upland forested area south of the drain. The forest is second-growth timber dominated by black locust

trees—not a desired end for the preferred pre-settlement forest types of this area (oak-hickory). There was an era when Black Locust was a popular site restoration tree for disturbed areas such as this woods. Trails through the woods lead to the dam and circle back to the pavilion and town square. A steep bluff on the upland park area offers nice views of the river and to the new landscape where the reservoir once existed.

The East Park is an 11-acre landscape mostly related to the former hydroelectric facility and reservoir. The majority of the landscape is hillside land managed as meadow. An abandoned park road lies between the hillside and the former reservoir. The bottomlands of the former reservoir are County-owned and a portion of them may become County parkland, potentially 40 acres and mostly on the West Park side of the River. The river access for boating (canoes, kayaks and john boats), river viewing, and fishing is the most popular use of the East Park. The parking for the park is now restricted to a small lot at the boat access point near Bennington Road and a small parking lot for the picnic area on Newberry Rd. The access driveway from Bennington Road to Newberry Road is permanently closed. A small woodlot (1.5 acres) lies on the other side of Newberry Road and has never had park improvements and is considered part of the East Park. All of the aforementioned features are envisioned in the Site Plan. Existing Park facilities include:

West Park--	Pavilion	Park trails	Horseshoes	Play equipment
	Historical markers	Town Square	Fishing access point	
	Water supply well pump (inactive)		Picnic Tables/Grilles	
East Park--	Pavilion	Restrooms	Play equipment	Sledding hill
	Boat launch (unimproved)		Fishing access points (2) with pathways	

Park issues and opportunities are many and these are addressed later in the Objectives and Action Plan sections of the Plan:

- New park land boundary at the bottomlands of the former reservoir
- One-to-two pedestrian connection(s) between the West Park and East Park
- Park facility repairs and east side park drive and lot abandonment/restoration
- New boat launch
- Fishing access improvements for both sides of the park
- New parking lot at boat launch
- New walking trail on the East Park with wildlife scenic viewing platform at SE corner
- Installation of an osprey nest platform in the south bottomlands
- Safety and demarcation landscaping for sledding hill
- Reforestation of some of the meadow lands at the East Park hillside
- Viewing platform on the river bluff of West Park
- Invasive plant species control in the bottomlands
- Accessibility play area safety upgrades
- Philanthropic plan for plantings and facilities
- Information kiosk for bicyclists and paddlers
- Nature Playscapes near the two pavilions
- Accessible facilities both for retrofitted and new facilities



Proposed Bottomlands Viewing Platform—E. Shiatown Proposed Bluff Viewing Platform—West Shiatown

Geeck Road County Park. Nestled in a valley floodplain, the 6-acre Geeck Road Park is a most scenic landscape in the system. The park lies near the Village of Bancroft and west of Durand. There is a welcoming sense of arrival here with a well-maintained parking lot. Leading from the lot are two pavilions and a new boat launch to the Shiawassee River. The park is level with mostly mowed grounds. The dedicated caretakers, the Amvets Durand #2273, have also built park facilities. The facilities include:

- | | | |
|-------------------------------|----------------------|-----------------------------|
| Two pavilions, one accessible | Playground equipment | 7 picnic sites with grilles |
| Park benches | Boat launch | Pathways to facilities |
| Horseshoes | | |

Park planning issues and opportunities include decisions on riverside tree plantings and natural areas in lieu of mowing to the water's edge, an exercise trail, a canoe landing sign visible to arriving paddlers, and resolution of the vandalism resulting in removal of the port-a-johns so important as a service to pavilion park users and paddlers.



River side Tree Planting Zone—Geeck



2013 Paddle Boat Launch – Geeck Park

Summary of River Frontage Parks.

The five County parks on the Shiawassee River have adequate frontage to engage the Plan’s principal goals, objectives and actions for the upcoming five years and beyond. The total river frontage within the park boundaries is as follows:

<u>Park Name</u>	<u>River Frontage</u>	<u>River Elevation</u>
Pine Grove Park.....	900 feet	639’ asl
Henderson Park.....	3,180 feet	667’ asl
Lytle Road Park.....	360 feet	739’ asl
Shiatown Park West.....	660 feet	781’ asl
Shiatown Park East.....	575 feet	781’ asl
Shiatown Park Dry Reservoir Bottomlands East	3,575 feet	783’ asl
Shiatown Park Dry Reservoir Bottomlands West.....	3,575 feet	783’ asl
Geeck Road Park	3,200 feet	800’ asl
Total River Frontage.....	14,425 feet (2.73 miles)	141’ fall -- 4.55’/mile

That 2.73-mile figure is the accessible fishing and scenic walk frontage in a public park setting. For paddlers the number is much greater and can be expressed in this manner: there are 35 miles of waterway between Geeck Road Park and Pine Grove Park that, for a paddler’s experience, is the length of county park river frontage available for public use. To view this river even more regionally, and not only from the County park frontage, from the dam/canoe launch at Byron to the take-out at Chesaning, there is a total of 48 miles of paddling. With the removal of the Corunna Dam in a few years, this will be an open, unobstructed blue highway/river trail and substantial improvement to fisheries and water quality—essentially a 500 acre regional park.

At a recent public forum on the River, a representative of the National Park Service revealed a survey result that placed the Shiawassee River in 7th place among Michigan’s 63 navigable rivers for paddler popularity. Note: The three low head dams in Owosso are navigable for most and the Corunna Brick Plant Causeway has an underpass bridge on the south riverside that varies in navigability. The same NPS speaker stated that 62% of kayaking occurs within an hour’s drive of one’s home, a confirmation of this plan’s river emphasis. Most standards for the establishment of a National Water Trail are in place and the Friends of the Shiawassee River will pursue nomination from the National Park Service. This Plan supports the designation.

Section IV D. Map Representation of the Parks and Open Space Inventory.

See the map on the next page for many of the features presented in the Inventory section of this Plan. Missing are the city, village and school park facilities. Maps of those park and open space areas have been completed as part of the inventory but are posted elsewhere on the County parks web page for reference and use. Suggested bike routes are the red-lined roads that connect cities, villages and regional places of interest. Four dotted line roads show the suggested arterial roadways in the four quadrants of the county.

Another purpose of this map is to identify year to year improvements to these favored roadways for directional signs, pavement widening, shoulder enhancements, and marketing. It is anticipated that the cities and villages will benefit from this regional perspective and support united policies and park upgrades in that context for healthful lifestyles.

SECTION V. PLANNING METHODS.

SECTION 5 A. Comparison of Park Facilities and Park Types to Suggested Recreational Standards.

The MDNR Parks Plan Guidebook offers a chart of suggested recreational standards. Reference that chart at Appendix F. There is another chart of standards available from the National Recreation and Parks Association that details park facility needs based on a facilities per capita basis. The standards are compared with the public park systems in the County. Most County municipal parks are better related to higher density population areas and do not reflect the Michigan bias for smaller population county park systems that primarily offer natural resource areas. The earlier narrative in the Inventory section of the Plan summarizes the adequacy of facilities for city and village parks in the County.

The Relevance of Regional Park Standards. At the regional/county level, parks are deemed better adjudged on the basis of the advantage of size and scale of a County with respect to their fit for natural resource areas, trails, regional/metro parks and greenways. If Rose Lake, the CIS Trail and Sleepy Hollow State Parks are not considered there is a shortfall of regional/metro park areas and natural resource areas. The county parks have some qualities of the park definitions of park types expected in a County, but they are very small parks for that scale. Henderson County Park has the feel of a regional park but not the size one would expect of a regional park. The three areas—Rose Lake, the CIS Trail and Sleepy Hollow—offer another benefit to the analysis and that is their location on the west half of Shiawassee County (and accessible relative to out-of-county Sleepy Hollow) with respect to the east-half location of the County Park system. That balancing effect has had even greater impact for the West County since the 2015 opening of the CIS Trail from Owosso to Ovid and beyond.

The riverside county parks—five of them—are inherently natural resource areas with the Shiawassee River, a substantial southern Michigan waterway, dominating the Plan's sense of purpose and value for nature. There is no acreage standard for natural resource type parks. There may be a shortage of space, forests and trails; however, the river is the heritage of the County Park system and the heritage of County history. *The riverside open space sites is the key revelation of the inventory and comparison analysis with the standards.*

A select number of park types featured at Appendix H and Appendix I are aligned to the county park settings. Three park types in the Appendix chart are a better fit to higher density areas for the approximately 32,000 urbanites within the County's 69,000 persons—that is, the mini-marks, neighborhood parks and community parks are not evaluated for the County Park system needs. These parks are found to be adequate for urban area residents. The regional parks are worthy of analysis for the County public. One park in Owosso, mostly undeveloped for regional park use meets the urban area standard for acreage (Collamer Park's 160 acres). This Plan counts Rose Lake as a regional park with its no-fee public access year round to multi-use trails in a forested environment. Owing to its location in the extreme southwest of the County, the standard is only met if one adds the Owosso Park into the analysis. Another park type, Natural resource areas, have no numerical criterion and are for local evaluation with no set number of acres. Portions of Shiatown, Henderson and Pine Grove parks are natural areas yet are small sites. The other two County parks are a closer fit to one park type category—"community parks". Kerby Park at 9 acres is a community park and it serves the settled areas of Caledonia Township and Corunna. Geeck Rd Park is also a community park in its make-up but does not serve an adjacent municipal environment unless Durand and Bancroft are considered nearby. Neither of these parks is large enough to strictly fit the community park standard for acreage.

Comparisons to Other County Park Systems. More comparisons to the adequacy of parks and recreation at the County level are made possible with the listing of other Michigan county parks in counties comparable in size to Shiawassee County. See the chart at Exhibit J. The chosen counties are all in the southern half of the Lower Peninsula and are close in population and structured with its largest city at the center of its county. The most difficult aspect of comparisons, among many, is the greater natural resource characteristics of these

other counties. Most have many lakes with a longer history of public ownership on lakefronts. River systems such as that of Shiawassee County parks reflect the rise in importance of rivers in the mid-1960's when the EPA adopted clean water standards and gradually made river systems more attractive for recreation. Michigan's long standing preference for boating and swimming on its world-class lake settings overwhelmed the value of rivers for recreation (with some notable exceptions such as the AuSable River). In that context the lesser ranked Shiawassee County park system with no lakes but with a credible waterway is better understood.

The County parks system is smaller than the nine other compared parks systems despite meeting the average population of 70,000. At 93 acres, it is well below the 318-acre average for the other parks. Hillsdale and Clinton County are smaller systems but have lakes and swimming beaches as do the others. Nearly all parks in the nine other counties, except Lapeer County's two waterslide parks, are concentrated on natural resource areas as are those of Shiawassee County. As acreage of county park lakes is included in the other county park systems area totals, the Shiawassee River, being navigable and accessible throughout the county, in effect, adds 500 acres of river surface water for waterfront recreational activity to the park system's operational area.

Funding Park Systems. Funding per capita is extremely low in Shiawassee County with only Hillsdale and Lenawee reflecting the lower end of the funding level. The average per capita spending for parks in the ten counties is \$2.42 with sources from millage, non-profit contributions, user fees and general fund allocations. Shiawassee County's funds are exclusively general fund allocations and most recently totaled 7 cents per capita. In a study of Pennsylvania towns it was revealed that the per capita park expenditures average \$19 for smaller towns and \$51 in larger towns (but not metro areas). This compares with the cities in the County that average from \$9.50 per capita to \$53 per capita. Natural resource park systems, a county park trait, together with rural and town population totals are by their nature much lower in per capita expenditures. To a point of sustainable maintenance, the lower numbers are not considered shortfalls in funding for landscapes that do not require park facilities developments.

Six of the ten county park systems have full time employees with part-time seasonal employees commonly added. Building and grounds departments are commonly associated with park management and maintenance. Most of the park systems are organized under Act 261 as is that of Shiawassee County's.

Six Special, Regional Park-like Standards—Evaluation.

- 1) Acres/capita. From the standpoint of acreage the recognized standard of having 8-10 acres of public parkland per 1,000 persons is a fraction below the lower standard of 8 acres per 1,000. There are 545 acres of public parkland or 7.9 acres per 1000 persons. Any effort to calculate a need to expand park acreage by a few acres to meet the standard should be subordinate to the availability of the planning process's revelation of a natural resource site adjacent to an existing park or other sites meeting criteria and goals and objectives of the Plan. See the park expansion criteria section of the Plan, Section 5-D.
- 2) Campgrounds. At 1,277 campsites, the six private campgrounds designed for public access through fees exceed the available campsites in all the other nine comparison counties. The moderate fee structures and quality of facilities, for most, result in a finding that campsites are adequate and accessible to all citizens of Shiawassee County. There is no statistical standard in Appendix H to measure adequacy of campsites.
- 3) Running Tracks. The standard is 1 running track per 20,000 persons. That would indicate 3 to 4 tracks for public use in the County. There are five running tracks in public schools distributed equitably about the county for public use after school areas and also excepting times of team practice and meets. Reports from local athletic directors explain that these open tracks are popular with local citizenry. It is concluded that there is no need for planning a running track in the county park system. Joggers may use the trail system in Owosso and the newly opened CIS trail system.

- 4) Beach Areas. There are no beach areas; however, all of the campgrounds have swimming beaches. Some offer a day use swimming pass (for a fee) for non-campers. This condition will be discussed in the objectives and action plan section of the Plan.
- 5) Swimming Pools. There are no public swimming pools. In urbanized areas one would expect 1 pool per 20,000 persons. That population level is not present in the County municipalities. The City of Owosso pool, open to all county residents at the time, was closed 10 years ago for budgetary reasons and years of observation of low use levels for what was deemed a well-managed and maintained facility. There is no finding of a shortfall of swimming pools in surveys. Available swimming programs at Owosso and Corunna pools offer public access with the added benefit that their programs occur in the colder months when winter recreation options are considerably lacking with park facilities.
- 6) Golf. The standard for golf courses is exceeded with the six private courses that are also considered accessible to the public for the affordable green fees and distance traveled from anywhere in the County.
- 7) Trail Systems. The standard is one trail system per park planning area. The newly opened CIS trail meets that standard and has created a public planning process for connectivity and additions to the system. The Shiawassee River is a blue highway water trail of equivalent significance to the region.

CONCLUSION OF THE COMMUNITY DESCRIPTION, INVENTORY AND PARK STANDARDS

EVALUATION. This section on park standards measurements and inventory observations does not complete the planning process to determine park needs. The public input phase that follows in this plan contributes to what is needed for the parks system (likewise deemed as “opportunities”) prior to concluding the objectives and recommending actions for a five-year strategy. The needs analysis to this point reveals the following:

- 1) The municipal park types in the smaller acreage range that are active play areas are more than adequate for the urban population together with the open access policy of these parks to the rural population. There is a county-wide 60-acre shortfall in community parks with Durand, Perry and Owosso needing acreage in this park type. Nearly all the parks need better maintenance.
- 2) There is no completed regional park in the County with the span of recreational facilities, urban forests and natural resource areas. Collamer Park in Owosso has the acreage to meet the standard but is underdeveloped owing to budget restrictions and the design challenges posed by a bisecting wetland and a few missing parcels to permit better access and functionality. Rose Lake meets the acreage standard but is limited to trail activity and is located in the extreme SW corner of the County. From the low volume of use patterns, this fine facility does not rise to a regional park classification. The review of potential conservation areas, still in private ownership, shows some options for longer term development of a regional park but outside the limits of this five-year plan.
- 3) Park facilities commonly found in municipal and county parks are adequate. These include picnic tables with grills, playground equipment, open space play areas, pavilions, ball diamonds, urban forests, benches, golf courses, running tracks, sledding hills, and riverfront paddling and fishing access. Upgrades are possible for some of these facility types and are site specific.
- 4) Park maintenance inventory reveals shortcomings and the need for policies on defined Level of Maintenance standards and responsive funding and/or volunteer contributions. Together with the issues with facilities and grounds keeping conditions, special challenges persist with water supply and restroom facilities.
- 5) Accessibility standards are at level 1 or 2 in all county parks and may be upgraded in many ways for each County park. See the evaluation of accessibility at Appendix J.
- 6) There are parking challenges at Henderson Park’s gate system to lengthen the park season.
- 7) The County parks, when compared to other county park systems, are under-funded.
- 8) The County parks, when evaluated for the natural resource areas offered with the Shiawassee River, offer a substantial foundation for park system development and the anchorage of a National Water Trail

nomination. The river frontage at 3 miles and the river's water surface at 500 acres between launch and landing between county parks provides a park acreage perspective of adequacy for regional parks. Every river segment between launch sites/parks and landings/parks is a parkway, sometimes called a "blue water highway", with endless scenic vistas.

- 9) Swimming beaches are a consequence of the County's lack of surface water—essentially last in the State of Michigan. A few very small lakes and converted gravel pit lakes to campgrounds with swimming beaches meet a need but fall short of what is customarily expected at the county level anywhere in Michigan. Continued day-pass beach use for non-campers is encouraged in the Plan.
- 10) The overall public open space/parkland adequacy in the County almost meets the standard. Still there is only 1% of the land in the County dedicated to public use, and that statistic is largely influenced by the size of Rose Lake Wildlife Research Station (a state park).
- 11) The inventory's list of quasi-public facilities and programs reveals an accommodating umbrella of church facilities and programming, clubs, school parks and gym facilities, private recreation, and membership recreation. Consideration of this aspect of the facilities inventory reveals the impact of alternatives for leisure time pursuits and their adequacy. Many of the entities in this category offer special use open space, park like activities, recreational programming, and winter play options that are not found in the public parks at either the County or municipal levels. Accessibility to the public is available in most respects, affordable, even non-fee based.
- 12) The fiscal conditions in the county evidenced by shortfalls in public education support, declining infrastructure, number of quality paying professions, level of education, population decline, aging, health conditions, youth age-group decline, and a long-standing culture of restraint in public endeavors are all indicators of an influence against ambitious progress in the public parks and recreation arena. Volunteer action and philanthropy have contributed measurably and regularly to the park system.
- 13) The needs of the county parks are varied and interspersed with those that are listed above. The specific park treatments are detailed in Section VII of the Plan, "Objectives and Action Plans" and in the Appendix I park sketch maps and improvements lists.

Section 5 B. Public Input Process and Summary Reports from Input

PUBLIC INPUT: SURVEYS. Local surveys are quite limited in response rate and frequency. This plan did not conduct a survey of recreational use and preferences. There are surveys in local municipalities that provide patterns for analysis. The State of Michigan reveals recreational demand in its Michigan Department of Natural Resources Comprehensive Outdoor Recreation Plan. The Plan reports that the top five recreation activities Michigan residents want are: 1) Bicycling, all types (25%); 2) Camping (24%); Fishing (23%); Walking Outdoors (21%); and Hiking, all types (20%). The last two are similar in nature and comprise 42% frequency of demand.

The recent public input surveys (part of their master planning) in Shiawassee County were conducted in the cities of Owosso, Corunna, Laingsburg and Perry. Each of the surveys offered segments for level of use/activity and on needs assessment. None of the surveys reflected an adequate response rate to rely upon the answers are statistically significant for the communities-at-large. The responses have value, when considered as a whole (1718 responses), where themes repeat themselves in the four communities.

- 1) Owosso: In order of highest responses...
 - a. Highest needs in the Parks: Restrooms, Plantings and Benches
 - b. Use of Leisure Time in City Parks: Walking/Hiking, Bicycling, Trail Use
 - c. Most Popular Recreational Activity Anywhere: Canoeing, Camping, Bicycling
- 2) Corunna: In order of highest responses...
 - a. Favorite park attractions: Play Structure, Historical Village, Walking Paths, Sledding, Community Center, Pavilions, Shiawassee River
 - b. No Needs identified

- 3) Corunna Focus Group: random needs responses, not in order of preference
 - a. Trail maintenance
 - b. Lack of a canoe launch
 - c. Opportunity for regional open connections with Durand, Owosso and CIS Trail
- 4) Laingsburg: in order of highest responses...
 - a. What uses of parks: Organizational events, Play, Exercise
 - b. Regional recreational preferences: Sleepy Hollow State Park, East Lansing Aquatic Center
 - c. With limited funds what is most important: Basic maintenance and Cleanliness
 - d. Note: No clear indicator when asked about needs
- 5) Perry: In order of highest response...
 - a. Jubilee Park main uses: Walking/Hiking, Bicycling, Playground
 - b. Veterans Memorial Park: Organized events
 - c. Needs for the future: Non-motorized links to other open space areas in the region, Trails, Playground Equipment
- 6) Perry Community Visioning Session: In order of response...
 - a. 1st is Non-Motorized Trails
 - b. 2nd is Playgrounds
 - c. 3rd is Community Gardens

Of use to findings in the inventory of natural assets in and about the County Parks, parks planning is consistent with repetitive survey themes from the four cities in the areas of trails, plantings, non-motorized connections to open spaces, paddle sports, bicycling, and improvements to and maintenance of play spaces.

PUBLIC INPUT AND PARTICIPATION PLANNING: LIVE HEALTHY SHIAWASSEE COALITION.

On August 20, 2015, the Shiawassee County Board of Commissioners authorized funding for the Shiawassee County Parks and Recreation Commission's preparation of a Parks and Recreation Plan. Town Plans LLC met with the Parks Commission through a series of planning sessions from November, 2015 to May, 2016.

ROWE Professional Services Co. was added to the planning process in December, 2015 to assist with a concept site plan development as well as county-wide open space planning for widespread engagement with existing recreation efforts throughout the county via the Live Healthy in Shiawassee County Coalition. Meetings were held with this organization from November, 2015 through May, 2016 to establish a county-wide perspective on parks and open space and healthful life styles through outdoor exercise and play. The coalition includes representation from county municipalities, private recreation providers, the intermediate school district, social service agencies, and other stakeholders and will continue to operate after Plan adoption.

In an effort to leverage existing resources to provide park and recreation services to county residents, the Shiawassee County Parks and Recreation Commission extended an offer to municipalities within the County to collaborate directly with the development of the Shiawassee County Parks and Recreation Five Year Parks and Recreation Plan. That effort included a presentation to the Shiawassee Chapter of the Michigan Townships Association.

To provide outreach to the community for Live Healthy lifestyles, the Coalition secured a display table at the Shiawassee Chamber's Home Show on the weekend of March 12 and 13, 2016. A map of the Shiawassee Water Trail and Greenways / Non-motorized Route plan was also presented for comment. The map was offered as a hand-out. A one-page survey was provided and there were 48 responses. In concert with the Parks and Recreation Commission, the highest ranked park item was maintenance of existing facilities (94%). Next in priority were maintaining and providing open space areas, marketing and establishing local bike routes and concentrating on local park improvements. No questions on this survey raised paddle boating or fishing. The most frequent written comments focused on bicycling opportunities and connections between places.

PUBLIC INPUT FROM THE COUNTY-WIDE SPEAKER SERIES.

Several presentations of the park plan findings have been made to Shiawassee County area organizations. At each presentation comments were requested so that the parks plan might reflect what is on the mind of those citizens who are a good sample of the area's leaders in community service. The commentary from each presentation was brief and pointed and are summarized below:

- 1) *Shiawassee Township Board of Trustees on December 8, 2015.* The Trustees endorsed the plan for Shiatown Park.
- 2) *Corunna Rotary Club on February 18, 2016.*
This club oversees clean-up and added improvements to Lytle Road County Park. The statements from the club included a desire to begin a native plant landscaping and tree planting contribution to Lytle Road Park.
- 3) *Shiawassee County Board of Commissioners Ways and Means Committee on March 9, 2016.*
This presentation of the park resources and Parks Commission initial plan ideas resulted in a commitment from this Committee to increase funding in the parks and an early endorsement (prior to the Park Plan's public hearing and adoption) of the findings and strategies for the future of the park system. Secondly, a news reporter from the Argus Press conducted a follow-up interview on the parks plan and published informative articles about the Plan in the newspaper on March 11 and 13, 2016
- 4) *Shiawassee Regional Chamber of Commerce Home Show Table for Plan Presentations and Surveying of attendees on March 12-13, 2016.* The survey results revealed:
- 5) *Durand Rotary Club on March 22, 2016.*
The club was presented the concept of a cafeteria plan of park improvements that are capable of being accomplished in a work session or two each year. There was special interest in Geeck Road County Park and Shiatown County Park, both in proximity to Durand. No changes to the park plan strategies were made other than the support for the plan's contents.
- 6) *Owosso Rotary Club on March 23, 2016.* The comments after the presentation focused on how nice the trails in the parks were albeit their shortness. There was an endorsement of the plan's intent to lengthen trails and build entirely new loop trails in three of the parks. An audience member asked that the plan adopt a recommendation for the efforts of others to establish a National River Trail designation that would include all five county riverside parks.
- 7) *Shiawassee Regional Chamber of Commerce Networking at Noon series on March 29, 2016.* This audience endorsed the river access plans and inquired about a new launch at Juddville Road south of Henderson Park. The Friends of the River, in attendance, explained the value of the County parks as research venues for ongoing macroinvertebrate studies for water quality. They also inquired if the Plan endorses a National River Trail designation. It was pointed out that the plan, in fact, endorses the efforts to achieve that nomination. Twenty more surveys were completed.
- 8) *Owosso Kiwanis Club on March 29, 2016.* The after-presentation points of emphasis focused on the benefit of the dam removal and the restoration work especially the benefits to fishing the River. There was strong support for the restoration of the Six Mile Creek Iron Bridge.
- 9) *Public Invitation Meeting with Shiatown County Park neighbors on March 30, 2016.* A neighbor requested that an effort would be made to relocate the border line trail in the west park more inland to reduce frequency of trespassing by park users. Another neighbor inquired about the use of the large boulders lining the abandoned driveway and parking lot. The response was that they will be use to bound the new parking lot at the launch site and for in-river placement for construction of riffle zones. One neighbor noted that there is now a bald eagles nest near the park and endorsed the plans for an osprey nest.
- 10) *Annual Meeting of Construction (mostly earth moving) Contractors on March 31, 2016.* The emphasis of the presentation was on their role in water quality improvement with the application of best practices in their earth moving work in the watershed.

- 11) *Three newspaper reports and one TV interview (Ch 12, Flint), all in March, 2016, concerning the parks master plan.* The public response has been through e-mail comments about the plan—mostly positive, and a follow-up invitation for the public to attend the May 4, 2016 Parks and Recreation Commission meeting when the plan draft was in review.
- 12) *Shiawassee Chapter of the Michigan Townships Association on May 4, 2016.*

SECTION 5 C. Translation of Standards, Public Input, and Data to Needs.

There are references to needs throughout the Plan narrative that are summarized here. The influences on needs have been many and include:

- Local and State/National Preference Surveys
- Characteristics of the Community—Demographic, Physical, Economic, Transportation
- Local and National standards as compared with County-wide inventory of facilities
- Public input from public meetings
- Analysis of natural resource assets of County Park lands
- Inventory of valued sites for expansion in response to needs analysis
- Accessibility Evaluations
- Parks Commissioner’s Goals and Objectives Workshops
- Funding analysis for needs to address varying levels of park upgrades and operations

The most direct analysis in the Plan is at pages 31 and 32 where needs are detailed from many of the above bullet points of influences. There, many details surface about adequacies and needs of the local and county parks systems.

The need influences arise in the form of tangible recommendations in plan sections to follow:

- ✓ action plans;
- ✓ capital improvements plan;
- ✓ individual park site plans;
- ✓ county wide connectivity plan;
- ✓ operational areas—funding, partnerships, level of maintenance, and;
- ✓ Shiawassee River frontage parks response to active waterfront plans.

The table on the next page is a reference to the five-year strategy for park upgrades and operations that surfaced from analysis, surveys and meeting workshops. The number and diversity of inputs enriches the confidence in the Parks and Recreation Commission’s recommendations—a necessary reflection of the County community’s preferences and needs.

The planning period, open to input throughout the process extended from October 2015 through July, 2016—ten months of initial notions followed by analysis, surveys, goal setting sessions and public meetings. All along the way planning products were generated in the form of charts, illustrations and maps. Professional engineering expertise was employed. Professional community planners carried the evolving plan over the entire planning period. Practical funding limitations were incorporated and translated into opportunities where low maintenance and high levels of funding support were revealed.

The Plan is a response to two key processes in planning: 1) Relevant Information, and; 2) Public Participation. The Plan follows the MDNR outline for grant eligible 5-year plans. In these contexts, the park plan becomes the official statement of Shiawassee County’s park system—a reliable reservoir for grant-in-aid considerations, philanthropy, motivation, volunteerism, annual budgeting, and foundation for future planning and response to even more influences. The chart below offers a way of translating needs and analysis into park plan products:

**Shiawassee County Parks and Recreation Plan
Needs of the Park System Summary Chart**

	<i>Analysis on Park System Needs</i>	<i>Influences from Park Plan Analysis</i>
A.	Fishing Access	National/State Surveys/Local Inventory Revelations
B	Park System Expansion Criteria; Local Standards; Historic Preservation; Survey Results	Fill Gap in Regional Park Acreage With Regional Park Availability Marketing; Restore 6 Mile Creek Iron Bridge
C	Recreational Biking & Connectivity Trends; Live Healthy Coalition Goals	Establish Recreational and Destination Bike Routes to and from Parks; Shiatown Footbridge
D	Marketing Upgrades--Website, Brochures, On-Site Kiosks, Events	Partnership and Philanthropic Needs; Survey input; Paddle and Biking Connectivity; Commissioner's policy
E	Demographic Data; Public Health Data	Accessibility Evaluation; Obesity Concerns--Live Healthy Coalition; Outdoor play emphasis; walking trails
F	Area's Physical Characteristics; Active waterfront goals; recreation surveys	Upgrades at the Five County Riverside Parks for fishing access, paddling, trailside paths, tree plantings
G	Maintenance of Parks; Survey Results-#1 Obligation; Funding "Strings"	Increased Parks Budget; Complete Level of Maintenance Plan; Reforest Unused Meadows; Comparison to other counties
H	National Water Trail Nomination; Parks Role in Economic Development	Increase in Waterfront Recreation Opportunities; Organizational Upgrades for Watershed Oversight
I	Environmental Goals	Native Prairie; Protection of Riverbanks; Tree Planting
J	Outdoor Exercise; Natural Play Spaces	Live Healthy Coalition Analysis; Affordable Upgrades
K	Operational Efficiencies	Excess mowing obligations; Level of Maintenance Plan benefits; Expanded partnerships
L	"Low-Hanging Fruit" Projects	Volunteerism and Philanthropic Outlets for Projects with Definable Limits and Affordability; Nature Play Areas
M	Park Size--Absence of Regional Park	Market Perception of the Reality of the 500-acre public waterway with County Park Access; Expand river parks

Missing from the chart are local and national standards relating to many recreational features. The earlier Plan sections detailed the absence of need for more urban-like park features in the County parks with more than adequate provision of playgrounds, pavilions, camping sites, sledding hills, beaches, off-road biking, play fields, running tracks, paddle boating access, recreational programming, and urban forests. The County park system has many of these facilities too with a Plan emphasis on their maintenance.

The knowledge of needs from analysis and stated public preferences, offers an ongoing guide to the community and Parks Commissioners for focused attention on priorities.

SECTION 5 D. Criteria for Facility Expansion and Open Space Acquisition

The Parks and Recreation Commission, at the earliest stage of parks planning established the policy to achieve a prescribed Level of Maintenance for existing parks and facilities before embarking on park facility improvements or park expansion. The benefit of stating criteria for facility expansion and open space acquisition is in the prioritization of possible activities revealed in the Inventory section of the Plan, public input, and the needs analysis. There are potential facility developments and open space additions to the park system that are consistent with the findings of the planning process and financially and operationally feasible.

Criterion 1: Low maintenance improvements with capital investment costs identifiable by other than the County general fund provide a basis for park facility and acreage improvements:

- Based on the needs analysis, both Kerby Road Park and Geeck Road Park are community parks. Community parks contain minimum acreages that neither park can achieve; however, there are a few facility upgrades with low maintenance obligations that can elevate these parks to the larger community's use, especially park loop walking paths.
- Beginning in 2012 the Shiatown County park reservoir was emptied as a result of the dam removal there. Opportunities are now present at that park to help elevate this park to *regional park* status, mostly in terms of total acreage and trails. With a 40-acre addition of county-owned land pending, opportunities for low maintenance walking paths arise and help complete path loops for the existing park area to permit a healthful walking distance. The needs analysis shows public health issues with outdoor exercise. Shiatown Park's south central location in the conveniently serves three of the five county cities and four of the six villages together with the preponderance of the county's non-farm settlement in rural areas.
- Park facility improvements are acceptable when they are consistent with plan goals, and are donated to the parks with post-construction maintenance care by partners and volunteers.

Criterion 2: The natural resource qualities of five of the county parks with Shiawassee River frontage provide justification for park facilities and expansion to respond to Plan goals of river trail expansion, public input favoring trails. To that end these park facilities and land areas are deemed consistent with this criterion:

- The loop trail expansion of the existing system at Shiatown Park with riverside segments
- A fishing access location on the west bank of the river in the bottomlands addition at Shiatown Park, and at the area below the dam -- both banks.
- The county-wide movement to create a National Water Trail together with river access improvements in the parks for parking, and paddle boat launches.
- A loop completion of the Henderson County Park trail.

Criterion 3: Park expansion outside the park boundaries may be justified when natural resource areas, filling of gaps in the river trail system, or linkages between county parks are identified as essential upgrades in the park planning process; moreover, these additions would have the attributes of low maintenance and high attractiveness for funding expenses of the additions. To that end three park plan elements arise for consideration in the five-year plan:

- Park System Addition #1—A combined bicycle route, cultural historical designation, and river access point is located at the unincorporated West Haven settlement between Pine Grove County Park and Henderson Road County Park. There, the Seymour Road river frontage and the 1886 Six-Mile Creek Iron Bridge offer a fishing and paddling river access and a walking and bicycling crossing. The former coal mining area, a rail spur from Owosso and site of the Estey Furniture manufacturing plant together with one of the most scenic vales in the County draw considerable attention for County-wide and regional interest in this area.



Six-Mile Creek Road Iron Bridge on the Shiawassee



Restoration Site—Six Mile Creek Iron Bridge

- Park System Addition #2—the 17-acre floodplain lowlands east of Pine Grove Park offer a gap-filling link in the river trail system. This privately owned parcel also lies in a deeply embanked river valley. Its adjacency to the existing park offers trade lands potential with County-owned lands or acquisition funding assistance from MDNR grant sources. The expansion would involve low maintenance improvements for the highest and best uses as a conservation area.
- Park System Addition #3—the 30 to 40 acre range of size possibilities to add exposed reservoir bottomlands at Shiatown for expanded loop trail segments, fishing access, an osprey nest, and a native prairie habitat.



Bottomlands Addition—Shiatown



View West to Partial Image of Bottomlands Addition

SECTION VII. GOALS, CAPITAL IMPROVEMENTS SCHEDULE & SUMMARY SHEET OF PARK UPGRADES

SECTION VII A. TEN GOALS WITH OBJECTIVES AND ACTION PLANS—2016-2020

Goals are visions for the future of Shiawassee County' parks without a reference to a specific time period or outcome. A park system with clear, non-conflicting goals tends to forge ahead and make progress. Objectives are more specific and detail an outcome in a specified time period. Objectives often assign responsibility. These goals were prepared after the Parks and Recreation Commission examined the conditions of our parks, national standards for facilities and programs in public parks, the unique characteristics of our County and region, and the interests of our citizens through input during the planning process.

Before the goals statement was prepared it was observed that there is no ground swell of support for major spending to create substantial amounts of open space and even less support for diverting money away from schools and essential local government services to fund the operations of parks. Past practices of buying open space, building community facilities, and operating recreation programs, when combined with inevitably inadequate funding, has evolved into a legacy of neglect. Park maintenance and cleanliness and strategic advances in small increments characterize this era of park administration.

A significant positive outlet that will reveal itself in this Plan is the low impact work that may be accomplished on the waterfront of the five riverfront parks. This is an opportunity to expand access to the riverbanks for people oriented uses and concurrent application of restoration actions to riverbank ecology.

In that same positive action theme, the parks' landscapes offer an environmental opportunity to demonstrate the emerging field of climate change practices, principally carbon storage benefits of trees and subsequent tree plantings, even reforestation of park sections. Local surveys bear out this point of emphasis.

Another contemporary movement that has sustaining influence is that *Partnerships for Parks* is a good means to increase citizen, community, and private sector involvement with the local parks. Mobilizing citizen and institutional initiatives can generate resources and creativity that would not otherwise be available to the County. This Plan establishes an expectation that an expanded support structure is required to maintain and improve existing park facilities. Oversight of volunteerism and replacement of volunteers becomes a parks administration duty. Marketing rises to prominence in the plan's objectives and action strategies.

Objectives are what is expected to be accomplished within the five-year plan. Related actions are listed below the objectives. The chart at the end of this section summarizes the actions in the individual parks and in the overall park system. Cost estimates, where relevant, are listed. Responsible parties and funding resources are added. *A detailed description of the nature of most funding sources is found in Appendix Q.*

Goal #1) to recognize the many benefits of parks and recreation to promote healthy life styles, relieve environmental stress, attract tourists, offer recreational outlets for youth, attract retirees, enhance property values, and help preserve the natural environment.

- **Objective:** The Parks and Recreation Commission will begin to use media, outreach, and marketing tools to offer the County parks as a means to healthier life styles, educational resources and exemplary best management practices for natural environment settings.
 - **Actions:**
 - Create a tri-fold brochure on the County Parks and offer it in display racks and available counter tops in public places about the County.
 - The County parks website page will be updated and current. The page will release news items on volunteer activity and ways to become involved.
 - The park system will expand digital connections to the public with park information applications for cell phone users & pavilion reservations.

- A philanthropic wish list for park improvements will be posted and marketed.
- Groups will be encouraged to conduct events in the county parks that involve, e.g., bike rides, fund raisers for their causes, annual company picnics, health walks, and place-based education for all, especially youth.

Goal #2) to set as the first priority and to avoid an all too commonplace legacy of neglect in public parks— follow these practices: a) park maintenance; b) routine repairs of facilities; c) accessibility upgrades; d) replacement of worn equipment and facilities, and; e) retrofitting and repositioning of the existing parks.

- Objective: Develop a Level of Maintenance standards and policy document for all parks to assist those who have the responsibility of carrying out those duties.
 - Actions:
 - Parks Commission to define and adopt Level of Maintenance expectations for— identification of lower maintenance areas of parks, standards for safety, and minimum periodic work schedule for facilities that, by their nature, fall into disrepair.
 - Establish an accessibility plan for handicapped persons to use park facilities
 - Define cleanliness and achieve the standard
 - Design against vandalism and budget for vandalism
- Objective: Parks Commission to adopt an annual schedule of specific maintenance duties that are otherwise subject to limited budget resources.
 - Actions:
 - Employ a safety-first approach.
 - Make incremental improvements to accessibility for park facilities
- Objective: Through marketing and word-of-mouth relationships, expand the existing corps of volunteers for a prepared list of duties and improvements in the parks.
 - Actions:
 - Identify a volunteer coordinator to oversee the program.
 - For each park identify duties suitable for volunteer work.
 - Provide cost share funding for maintenance materials where needed.
 - Routinely use media to extol volunteerism.
 - Establish criteria for naming rights of pavilions and the island at Shiatown Park for reliable and significant involvement.

Goal #3) to recognize the County’s fiscal limitations that imposed limits on previous park plan objectives and prepare a plan that is feasible under these conditions and close to the nature of the park land resource.

- Objective: Rely on the park’s natural assets with lower cost improvements on the landscape in contrast to facilities construction that would expect to be funded from the County general fund and require a higher level of maintenance.
 - Actions:
 - After maintenance is upgraded for existing parks, concentrate on trails, conservation areas, tree planting, environmental demonstration sites, interpretive signs, river access for paddlers and fishers, and operational efficiency upgrades.
 - The P&R Commission is to review conditions and submit annual budget requests to the County Commissioners that meet minimum standards for park maintenance.
 - With volunteers, complete riverside native tree and shrub plantings along river courses. Install interpretive signs at specimen tree and shrub sites.
 - With volunteers and philanthropy, implement reforestation projects on low maintenance meadowlands at Shiatown, Kerby, and Geeck Road parks while preserving scenic view corridors at some sites.
 - With philanthropy and grants-in-aid, expand and upgrade pathways and trails at Shiatown, Henderson, and Pine Grove parks.

- Through project donations, install park perimeter exercise paths at Kerby Park and Geeck Park. Add viewing platform on north end overlooking Leslie Lake.
- With donations and grants-in-aid, install an osprey platform tower at the bottomlands of Shiatown Park
- Provide play spaces in natural settings for unstructured and imaginative play.

Goal #4) to accomplish the parks improvements (that have regional service characteristics) through partnerships with other government units, state and federal financial sources, philanthropy, and local organizations. Trail ways and greenways leading to, from and through the County shall be at the forefront of this effort.

- Objective: Prepare an annual project plan for funding needed park improvements and communicate the plan.
 - Actions:
 - Parks commissioners and support personnel to meet with “host” townships (that have county parks within their borders) for a particular year’s objectives for parks and request ideas for assistance and means to accomplish plans.
 - Create a Facebook page to engage park “friends” with reports on accomplishments, scenic photography, pictures of the public’s use of parks and calls for philanthropy.
 - Identify a volunteer grant writer to approach state and federal government and non-profit entities for grants-in-aid. Develop local grant match strategies and resources.
 - Publish maps, essentially a bicycle route atlas of routes between open spaces, especially County parks and city and village parks along the Shiawassee River. Place on website and share with other entities such as the CIS trail organization.
 - Install directional signs at the park parking areas that show the recreational loop bicycle rides and destination based bicycle rides to open space and places of interest areas about the parks.
 - Address restroom facilities, especially at Geeck and more access to such facilities.
- Objective: Work with Live Healthy Shiawassee Coalition, the Shiawassee County Convention and Visitors Bureau, the County Historical Society, the Friends of the Shiawassee River and other established interest groups in the County to build the context of County Parks into the regional quality of life fabric for area residents.
 - Actions:
 - Team with the Friends of the Shiawassee River to establish a National Water Trail or at least a position in the central branch of the Shiawassee River into the Heritage Water Trail system already established upstream from Byron.
 - Create an initial map of open space and their interconnections and update the map every few years together with marketing and display in public places.
 - Assure a place for County Parks in the publications and websites of other entities.
 - Expand the trail system at Shiatown, construct exercise trails at Geeck Road and Kerby Road, and continue trail additions at Pine Grove and Henderson Parks.
 - Expand inclusiveness accommodations for the disabled population through accessible pathways, approachable play and picnic spaces, viewing platforms, dedicated parking and barrier free restrooms.

Goal #5) to apply a mix of recreational standards, facilities service levels, unique qualities and capacities of each park, benchmarking from other Counties, and information from surveys, focus group and interest groups in arriving at the recommendations for park improvements.

- Objective: Apply the results of the park facilities and park type analysis into the Plan to each Park’s strategy list together with scheduling, cost estimates and identification of responsible entities.

Photo Page of Park Images Related to Goals, Objectives and Actions



Shiatown Paddle Boat Launch Upgrade Need



Collapsed Trail Footbridge Shiatown West Park Trail



Kerby Park Volleyball Court Maintenance Need



Henderson Park Accessibility Pathway Need



Kerby Park north meadow restoration area



Henderson Park Trail Section—To Be Extended



Information Sign Concept for Bike Trail Posting—Geeck Park



Heritage Water Trail Sign-- Fenton

Goal #7) to establish short term and long-term development strategies. In the short term, existing parks that are considered park resources for the present and future shall accomplish a complete development and maintenance plan prior to the acquisition of new areas, unless... natural resource areas are acquired as a conservation zone and improved river access.

- **Objective:** Expand the park system (in concert with the Shiawassee National Water Trail development) to key sites that are beneficial for river access and historic/cultural significance.
 - **Actions:**
 - Improve access to the bottomlands at Pine Grove Park through coordination with the private property owner of the bottomland area.
 - Work towards a new County Park at historic West Haven halfway between Henderson Park and Pine Grove Park for river access and the restoration of the Six Mile Creek Road Iron Bridge for pedestrian and bicycling traffic.
- **Objective:** Work with partners in the public realm to investigate possibilities for two conservation zones at the Rattlesnake Island (locals named it) wetlands grouping and the Austin Twin Lakes natural area north of the City of Perry.
 - **Actions:**
 - Identify Land Conservancies in Michigan and communicate the worth of these areas with the intent for their investment over time for preservation.
 - Seek environmental evaluation funds to reveal the qualities of these areas as a marketing tool to Michigan Land Conservancies.
 - Communicate these interests to the County Natural Resources and Conservation Service and the Live Healthy Shiawassee Coalition and gain their assistance.

Goal #8) to maintain receptivity for agreements between the County and other local governments and entities on any number of park conditions or opportunities, e.g., joint oversight, financing, usage and maintenance of certain recreational facilities and areas.

- **Objective:** Identify the entities with a geographic connection to parks or a thematic relationship with parks for the purpose of approaching them with joint oversight of the parks or aspects of the parks.

- Actions:
 - Scan and organize the available State enabling acts that offer inter-local agreements for presentation to other public bodies together with a request for their engagement in county parks maintenance and development.
 - Each park to be equipped with a list of connected entities, their chief contact and a relevant Park Commissioner or County staff person to carry out the initiative.
 - List the possibilities for others' engagement with the parks.
- Objective: Work to develop more accessibility to recreational facilities that are privately owned or quasi-public to provide leisure time opportunities to the public.
 - Actions:
 - Encourage swimming beaches at campgrounds to offer day-use access to their swimming beaches and where accomplished, market that opportunity together with related county parks marketing efforts.



Fishing Access at Shiatown Park



Stream Team across from Henderson Park at Drain

Goal #9) to renovate and reposition the parks into alternative marketing themes such as an “outdoor special event center”, “health and fitness system”, “neighborhood enhancement investments,” or “cultural-historic park”. Encourage park and/or facility naming for ongoing development and maintenance support. Emphasize market opportunity for sustaining the parks together with market demand.

- Objective: Together with implementation of the five-year plan, set aside meeting time of the Parks and Recreation Commission for fashioning authentic identifiers for county parks and facilities.
 - Actions:
 - List park locations and facilities for naming rights, e.g. the large island at Shiatown Park, improved playgrounds, reforestation areas, pavilions, and canoe landings.
 - Use trailhead signs for relabeling trails with information for health and fitness.
 - Gain state recognition and signs for Historic Sites Registry at Shiatown and Six Mile Creek in West Haven.
 - Use project signs where there are new park investments.
 - Build identification with park neighbors for watchful eyes, caretaking walks, and interpreter guides for natural experiences.
 - Rename parks for their principal function, e.g., Lytle Road River Access Park, Geeck Road Community Park, Shiatown Regional Park, Henderson Regional Park, Pine Grove River Park (if lowlands are acquired), Kerby Community Park.

- Establish native plant areas in the parks for interested citizenry to adopt and care for trees, shrubs, wildflowers, ferns and grasses.
- Create a monarch butterfly milkweed habitat and a migration route from Oakley to Byron with county park sites being principle linking sites.
- **Objective:** Use image building with social media and public relations tools to reflect the unique, highly valued properties of the natural resource character of the parks, especially Geeck, Shiatown, Henderson and eventually Pine Grove parks.
 - **Actions:**
 - Make speakers available to present park features to service clubs, annual meetings of “first cousin” organizations, and schools.
 - Use the close-to-home advantages of county parks for lower income households to experience the parks’ open space qualities and healthful benefits from exercise.
 - Endorse youth organization & school class trips to county parks and supply guides for the learning experience.

Goal #10) to identify incremental improvements for non-motorized transportation from every Shiawassee County home to every park and open space area through pathways, dedicated lanes, accommodating County roads, rail trails, and bikeways.

- **Objective:** Accomplish a comprehensive non-motorized transportation plan for Shiawassee County.
 - **Actions:**
 - Coordinate the County park plans with the efforts of the Live Healthy Shiawassee Coalition to create the comprehensive plan for non-motorized transportation.
 - Work with the County Road Commission to understand possibilities for bike-friendly County roads and the means for upgrading best traveled roadways for bikers.
 - Work with the interests to expand the CIS rail trail from Ovid to Owosso to connect with the James Miner Trail, and eventually a new rail trail between Corunna and Durand. Emphasize the road biking connections to County Parks off these trails.
 - Upon completion of the rails-to-trails segment between Corunna and Durand, reopen Davis Roadside Park at as a rest area for trail users.



Owosso area campground showing swimming pass availability.

SECTION VII B. Capital Improvements Schedule, Costs & Funding Sources

Based on the goals, actions and objectives, the Plan implementation of physical improvements to the parks is charted below into a 15-year Capital Improvements Plan schedule where each park has its own set of actions and a prioritization of actions within one of three time stages 5 year (Short Term), 10 year (Medium Term) & 15 years (Longer Term) to completion. Add a cost estimate of the plan/s short and medium term actions, and a projection of funding sources for each action item. This Plan will be updated at the Commission's last meeting of each year to assist in the budget request process to the Shiawassee County Board of Commissioners.

The action items above that are not physical improvements in the parks but are processes, especially marketing initiatives, are intended to be implemented every year of the Plan according to priorities of the Parks and Recreation Commission.



Osprey Nest Design Samples for New Bottomlands Addition to Shiatown Park.

The next three pages offer charts of the Capital Improvements Plan for all the parks and these represent a summary statement of the goals, objectives, actions, public input, and needs analysis. The page following the CIP is a summary statement of all the park actions by category of activity. This is a quick reference chart to the improvements to facilities and operations of the park system.

A detailed description of the many funding sources for park improvements is provided in [Appendix S](#).

Shiawassee County Parks and Recreation Plan

Capital Improvements Plan Schedule

Page 1 of 3

<i>Park Name & Project List</i>	<i>Estimated Cost</i>	<i>Potential Funding Sources</i>
SHIATOWN		
Short Term -- Within 5 Years		
Canoe Launch at East Park	\$7,000	FNS/PH
Trail System-North Park + 2 Benches	\$25,000	RP/VOL & PA
Invasive Species Control-Bottomlands	\$1,500	VOL
Bennington East-West Park Connect	\$42,000	MDOT & CRC
Sledding Hill + Benches	\$1,500	FNS/PH & VOL
Expanded Parking West Pavilion	\$2,500	CRC & PA
Expanded Parking Canoe Launch	\$15,000	FNS/PH & PA
Fishing Access & Pier East Side	\$12,000	VOL
Reforest East Park Hillside & Trail Edge	\$9,000	FNS/PH & VOL & CFG
Accessibility Paths & Tables at Pavilions	\$2,500	RP & PA
Medium Term -- Within 10 Years		
150' River Footbridge @\$600/foot	\$90,000	MNRTF & FRC & PA
Install Biking Information kiosk	\$500	WMCGF, PA, CRC
Fill East Drive Drainage Swale	\$2,500	VOL
Fishing Access Pier West Side	\$1,500	VOL
Viewing Platforms East & West Parks	\$15,000	MNRTF & PA
Bottomlands Trail + 2 Benches	\$30,000	MNRTF & PA
Bottomlands Fishing Platform	\$1,500	MNRTF & WMCGF
Bottomlands Trail Plantings	\$15,000	MNRTF & FNS
Longer Term (no cost estimates)		
Osprey Nest Tower--Bottomlands		FNS/PH & FRC
Upgrade canoe launch--barrier free		MNRTF
Island Arch Bridge		FNS/PH & VOL
Sub-Total:	\$274,000	
GEECK ROAD		
Shorter Term --Within 5 Years		
Install Loop Exercise Trail	\$11,000	FNS/PH & VOL
Accessibility Path to West Pavilion	\$400	VOL
Plant Riverside Trees at openings	\$1,200	FNS/PH & VOL
Install Restroom	\$7,500	WMCFG
Plant Roadside Trees	\$1,200	FNS/PH & FRC
Longer Term (no cost estimates)		
Install Barrier Free Canoe Launch Equip.		MNRTF
Sub-Total:	\$21,300	

<i>Park Name & Project List</i>	<i>Estimated Cost</i>	<i>Potential Funding Sources</i>
HENDERSON		
Short Term -- Within 5 Years		
Accessibility Paths & Tables at Pavilions	\$2,000	WMCGF & PA
Recess East Gate Opening	\$2,500	WMCGF & VOL
Install Biking Information Kiosk	\$500	WMCGF, PA, CRC
Restore Abandoned Launch-West	\$400	FNS/PH
Medium Term -- Within 10 Years		
Improve West Canoe Launch	\$1,500	VOL
Complete Trail Loop	\$20,000	MNRTF & PA
Expand Parking -- Pavilion A	\$5,000	RP & PA
Add Play Equipment to Pavilions B&C	\$10,000	RP & PA
Longer Term (no cost estimates)		
Install Canoe Guide Sign at Launch		VOL
Restore Barren West Lowland Areas		VOL
Sub-Total:	\$41,900	

PINE GROVE		
Shorter Term -- Within 5 Years		
Acquire property for river access	\$0	LE
Develop river access launch/fishing	\$10,000	MNRTF & FNS/PH/PA
Install Biking information kiosk	\$500	WMCGF, PA, CRC
Medium Term -- Within 10 Years		
6 Mile Creek Bridge Restore	\$250,000	MDOT & FNS/PH/PA
6 Mile Creek Launch & Signs	\$5,000	FNS/PH & VOL
Barrier Free Path to Pavilion/Tables	\$2,500	WMCGF & PA
Complete Loop Trail + 2 Benches	\$15,000	MNRTF & PA
Sub-Total:	\$283,000	

LYTLE ROAD		
Shorter Term -- Within 5 Years		
Install Biking Information Kiosk	\$500	WMCGF, CRC, PA
Replace Canoe Landing Sign	\$75	VOL & FRC
Medium Term -- Within 10 Years		
Replace Guardrail w/ Split Rail Fence	\$250	VOL & PA
Plant Roadside & Riverbank Trees	\$500	VOL & PA
Sub-Total:	\$1,325	

<i>Park Name & Project List</i>	<i>Estimated Cost</i>	<i>Potential Funding Sources</i>
KERBY ROAD		
Shorter Term --Within 5 Years		
Build Exercise Loop Trail	\$12,000	RP & WMCGF & PH
Accessibility Paths & Tables at Pavilions	\$5,000	WMCGF & PA
Install Biking Information Kiosk	\$500	CRC, PA
Relocate Ball Diamond Backstop	\$150	VOL
Medium Term -- Within 10 Years		
Add Four Park Benches	\$1,000	PA
Reforest Low Maintenance Meadow	\$8,000	MNRTF & PA
Street side Tree Plantings	\$3,000	MNRTF & PA
Longer Term (no cost estimates)		
Construct Viewing Platform-Lake Leslie		FNS/PH & VOL
Sub-Total:	\$29,650	

DAVIS PARK		
Shorter Term & Medium Term		<i>No Plans Scheduled</i>
Longer Term (no cost estimates)		
Upon completion of Durand-Corunna rail trail:		
a) Install Park Sign along Trail		MDOT & PA
b) Install 2 Benches and Tables along Trail		MDOT & PA
c) Trailside Tree Plantings; wildflowers		MDOT & PA
Sub-Total:	\$0	
Grand Total:	\$651,175	Estimate only/no contingency factors

Name of Funding Source	Symbols for Funding Sources:
Land and Water Conservation Fund	LWCF
Michigan Natural Resources Trust Fund	MNRTF
State's Recreation Passport Grants	RP
State's Community Forestry Grants	CFG
Foundations; Philanthropic; Partnerships	FNS/PH/PA
Fund Raising Campaigns	FRC
Waste Mgmt. County "Green" Fund	WMCGF
Bridge Restoration Funding	MDOT
County Road Commission--Roadside Biking	CRC
Volunteer Labor, Materials, Equipment	VOL
Land Exchange	LE

SECTION VII C. Chart of Park Facility and Operational Upgrades by Activity Categories.

The CIP chart displayed above is summarized by category of activity directly below:

2016 Shiawassee County Parks, Recreation & Open Space Plan

SUMMARY OF PLANNED FACILITIES AND OPEARATIONAL UPGRADES

Page 1 of 2

<i>Park Category</i>	<i>Plan Feature</i>
I. ACTIVE WATERFRONTS:	>Canoe Launches at Shiatown, 6 Mile Creek, and Pine Grove Parks with parking areas
	>Fishing Piers at Shiatown
	>Benches along River Banks
	>Land Acquisitions at Pine Grove and 6 Mile Creek
	>Marketing Paddling Adventures
	>National Park Service Designation of National Water Trail
	>Paddling Information at Kiosks in Riverside Parks
II. WALKING/HIKING:	>Pathways & Trails at Geeck, Kerby, Henderson, Pine Grove & Henderson
	>Rail Trail between Corunna & Vernon with Davis Park Development
	>Shiatown Foot Bridge and Bennington Road Park Connector
III. FISHING:	>Shade Trees along River Frontage and Submergent Fallen Tree Placement
	>Access Points and Improvements at Shiatown
	>Support for Walleye Migration to Byron Dam
IV. BIKING:	>Information Kiosks at All Parks--Biking and Paddling
	>Marketing of Destination and Recreational Loop Bike Rides at all County Parks
	>West Haven 1887 Iron Bridge Restoration For Connector Route
	>Road Commission Liaison for Selected Route Bikeway Upgrades

SUMMARY OF PLANNED FACILITIES AND OPEARATIONAL UPGRADES

Page 2 of 2

<i>Park Category</i>	<i>Plan Feature</i>
V. ENVIRONMENTAL:	>Reforestation Plots at Henderson, Kerby & Shiatown
	>Nature Play Areas in All Parks with Pavilions
	>Friends of the Shiawassee River Stream Team Operations in Riverside Parks
	>Invasive Species Control at Shiatown and Elsewhere
	>Osprey Nest at Shiatown
	>Roadside Trees at Geeck, Shiatown, Henderson & Lytle
	>Native Grasses, Wildflowers, and Shrub Plantings along all River Fronts to 25-50' Depth From Embankments; Native Prairie for Shiatown bottomlands.
VI. OPERATIONAL:	>Maintenance Upgrades and Corresponding Funding Stability
	>Adopt and Update Level of Maintenance Plan
	>Establish Cleanliness Standards for Pavilions and Tables
	>Expand Marketing for Park Use Opportunities
	>Expand Marketing for Philanthropic Projects & Gifts
	>Increase Park Projects and Operations Partnerships with Organizations, Individuals and Other Government Units; With the National Parks Service, establish a National Water Trail
	>Make Parking Improvements at Shiatown & Henderson
	>Establish Capital Improvements Fund for Matching Grant Funds & Acquire Grant Application Assistance
	>Routinely Schedule Barrier Free Accessibility Upgrades for Park Facilities; and new additions compliant

The list of improvements is ambitious and indicates a need for a follow-through administrative arm of the plan to achieve progress on most of the listed items. The plan assigns the task of implementation strategies to the Parks and Recreation Commission, the Director of Buildings and Grounds, and the County Commissioner’s Ways and Means Committee.

SECTION XIII. LOCAL ADOPTION. [Incomplete]

Approval Process

Based on the information gathered from the methods described above, a draft plan document was prepared. The draft plan was presented to the Shiawassee County Parks and Recreation Commission on May 4, 2016 for comment; meetings are open to the public.

A draft of the plan was posted for a thirty day public review from _____ to _____ at the Shiawassee County Parks and Recreation Commission Administration offices at _____. This was advertised with the _____, which is circulated throughout Shiawassee County, on _____. It was also available on-line through the Shiawassee County website. The draft plan was discussed as an agenda item at the Shiawassee County Parks and Recreation Commission on _____ to address comments from commission members; meetings are open to the public.

A public hearing was held by the Shiawassee County Parks and Recreation Commission on _____ following the comment period. This was also advertised with the _____, on _____. The plan was then approved by the Parks and Recreation Commission on _____ and the Shiawassee County Board of Commissioners on _____.

This plan reflects a prioritized list of maintenance items to existing facilities and the development of new facilities that best address the needs and desires of the citizens of Shiawassee County.

SECTION IX -- Appendix -- Table of Contents

Appendix A Population, Economy and Social-Cultural Trends & Projections

Appendix B	Municipal Park Facilities
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Appendix G	County and State Park Types/Standards
Appendix H	Other Michigan County Park Systems – Comparisons
Appendix I	County Park Map Sketches
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	2 - Kerby Rd. Park
	3 - Henderson Rd. Park
	4 - Lytle Rd. Park
	5 - Geeck Rd Park
	6 - Pine Grove Park
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	8 – Proposed West Haven County Park Boat Launch
Appendix J	Accessibility Guidelines and Park Facilities Evaluation
Appendix K	Recreational Bicycling Routes
Appendix L	Shiawassee River Fishing Resource
Appendix M	Shiawassee River Heritage Trail Paddle-Boating Guide
Appendix N	Requirements for a NPS National Water Trail
Appendix O	Economic and Health Benefits of Parks, Open Space & Trails
Appendix P	Shiatown County Park Site Plans
Appendix Q	Funding Sources for Parks Development
Appendix R	Philanthropic, Gift, and Volunteer Donations to the Parks
Appendix S & T	Grant Close-Out Reports—Henderson Park & Pine Grove Park
Appendix U	Plan Certification Checklist

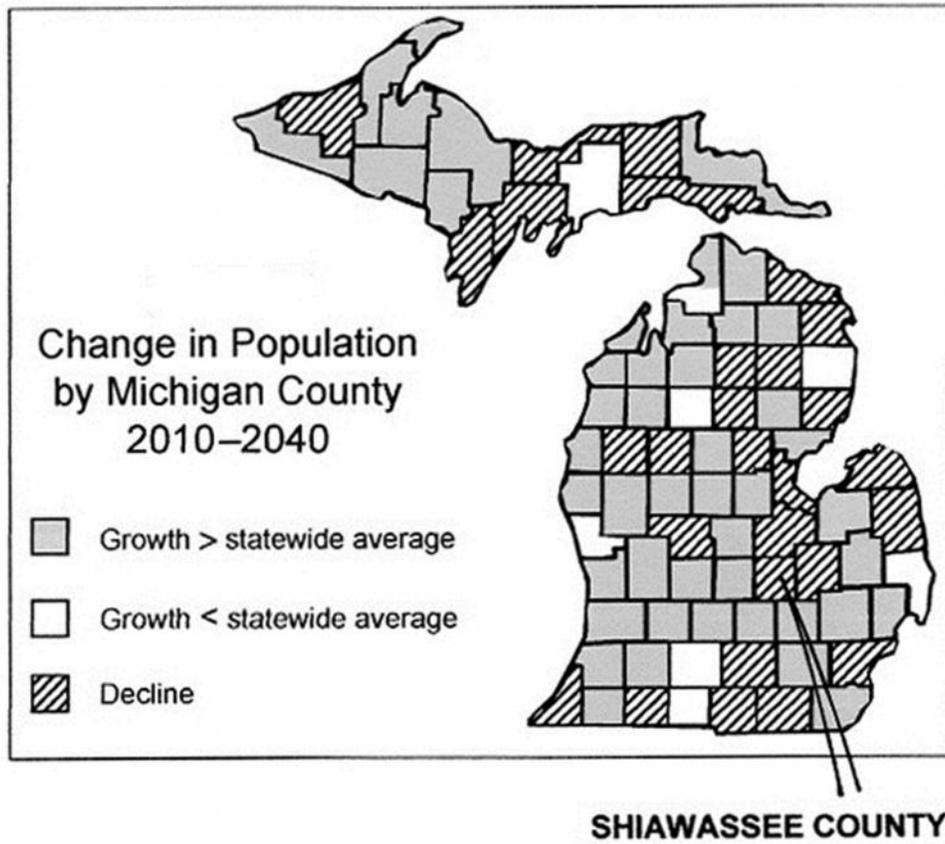
APPENDIX A – POPULATION DATA AND TRENDS

Shiawassee County’s population has declined in the past 34 years. Despite the decline, the figures below illustrate a relatively steady level of occupancy for the County:

<u>Year</u>	<u>Population</u>	<u>Percentage Change</u>
2014	68,933 (est.)	-2.4%
2010	70,638	-1.5%
2000	71,714	+2.6%
1990	69,877	-1.9%
1980	71,240	--

Another way of stating the condition is that the population has declined 3.2% since 1980. The County is influenced with economy declines in Genesee and Saginaw counties with their reductions in auto worker and auto supplier jobs. Declining family size is the greatest influence on the County’s population decline. Out-migration is a smaller factor but present especially with the family formation age group. The data effect of family size is better understood when the increasing number of dwelling units stands in contrast. For example there were 24,464 dwelling units in the County in 1980. That figure grew to 27,481 in 2010 for an increase of 3,000 dwelling units.

The map below from Donald Grimes at the University of Michigan’s Social Research Center shows the 30-year expectation for lowering population numbers for the County. For the purpose of parks planning based on facilities and park type standards, the five-year Plan will use the 69,000 population number.



On this map the influence from and dependence on Genesee County and Saginaw County is portrayed consistently with the data. Growth in the Lansing region is confined to a few townships in SW Shiawassee County and slight compared with other suburban areas about Lansing in Clinton, Ingham and Eaton counties.

Aging. The aging of Shiawassee County, and much of Michigan, has been progressing for the 65+ year olds for many decades. That most recent median age level, 2010, is 41.3 years with Michigan at 39.3 years. This is not reflective of growth areas of the U.S. The percentage of the 65+ age group for the overall population is 16.4% (15.4%, State). The U. Of Michigan Population Studies Center projects that nearly 1 in 4 Michigan residents will be over 65 years-old unless international in-migration, an unknown outcome, has its observed historical effect on age levels elsewhere in the country.

Within all households, the 0 to 34 age groups comprise only 34.9% of households versus 39% at the state level.

Race/Diversity. This statistic is important for its reflection on diversity within a community. Economic statistics show a statistically significant correlation with various measures of diversity and prosperity for a given metro area. Shiawassee County does not have diversity with respect to race. These numbers reveal a stark contrast between the State and the County:

Racial Composition – 2014 American Community Survey

	<u>Caucasian</u>	<u>Afr-Amer.</u>	<u>Hispanic</u>	<u>Asian</u>	<u>2 Or More Races</u>
State of Michigan	79.2%	14%	4.8%	2.6%	2.6%
Shiawassee County	96.7%	0.5%	2.9%	0.1%	1.5%

Michigan Population Trends. The University Of Michigan Population Statistics Center projects various demographic attributes through 2040. These are State level projections that are important for understanding the context in which the park system might operate and develop.

- There will be a net loss of population in exchange with other states
- There will be few immigrants
- Total employment will be dropping (-10%) compared to the U.S. (+7%)
- There was a 30% decline in construction between 2000 and 2010 as compared to a 4.7% decline nationally
- In constant dollars from 2000 to 2010, per capita income has dropped 20.6%, a figure near the bottom of all states

The topic of demography has implications with a park planning process. Within the State of Michigan and Shiawassee County there are shifts, the most important being the affordability of parks and their recreation programs with a declining population and relative well-being. These numbers have adverse effects on property values and the consequential public funds available to parks and recreation. Greater representation of older populations recreate differently, mostly passive activity, and require attention to accessibility. Shiawassee County's relatively poor health conditions for so many and higher levels of poverty command accessibility considerations in parks, affordability of park use, and attention to walkability. The homeowner housing characteristics are slightly higher than the State's. Owner occupancy is 70% versus 61% for Michigan. That difference is a product of the County's rural/urban character over higher density Michigan metro-areas with alternative housing. This statistic does not influence park plan decision making, except for what is deemed a lesser park needs for the large lot rural homeowners with their own open spaces.

APPENDIX B – MUNICIPAL PARK FACILITIES, EXCEPT COUNTY PARKS

FACILITY	PUBLIC PARK FACILITIES - County Wide Except for County Parks*											Total Facilities	
	Municipality Name**												
	CITY OF OWOSSO	CITY OF CORUNN A	CITY OF DURAND	CITY OF PERRY	CITY OF LAING	VILLAGE OF VERNON	VILLAGE OF BYRON	VILLAGE OF LENNON	VILL. OF MORRICE	VILL. OF BANCROFT	VILLAGE OF OVID	WOODHULL TWP.	
Basketball Courts	1***		5		1	1	1			1		1	11
Tennis	3			2		1			2				8
Beach Volleyball	2	1											3
Baseball - Youth	5	2	1			1	1	1		1	2	1	15
Softball - Adult	1	5	3	2		1	2	2	1	1	1	2	19
- Youth	3	2				1				1	1		8
Soccer	5				1						2		8
Playgrounds	3	2	2	1	3	1	1	1	1	1	1	1	19
Ice Skating/In-Line	2	1											3
Sledding Hill	3	1	1	2				1					8
Trails - Bicycle (+Mtn Bix'g)	2											1	3
- Hiking / Jogging	4	1			1								7
Picnic Tables w/grills	9	10	7		6			3					35
Pavilions	8	3	3	2	?	1	1	2		1		2	23
Horseshoes		8											8
Rest Rooms/Porta Johns	6	2	3	2	1	1	1	1		1	1	1	20
Amphitheater/Gazebo	2	3	1										6
Fishing/Water Frontage	3	1					1						5
River Paddling Access	4	2					1						7
Community Center/Historic	2	2								1			5
Urban Forests	4	1											5
Playfield	6	2	3	2		1	1		1	1	1	1	6
Drinking Water	4	2				1							18
Splash Park	1											3	10
Park Benches	20	15	5	2	14		2					6	64
Skate Park/BMX	1				1								1
Disc Golf		1-18 Holes											1
PARK ACREAGE	260	95	17	13	25	6	4	5	6	3	5	20	459

*A chart on school park facilities is provided elsewhere in this Plan and effectively expands several park-like facilities equitably throughout the County.

**Village of New Lothrop and all other Townships do not have parks; some townships contribute resources to others' parks

***Numbers indicate quantity of facilities; in this example the City of Owosso has one basketball court in its entire system.

APPENDIX C

PUBLIC PARK FACILITIES - COUNTY PARKS								
FACILITY*	PARK NAME							Total Facilities
	Henderson	Shiatown	Kerby	Geeck	Lytle Rd	Pine Grove	Davis Roadside	
Basketball Courts								0
Tennis								0
Beach Volleyball	1							1
Baseball - Youth								0
Softball	2		1					3
Soccer								0
Play Equip't/Playscapes	3	2	1	2				8
Ice Skating/In-Line								0
Sledding Hill		1						1
Trails - Bicycle (+Mtn Bik'g)								0
- Hiking / Jogging	1	1				1		3
Picnic Tables w/grills	10	11	11	7	1	1		41
Pavilions	3	2	3	2		1		11
Horseshoes	3	2	1	2				8
Rest Rooms/Porta Johns	2	1	1					4
Band Shell/Gazebo/Viewing Deck	1							1
Fishing/Water Frontage	2	3		1	1	1		8
River Paddling Access	2	2		1	1			6
Comm'ty Center/Historic		1						1
Urban Forests/Natural Areas	1	1				1	1	4
Playfield	2	1	1	1				5
Drinking Water***	4	1				1		6
Splash Park								0
Park Benches	5			2	1			8
Skate Park/BMX								0
Disc Golf								0
PARK ACREAGE	32	23**	9	6	0.5	22.5	0.5	93.5
*Numbers indicate quantity of facilities; e.g., there are 3 horseshoe pits at Henderson Park								
**Except for just upstream of the dam, the Shiatown acreage does not include the bottomlands of the former reservoir.								
***Some of the pump wells are not in service at this time.								
Note 1: There are no campsites or swimming options in the county park system.								
Note 2: Pine Grove Park is closed for the indefinite future.								

APPENDIX D – Page 1 of 3 – Recreational Facility 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 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'. Additional 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.).
BASEBALL 1. OFFICIAL	3.0-3.85 A minimum 1.2 A minimum	• 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	¼ - ½ mile	Part of neighborhood complex. Lighted fields part of community complex.
2. LITTLE LEAGUE						

APPENDIX D – Page 2 of 3 – Recreational Facility Standards

ACTIVITY/ FACILITY	RECOMMENDED SPACE REQUIREMENTS	RECOMMENDED SIZE AND DIMENSIONS	RECOMMENDED ORIENTATION	NO. OF UNITS PER POPULATION	SERVICE RADIUS	LOCATION NOTES
FIELD HOCKEY	Minimum 1.5A	180' x 300' with a minimum of 10' clearance on all sides.	Fall season-long axis north-west to southeast. For longer periods, north to south. Same as field hockey.	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 2.1A	195' to 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	13.5A 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.
1/4-MILE RUNNING TRACK	4.3A	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.
SOFTBALL	1.5 to 2.0A	Baselines-60' Pitching distance-45' (men) -40' (women). Fast pitch field radius from plate-225' between foul lines. Slow pitch-275' (men) -250' (women). 120' x 80'	Same as baseball.	1 per 5,000 (if also used for youth baseball)	1/4- to 1/2- 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.		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	

APPENDIX D – Page 3 of 3 – Recreational Facility Standards

ACTIVITY/ FACILITY	RECOMMENDED SPACE REQUIREMENTS	RECOMMENDED SIZE AND DIMENSIONS	RECOMMENDED ORIENTATION	NO. OF UNITS PER POPULATION	SERVICE RADIUS	LOCATION NOTES
ARCHERY RANGE	Minimum 0.65A	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 30A	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.
GOLF 1. PAR 3 (18- HOLE) 2. 9-HOLE STANDARD 3. 18-HOLE STANDARD	<ul style="list-style-type: none"> • 50-60A • Minimum 50A • Minimum 110A 	<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 	1/2 to 1 hour travel time	9-hole course can accommodate 350 people/day. 18-hole course can accommodate 500-550 people a day. Course may be located in community, district, or regional/metro park.
SWIMMING POOLS	Varies on size of pool and amenities. Usually 1 to 2A 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 siting 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 1m 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 3-4A 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 E – SCHOOL PARK FACILITIES

SCHOOL PARKLIKE FACILITIES - County Wide

FACILITY	School District Name*										Total Facilities
	OWOSSO	CORUNN A	DURAND	PERRY	LAINGSBURG	BYRON	OVID	NEW LOTRHOP	MORRICE		
Number of Play Sites	9	4	3	3	4	1	3	3	1		31
Basketball Courts	12	6	6	2	1		2	2			31
Tennis-Public Access	16	8	8	2		2	8		2		46
Beach Volleyball											0
Baseball--Public Access				2				1			3
Softball-Public Access	4	1	1	2	2			1			11
Soccer-Public Access	3		2	3	3						11
Running Track Access	1		1	1	1	1	1	1	1		7
Playgrounds	7	3	2	2	3		2	1			20
Playfield	6	1	2	1	2		2	2			16
Sledding Hill	1										1
Trails						1					1
Pavilions											0
Rest Rooms/Porta John											0
Amphitheater/Gazebo	1										0
Fishing/Water Frontage	1					1					2
River Paddling Access	1					1					2
Urban Forests		1				1					2
Drinking Water											0
Benches	2										2
PLAYSITE ACREAGE	36	11	12	11	12	5	10	7	3		107

*Includes private and parochial schools within the respective school districts.
 Note: Byron Area Schools' riverside interpretive trail is in development.

APPENDIX F – Municipal Park Types & Relevant Standards for Park Types

PARK TYPES & STANDARDS--All Municipal Parks Except County and State Parks

PARK TYPES	Municipality Name AND Acreage Per Park Type*											WOODHULL TWP.	Total Facilities			
	Standard/per 1,000 Persons**	CITY OF OWOSSO	CITY OF CORUNNA	CITY OF DURAND	CITY OF PERRY	CITY OF LAINGG	VILLAGE OF VERNON	VILLAGE OF BYRON	VILL. OF LENNON	VILL. OF MORRICE	VILL. OF BANCRT			VILLAGE OF OVID		
Note: Park Types and Standards are from National Park & Rec'n Association																
Mini-Park (0.25-1 ac)	0.25 acres	2/2.6 ac	2/1ac	2/1ac	2/13 ac	2/7ac										6#/5 ac
Neighborhood (1-5 ac)	1-2 acres	1/6ac			2/11ac	1/12ac			1/5ac		2/3ac	2/5ac				10#/33 ac
Neigh'd School Parks (Var.)	Variable	8/36ac	3/11ac	3/13ac	2/11ac	1/12ac			1/3ac		1/10ac					20#/101 ac
Community Park (30-50 ac)	5-8 acres	2/14ac	1/15ac	2/17ac					1/6ac			1/20ac				10#/100 ac
Special Use Park	Variable	2/8ac														2#/8 ac
Large Urban Park (50-75 ac)	Variable		1/25ac													
Natural Resource Area (var)	Variable	1/8ac	1/40ac													2#/48 ac
Reg/Metro Park (200+ ac)	5-10 acres	1/164ac														1#/164 ac
Greenways (Variable)	Variable	1/13ac														15/13 ac
Sports Complex (25 acres)	Variable	3/35ac	1/15ac													4#/50 ac
Biking Trails 5 Mile Loop***	Variable	4 miles														
Biking Trails 15-25 mile linear	Variable															4 miles
River Paddling Trails	Variable	41 miles														
Mountain Biking 5 mile loop	Variable	4 miles														
Cross Cnty Skiing 0.5-3 mile	Variable	1 mile														0.7 miles
Hiking/Devp Trails 0.25-5 mi	Variable half-day	1 mile														0.7 miles
Hiking Devp Trails 5-15 mi	Variable full day															
Hiking Primitive 5 Mile min	Variable	5 miles														5 miles
Snowmobile-50-60 miles	Variable															
Equestrian 5 miles	Variable															
Snowshoe - 3 mile loops	Variable	3 miles														3 miles
Annual Park Budget****	\$290,000	\$210,000	\$71,000	\$6,000	\$25,000	\$1,000	\$1,000	\$1,000	\$0	\$1,000	\$1,000	\$1,000	\$30,000	\$639,000		
Per Capita Expenditures	\$19.61	\$53.20/cap	\$21.18/cap	\$3.65/cap	\$19.48/cap								\$7.87/cap	\$9.33/cap		
PARK ACREAGE		260	107	31	24	37	6	9	5	9	3	15	20	526		

*See companion chart in this Plan for County Parks and other regional public access spaces.

**Parks are credited as a park type even if the acreage is below the NPRA standards for park size.

***Some trails are multi-purpose; therefore, the overall trail mileage should not be compounded. Trails effectively add to park acreage totals.

****Annual park budgets in smaller municipalities are blended into the public works budgets and are not itemized--mostly maintenance expenditures.

The plan calculates \$1,000 per year per village based on one village's itemization.

Note: 1) The Clinton-Ionia-Shiawassee Trail connects with other trails in Michigan to form a 1.25 rail trail. The Shiawassee stretch is 8 miles long from Ovid to Owosso.

2) The 86 acre County Park system has an annual allocation for maintenance of \$5,000. That will be raised after the completion of the new master plan.

APPENDIX G – COUNTY AND STATE PARK TYPES & STANDARDS

PARK TYPES--County, Special Use, and State Parks/Trails

PARK TYPES	Name And Acreage Per Park Type*											Total Facilities	
	Standards/par 1,000 Persons**	SHIATOWN COUNTY PARK	HENDERSON COUNTY PARK	GEECK RD COUNTY PARK	KERBY RD COUNTY PARK	LYTLE RD COUNTY PARK	PINE GROVE PARK	C/S TRAIL ****	JAMES MINER TRAIL	WOIGHT LOOP TRAIL	ROSE LAKE STATE PARK		SLEEPY HOLLOW STATE PARK
Note: Park Types and Standards are from National Park & Rec'n Association													
Mini-Park (0.25-1 ac)	0.25 acres												
Neighborhood (1-5 ac)	1-2 acres												
Neigh'd School Parks (Var.)	Variable												
Community Park (30-50 ac)	5-8 acres			9 acres									
Special Use Park	Variable				0.8 acres								
Large Rural/Urban Park (50-75 ac)	Variable		32 acres										
Natural Resource Area (var)	Variable	16 acres		6 acres		22 acres				4140 acres	2878 acres		
Reg/Metro Park (200+ ac)	5-10 acres												
Greenways (Variable)	Variable												
Sports Complex (25 acres)	Variable												
Biking Trails 5 Mile Loop***	Variable							4 miles			16 miles		
Biking Trails 15-25 mile linear	Variable							8 miles				41 miles	
In-River Trails	Variable												
Mountain Biking 5 mile loop	Variable												
Cross Cnty Skiing 0.5-3 mile	Variable									7 miles	16 miles		
Hiking-Dev'p Trails 0.25-5 mi	Variable half-day									7 miles	16 miles		
Hiking Dev'p Trails 5-15 mi	Variable full day							4 miles		7 miles	16 miles		
Hiking Primitive 5 Mile min	Variable												
Snowmobile-50-80 miles	Variable												
Equestrian 5 miles	Variable									7 miles			
Snowshoe - 3 mile loops	Variable										16 miles		
SERVICE AREA*****	n/a	regional	regional	sub-region	sub-region	regional	sub-reg'n	regional	sub-reg'n	regional	regional	regional	regional

*See companion chart in this Plan for County Parks and other regional public access spaces.

**Parks are credited as a park type even if the acreage is below the NPRA standards for park size.

***Some trails are multi-purpose; therefore, the overall trail mileage should not be compounded. Trails effectively add to park acreage totals.

****The Clinton-Ionia-Shiawassee Trail connects with other trails in Michigan to form a 125-mile rail trail. The Shiawassee stretch is 8 miles long from Ovid to Owosso.

*****Service area definitions are: regional is county-wide; sub-region is up to half the county; municipal is principally within a city boundary

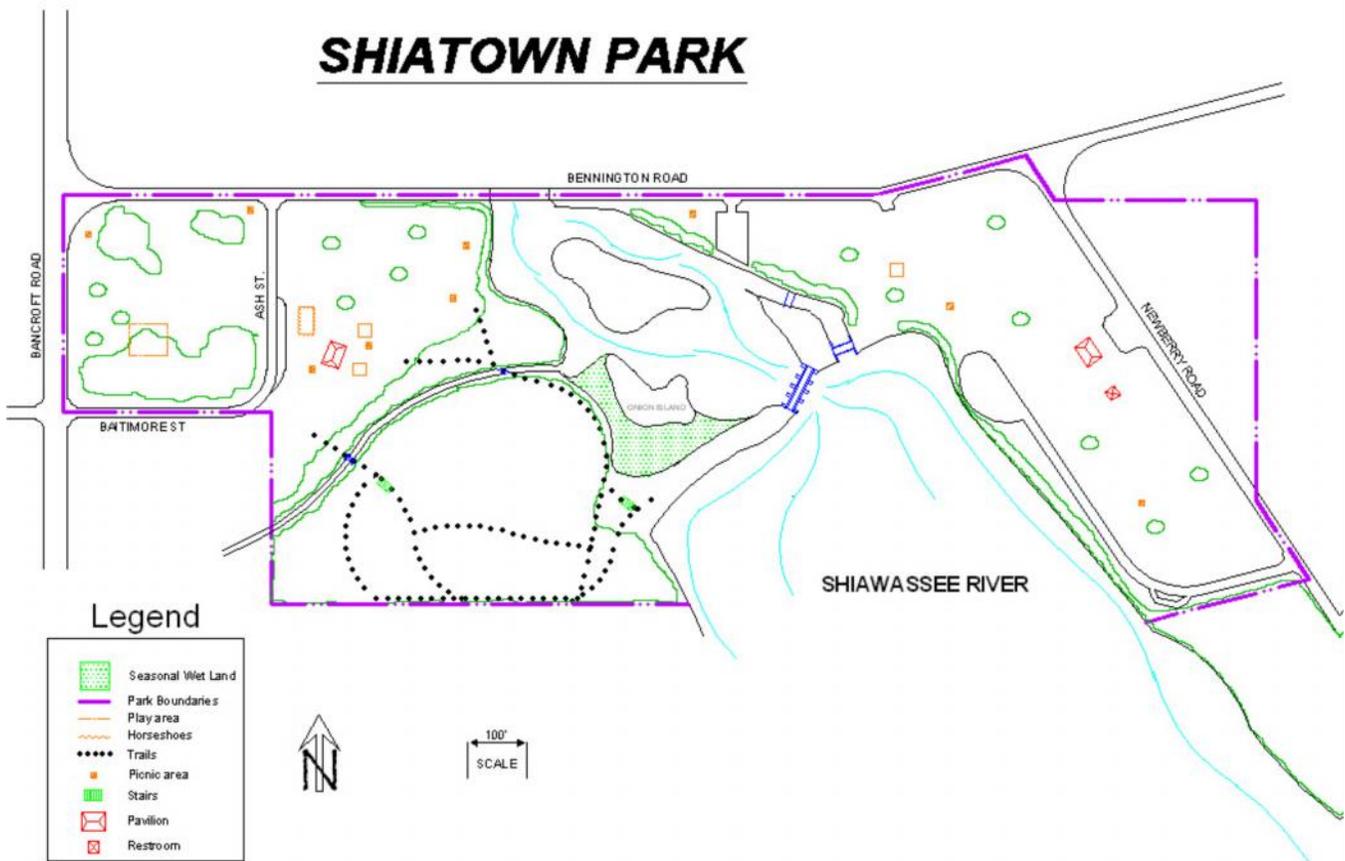
APPENDIX H

COMPARISON CHART--COUNTY PARK SYSTEMS ABOUT MICHIGAN

COUNTY NAME Population	OPERATIONAL FEATURES	NUMBER OF PARKS	RECREATIONAL FEATURES	TOTAL ACREAGE	ANNUAL BUDGET & Per Capita	NOTES*
BARRY--59,097	P&R Comm'n; County wide millage--1/4 mill	Three; Charlton Park has 322 acres; also Yankee Springs State Area of 5,600 acres	Swimming Beach; Historical Museum	383	\$62,000 & \$0.95	Value of Volunteer hours is \$100,000; CIP plan is \$500,000
CASS--52,293	P&R Comm'n; full time director;	6 parks; one regional at 820 acres	2 swimming beaches; programming events	919	\$150,500 & \$2.87	Volunteer value is \$70,000; \$42,000 revenues from programming
CLINTON--75,382	Called Clinton Parks & Greenspace; Comm'n oversight; part time employee	Three; Motz county Park at 42 acres; also Sleepy Hollow & Maple River Nat Area	Swimming; native prairie;	133	\$124,928 & \$1.66	Three themes in Plan" Water-based rec'n, trail & transport'n/access
EATON--107,759	P&R Comm'n; 4 FTE's; seasonal employees	Nine; Fitzgerald has the Ledges of Grand Ledge;	Swimming; the Ledges; Playhouse Theater; River access sites; trails	367	\$518,871 & \$4.81	Has map of Parks & Trails--"Heart of Michigan"; Regional Planning Support
IONIA--64,000	Act 261 Park Advisory Board; 1.5 employees	3 parks; Bertha Brock Park-196 acres	camping; lodges, disc golf; natural area	400	\$118,000 & \$1.84	C.I.P. is \$1,200,000
GRATIOT--42,000	Act 261 P&R Comm'n; 1 FTE	2 parks; each with swimming;	swimming; 2 disc golf;	160	\$384,000 & \$9.14	Millage (0.35); 36% of budget is C.I.P.
HILLSDALE--45,830	P&R Comm'n; no FTE's	4 parks;	swimming; man- made fishing ponds	116	\$25,000 & \$0.55	General Fund; low scale system
LAPEER--88,319	Buildings & Grounds; 1.5 employees for parks	2 parks	2 water slide parks; a revenue generator	149	\$285,500 & \$3.23	Also Ortonville Rec'n area at 4,000 acres
LENAWEE--99,982	P&R Comm'n based on Act 156 of 1917; Cnty Admin'r Supervisor	6 Parks plus 3500 acres of state parks	natural area parks cover 260 acres;	469	\$25,000 & \$0.25	Bldgs & Gds oversees parks
SHIAWASSEE--68,900	P&R Comm'n, Act 261 of 1965	7 Parks plus DeVries Nature Conser'cy and Rose Lake	5 Riverfront parks, 4 with access facilities	95	\$35,000 & \$0.50	Undertaking a 5 Year Plan Process for 2016

*Note: Volunteer Hours are credited at \$21.00 per hour in two of the County Park Systems; not calculated in the per capita figure.

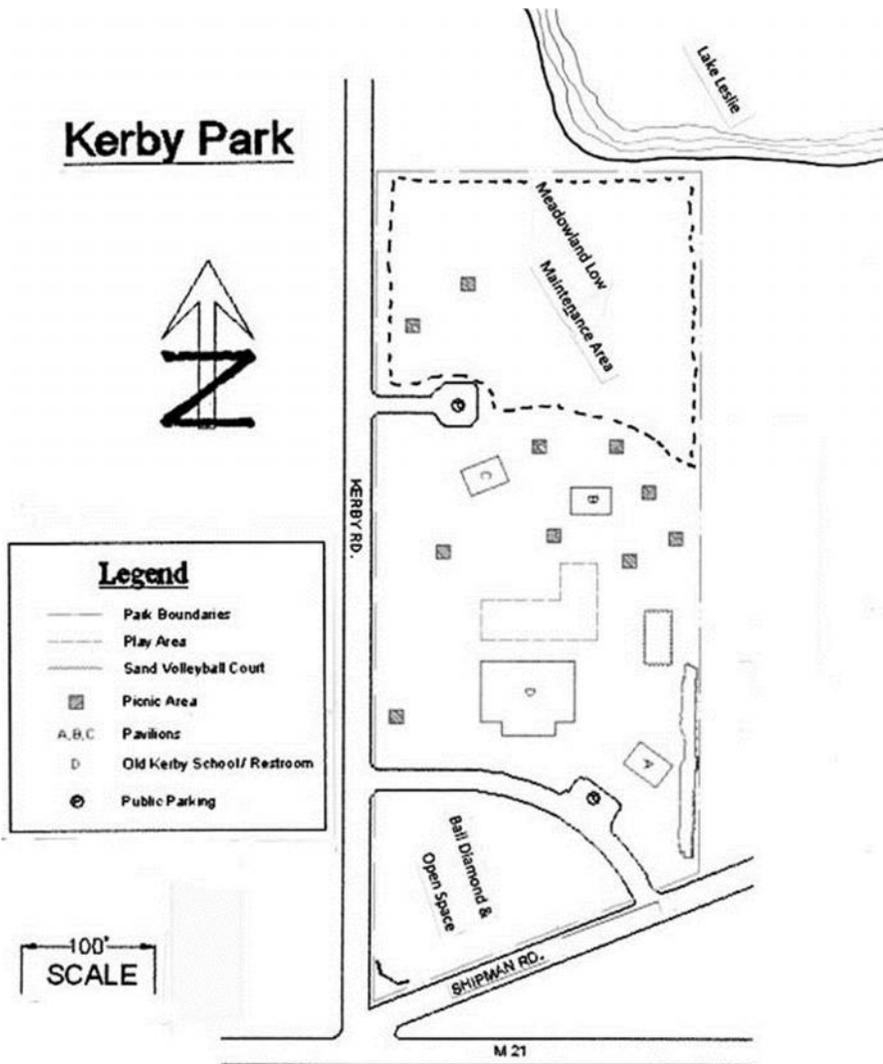
APPENDIX I – 1: County Park Map Sketch—Shiatown Park



ADDITIONS AND DELETIONS TO SHIATOWN SITE PLAN IN THE 2016-2020 PARKS PLAN:

- >Add ramp to Bennington Road Bridge crossing
- >Connect trails on West side to ramp
- >Define biking/roadway direction to Lytle Road Park and canoe launch
- >Add Viewing Decks
- >Continue trails from west side into the bottomlands
- >Construct footbridge across former dam
- >Add loop trail for east parks
- >Relocate and expand canoe launch parking area
- >Fill east drain
- >Loop trail in bottomlands
- >Construct osprey tower nest in bottomlands
- >Add 30 to 40 acres
- >Delineate sledding hill in East Park
- >Restore east side parking area and drive to a trail
- >Relocate border boulders to river fill and new parking lot
- >Plant trees along river
- >6+ Benches
- >Reforest sections of east side hill; preserve view corridor for east side pavilion
- >Repair footbridge
- >Construct canoe launch on east side
- >Build arch bridge to north island; name the island
- >Enhance three fishing access areas
- >Control invasive species in bottomlands
- >Indicate on signs bike/roadway routes for destination & recreation loops
- >Plant botanical sites along bottomlands trail
- >Create unstructured play spaces near pavilions for imaginative playtime

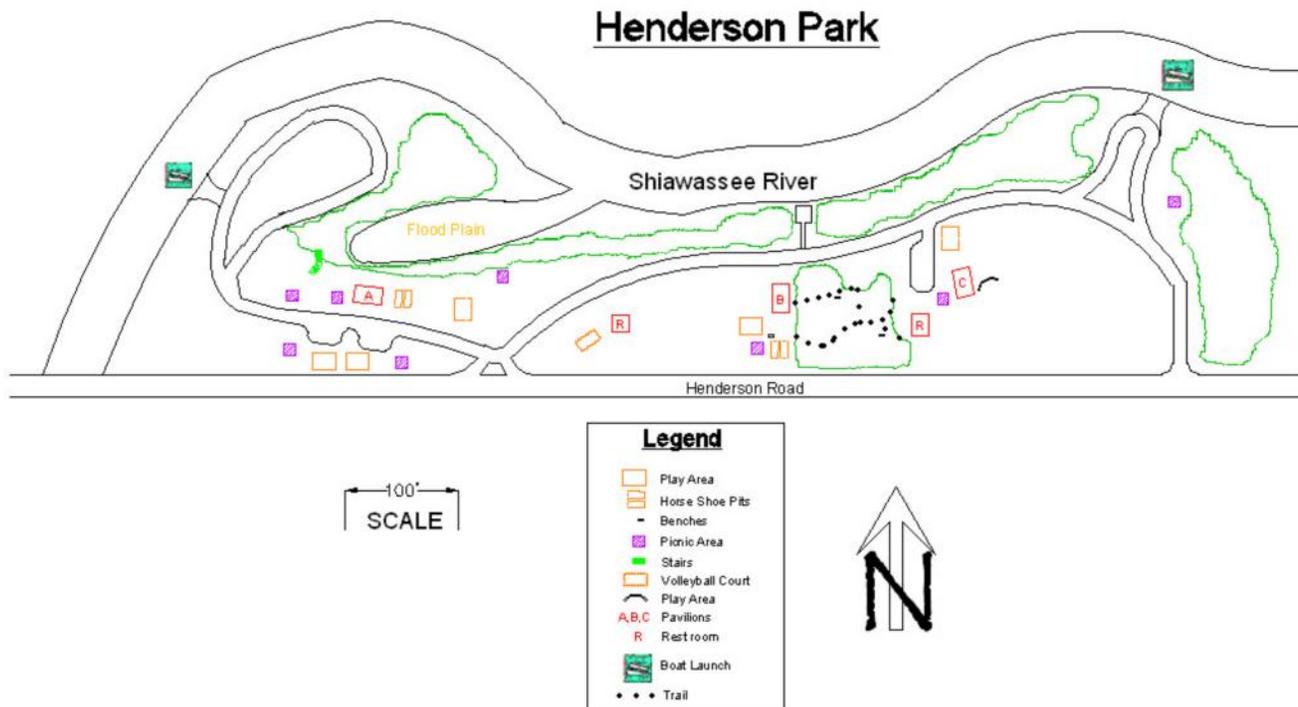
APPENDIX I-2: COUNTY PARK MAP SKETCH—KERBY RD. PARK



ADDITIONS AND DELETIONS TO KERBY SITE PLAN IN THE 2016-2020 PARKS PLAN:

- >Build Exercise loop trail
- >Reforest north low maintenance area
- >Tree line the roads
- >Build viewing platform overlooking Lake Leslie
- >Relocate ball diamond backstop
- >4 Benches
- >Construct information sign board and add recreational loop rides and destination bike routes
- >Create unstructured play areas near one or more pavilions for imaginative playtime

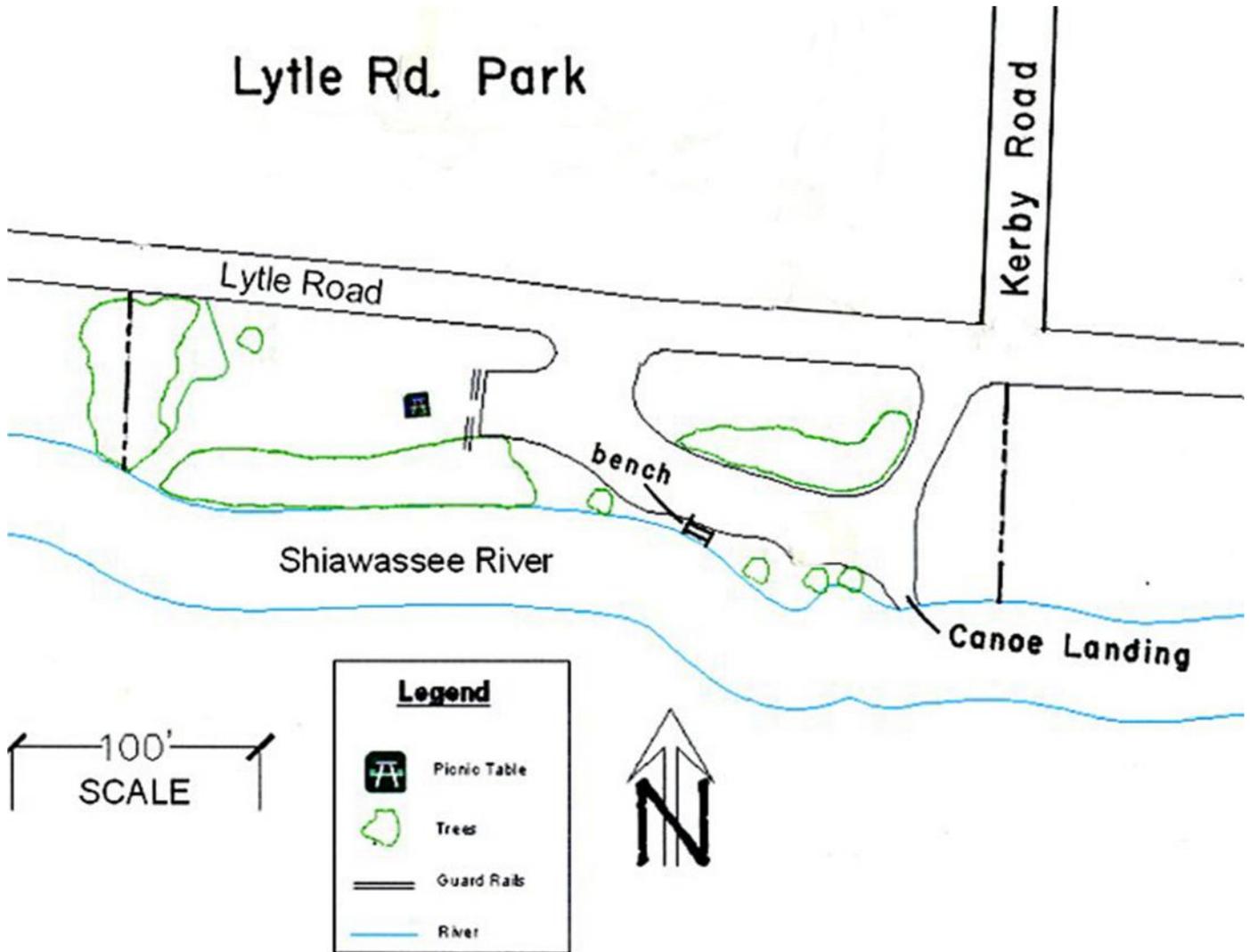
APPENDIX I-3: COUNTY PARK MAP SKETCH—HENDERSON PARK



ADDITIONS AND DELETIONS TO HENDERSON SITE PLAN IN THE 2016-2020 PARKS PLAN:

- >Close west side canoe landing and repair erosion scar
- >Add to existing trail with an exercise loop trail
- >Relocate East Gate to park interior control location with parking for year-round access to east canoe launch
- >Add parking for Pavilion A
- >Post on kiosks a map of County paddling take-out/put-in points
- >Post on kiosks recreational bike loop roadway rides and destination route to upstream and downstream canoe launch sites at Pine Grove Park, DeVries Nature Conservancy, and Owosso’s Harmon Patridge Park
- >Restore/close driveways and barren lands on West side lowland near one or more pavilions for imaginative playtime
- >Improve other west side canoe landing
- >Add donated play equipment to Pavilions B & C
- >Add an interpretive sign on the park’s history
- >Build an information sign board at east canoe launch area
- >Create unstructured play areas

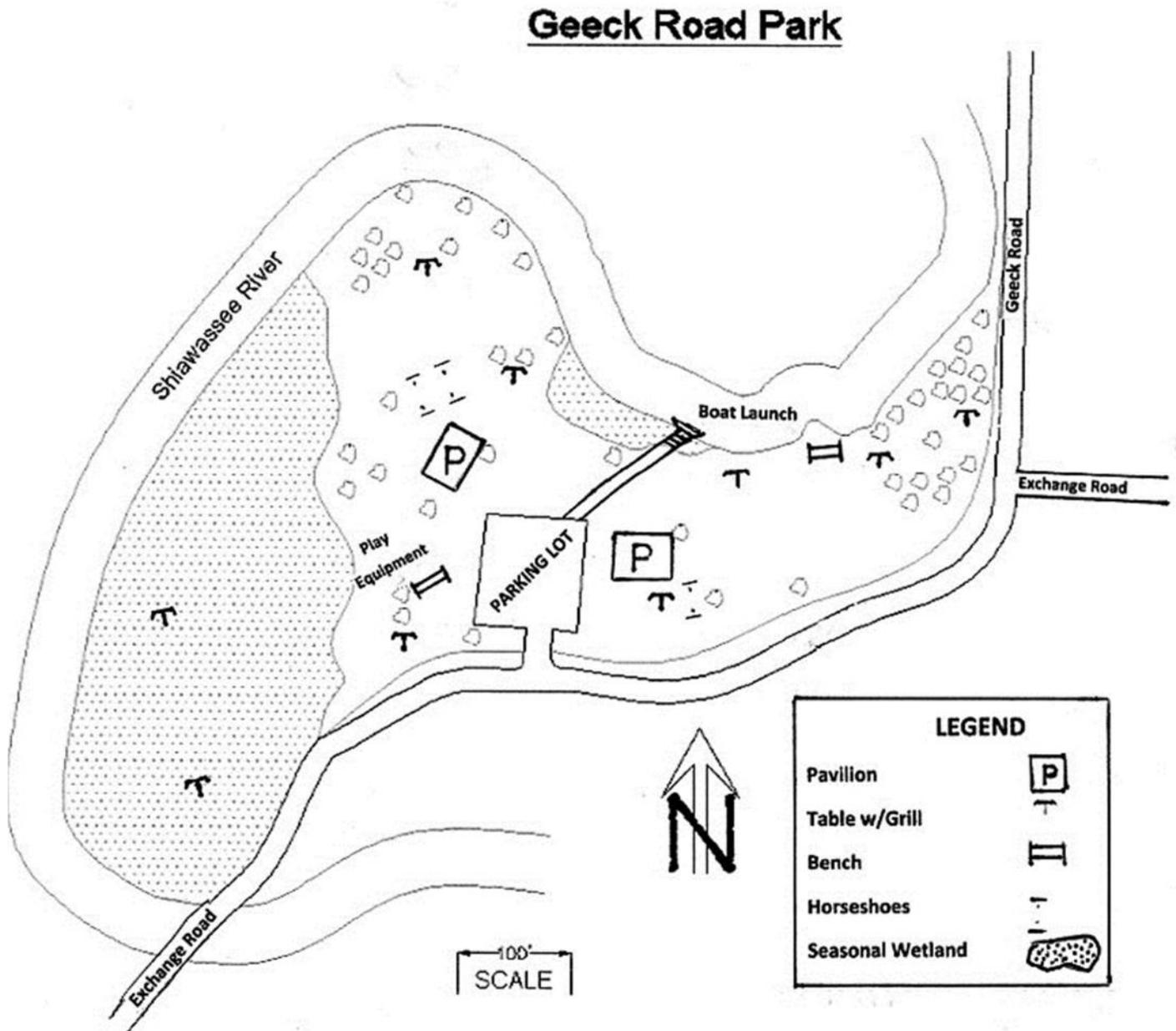
APPENDIX I-4: COUNTY PARK MAP SKETCH—LYTLE RD. PARK



ADDITIONS AND DELETIONS TO LYTLE SITE PLAN IN THE 2016-2020 PARKS PLAN:

- >Replace guardrail at picnic site with natural fencing
- >plant roadside trees and native landscaping
- >Replace lost canoe landing sign
- >Construct an information kiosk and add County river guide for paddlers
- >Add to kiosk recreational loop bike trails to country scenic areas and destination bike trails to upstream canoe launch and Corunna
- >Add deep-rooted riverbank shrubs to eroded and barren areas
- >Add handicapper parking space at picnic site and accessible pathway to accessible table

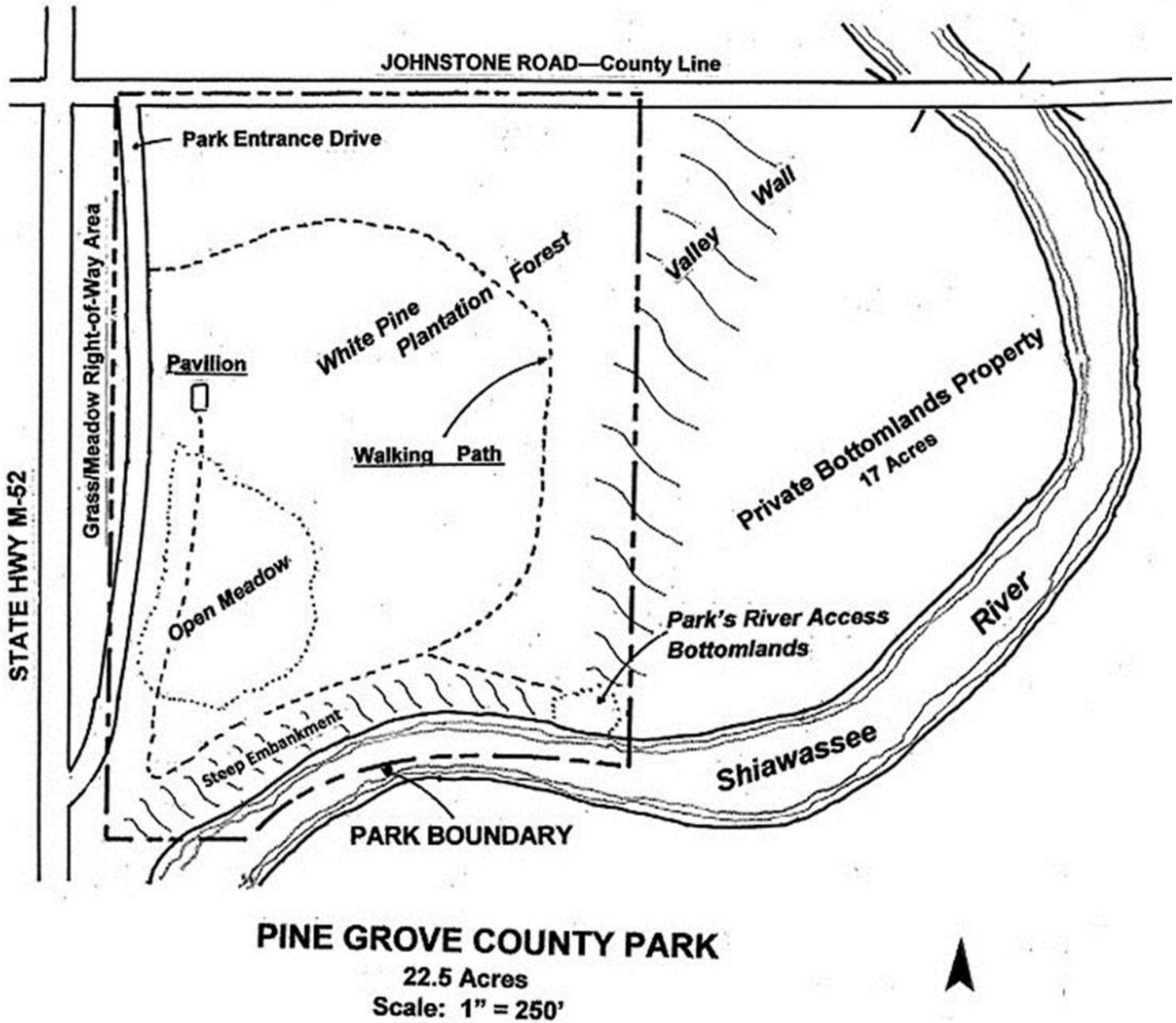
APPENDIX I-5: COUNTY PARK MAP SKETCH—GEECK RD. PARK



ADDITIONS AND DELETIONS TO GEECK SITE PLAN IN THE 2016-2020 PARKS PLAN:

- >Add line of riverside trees north of Exchange Road Bridge
- >Construct accessible loop exercise trail
- >Replace canoe landing sign
- >Construct barrier free approach to west pavilion
- >Use existing sign board kiosk for recreational loop bike rides and directional biking options including upstream and downstream canoe landings at Shiatown Park and Walnut Hills Campground
- >Create unstructured play areas near one or both pavilions for imaginative playtime

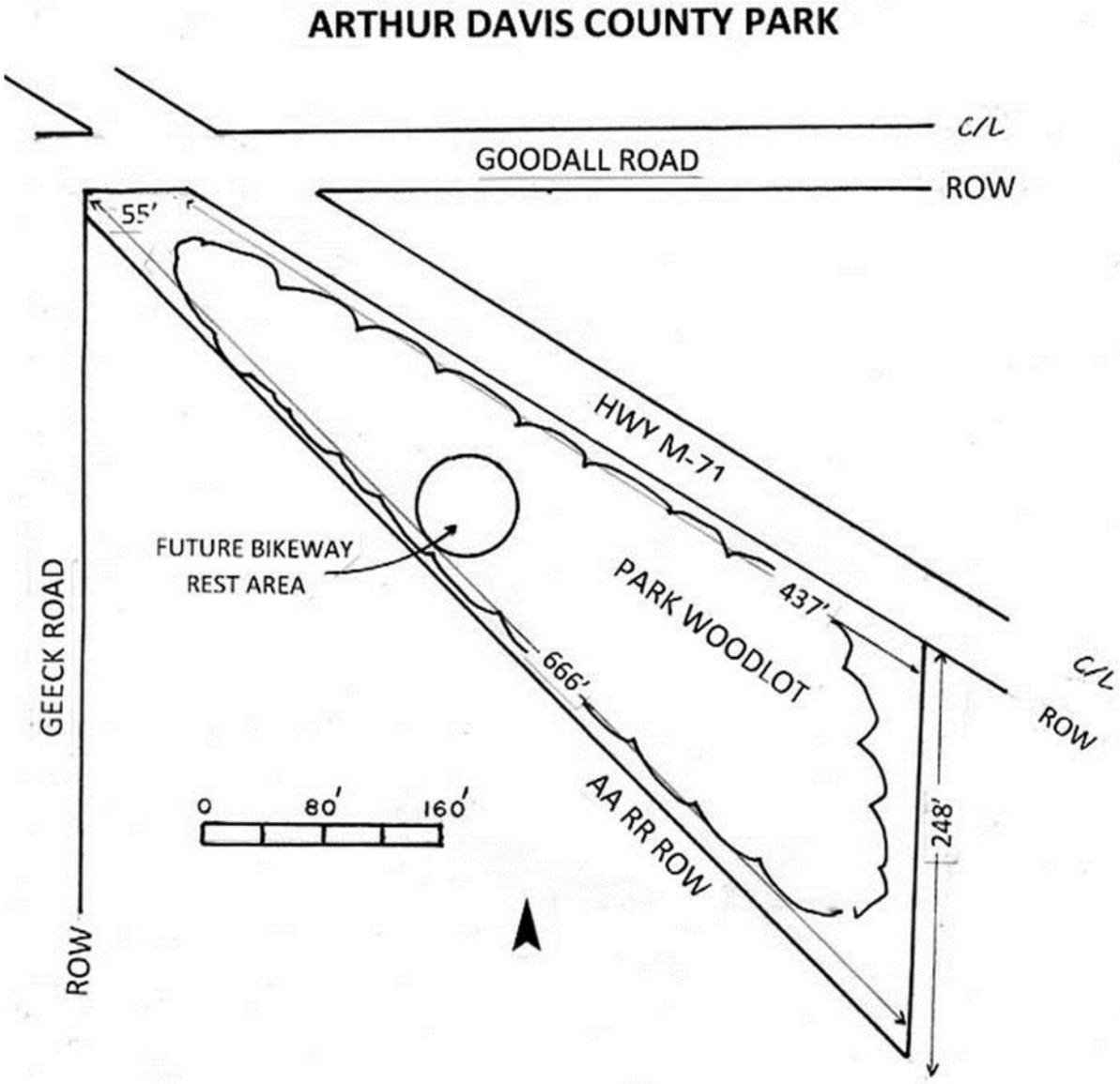
APPENDIX I-6: COUNTY PARK MAP SKETCH—PINE GROVE PARK



ADDITIONS AND DELETIONS TO PINE GROVE SITE PLAN IN THE 2016-2020 PARKS PLAN:

- >Show eventual park boundary that includes possible revisions to existing park boundary and addition of bottomlands area for accessible river frontage at the park
- >Complete an exercise trail system on the lower lands that loops both parks >Add 4 Benches
- >Add paddle boat landing on river bottomlands and access drive parking area
- >Add information kiosk on upper and lower parks for biking options, both a loop recreational system and destination based routes to Oakley and upstream and downstream paddle boat launches/landings

APPENDIX I-7 ARTHUR DAVIS COUNTY PARK MAP SKETCH

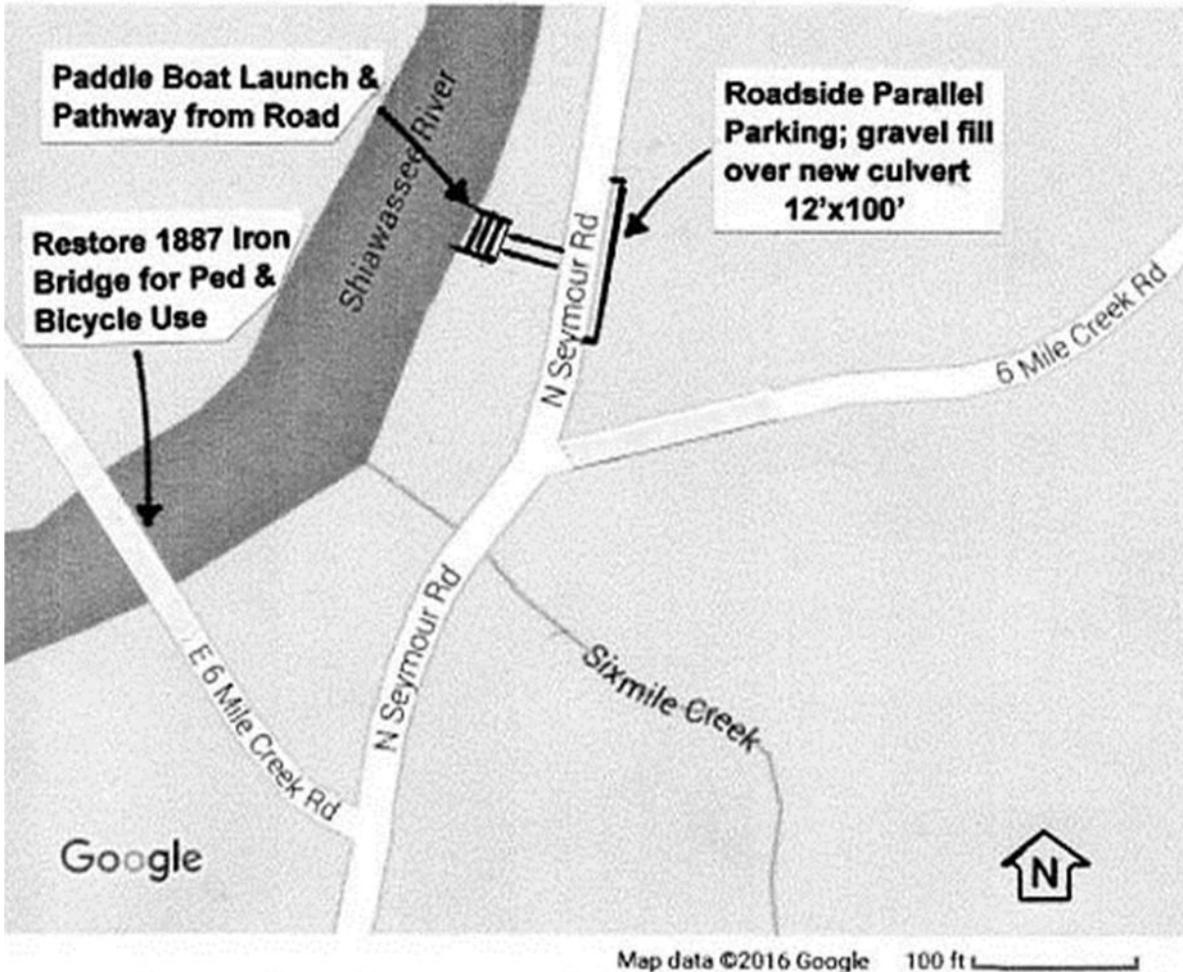


ADDITIONS AND DELETIONS TO DAVIS PARK SITE PLAN IN THE 2016-2020 PARKS PLAN:

- >Native Tree, Grasses and Wildflowers Species Planting—At Selected Areas of Need or Opportunity
- >Maintain natural habitats
- >When Corunna to Durand Rail Trail is completed, construct trailside rest area

APPENDIX I-8 COUNTY PARK MAP SKETCH WEST HAVEN (PROPOSED)

PROPOSED WEST HAVEN PARK BOAT LAUNCH AND PEDESTRIAN/BICYCLE BRIDGE



ADDITIONS AND DELETIONS TO WEST HAVEN SITE PLAN IN THE 2016-2020 PARKS PLAN:

- >Restore 1887 Iron Bridge for Non-Motorized Transportation Use
- >Fill Roadside area with Gravel for a 4-bay parking lot to Serve Paddle Launch
- >Install Pathway for Paddle Launch
- >Add directional signs, information signs and bridge use signs

APPENDIX J – ACCESSIBILITY GUIDELINES AND BARRIER FREE EVALUATION OF COUNTY PARK FACILITIES

Recreational areas, facilities, and programs play an important role in the life of the community; therefore it is essential that people with disabilities have an equal opportunity to enjoy these areas and any programs provided. Federal and state laws prohibit discrimination on the basis of disability, and these laws apply to parks and other recreation lands and programs controlled and operated by local units of government. According to 2014 American Community Survey estimates, almost 8 percent of the State’s non-senior population has one or more disabilities.

Under the State Utilization of Public Facilities by the Physically Limited Act (1966 PA 1, as amended) all public facilities, including improved areas used for recreation, must meet the barrier free design requirements contained in the state construction code. Under this act, the administration and enforcement related to barrier free design requirements are vested in the local or state government agency responsible for issuing a building permit. If the project does not require a building permit, administration and enforcement of barrier free design requirements are vested in the Department of Licensing and Regulatory Affairs.

The Department of Justice published revised regulations for Titles II and III of the Americans with Disabilities Act of 1990 “ADA” in the *Federal Register* on September 15, 2010. It is a civil rights act with no “grandfather clause” for exempting public facilities. These regulations adopted revised, enforceable accessibility standards called the *2010 ADA Standards for Accessible Design*, “2010 Standards” or “Standards”. The 2010 Standards set minimum requirements – both scoping and technical – for newly designed and constructed or altered state and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.



Accessible Floating Canoe Launch Proposed in the Plan for Shiatown and Geeck Parks

On September 26, 2013, the federal Architectural and Transportation Barriers Compliance Board (known as the Access Board) issued updated guidelines, entitled the Accessibility Guidelines for Outdoor Developed Areas. These guidelines are enforceable under the Architectural Barriers Act (ABA) Standards for federal agencies on November 26, 2013. They should eventually be adopted as enforceable standards for Title II and III agencies, but until that occurs, the existing ADA Standards must be followed when the two conflict. Included in the Outdoor Guidelines are technical provisions for the number and types of recreation facilities including camping facilities, picnic facilities, viewing areas, trails and beach access routes. While none of these guidelines has yet been adopted for Title II and III agencies, they represent the best information available on developing barrier free recreation facilities.

This Appendix section proceeds to ranking the Shiawassee County parks and their facilities. The ranking system suggested by the Michigan Department of Natural Resources Guidelines (2006) was used to evaluate the parks. The ranking system ranges from 1 to 5 and is described as follows:

1. None of the facilities meet accessibility guidelines;
2. Some of the facilities/park areas meet accessibility guidelines;
3. Most of the facilities/park areas meet accessibility guidelines;
4. The entire park meets accessibility guidelines; and
5. The entire park was developed/renovated using the principles of universal design.

Each of the County parks was evaluated using this ranking system. The Table below provides the result of this assessment.

Current and future park projects are designed to comply with accessibility guidelines and standards of the American with Disabilities Act (ADA). Current deficiencies regarding accessibility are mainly the result of older equipment or facilities which pre-date ADA standards. It is the intent of Shiawassee County Parks to retrofit these facilities with park upgrade and renovation projects. A sample list of planned park improvements with accessibility are:

- 1) P/H parking at new parking lots in Shiatown
- 2) Barrier free picnic tables in the pavilions
- 3) Barrier free pathways from parking areas to pavilions and playspaces
- 4) Accessible fishing pier at Shiatown
- 5) Accessible viewing decks at Shiatown
- 6) Accessible footbridge for Shiatown
- 7) Accessible trail on native prairie lands at Shiatown bottomlands
- 8) Accessible new trail sections at Henderson Park
- 9) Accessible trail exercise loops at Pine Grove, Geeck and Kerby Parks
- 10) Accessible natural play spaces in all parks where they are installed
- 11) Accessible paddleboat launches and landing at Geeck and Shiatown Parks
- 12) Accessible restroom facilities where restrooms are provided in the parks

ACCESSIBILITY EVALAUTION OF SHIAWASSEE COUNTY PARKS/Page 1 of 2

<i>Park Name</i>	<i>Rating</i>	<i>Comments</i>	<i>Park Improvement Design Actions</i>
PINE GROVE 90 % Level Terrain	1	Pavilion Access not barrier free	Construct access pathway
		Trail is level but not barrier free	Install firm surface trail
		No P/H Parking	Supply 2 P/H spaces
HENDERSON 80% Level Terrain	2	Pavilion A: P/H Parking signs & surface okay	
		No Play Area Access	Install firm surface pathways
		No Pathway to Pavilion	Install firm surface pathway
		Inadequate Table Space	Replace two tables for P/H; secure maneuvering space
		Several inaccessible Picnic sites	Make one site accessible
		Bathroom servicing Pavilion A and Pavilion B not barrier free	Remodel to accommodate
		Pavilion B: No P/H parking signs, or surface	Install signs and firm surface
		No Pathway to Pavilion	Install firm surface pathway
		No Pathway to Play Area	Install firm surface pathway
		Inadequate Table Space	Replace two tables for P/H; secure maneuvering space
		Pavilion C: P/H parking provided	
		No Pathway to Pavilion	Install firm surface pathway
		No Pathway to Play Area	Install firm surface pathway
		Bathroom is barrier free; no path	Install firm surface pathway
		Inadequate Table Space	Replace two tables for P/H; secure maneuvering space
		General Items: Trails not firm/ footbridge ramps too steep	Install firm surface trail; repair ramps
Some existing trail segments are exempt owing to terrain	all new planned trail segments are on level terrain		
LYTLE Park Areas on Level Terrain	1	No P/H parking	Install space at picnicking table/barbecue site
		Fence opening to picnic site too narrow	Widen opening
		P/H parking area surface rough	Top dress w/crushed limestone
		River viewing bench inaccessible	Install concrete pad at top of slope

ACCESSIBILITY EVALAUTION OF SHIAWASSEE COUNTY PARKS/Page 2 of 2

<i>Park Name</i>	<i>Rating</i>	<i>Comments</i>	<i>Park Improvement Design Actions</i>
SHIATOWN Park is mostly rolling terrain	2	West Park: No P/H Parking Signs, space or Surface	Install two compliant spaces
		No Pathway to Pavilion	Install firm surface pathway
		No pull-up tables	Install two compliant tables
		4" gap from land to pavilion surface	Ramp from land to surface
		Play area inaccessible	Install firm surface pathway
		Trails are terrain exempt	Future accessible trails in plans
		East Park: River Access Lot-No P/H Parking	Install P/H space w/sign; top dress parking surface
		Newberry Rd Lot-No P/H Space	Install P/H space w/sign; top dress parking surface
		No Pathway to Pavilion	Install firm surface pathway
		No Pathway to Play Area	Install firm surface pathway
		Bathroom not barrier free	Install barrier free bathroom
		Tables/Site Grade & Maneuvering are compliant	
KERBY	2	Pavilions A, B & C: No P/H Parking	Install 2 P/H spaces with sign & top dress lot with firm material
		No Pathways to Pavilions	Install firm surface pathways
		Picnic Tables & Maneuvering Space are Compliant	
		General: No Pathways to two play areas	Install firm surface pathways
		Restrooms are barrier free	
		Sidewalk to restrooms in depression and flooded after rain	Elevate sidewalk
GEECK Level Grade for Entire Park	2	No P/H Parking Spaces	Install two parking spaces at path entrance to each pavilion
		No firm surface to West pavilion	Install firm surface pathway
		Play areas inaccessible	Install firm surface pathway
		Parking Lot surface loose	Top dress P/H parking areas on lot with firm material
		East Pavilion Completely Compliant	

APPENDIX K: County Parks and Recreation Plan Destination Routes and Recreational Loop Routes To and From County Parks

Introduction. This Appendix section references routes for recreational road biking to and from County Parks. Contrast this focus with the County-wide connectivity map on Page 28 that features regional biking routes between urban areas and major parks. The ordinary rider safety precautions apply for country road cycling here there are no dedicated bike lanes or wider pavement roadways. Many of these roads have 24' pavement widths with narrow gravel shoulders. For the selected routes, that condition is offset by relatively lower traffic volumes. The suggested routes are deemed appropriate for adolescent and adult bicyclists. Nevertheless, the recreational benefits to that experience level offers rewarding and healthful outings as part of a park visit or transportation link to other open space areas.

Connectivity in this context means destination bicycle routes between county, state or local parks. Mileage information is provided. Recreation loop routes are bike loops starting and ending at a county park. The recreation routes are relatively shorter and designed intentionally so as a supplemental park activity to a county park visit. Below, one park biking concept at Kerby Park is featured with a number of bicycling options. It is recommended that, after review, revisions over time, and actual trial runs, that the eventual recommended routes are posted on an informational sign at the parking areas of the parks and the park system website. The entire list of 37 routes is posted on the County Parks website.

Illustration of Kerby Road Park Bicycling. Located near State Highway M-21, no routes advise use of that highway except for suggested crossings. There are two suggested recreational loop routes and three connectivity routes. Ambitious bikers could add other destinations to the connectivity routes; the three listed in this plan have proximity to destinations where other routes might begin. Below are two illustrations of bike rides (out of 37 mapped route options)...

Illustration Recreational Loop Ride #1: *Country Scenic Loop north—Length is 6.2 miles*

North on N. Kerby Road at Park Entrance to Copas Road;
West on Copas Road to Notnagle Road;
North on Notnagle Road to Wilkinson Road;
East on Wilkinson Road to N. Geeck Road;
South on N. Geeck Road to Shipman Road;
Southwest on Shipman Road to Kerby Park.

Appendix K (Continued): Recreational Loop Ride #1 at Kerby County Park (cont'd)

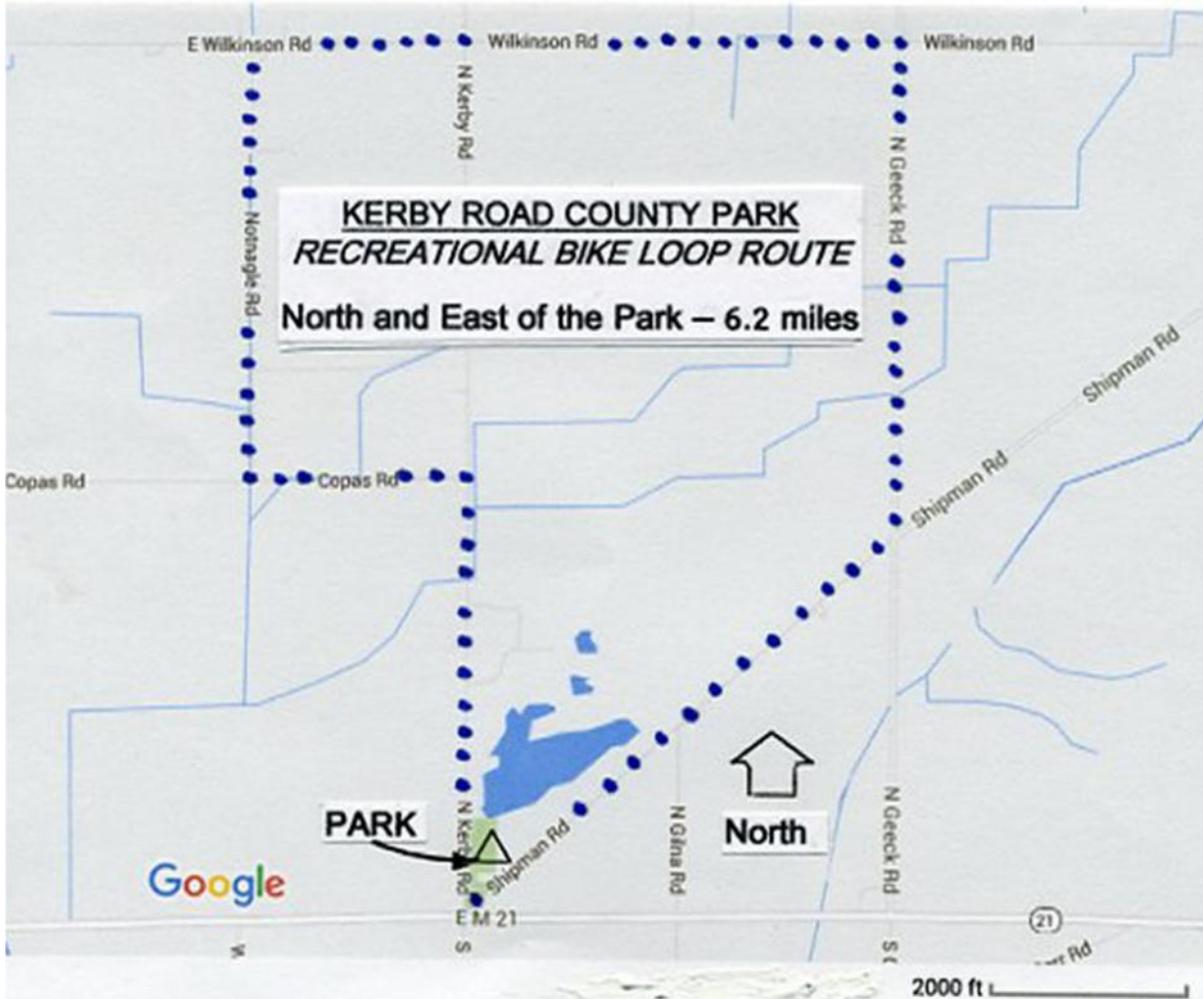


Illustration Recreational Loop Ride #2: Country Scenic Loop south—Length is 7.8 miles

Northwest on Shipman Road from Park Entrance to Gilna Road;
South on Gilna Road (proceed across M-21) to Serr Road;
East on Serr Road to S. Geeck Road;
South on S. Geeck Road to Lytle Road;
West on Lytle Road (intermediate stop at Lytle Rd. Park) to Kerby Road;
North on Kerby Road to Serr Road;
East on Serr Road to Gilna Road;
North on Gilna Road to Shipman Road;
Southwest on Shipman Road to Kerby Park.

APPENDIX L – THE SHIAWASSEE RIVER FISHING RESOURCE

Significant fishery - Based on records from the Michigan Department of Natural Resources (DNR) and the University of Michigan's Museum of Zoology, more than seventy species of fish have been collected from the Shiawassee River since the early 1900s. The middle segment of the Shiawassee River generally supports diverse and stable cool and warm water fish communities. Recreational sport fisheries are good for smallmouth bass, rock bass, northern pike, white sucker, redhorse suckers, and channel catfish. Recent DNR, Fisheries surveys at Chesaning indicate a significant spawning run of Saginaw Bay walleye which could become a benefitting species with the Shiawassee Town Dam removal, in conjunction with fish passage plans at Corunna Dam. The Shiawassee River has also been found to contain habitat that would be beneficial to lake sturgeon rehabilitation if accessible.

Endangered species habitat – The Michigan Natural Features Inventory indicates aquatic species for Shiawassee County and the Shiawassee River of concern are:

Fish - pugnose shiner (endangered), lake sturgeon (threatened)

Mussels – elk toe (special concern), slippershell (threatened)

Reptiles – Blanding's turtle (special concern)

In addition, The Michigan Wildlife Action Plan indicates for the Shiawassee River, species of special conservation need are:

black redhorse	lake sturgeon	striped shiner
brown bullhead	river chub	
golden redhorse	stonecat	

Key migratory fish habitat – In conjunction with the Corunna Dam removal, the removal of Shiawassee Town Dam would allow passage and new habitat for Saginaw Bay spawning walleye, as well as for all other native species. There have been at least two reports of lake sturgeon in the Shiawassee River received by DNR, Fisheries (Joe Leonardi, DNR Fisheries--personal communication). Additionally, the Shiawassee River has been identified as potential habitat for the State threatened lake sturgeon.

The fishing experience is enhanced with land management practices for continued or improved fish habitat. The best environments include natural shading (trees), dense riverside shrubs and ground cover extending into the waterway, fallen and partly submerged trees, gravel beds for laying eggs, and natural "holes" in the riverbed. The County parks can provide educational examples to the public about best management practices and benefit the quality of the fishing experience in the parks with these measures:

- Tree and shrub plantings
- Avoidance of mowing within at least 25 feet of the top of bank; together with tree plantings, follow with deep rooted shrub and ground cover plantings
- Erosion control programs at the park and upstream to avoid siltation and filling of natural deep spots in the river
- Erosion control and stormwater management to avoid siltation and street debris from covering gravel beds
- Avoidance of use of fertilizers in the park and upstream to prevent extreme water vegetation coverage of the waterways
- When opening the river for navigation, remove the least amount of tree fall area in the river for a navigation channel
- Dam removal where the purpose of the dams is outlived or the structures are deteriorated

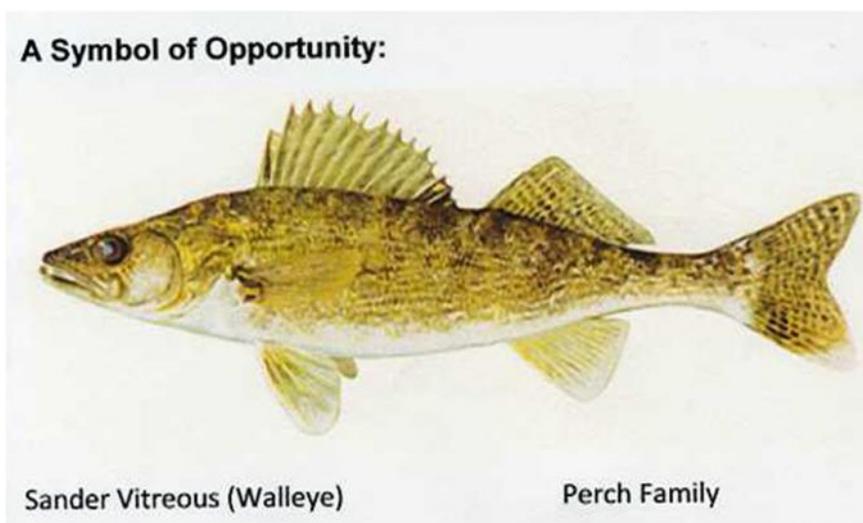
The inventory of freshwater fish species in the Shiawassee River is extensive and is offered in this Appendix as a reference tool for both the parks and educational benefit. The 54 fish are:

Black bullhead	Gizzard shad	Shorthead redhorse
Black crappie	Golden redhorse	Silver redhorse
Black redhorse	Greater redhorse	Smallmouth bass
Blacknose shiner	Green sunfish	Spotfin shiner
Blackside darter	Hornyhead chub	Stonecat
Blackstripe topminnow	Johnny darter	Striped shiner
Bluegill	Lake sturgeon	Trout perch
Bluntnose minnow	Largemouth bass	Walleye
Bowfin	Logperch	Warmouth
Brook silverside	Longear sunfish	White bass
Brown bullhead	Mimic shiner	Yellow bullhead
Central mudminnow	Northern hogsucker	Yellow perch
Central stoneroller	Northern pike	Channel catfish
Pumpkinseed	Common carp	Quillback
Common shiner	Rainbow darter	Common white sucker
Redfin shiner	Creek chub	River chub
Emerald shiner	Rock bass	Fathead minnow
Roseyface shiner	Freshwater drum	Sand shiner

Invasive species are not deemed a native fish as are those in the above list. The invasives include:

- Oriental weatherfish (released from aquariums) upstream of the Byron Millpond
- Round Goby—colonized in the whole watershed and especially adverse to small and largemouth bass
- Zebra mussel—not a fish but harmful to fisheries
- Sea lamprey—migrates to the Shiawassee Dam from Saginaw Bay. Treated every five years with lampricide, a process that will continue after dam removal is completed in 2016

Another mention of water quality programming includes the MDNR fishery survey conducted every five years and the Friends of the Shiawassee River stream team macro-invertebrate surveys from Byron to Henderson—an annual event. The latter survey is an indicator of the health of the fishery. These information sources offer both an evaluation tool for past best management practices and a recommendation for prioritization of increased best management practices into the future.

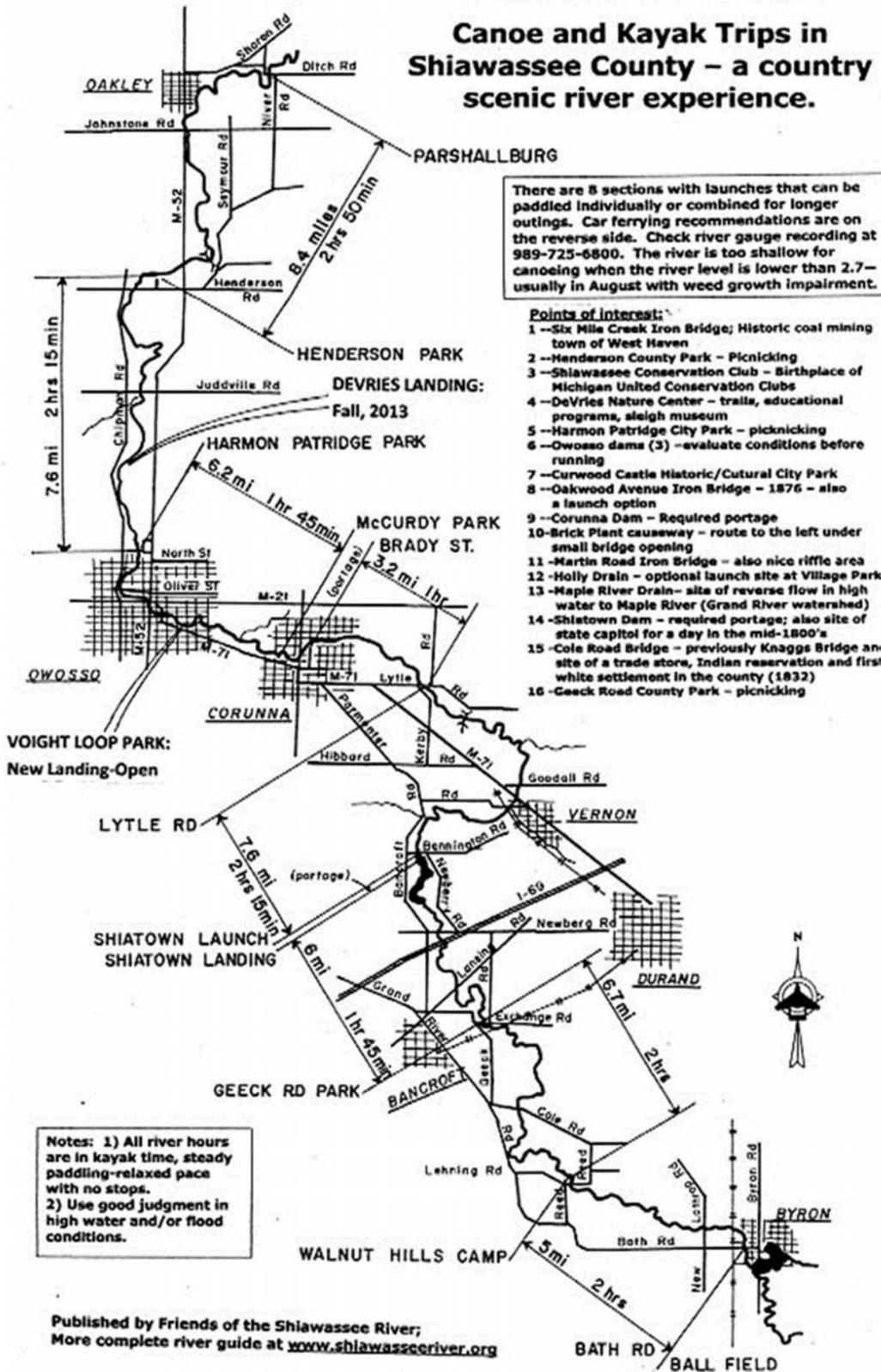


Newest arrival at Henderson and Pine Grove Parks since Chesaning Dam Removal

APPENDIX M SHIAWASSEE RIVER HERITAGE TRAIL PADDLE BOATING GUIDE

SHIAWASSEE RIVER

Canoe and Kayak Trips in
Shiawassee County – a country
scenic river experience.



APPENDIX N

REQUIREMENTS FOR A NATIONAL PARK SERVICE NATIONAL WATER TRAIL

The Plan calls for the achievement of national recognition of the Shiawassee River as a National Water Trail. Many requirements have been met. The five County Parks contribute well to this entitlement that few rivers in the country have achieved. It is beneficial for the working master plan to offer a reference for Parks & Recreation Commissioners to employ in advancing a nomination.

What are the National Water Trail Criteria and Best Management Practices?

As a subset of the national recreation trail designation, trails in the National Water Trails System must meet the four criteria for National Recreation Trail designation as follows:

1. The trail (and its access points) must be open to public use and be designed, constructed, and maintained according to best management practices, in keeping with the anticipated use. Water trail access points that demonstrate state-of-the-art design and management are especially encouraged to apply for national water trail designation.
2. The trail is in compliance with applicable land use plans and environmental laws.
3. The trail will be open for public use for at least 10 consecutive years after designation.
4. The trail designation must be supported by the landowner(s), (public or private), on which access points exist.

In addition to the national recreation trails criteria, a designated water trail **must** incorporate the following best management practices:

- **Recreation Opportunities:** The water trail route has established public access points that accommodate a diversity of trip lengths and provide access to a variety of opportunities for recreation and education.
- **Education:** The water trail users are provided with opportunities to learn about the value of water resources, cultural heritage, boating skills, and outdoor ethics.
- **Conservation:** The water trail provides opportunities for communities to develop and implement strategies that enhance and restore the health of local waterways and surrounding lands.
- **Community Support:** Local communities provide support and advocacy for maintenance and stewardship of the water trail.
- **Public Information:** The public is provided with accessible and understandable water trail information, including details for identifying access and trail routes; cultural, historic, and natural features; hazards; and water quality. The water trail is promoted to the community and broad national audience.
- **Trail Maintenance:** There is a demonstrated ability to support routine and long-term maintenance investments on the water trail. Facilities are designed, constructed, and maintained by incorporating sustainability principles.
- **Planning:** Maintain a water trail plan that describes a vision, desired future conditions, and strategies to strengthen best management practices.

APPENDIX O

ECONOMIC, HEALTH and ENVIRONMENTAL BENEFITS of PARKS, TRAILS and OPEN SPACE

To justify investment of resources public bodies must be convinced that parks and recreation efforts deliver public benefits, meaning benefits that apply to most people in a community. The benefits attributed to parks and open spaces are organized into three categories that are also subdivided into TEN PUBLIC BENEFITS.

I. Economic Development.

1. Attracting tourists.
 - ✓ Available attractions
 - ✓ Parks and recreation system attractions
 - ✓ Non-profit “partners” attractions
2. Enhancing real estate values.
 - ✓ People will pay more to live close to natural park areas.
 - ✓ Subsequent higher property taxes to local governments
 - ✓ Aggregate payment to local government often sufficient to pay annual debt charges required to pay bonds for the park improvements.
3. Attracting businesses.
 - ✓ Parks attract highly educated professionals
 - ✓ Quality of life is a major component for where people choose to live
4. Attracting retirees.
 - ✓ A clean growth industry is the increasing number of relatively affluent, active retirees.
 - ✓ The decision to settle is guided by two factors: climate and recreational opportunities.

II. Alleviating Social Problems.

5. Preventing youth crime.
 - ✓ Early stimulant in the parks movement of the twentieth century.
 - ✓ Social support from adult leaders
 - ✓ Intense and individualized attention to participants
 - ✓ A sense of group belonging
 - ✓ Relative benefit of return on investment versus vandalism, crime, and idleness
6. Healthy lifestyles.
 - ✓ Key to controlling health care costs is prevention
 - ✓ Parks and recreation facilitate improvements in physical fitness
 - ✓ Parks and recreation facilitate positive emotional, intellectual, and social experiences
 - ✓ People with wellness have a proclivity to act during their free time, rather than merely to be acted on.
7. Environmental stress.
 - ✓ Parks in urban settings have a restorative effect that releases the tensions of modern life, especially in urban settings.

- ✓ The cost of environmental stress in terms of work days lost and medical care is likely to be substantially greater than the cost of providing and maintaining parks.

8. Unemployment and underemployment.

- ✓ Basic physiological needs that many people derive from work are difficult to acquire when they are working in low-level service jobs that are unfortunately the major growth positions in the economy. For unemployed such needs may be totally unmet.
- ✓ The needs are self-esteem, peer group recognition, ego satisfaction from achievement, a desire to be successful, excitement and self-worth.
- ✓ For a growing number of people these needs will be fulfilled in their familial or leisure milieus or they will not be fulfilled at all.

III. Environmental Stewardship.

9. Historical preservation.

- ✓ Preserving historical remnants as part of a parkscape offers lingering evidence to remind people of what they once were, who they are, what they are and where they are.

10. The natural environment.

- ✓ People turn to the natural environment, preserved by human action as a park, wilderness or wildlife refuge for something they cannot get in the built environment.
- ✓ Parks play a role in preserving our natural life support system—the green infrastructure of a region connected by waterways, wetlands, woodlands, greenways, conservation lands and wildlife habitat.
- ✓ Green infrastructure is planned and protected before development.

With a few high profile exceptions, Shiawassee County parks have quietly and reliably improved in small increments to supply many of the benefits from this list. This plan believes that the parks can do better and offers avenues for improvement.

DETAILS ON ECONOMIC BENEFITS OF TRAILS.

160 million Americans are participating in outdoor adventure activities that contributes \$730 billion to the U.S. economy and supports 6.5 million jobs across the United States. Active outdoor recreation retail sales are second only to the telecommunications industry. “Leisure literacy” is increasing on a national level and activities, together with their variety, are on the rise. Further, baby boomers are active retirees. Activities reporting greatest growth are snowshoeing (+83.4%), kayaking (+23.3%) and trail running (+22.1%). It has also been shown that 1 in 4 Americans choose their vacation destination based on available outdoor activities.

In recent nationwide surveys by the National Association of Realtors and the National Association of Home Builders, home buyers ranked trails as the second most important amenity among a list of 18 choices. Quite, safe streets and neighborhoods ranked #1.

An MDOT 2014 study found that the total annual economic impact of bicycling equals \$668 million. Sixty-three million dollars of that figure comes from bicycling retail revenue and thirty-eight million is the total annual spending associated with bicycling events and vacations in Michigan. Thirty-nine percent of state residents stated that road bikes were their primary bicycle type while thirty-one percent chose mountain bikes.

In Midland, Michigan, a study of the Pere Marquette Trail found that 8 of 10 trail users also visited a business along or near the trail. Businesses along the Hart-Montague Trail a 22-mile trail in West Michigan, found that their sales revenue increased 25 to 30 percent within the first six months of the trail's existence.

In a 2010 State of the State survey conducted by the MSU Institute for Public Policy and Social Research, over 80 percent of respondents indicated trails and parks were *somewhat to very important* to economic recovery.

Based on Michigan's 2007 survey, the Michigan Horse Council estimates the horse industry contributes \$2.5 billion to the state's economy and generates more than \$40 million in taxes each year. A 2006 MSU study estimated an approximately \$351 million in direct and secondary economic impact generated annually by equestrian trail riders. Recreational horseback riders are growing in numbers faster than any other segment of the horse industry.

DETAILS ON HEALTH IMPACT OF TRAILS AND OPEN SPACE.

The benefits of exercise are well-known. Exercise, such as that provided by most trail activities, is a key component of any weight loss effort, protection against developing diabetes, improvement of symptoms of mild to moderate depressions at a magnitude comparable to some pharmacological agents, and a positive influence in warding off premature death.

Trails provide natural, scenic areas that cause people to want to be outside and physically active. In southeastern Missouri, 55% of trail users stated they are exercising more now than before the existence of a nearby trail.

An earlier section of the plan reports on a strategic plan of our local health department that rated obesity as the top concern for community public health. Other indicators raising concern are:

- Top US military officers report that 27 percent of young adults are too overweight to serve in the military. The percent who were rejected for the military for overweight reasons rose by 70 percent from 1995 to 2008. This statistic is being raised as a cause for national security concerns.
- University Hospitals in Cleveland, Ohio research arm indicates that an inactive lifestyle in youth and middle age may contribute to an increased risk of dementia in old age.
- The cost of physical inactivity among Michigan citizenry is estimated at nearly \$9 billion per year. When stated in per capita terms, the cost of physical inactivity for each Michigan adult resident is \$1,175 per year.
- In a recent study, some 70% of US mothers reported that they played outside nearly every day as children; only 31% of their children do.
- Per capita park visits have been dropping since the dawn of the digital era.
- Only about 10% of American teens spend time outside every day.
- Harvard School of Public Health says American adults spend less time outdoors than they do inside vehicles—less than 5% of their day.

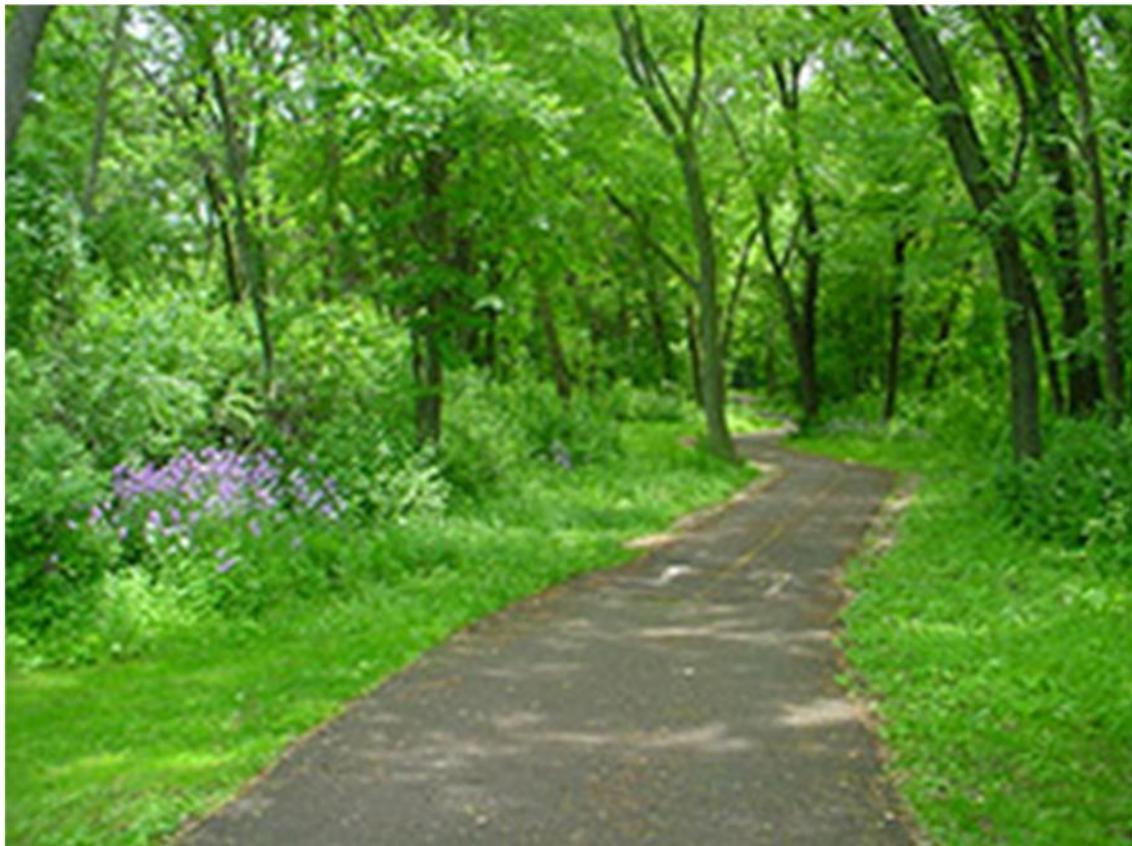
Some positive perspectives on outdoor play and exercise for mental health benefits are reported in National Geographic Magazine, June 2016 issue. Some key points are:

- David Strayer, University of Utah cognitive psychologist: "When we slow down, stop the busywork, and take in beautiful natural surroundings, not only do we feel restored, but our mental performance improves too."
- Strayer proceeds to explain that nature nurtures us. The ability to voluntarily focus attention and ignore distractions is crucial to solving problems and completing tasks. modern life sometimes requires more of the resource that we have—and once it's depleted, prolonged and concentrated effort leads to mental fatigue, loss of effectiveness and stress.
- Forest walks in Switzerland for kindergartners fosters more self-confidence and an independent spirit.
- Forest walks can decrease our stress hormone by as much as 16%.

- Attending to stimuli in peaceful, natural environments—trees, flowing water, nature sound—is a different type of experience. It doesn't require a prolonged effort or an act of will to avoid distractions. Researchers say this kind of focus allows the brain to disengage and restore its capacity for directed attention. Research reveals that nature can improve creativity by up to 50%.
- At the University of California-San Francisco Children's Hospital, pediatricians are writing prescriptions for young patients and their families to visit nearby parks. They use marketing tools as well with maps and brochures. The hospital works with local transit to provide transportation to parks and programs for entire families. As one physician quoted a Korean proverb, "body and soil are one."
- In a Finland study it was found that a 40 to 50 minute walk is enough for physiological changes and mood changes and improved attention. It recommends "five doses" a month.
- Environmental psychologists at the University of Michigan explain that it's the visual element in natural environments—sunsets, streams, wildflowers, butterflies—that reduce stress and mental fatigue. Such stimuli promote a gentle, soft focus that allows our brains to wander, rest and recover from the "nervous irritation" of city and suburban life.

A 2000 Michigan State University survey about the Pere Marquette trail in Midland, Michigan, found that 73% of trail users reported improvement in their health due to the trail.

The evidence is mounting about mental and physical health benefits, and the public response has been and can be expanded trail development and maintenance, access to natural resource areas of a community, and marketing opportunities.



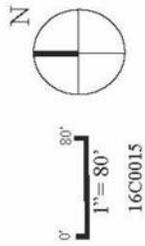
Park pathways for exercise, walking, biking, running and in-line skating

APPENDIX P-1: SITE PLAN FOR SHIATOWN COUNTY PARK

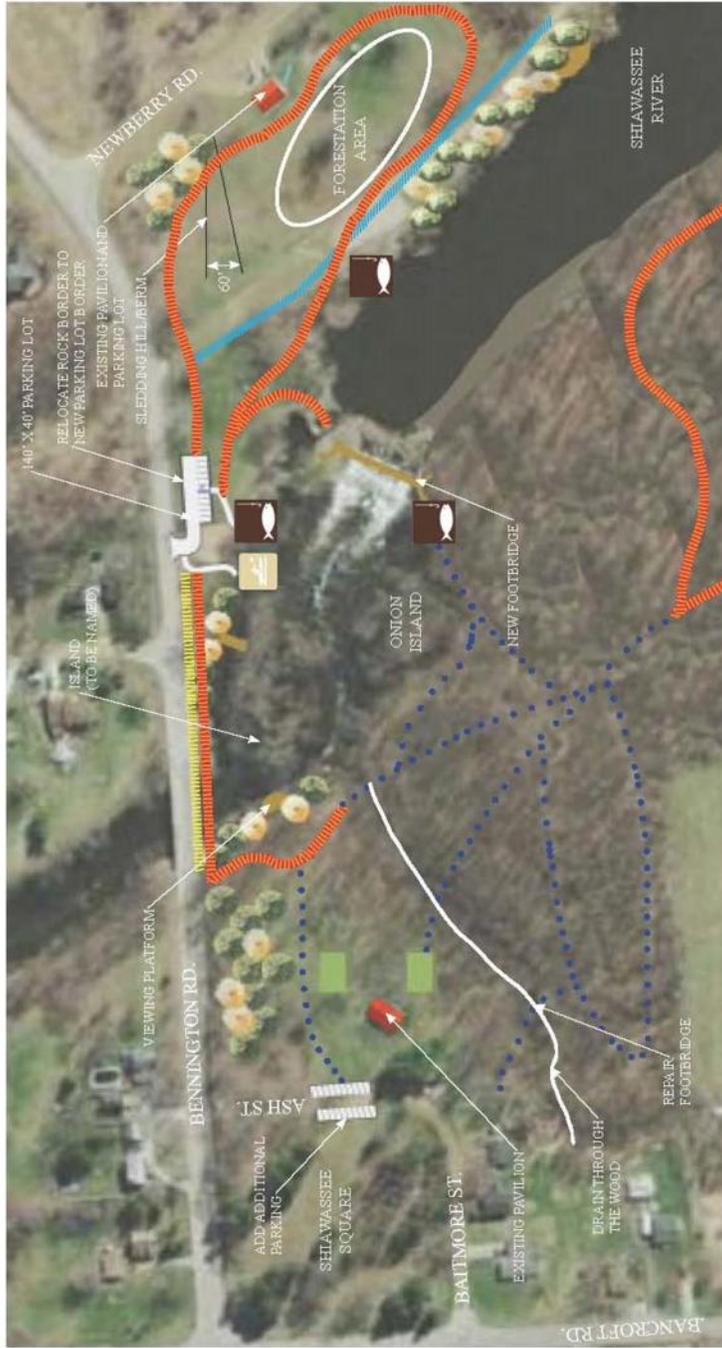


The overall park plan that includes the newly acquired bottomlands of the former reservoir. Efforts are encouraged to convert the bottomlands to a native prairie grassland before invasive species dominate the landscape.

APPENDIX P-1: SHIATOWN COUNTY PARK SITE PLAN—NORTH PARK DETAIL



SHIATOWN COUNTY PARK SITE PLAN DETAIL
SHIawassee COUNTY, MICHIGAN



- LEGEND:**
- EXISTING TRAILS
 - PATHWAY/RAMP/SIDEWALK
 - CONNECTION TO BENNINGTON ROAD
 - BRIDGE
 - PROPOSED TRAILS
 - DRIVE/SWALE FILL AREA
 - FISHING PLATFORM
 - CANOE LAUNCH

MARCH 2016
 ROWE PROFESSIONAL SERVICES COMPANY

The North Park detail map of the Shiatown Park Site Plan displays details of existing and planned features. The principal additions include:

- A footbridge connecting the east and west parks at the former dam location.
- A trail system that provides a one mile walk about the park's scenic variety of settings.
- A new canoe launch with an expanded parking area.
- A reforestation plot at the east park.
- A sledding hill at the east park.
- Four fishing piers, three to be enhanced existing access points and one to be located upstream (see other map) across from the erosion control installations.
- Two bluff viewing decks for scenic overlooks and nature viewing
- A native plant restoration area on the former reservoir bottomlands.
- A protected walk zone on Bennington Road to connect the two parks.



Barrier Free Fishing Platforms—Pere Marquette River, MI

APPENDIX Q

FUNDING RESOURCES FOR PARKS IMPROVEMENT

Local units of government may apply for State Funding at the state level, the Land and Water Conservation Fund (LWCF), the Michigan Natural Resources Trust Fund (MNRTF) and the Recreation Passport Grants. These grants continue to be the primary funding sources for parkland acquisition and development. Other funding sources are mentioned in this section of the Plan.

The MNRTF provides funding for the purchase and development of parkland for natural resource based preservation and recreation. Goals of the program are to:

- Protect natural resources and provide for their access, public use, and enjoyment;
- Provide public access to Michigan's water bodies, particularly the Great Lakes, and facilitate their recreation use;
- Meet regional, county, and community needs for outdoor recreation opportunities;
- Improve the opportunities for outdoor recreation in urban areas; and,
- Stimulate Michigan's economy through recreation related tourism and community revitalization.

Grant proposals must include a local match of at least 25 percent of the total project cost. There is no minimum or maximum for acquisition projects. For development projects, the minimum funding request is \$15,000 and the maximum is \$300,000. Applications are due by April 1 for acquisition projects and development projects.

The LWCF is a federal appropriation to the National Park Service, who distributes funds to the Michigan Department of Natural Resources for development of outdoor recreation facilities. The focus of the program has recently been on trail way systems and other community recreation needs such as playgrounds, picnic areas, skate parks, ball fields, soccer fields, and walking paths. Minimum grant requests are \$30,000 and maximum grant requests are \$100,000. The match percentage must be 50 percent of the total project cost. Applications are due no later than April 1, each year.

Recreation Passport Grants: PA 32 of 2010 created the Local Public Recreation Facilities Fund to be used for the development of public recreation facilities for local units of government. Money for this fund is derived from the sale of the Recreation Passport which replaces the resident Motor Vehicle Permit (MVP) — or window sticker — for state park entrance. The passport will be required for entry to state parks, recreation areas and boating access sites. The first \$12,730,000.00 will be distributed to replace lost revenue from the elimination of the motor vehicle permit and boating access site permits, as well as to pay for administration by the Secretary of State. Ten percent of remaining revenue will be used to fund the Recreation Passport local grant program.

The grant program may only be used for local development projects. The program is focused on renovating and improving existing parks, but the development of new parks is eligible. Minimum Request \$7,500/Maximum Request \$45,000. The required local match is 25% and local match may include "soft" sources, not just cash.

Also at the state level, the Michigan Department of Transportation (MDOT) provides important funding opportunities for counties. **Michigan Transportation Enhancement Grants** facilitate capital improvements for non-motorized transportation (e.g. foot and bicycle trails), as well as transportation aesthetics (e.g. roadside landscaping), improvements in transportation related water quality, and historic preservation related to transportation. One important application of such funds is for the preservation and development of abandoned railway corridors into conversion for hiking, bicycling and in-line skating. This is also a priority use of the MNRTF. In total, approximately \$20 million is annually available on a competitive basis in Transportation Enhancement Grants.

In addition, Michigan Public Act 51 of 1951 as amended, commonly referred to as the **Michigan Transportation Fund Act**, mandates in Section 247.660k that counties use a reasonable amount, but not less than 1% of the funds they receive annually from the Michigan Transportation Fund, for non-motorized

transportation services and facilities. This may include facilities established in conjunction with existing roads, such as bike lanes, as well as those separate from roads, such as developing and maintaining a rail-trail.

Community Forestry Grants. Local units of government are eligible for up to \$20,000 in any given year for assistance in tree planting programs.

Foundation Grants and Philanthropic Donations. Park facilities, in contrast to general support for parks, are attractive places for foundations and philanthropic gifts. With a parks plan in place, an official statement of the local government, investments by these entities are secure; they have passed public support tests through hearings and input. It has been reported recently (Hillsdale College) that only 14 percent of charitable giving in our country comes from foundations, and only five percent from corporations. The rest comes from individuals, and the bulk of it comes from small givers at an average rate of \$2,500 per household per year. The most popular categories of donations are environmental, youth recreation and exercise, accessibility, and play spaces.

Waste Management County Green Fund. The Waste Management Lennon Landfill incorporates a tipping fee revenue into its fee structure and annually grants monies to the County for green programs---hazardous waste collections, tire collections, recycling and county parks. Some funds may be accumulated over a period of years to build a sufficient local match for the more significant and desired park improvements.

Volunteer Labor, Equipment and Materials. Any number of actions in the Parks Plan may be accomplished in their entirety through volunteers. It is the duty of the Parks Commission to communicate and market opportunities for citizens and entities to exercise their community service spirit in the county parks.

Land Exchange. The county may use land resources in a park that reflect excess real estate where a better adjoining parcel in the system might become available.

APPENDIX R

PHILANTHROPIC, GIFTS, and VOLUNTEER DONATION OPPORTUNITIES

“A man has made at least a start on discovering the meaning of human life when he plants shade trees under which he knows full well he will never sit.” Elton Trueblood

The 2016-2020 Shiawassee County Parks, Recreation and Open Space Plan includes many tangible, desired improvements that are compatible with philanthropy and volunteerism. Each park contains goals and actions that range from small scale to large scale upgrades for the public’s enjoyment of the outdoors.

It is believed that the attraction to the County Parks--and the official statement that is the Parks, Recreation and Open Space Plan--for gifts and donations is a credible outlet for support from a variety of sources. The basis for that optimism is multi-faceted and includes:

- A long-term Shiawassee County commitment to maintenance, repairs and operations that demonstrate ongoing appreciation for contributed time and gifts;
- The objective to provide alternative and convenient places for outdoor exercise and the beneficial effects from leading healthy lifestyles;
- The natural character of the county park landscapes, especially the five waterfront parks, to gain close-to-home access to communing with nature;
- The available spectrum of donations that range from safe cash allocations to the Parks through the County Treasurer at one end of the spectrum to hands-on park improvements with ongoing volunteer operational activity at the other end—with all the variable options in between;
- The Park Plan’s contemporary focus on environmental qualities for public access to natural landscapes with attendant educational opportunities and outlets for personal expression of values;
- The MDNR-approved Plan’s eligibility for the many grants-in-aid programs that provide generous funding ratios yet still require local cash infusions;
- The Park’s prime suitability to the four highest expressed interests of the public during their leisure time outdoors—that is, walking/hiking, fishing, bicycling and paddle boating, and;
- The role the County Parks serves for accommodating the outdoor experience objectives of travelers and visitors to the area.

The list of needs and desires for the Parks is organized into categories of giving. The categories are inherently compromised, in part, because they can be looked upon in other ways where a blend of means for public contributions is possible. For example, a cash gift for a park bench might include a work-session for an organization, or tree plantings might be followed with caretaking in the early years of growth. Users of this resource are encouraged to think freely about those mix-and-match possibilities with expectations for others’ involvement, endowment reserves for upkeep, and hands-on experiences.

- I. Park Facilities that benefit most from cash contributions through the County Treasurer:
 - a. Local funding campaigns to match government grant requirements for...
 - i. A new footbridge over the former Shiatown Dam site to connect the East and West Shiatown Parks
 - ii. The restoration of the 6-Mile Creek 1887 iron bridge in West Haven
 - iii. Barrier Free canoe launches at Geeck Road and Shiatown County Parks
 - iv. Osprey Nest at Shiatown County Park
 - v. Native Grasses and Wildflowers prairie at Shiatown bottomlands
 - vi. Viewing platforms at Shiatown and Kerby Parks
 - vii. Barrier Free fishing platform at Shiatown

- viii. Property acquisition for a Six-Mile Creek West Haven County parklet and expansion at Pine Grove County Park into the adjoining bottomlands
 - b. Trees along riversides and park roadsides, reforestation areas in Shiatown and Kerby Parks, and shade trees interspersed through the Parks
 - c. Park benches along all the trails and at scenic overlooks
 - d. Play equipment upgrades at Henderson Park
 - e. Exercise loop paths at Geeck, Henderson, Shiatown, and Kerby Parks
 - f. Barrier free picnic tables for all pavilions

- II. Park Facilities that benefit from any combination of cash, work sessions, equipment donations, and materials donations with a lesser reliance on grants:
 - a. Parking Lots at Shiatown’s East and West parks—grading, gravel and rock boundary
 - b. Park bench installations and donations
 - c. Construction of viewing platforms at Shiatown and Kerby parks
 - d. Construction of Nature play areas near all pavilions and playgrounds
 - e. Construction of information kiosks in all parks for bike routes, park rules, pavilion rentals, and paddle boating
 - f. Planting and maintenance of monarch butterfly migration gardens in all parks
 - g. Tree plantings along riversides, park reforestation areas, shade trees, and roadsides
 - h. Native plantings and maintenance along riversides and the Shiatown bottomlands prairie
 - i. Barrier free accessibility pathways to all pavilions and play areas

- III. Volunteerism Emphasis
 - a. Participation in Friends of the Shiawassee River Stream Team water quality sampling sites at County Parks
 - b. Cleanliness and clean-up campaigns—special event and routine services
 - c. Maintenance of the Walking Trails
 - d. Maintenance of tree plantings, butterfly gardens, and native plant areas

Contributors to the Parks are advised to contact the Shiawassee County Buildings and Grounds Superintendent staff office. To identify locations for engagement, the Parks website contains detailed site maps of the parks in the Parks Plan document.

There are relatively close-by Native Plant outlets available for planning and planting Shiatown’s bottomlands, river shoreline deep-rooted grasses, wildflowers and shrubs, and monarch butterfly migration gardens. The following list is a sampling with no intent to endorse their products or services:

- 1) Natural Resource Conservation Service, Owosso – Annual Spring Native Plant Sale (989-723-8263, ext 3)
- 2) Prairie Moon Nursery Catalog—www.prairiemoon.com
- 3) Designs By Nature, Laingsburg (517-651-6502)
- 4) Wildtype Native Plant Nursery, Mason (517-244-1140)
- 5) Native Plant Nursery, Ann Arbor (734-677-3260)
- 6) Michigan Wildflower Farm, Portland (wildflowers@voyager.net)
- 7) Hidden Savanna Nursery, Kalamazoo (info@hiddensavanna.com)
- 8) Four Seasons Nursery, Traverse City (231-932-7400)

Shiawassee County-based landscape nurseries are also a source for special orders and potentially an inventory of some native plants, especially ground cover.

APPENDIX S (Page 1 of 3)

MDNR GRANT CLOSURE REPORT – PINE GROVE COUNTY PARK



Michigan Department of Natural Resources - Grants Management

PUBLIC OUTDOOR RECREATION GRANT POST-COMPLETION SELF-CERTIFICATION REPORT

*This information required under authority of Part 19, PA 451 of 1994, as amended,
the Land and Water Conservation Fund Act of 1965, 78 Stat. 897 (1964); and Part 715, of PA 451 of 1994, as amended.*

GRANT TYPE: MICHIGAN NATURAL RESOURCES TRUST FUND CLEAN MICHIGAN INITIATIVE
 (Please select one) LAND AND WATER CONSERVATION FUND RECREATION PASSPORT BOND
 FUND

GRANTEE: SHIAWASSEE COUNTY

PROJECT BF 89-510 PROJECT TYPE: ACQUISITION

PROJECT TITLE: PINE PARK

PROJECT SCOPE: ACQUIRE 20 ACRES FOR A NEW COUNTY PARK

TO BE COMPLETED BY LOCAL GOVERNMENT AGENCY (GRANTEE)

Name of Agency (Grantee) SHIAWASSEE COUNTY	Contact Person PHILIP HATHAWAY	Title PLANNING CONSULTANT
Address 201 N. SHIAWASSEE STREET	Telephone 989-277-7846	
City, State, ZIP CORUNNA, MI 48817	Email philhath@gmail.com	

SITE DEVELOPMENT

Any change(s) in the facility type, site layout, or recreation activities provided?
 If yes, please describe change(s). Yes No

Has any portion of the project site been converted to a use other than outdoor recreation? If yes, please describe what portion and describe use. (This would include cell towers and any non-recreation buildings.) Yes No

Are any of the facilities obsolete? If yes, please explain. Yes No

SITE QUALITY

Is there a park entry sign which identifies the property or facility as a public recreation area?
 If yes, please provide a photograph of the sign. If no, please explain. Yes No
Park is temporarily decommissioned until maintenance funding is restored

Are the facilities and the site being properly maintained? If no, please explain. Yes No

Is vandalism a problem at this site? If yes, explain the measures being taken to prevent or minimize vandalism. Yes No

APPENDIX S (PAGE 2 OF 3) – MDNR Grant Closure Report—Pine Grove Park

POST COMPLETION SELF-CERTIFICATION REPORT - CONT'D

Is maintenance scheduled on a regular basis? If yes, give schedule. If no, please explain. Yes No
Except for mowing park entrance right-of-way area, park is decommissioned. Also the balance of the park is meadow and woodlot and has the appearance of a cared-for park.

GENERAL

Is a Program Recognition plaque permanently displayed at the site? If yes, please provide a photograph. (Not required for Bond Fund Grants) Yes No N/A

Is any segment of the general public restricted from using the site or facilities? (i.e. resident only, league only, boaters only, etc.) If yes, please explain. Yes No

Is a fee charged for use of the site or facilities? If yes, please provide fee structure. Yes No

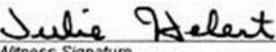
What are the hours and seasons for availability of the site?

Year-round

COMMENTS (ATTACH SEPARATE SHEET IF MORE SPACE IS NEEDED)

APPENDIX S (Page 3 of 3)—MDNR Grant Closure Report – PINE GROVE PARK

POST COMPLETION SELF-CERTIFICATION REPORT - CONT'D

CERTIFICATION		
<i>I do hereby certify that I am duly elected, appointed and/or authorized by the Grantee named above and that the information and answers provided herein are true and accurate to the best of my personal knowledge, information and belief.</i>		
Philip B. Hathaway, Pres. Town Plans Please print	 Grantee Authorized Signature	1/21/16 Date
Julie Hebert, Ex Asst; Shiawassee Cnty Please print	 Witness Signature	1-21-16 Date

Send completed report to: POST COMPLETION GRANT INSPECTION REPORTS
GRANTS MANAGEMENT
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
PO BOX 30425
LANSING MI 48909-7925

APPENDIX T (Page 1 of 3)

MDNR GRANT CLOSURE REPORT – HENDERSON COUNTY PARK



Michigan Department of Natural Resources - Grants Management

PUBLIC OUTDOOR RECREATION GRANT POST-COMPLETION SELF-CERTIFICATION REPORT

*This information required under authority of Part 19, PA 451 of 1994, as amended,
the Land and Water Conservation Fund Act of 1965, 78 Stat. 897 (1964); and Part 715, of PA 451 of 1994, as amended.*

GRANT TYPE: MICHIGAN NATURAL RESOURCES TRUST FUND CLEAN MICHIGAN INITIATIVE
(Please select one) LAND AND WATER CONSERVATION FUND RECREATION PASSPORT BOND
FUND

GRANTEE: SHIAWASSEE COUNTY

PROJECT 26-00083 PROJECT TYPE: Park Improvements

PROJECT TITLE: Henderson Park Improvements

PROJECT SCOPE: New Facilities--Canoe Launche, Pavilion, Stairway, Restroom, Pier

TO BE COMPLETED BY LOCAL GOVERNMENT AGENCY (GRANTEE)

Name of Agency (Grantee) SHIAWASSEE COUNTY	Contact Person PHILIP HATHAWAY	Title PLANNING CONSULTANT
Address 201 N. SHIAWASSEE STREET	Telephone 989-277-7846	
City, State, ZIP CORUNNA, MI 48817	Email philhath@gmail.com	

SITE DEVELOPMENT

Any change(s) in the facility type, site layout, or recreation activities provided?
If yes, please describe change(s). Yes No

No evidence of a fishing pier having been constructed

Has any portion of the project site been converted to a use other than outdoor recreation? If yes, please describe what portion and describe use. (This would include cell towers and any non-recreation buildings.) Yes No

Are any of the facilities obsolete? If yes, please explain. Yes No

SITE QUALITY

Is there a park entry sign which identifies the property or facility as a public recreation area?
If yes, please provide a photograph of the sign. If no, please explain. Yes No

Are the facilities and the site being properly maintained? If no, please explain. Yes No

Is vandalism a problem at this site? If yes, explain the measures being taken to prevent or minimize vandalism. Yes No

Appendix T MDNR Grant Closure Report – Henderson Park (Page 2 of 3)

POST COMPLETION SELF-CERTIFICATION REPORT - CONT'D

Is maintenance scheduled on a regular basis? If yes, give schedule. If no, please explain. Yes No
Mowing, cleaning, and road grading are maintenance items secheduled for mowing as rainfall dictates, cleaning bi-weekly or as needed and road grading as needed.

GENERAL

Is a Program Recognition plaque permanently displayed at the site? If yes, please provide a photograph. (Not required for Bond Fund Grants) Yes No N/A

Is any segment of the general public restricted from using the site or facilities? (i.e. resident only, league only, boaters only, etc.) If yes, please explain. Yes No

Is a fee charged for use of the site or facilities? If yes, please provide fee structure. Yes No
\$50 per pavilion event use

What are the hours and seasons for availability of the site?

Daytime only from Mid-April to Mid-October

COMMENTS (ATTACH SEPARATE SHEET IF MORE SPACE IS NEEDED)

APPENDIX T—MDNR Grant Closure Rpt. – Henderson Park (Page 3 of 3)

POST COMPLETION SELF-CERTIFICATION REPORT - CONT'D

CERTIFICATION		
<i>I do hereby certify that I am duly elected, appointed and/or authorized by the Grantee named above and that the information and answers provided herein are true and accurate to the best of my personal knowledge, information and belief.</i>		
Philip B. Hathaway, Pres. Town Plans Please print	<i>Philip B. Hathaway</i> Grantee Authorized Signature	1/21/16 Date
Julie Hebert, Ex Asst; Shiawassee Cnty Please print	<i>Julie Hebert</i> Witness Signature	1-21-16 Date

Send completed report to: POST COMPLETION GRANT INSPECTION REPORTS
GRANTS MANAGEMENT
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
PO BOX 30425
LANSING MI 48909-7925



LWCF Commemorative Sign (bottom center of Park Sign) for Grant # 26-00083.

APPENDIX U -- PLAN CERTIFICATION CHECKLIST

Michigan Department of Natural Resources - Grants Management



COMMUNITY PARK, RECREATION, OPEN SPACE, AND GREENWAY PLAN CERTIFICATION CHECKLIST

By Authority of Parts 19, 703 and 716 of Act 451, P.A. 1994, as amended, submission of this information is required for eligibility to apply for grants

INSTRUCTIONS: Complete, obtain certification signatures and submit this checklist with a locally adopted recreation plan.

All recreation plans are required to meet the content and local approval standards listed in this checklist and as outlined in the *Guidelines for the Development of Community Park, Recreation, Open Space and Greenway Plans* provided by the Michigan Department of Natural Resources (DNR). Plans must be submitted to the DNR **with** a completed checklist that has been signed by an authorized official(s) of the local unit of government(s) submitting the plan. Plans may be submitted at any time of the year, but no later than March 1 of the year the local unit of government is applying for grants.

PLAN INFORMATION

Name of Plan:

List the community names (including school districts) that are covered under the plan and have passed a resolution adopting the plan.

County

Month and year plan adopted by the community's governing body

PLAN CONTENT

INSTRUCTIONS: Please check each box to certify that the listed information is included in the final plan.

1. **COMMUNITY DESCRIPTION**

2. **ADMINISTRATIVE STRUCTURE**

Roles of Commission(s) or Advisory Board(s)

Department, Authority and/or Staff Description and Organizational Chart

Annual and Projected Budgets for Operations, Maintenance, Capital Improvements and Recreation Programming

Current Funding Sources

Role of Volunteers

Relationship(s) with School Districts, Other Public Agencies or Private Organizations

Regional Authorities or Trail way Commissions Only

Description of the Relationship between the Authority or Commission and the Recreation Departments of Participating Communities

Articles of Incorporation

3. RECREATION INVENTORY

Description of Methods Used to Conduct the Inventory

Inventory of all Community Owned Parks and Recreation Facilities

Location Maps (site development plans recommended but not required)

Accessibility Assessment

Status Report for all Grant-Assisted Parks and Recreation Facilities

4. RESOURCE INVENTORY (OPTIONAL)

5. DESCRIPTION OF THE PLANNING PROCESS

PR1924-1 (Rev. 12/26/2012)

6. DESCRIPTION OF THE PUBLIC INPUT PROCESS

Description of the Method(s) Used to Solicit Public Input Before or During Preparation of the Plan, Including a Copy of the Survey or Meeting Agenda and a Summary of the Responses Received

Copy of the Notice of the Availability of the Draft Plan for Public Review and Comment

Date of the Notice _____

Type of Notice _____

Plan Location _____

Duration of Draft Plan Public Review Period (Must be at Least 30 Days) _____

Copy of the Notice for the Public Meeting Held after the One Month Public Review Period and Before the Plan's Adoption by the Governing Body(ies)

Date of Notice _____

Name of Newspaper _____

Date of Meeting _____

Copy of the Minutes from the Public Meeting (public hearing and meeting where the plan was adopted)

7. GOALS AND OBJECTIVES

8. ACTION PROGRAM

9. POST-COMPLETION SELF-CERTIFICATION REPORT(S)

PLAN ADOPTION DOCUMENTATION

APPROVAL DOCUMENTATION: For multi-jurisdictional plans, **each** local unit of government must pass a resolution adopting the plan. Prepare and attach a separate page for each unit of government included in the plan.

- 1. Official resolution of adoption by the governing body dated: _____
- 2. Official resolution of the _____ Commission or Board, recommending adoption of the plan by the governing body, _____
- 3. Copy of letter transmitting adopted plan to County Planning Agency dated: _____
- 4. Copy of letter transmitting adopted plan to Regional Planning Agency _____

OVERALL CERTIFICATION

NOTE: For multi-jurisdictional plans, Overall Certification must include the signature of each local unit of government. Prepare and attach a separate signature page for each unit of government included in the plan.

I hereby certify that the recreation plan for

includes the required content, as indicated

(Local Unit of Government)

above and as set forth by the DNR.

Authorized Official for the Local Unit of Government

Date

PR1924-1 (Rev. 12/26/2012)

This completed checklist must be uploaded in MiRecGrants