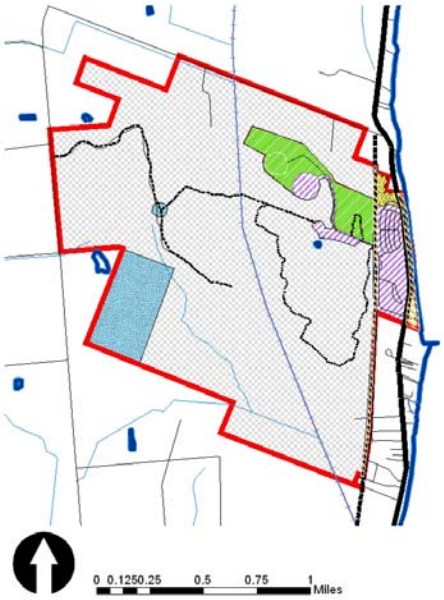
May, 2005

GENERAL MANAGEMENT PLAN

Long-range management guidance focused on the specific natural resources, historic-cultural resources, recreation opportunities, and the education-interpretation opportunities of…

ALGONAC STATE PARK



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PLAN APPROVALS:

6/01/05

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6/6/05

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6/7/05

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EXECUTIVE SUMMARY

Long-range planning for Algonac State Park began in June of 2003 as one of four parks statewide where a new planning philosophy was implemented. "Management Planning", a comprehensive, resource based process, is Parks and Recreation Division's (PRD) adaptation of National Park Service planning methodology. In our iteration of this process, we focus our attention on the four principles of the PRD Mission Statement. To that end we thoroughly inventory the (1) natural resource values of the park, establish its (2) historic/cultural resources, identify the (3) recreational opportunities and develop the (4) educational and interpretation opportunities of the park.

With this base of knowledge and with input of the "Planning Team" (made up of Department resource staff, stakeholders and public), we established an 'identity' for the park. The key significance of Algonac SP is twofold:

First, "Algonac State Park protects globally significant lakeplain prairie and lakeplain oak openings, among the rarest and most unique natural communities in Michigan. At least 22 endangered, threatened, or special concern plant and animal species live within Algonac State Park" (Palmgren, 2002).

Second is its recreational importance for the magnificent viewing opportunities of Great Lakes shipping activity on the St. Clair River. This was one of the principle reasons for the establishment of Algonac State Park in 1937.

In concert with this analysis of the park, the Planning Team also established the appropriate Management Zones and their extent of influence on the park. From a pallet of nine standard zones, we utilized six for Algonac SP. The Management Zone Plan is found on page 16, and a thorough review of all zones accompanies that graphic. A condensed review of the zones applied at Algonac SP is as follows:

- Primitive Zone – of the total 1,408 acres in the park, 1,170 acres of undeveloped land fall into this zone description, and represent the primary target for lakeplain ecosystem restoration efforts.
- Ecologically Sensitive Zone – exists as a sub-set of the Primitive Zone. Totaling approximately 90 acres, this 'seasonal' designation protects two active heron rookeries. It will be closed during the non-hunting season at Algonac SP. (April 1-September 15)

- Natural Resource Recreation Zone – 62 acres of park land lies adjacent to and serves to buffer the high-use Developed Recreation Zone from the Primitive Zone.

- Developed Recreation Zone – this 67 acre zone incorporates all of the modern campgrounds, day-use areas and archery and trap ranges.

- Scenic Zone – recognizes the viewing opportunities of the St. Clair River from the shoreline frontage of the park. The acreage of this zone totals approximately twelve (12) acres of the park.

- Visitor Services Zone – takes in the headquarters and shop area of the park, and totals just over four acres of land.

The Primitive Zone is of the greatest influence, with 1,170 acres comprising 83% of the park. This zone encompasses the lakeplain ecosystem, with seven NRC 'designated areas', and the proposed "Natural Area" designation under law of 370 acres. The zone is highly influenced by the hydrology of the area…a critical component of this unique ecosystem. As such, it is subject to fluctuating water levels, which can and do impact or inundate significant portions of the zone over time. The sensitivity of this ecosystem is such that the limitations of the Primitive Zone are needed to protect existing lakeplain remnants and the ongoing restoration efforts. **It is recommended to expand the legal "Natural Area" designation to encompass this entire zone.** This would provide enforceable status to the use limitations that are needed. In this zone there is only limited trail development permitted, with no mechanized or equestrian uses allowed.

This same ecosystem extends beyond the historic boundaries of the park. As properties are acquired within the new boundaries (and/or with expansion of boundaries), the Primitive Zone will expand to incorporate them, and at some point, expansion of the Natural Area designation would follow.

INTRODUCTION

Planning Process Overview ("Management Planning Process Outline") – The Management Planning Process develops a series of planning steps, each built upon the previous, that keep all planning and action decisions focused on (1) the mission of the Parks and Recreation Division, and (2) the specific Purpose and Significance of the park.

There are four stages of planning, implemented in the following order:

- General Management Plan (GMP) - 20-year long-range goals
- 10-Year Action Plan - long range action goals to attain the GMP
- 5-Year Action Plan – specific actions to implement
- Annual Action Plan and Progress Report – what will be done this year and what progress was made on last year's plan

This is the **General Management Plan**, the first step in our planning process. In this stage of planning, we are defining what the park will look like in twenty years. What will be the condition of flora and fauna? How will we address historic and cultural resources? What recreational opportunities will be provided? What education and interpretation efforts will meet the visitor? What will guide the manager's operational decisions? What will be the visitor's overall experience?

A key tool of this plan is the identification of "Management Zones" ("Management Zone Definitions") which define specific characteristics of the land, addressing management for:

- Natural features
- Historic/cultural features
- Education/interpretation
- Recreational opportunities

These four elements represent the primary elements of the PRD Mission Statement, and provide the primary guidance for both planning and management decisions. Within the parameters of this guidance, "Purpose" and "Significance" statements are developed for the park that establishes its unique identity and focus. No two parks are the same and this emphasis is directed at ensuring that the differences found from park to park are acknowledged, highlighted and celebrated.

Planning Objectives - The objective of this General Management Plan is to bring together Department staff, impacted and impacting stakeholders, and the public who use the park in a planning process that will define and clarify the unique "Purpose" and "Significance" of Algonac State Park. Collectively, we will

reinforce those attributes in the planning and management decisions that impact the park through the implementation of the Management Zone Plan. Future action plans, whether focused on a development proposal, a resource improvement initiative, an interpretive program, or day-to-day management of the park will be guided by this General Management Plan.

PLANNING TEAM

Accomplishment of our planning objectives was and is dependent upon the valuable input provided by all members of the 'Planning Team'. Following are the names of those critical participants in this planning process:

Name	**Representing**
Paul N. Curtis, Chair	MDNR–PRD, Management Plan Administrator
Steve Pondo	MDNR–PRD, Park Manager
Anna Sylvester	MDNR–PRD, Pontiac North (past) District Supervisor
Luba Sitar	MDNR–PRD, Pontiac North (current) District Supervisor
Kristen Bennett	MDNR–PRD, Pontiac North District Planner
Carl Lindell	MDNR-PRD, Bay City District Supervisor
Mark Sine	MDNR-PRD, Lakeport SP Manager
Dan Lord	MDNR-PRD, Statewide Development Planner
Ray Fahlsing	MDNR-PRD, Stewardship Program Manager
Sarah Zalewski	MDNR-PRD, Park Ranger
Ron Pinson	MDNR-LED, Conservation Officer
Earl Cole	MDNR-FMFM, Fire Officer
Ernie Kafkas	MDNR-WD, Wildlife Biologist
Jeff Braunscheidel	MDNR-FD, Fisheries Biologist
Douglas Finley	MDNR-EO, Education and Outreach Manager
Mark Brochu	St. Clair County, Parks Director
Fred Fuller	St. Clair County, Drain Commissioner
Lisa Brush	Southeast Michigan Stewardship Network
Bill Bakeman	St. Clair Flats Re-enactment Group
Bill Furtaw	Michigan United Conservation Clubs, District 8
Dan Prior	Prior Plumbing Company (local business)

CORE VALUES

Guidance for the General Management Plan stems from the Mission Statements of the Department and the Division, and the Purpose and Significance Statements that have evolved through the planning process. The core values found in these statements must be reflected in this long-range General Management Plan for Algonac State Park and subsequently reflected in any shorter range action plans:

DNR Mission Statement - *"The Michigan Department of Natural Resources is committed to the conservation, protection, management, use and enjoyment of the State's natural resources for current and future generations."*

PRD Mission Statement - "*Acquire, protect, and preserve the natural, historic, and cultural features of Michigan's unique resources and provide public recreation and educational opportunities."*

The core values derived from these statements are that PRD will acquire, preserve and protect; (1) natural resources, (2) cultural resources, (3) provide public recreation, and (4) provide educational opportunities.

Park Purpose - Park purpose statements are based on park legislation, legislative history, special designations and DNR policies. These statements reaffirm the reasons for which Algonac State Park was identified as part of the State Park system.

- To provide public access to, and viewing of, the St. Clair River with its busy water-based traffic of freighters and pleasure boats, near a densely populated region.
- To preserve and protect the park's unique natural resources for current and future generations
- To preserve and protect the park's historic/cultural resources
- To provide opportunities for recreational uses and experiences that are compatible with the park's resource(s) base.
- To provide educational and interpretive opportunities for the public that reflect the mission of the DNR and the unique qualities of Algonac State Park.

Park Significance - Park significance statements capture the essence of the park's importance to our state's natural and cultural heritage. These statements describe the distinctiveness of Algonac State Park. Understanding these distinctions help managers make decisions that preserve those special resources and values necessary to accomplish the park's purposes.

- Algonac State Park, located on the international border with Canada, is contained within the St. Clair Flats, the largest freshwater delta system in the world.
- This coastal park is ecologically important in that it contains remnant and restored lakeplain prairies and oak savanna openings which are some of the rarest natural communities, with unique biological diversity, in Michigan, the nation, and globally.
- Algonac State Park provides year round recreational opportunities along the St. Clair River scenic corridor, with a strong connection to the viewing of the St. Clair River and Great Lakes shipping/boating activities.
- Algonac State Park contains culturally sensitive resources of Native American and European occupation and activities.
- Algonac State Park offers excellent opportunities for research, education and interpretation in the areas of:

  - The unique ecological systems of lakeplain prairies, oak savannas and great lakes marshes.
  - Great Lakes shipping, boating and fishing.
  - Cultural aspects of Native American and European life.

Legal Mandates - For all park General Management Plans, all legal mandates will be identified and will serve to further guide the development of the General Management Plan and subsequent Action Plans. For our planning purposes, the term "Legal Mandates" refers to not only state law, but also the administrative tools of "Policy" and "Directive" of the Natural Resource Commission, the Department, and Parks and Recreation Division. Specific to Algonac State Park, the following legal mandates have been identified:

- PA 451 OF 1994, PART 741 - STATE PARK SYSTEM - NATURAL RESOURCE AND ENVIRONMENTAL PROTECTION ACT - This act is the recodification of law that established the Michigan State Park System and defined the powers and duties of same. Notable in this law is Section 324.74102 which identifies the duties of the department and reinforces those core values cited above.

  This section reads:

  (1) "The legislature finds:
  - (a) Michigan State Parks preserve and protect Michigan's significant natural and historic resources.
  - (b) Michigan State Parks are appropriate and uniquely suited to provide opportunities to learn about protection and management of Michigan's natural resources.
  - (c) Michigan State Parks are an important component of Michigan's tourism industry and vital to local economies.

(2) The department shall create, maintain, operate, promote, and make available for public use and enjoyment a system of state parks to preserve and protect Michigan's significant natural resources and areas of natural beauty or historic significance, to provide open space for public recreation, and to provide an opportunity to understand Michigan's natural resources and need to protect and manage those resources."

- <u>PA 451 OF 1994, PART 351 – WILDERNESS AND NATURAL AREAS - NATURAL RESOURCE AND ENVIRONMENTAL PROTECTION ACT</u>
  This is an act… "to protect the environment and natural resources of the state…" Within this law are three designations (definitions); "NATURAL AREA", "WILD AREA", and "WILDERNESS AREA".

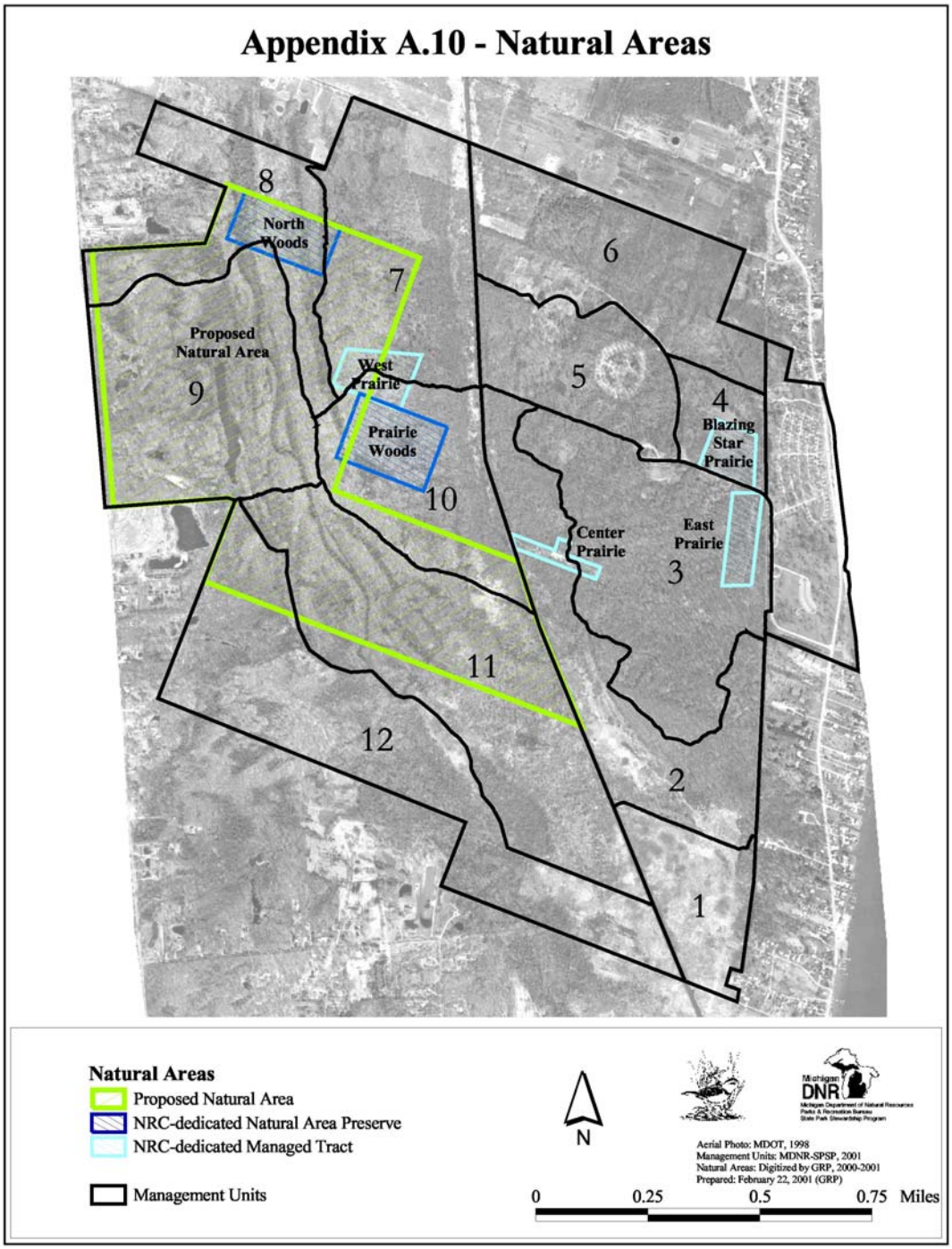
  Portions of Algonac State Park fall under this law with areas identified as "PROPOSED NATURAL AREA" that by this law, must be treated as a designated "NATURAL AREA". SECTION 324.35105 – PROHIBITED ACTIVITIES, identifies that the following cannot occur on state land in a Natural Area, Wild Area, or Wilderness Area:

  (a) Any alteration of vegetation except as necessary for appropriate public access.
  (b) Granting an easement for any purpose.
  (c) Exploration for or extraction of minerals.
  (d) A commercial enterprise, utility or permanent road.
  (e) A temporary road, landing of aircraft, use of motor vehicles, motorboats, or other form of mechanical transport, or any structure or installation.
  (f) Motorized equipment (except if authorized by Department for management or conservation purposes)

  (2) If a right-of-way or an easement was granted on land prior to designation under this law, the department may grant an easement along the route of same right-of-way or easement for the installation and maintenance of utilities for gas, electric, telephone, and cable services.

- <u>NATURAL RESOURCE COMMISSION (NRC) DEDICATED AREA</u> – There are six dedicated areas in Algonac State Park. Four as "Managed Tracts" and two as "Nature Study Areas". These areas by direction of the NRC are managed to preserve and protect the unique natural communities. Compatible development needed for public access and passive use of the areas is allowed (ie. roads, parking, and paths).

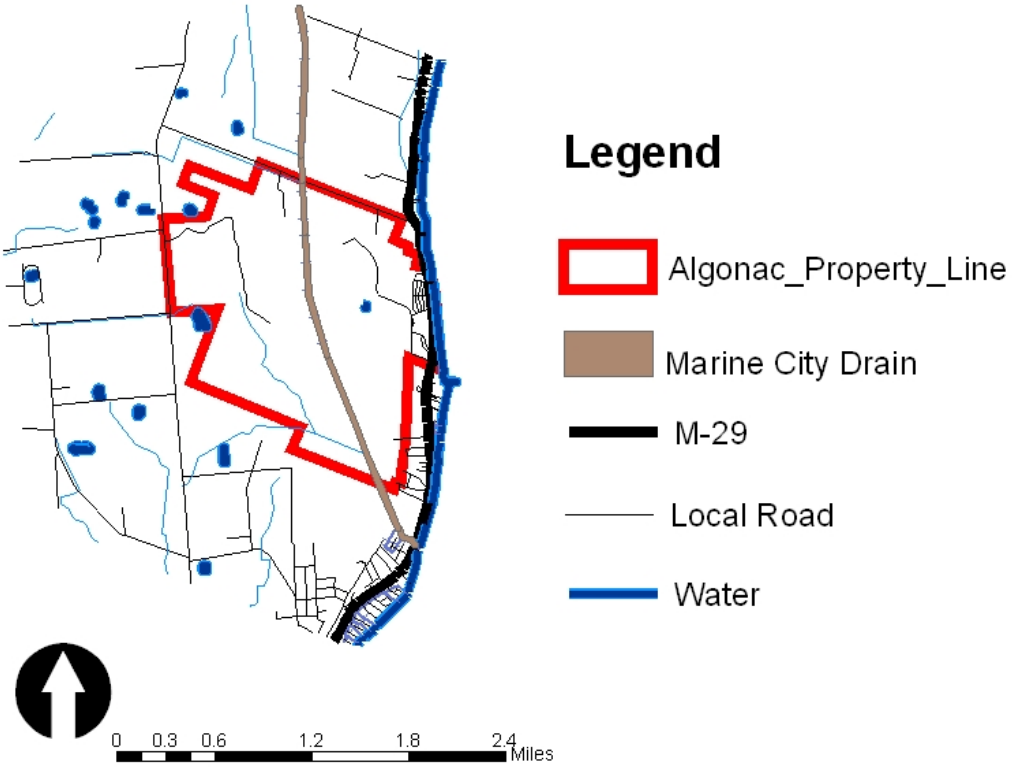
(Image from Stewardship Plan Report)



- <u>MARINE CITY DRAIN – RIGHT-OF-WAY</u> – The St. Clair County Drain Commission has rights across Algonac State Park for the maintenance of the Marine City Drain. Records from the Drain Commission indicate a 100' easement on each side of the center line of the Marine City Drain. All drain easements generally give the Drain Commissioner the right to locate, construct, and maintain the drain on the easement, as well as spread the spoils from excavation.

Algonac State Park

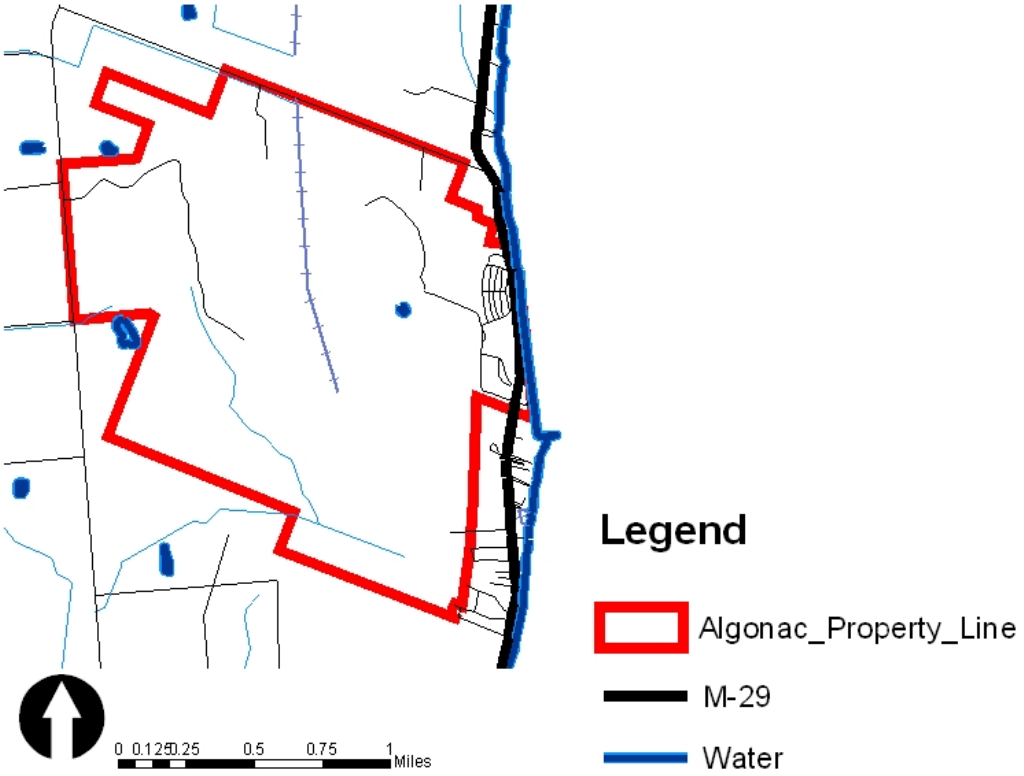
MARINE CITY DRAIN R.O.W. - 200'



- M-29 MDOT RIGHT-OF-WAY – Right-of-Way for M-29 cuts through the park, separating the shoreline property from the Riverfront Campground and Day-Use area. The ROW is 66' total, 33' on each side from the centerline of road. Along much of the ROW, the edge of the river is within this ROW. Any improvements impacting the ROW are subject to MDOT permit requirements.

Algonac State Park

M-29 R.O.W. - 66'



- MICHIGAN NATURAL RESOURCES TRUST FUND (MNRTF) IMPROVEMENTS - Approximately 4,200 feet of paved trail was developed on the old railroad bed through Algonac State Park, as part of the "Bridge to Bay Trail". This improvement was funded by a grant to St. Clair County through the Michigan Natural Resources Trust Fund (TF 97-195), which provides protection of the project purpose (linear trail) through the grant agreement. Any conversion of use for other than the granted project purpose must receive MNRTF Board approval.

- LAND AND WATER CONSERVATION FUND (LWCF) IMPROVEMENTS Federal funds have been utilized for development projects at Algonac State Park. The project purposes for which funding was secured are required to remain intact as a requirement of utilizing that funding source. The specific project purposes funded with LWCF are:

  - (1965) – Toilet/Shower Building with utilities
  - (1973) – General park improvements to include: construction of parking lot and picnic area, pedestrian bridge, installation of vault toilets, water lines, walks, upgrading of existing archery and trap ranges and bituminous surfacing of existing gravel roads.
  - (1978) – Paving of parking areas, roads and entry drive. Construction of underground drainage system to benefit camping areas.

- NORTH AMERICAN WETLAND CONSERVATION ACT (NAWCA) – Grant funding from this source has been used at Algonac SP by the Stewardship program for purposes of controlling invasive species (ie. phragmites) and restoration of the great lakes prairie and oak opening habitats. Provisions of this grant require that following completion of the grant activity, the grant recipient must continue to implement those actions for ten years after the grant period. At Algonac, we will continue under these provisions until the year 2015. The area impacted by the grant is represented by the Primitive Zone.

- LAND OWNERSHIP ISSUES

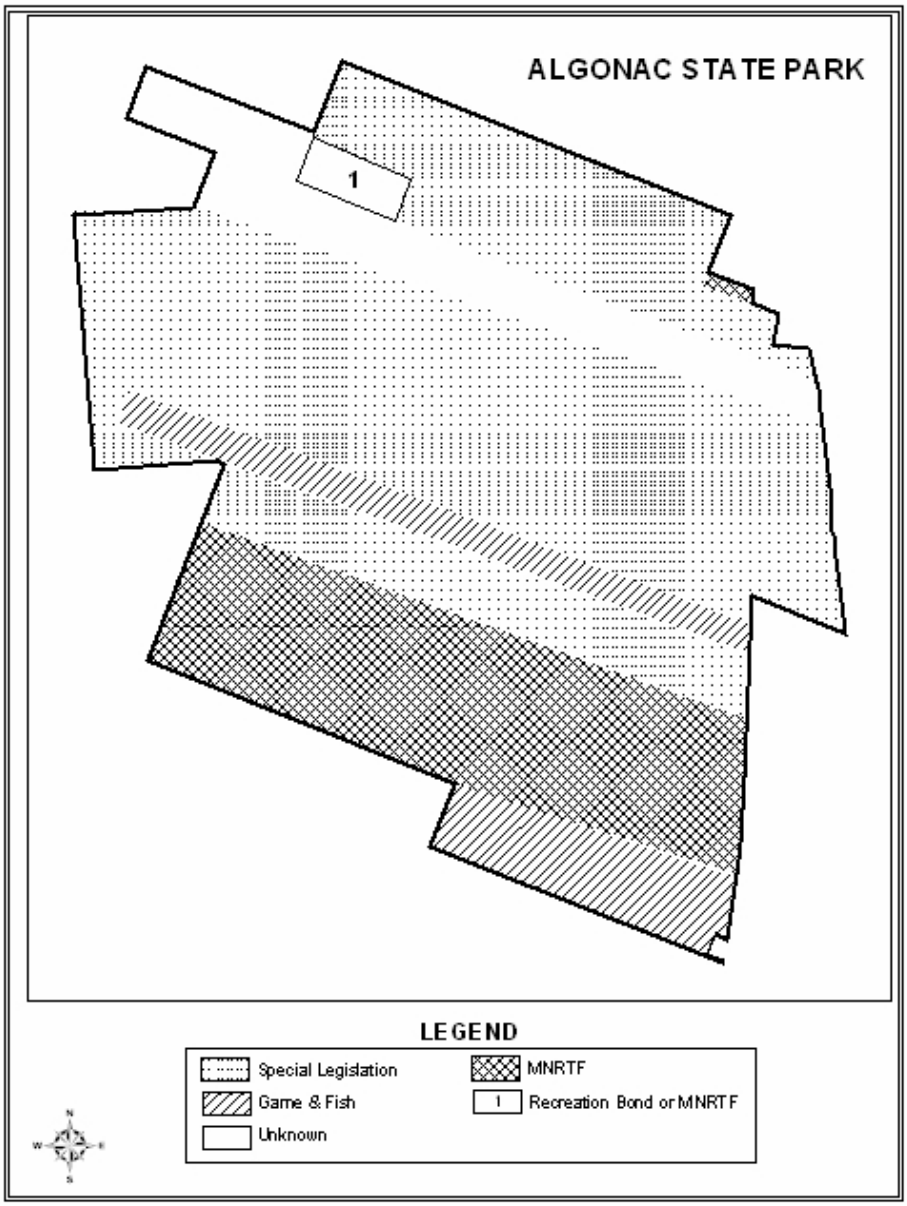
  - Land and Water Conservation Fund (LWCF) – With this federal funding, four parcels were acquired. A 3.5 acre parcel with frontage on the St. Clair River (park manager residence), and three adjacent parcels at the north and west end of the park were acquired for 'general recreation purposes'. With inclusion of federal LWCF dollars at Algonac (also used for development), the entire park falls under the boundary definition for the fund source, and thereby the entire park is bound by the restrictions of LWCF that protects against "conversion of use".

- Special Legislation – More than half of the total park acreage has been acquired with this source. It is utilized for general program purposes.

- Michigan Natural Resources Trust Fund (MNRTF) – Is utilized for general program purposes.

- State Game and Fish Fund – Acquisition of lands with this funding source are for purposes of wildlife habitat and recreation opportunities.

LAND ACQUISITION FUNDING SOURCES



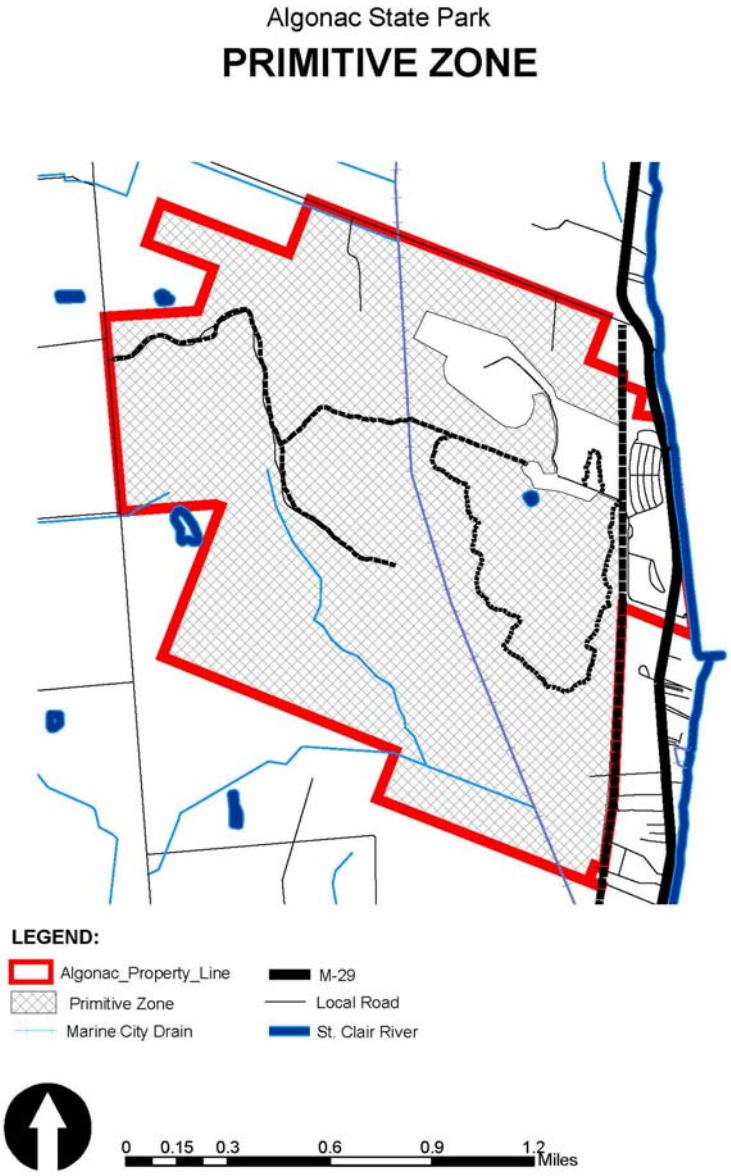
GENERAL MANAGEMENT PLAN

With guidance of the Algonac SP Planning Team (inclusive Department participation) and input from our stakeholders and the public, the park "Purpose and Significance Statements" were drafted and adopted. This established an identity for Algonac State Park that highlights; the unique ecological importance of the park as part of the St. Clair Flats Delta, the opportunities to re-establish rare lakeplain prairies and oak openings, the historical connection of Algonac SP to viewing of the St. Clair River and Great Lakes boating and shipping activities, and the special recreation and educational opportunities that follow these important qualities of this park.

Based on this 'identity' for the park, a "Management Zone Plan" was subsequently drafted and adopted with stakeholder support and no public objection. The Management Zone Definitions apply to each zone used, with special considerations highlighted in the following descriptive narratives of management guidance for each zone of the park:

Primitive Zone

The majority of park acreage is identified as this zone. In general terms, it is all of the park property west of the 'Bridge to Bay' rail-trail, less those areas dedicated for Day-Use and Campgrounds.



In this 1,170 acre zone (83% of the park) are found seven Natural Resources Commission dedicated natural areas that make up 62 acres, as well as the 370 acre proposed "Natural Area", legally defined under Act 451 of 1994.

This zone is the target of our Department's long standing efforts to preserve and re-establish the lakeplain prairie and oak savannah communities, which are of global significance. The PRD Stewardship program has targeted Algonac SP and specifically, work in this part of the park for their restoration efforts. Their goal is "…to restore Algonac SP to a sustainable, functioning, high quality lakeplain landscape consistent with the original lakeplain prairies and oak openings that existed in the region prior to European-American settlement" (Palmgren, 2002).

The Zone is bisected by the Marine City Drain, which runs from north to south through the park. The Right –of-Way for this drain is 200' wide (100' from Center Line). Much of this land was historically cleared and farmed, but now is covered with both prairie and savannah remnants and expansion of understory and overstory. West of the rail-trail to the drain, and west yet of the drain, the land is relatively flat. Along the westerly boundary of the park (and this zone) are old shoreline remnants of sand ridges and a much more heavily wooded condition. Following are the values to be attained in this zone:

- Natural Resources – A "Stewardship Management Plan" for Algonac State Park was adopted in 2002. This plan presents the specific prescriptive measures of management for the entire park. In general, it calls for long-term efforts to reduce fragmentation of cover-type, control of invasive species, and attainment of large, contiguous blocks of Lakeplain Wet-mesic Prairie, Lakeplain Mesic Prairie, Lakeplain Oak Openings (Savannahs), and Great Lakes Marsh. **The guidance of the Stewardship Plan will dictate actions in this zone.**

- Historic/Cultural Resources – **If any activity in this zone requires earthwork, it must first be reviewed and approved by Stewardship.** Known archeological sites exist primarily along the sand ridges on the west end of the park, and the likelihood exists that others could be found in this zone.

- Recreational Opportunities – With the focus of this zone being restoration and enhancement of the natural communities that once dominated this landscape, the Primitive Zone designation strengthens that focus and limits recreation to low density uses, such as hunting, trapping, birding and foot trail use. **No bicycle, equestrian, 'All Terrain Vehicle' (ATV), 'Off-Road Vehicle (ORV), snowmobile, or any other non-human form of conveyance is allowed in this zone.**

- Education Opportunities – The ecological significance of this park and the work being conducted in this zone offer wonderful opportunities for education and research. Educational materials can be presented through the use of kiosks at trailheads and interpretive signage along trails and at other locations. **Specific planning recommendations for education**

and interpretation will require input from Education and Outreach (EO) and others.

- Visitor Experience – This will reflect the high degree of 'natural' feel of the zone, a significant sense of solitude, and a lack of man-made improvements. **The visitor will likely experience restoration efforts over time, which can include prescribed burning and mechanical methods (ie. hydro-ax clearing) of vegetation modification, as well as plant restoration efforts.**

- Management Focus – Management of this zone will be focused on the Stewardship Plan recommendations for restoration, and maintaining the low-impact character of the zone. **It is recommended to expand the legal "Natural Area" designation to encompass this entire zone.** This would provide enforceable status to the use limitations that are needed. In this zone there is only limited trail development permitted, with no mechanized or equestrian uses allowed.

- Development - Only trail improvements (which can include boardwalks, observation overlooks/platforms, and bridges) and educational or interpretive signage will be the evidence of man-made elements in this zone. Any improvements needed for resource protection, such as erosion control, shall be 'natural' in character. All development will meet the approval requirements of the planning process. Guidance for approvals will be that any development will maintain as little evidence of human activity as possible.

(NOTE…a portion of this zone has been identified as an Ecologically Sensitive Zone. (description follows)

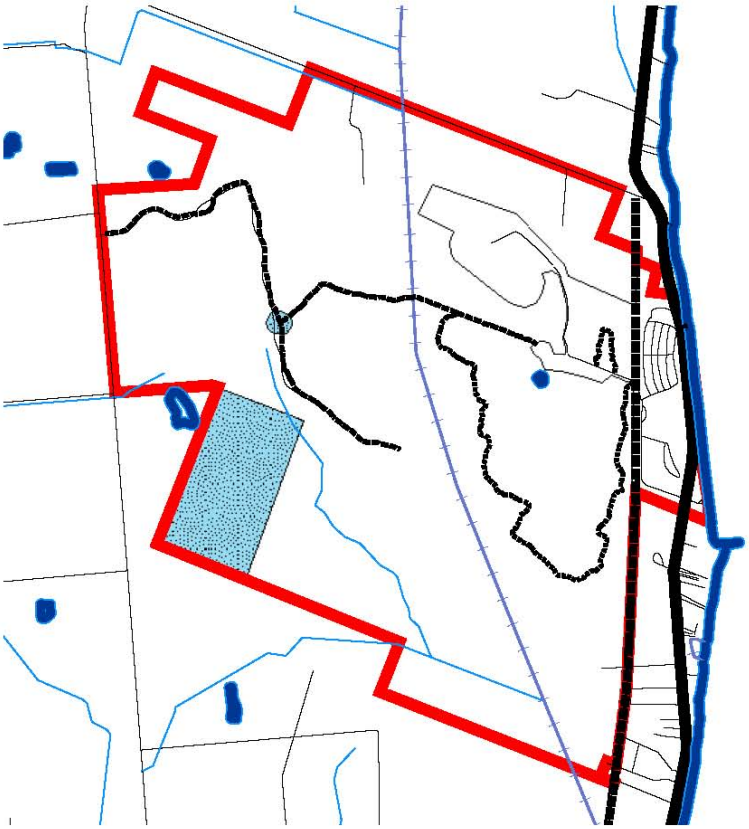
Ecologically Sensitive Zone

In the southwest corner of the park (and the Primitive Zone), two tracts of land are identified for purposes of protecting active heron rookeries. The largest tract is approximately 80 acres in area. Another small rookery lies approximately ¼ mile north of this large area, and is comprised of approximately ten acres of wooded habitat.

Algonac State Park

ECOLOGICALLY SENSITIVE ZONE

(Seasonal Heron Rookery)



LEGEND:

- Algonac_Property_Line
- Ecologically Sensitive Zone
- Marine City Drain
- M-29
- Local Road
- St. Clair River

0 0.15 0.3 0.6 0.9 1.2 Miles

It must be acknowledged that the zone locations we have shown have been determined by the herons. If they decide to move or nest elsewhere in the park, the zone will move with them.

This zone designation carries with it a 'Seasonal' condition that protects the rookeries during active nesting (April 2 – September 14), but allows entry and use of the area during the hunting season of September 15 to April 1. All of the values of the Primitive Zone apply to this area, and additionally, the following values will be attained:

- Natural Resources – **Maintaining the integrity of the natural habitat of the rookeries is the primary purpose of this designation.** Rookeries are a critical element to the survival of this species. These birds colonize in a concentrated area during nesting. Any disruption of this would impact the heron population of not just the park, but also that of a wide geographic area. While selective timber harvest and vegetative management (prescribed burns) to address invasive species or re-establish native systems is allowed, **no such measures will take place during the 'season' of this zone.**

- Historic/Cultural Resources – **If any activity in this zone requires earthwork, it must first be reviewed and approved by Stewardship.** Known archeological sites exist primarily along the sand ridges on the west end of the park, and the likelihood exists that others could be found in this zone.

- Recreation Opportunities – Public entry into this zone will not be allowed during the zone season, so that the heron rookeries stay undisturbed during the time of nesting. During the hunting season (September 15 to April 1), access is allowed. **No bicycle, equestrian, 'All Terrain Vehicle' (ATV), 'Off-Road Vehicle (ORV), snowmobile, or any other non-human form of conveyance is allowed in this zone.**

- Education Opportunities – Interpretation of the rookery can take place outside the zone. Educational materials can be presented through the use of kiosks at trailheads and interpretive signage along trails and at other locations.

- Visitor Experience – This will reflect the high degree of 'natural' feel of the zone, a significant sense of solitude, and a lack of man-made improvements. **During the '0ff-Season' time of this zone, the visitor will likely experience restoration efforts over time. This can include controlled burning and mechanical methods (ie. hydro-ax clearing) of vegetation modification, as well as plant restoration efforts.** During the 'Season' of this zone designation, visitors will not be allowed in the zone.

- Management Focus – Management of this zone will be focused on the Stewardship Plan recommendations for restoration, maintaining the low-impact character of the zone, and most significantly, maintaining the quality of life for the heron rookeries by controlling human disturbances.

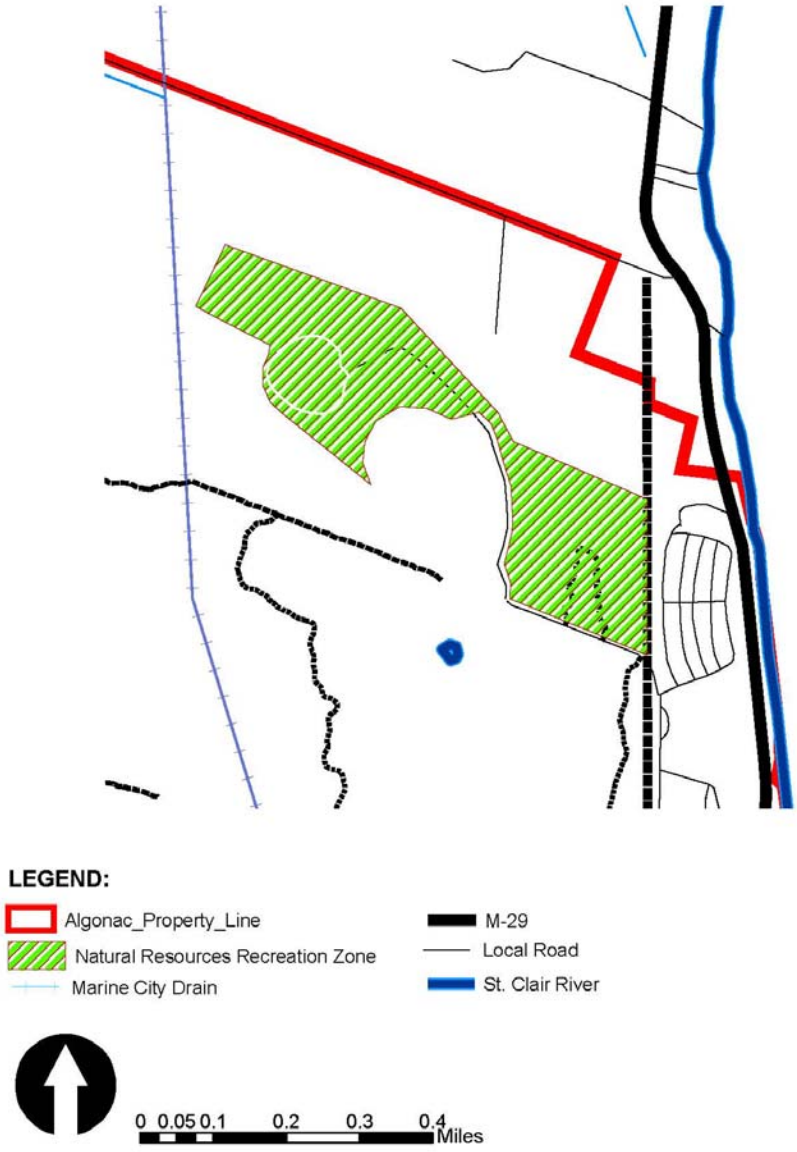
- Development - Only trail improvements (can include boardwalks, observation overlooks / platforms, and bridges) and educational or interpretive signage will be the evidence of man-made elements in this zone. Any improvements needed for resource protection, such as erosion control, shall be 'natural' in character. All development will meet the approval requirements of the planning process and will be constructed in the "Off-Season" of the zone. Guidance for approvals will be that any development will maintain as little evidence of human activity as possible.

Natural Resource Recreation Zone

This 62 acre zone is located in close proximity to that portion of the 'Developed Recreation Zone' that lies immediately west of the rail-trail.

Algonac State Park

NATURAL RESOURCE RECREATION ZONE



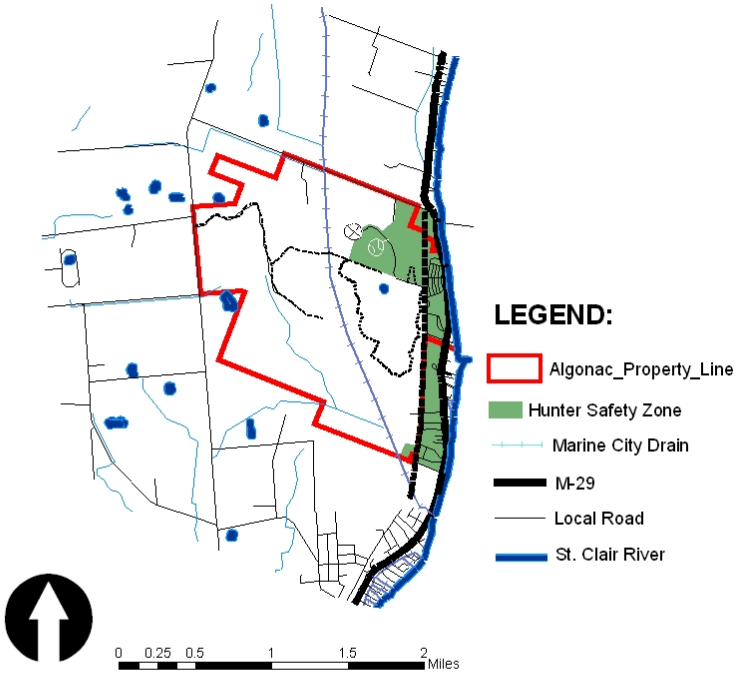
The purpose of this designation is to recognize the more intensive public use of the area for general recreational purposes and special events (ie. Historic Re-enactment). There are scattered occurrences of Endangered, Threatened, or Special Concern species in this area. The following values will be attained:

- Natural Resources –In general, the natural resources can be modified to support visitor activities, provided it still falls within the guidance of the Stewardship Plan and does not cause damage to high quality lakeplain prairie habitats or Endangered, Threatened, or Special Concern species.

- Historic/Cultural Resources – **If any activity in this zone requires earthwork, it must first be reviewed and approved by Stewardship.**

- Recreation Opportunities – General recreation takes place in this zone. **No snowmobile, ATV, or ORV use will be allowed.** In part of this zone (north and west of the Organizational Campground), hunting is allowed.

ALGONAC HUNTING SAFETY ZONE



- Education Opportunities – The Blazing Star Prairie lies within this zone and was developed as an educational tool, intended for high public exposure. It is served by an interpretive trail (with signage) through the prairie with an informational kiosk at the trailhead. The Youth Group Organizational Campground is the highest public use of this zone and it is also the location of the annual Historic Re-enactment Camps each fall, which provide educational experiences depicting the Native American and European settlements of the area.

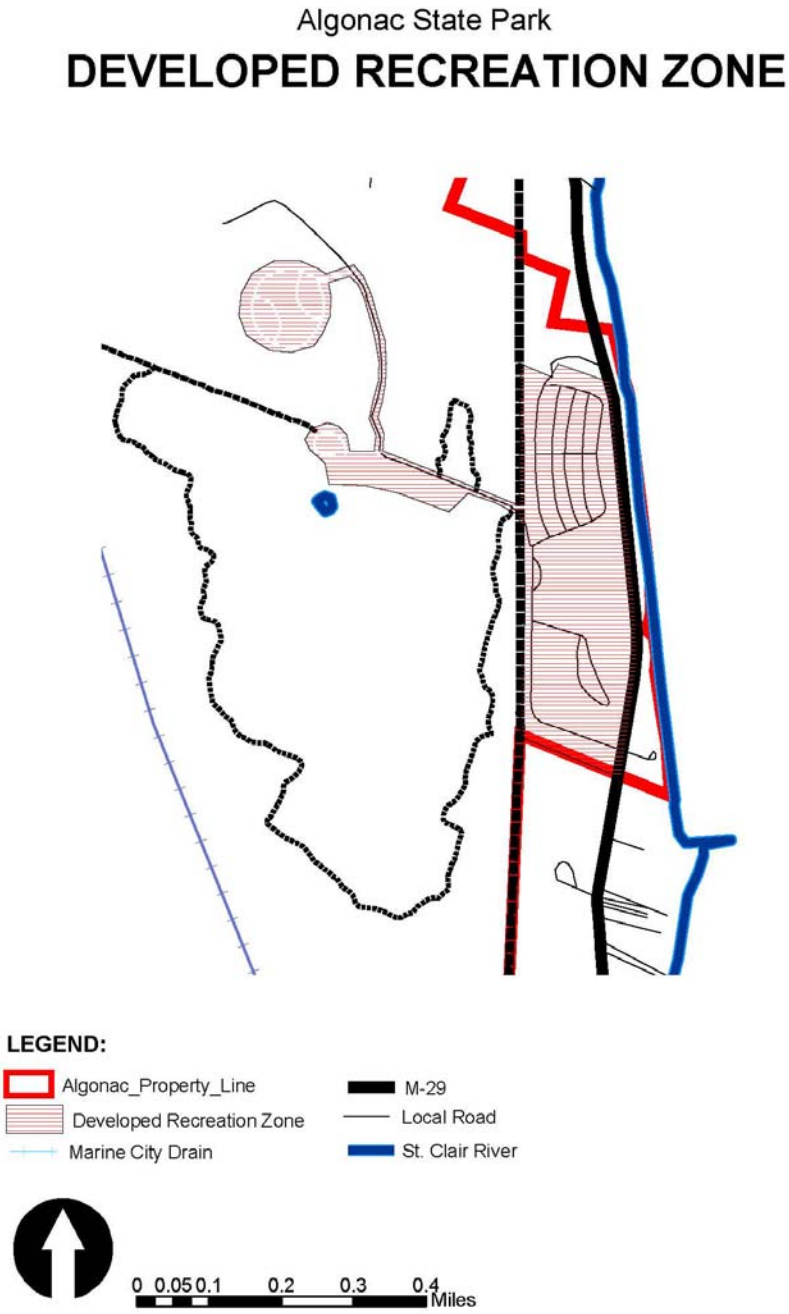
- Visitor Experience – In close proximity to the Developed Recreation Zone, the visitor can expect a high level of encounters with other park visitors, particularly with the 'Blazing Star Prairie' Trail as a key element of this zone. In part of this zone (north and west of the Organizational Campground), hunting is allowed. (see map of 'Hunting Safety Zone')

- Management Focus – Maintain public awareness of the educational opportunities in this zone, and develop/maintain ADA access to same. Provide / maintain signage for the hunting 'Safety Zone'. Protect any scattered occurrences of Endangered, Threatened, or Special Concern species in this area.

- Development – Any development activity will focus on complimenting the educational uses of this zone. Provide/maintain ADA trail access. All development will meet the approval requirements of the planning process

Developed Recreation Zone

Comprised of 67 acres, this includes the majority of park land that is bordered by the Bridge-to-Bay Trail to the west and M-29 to the east. It also includes a well defined area west of the trail.



This zone includes the 'Riverfront Campground', the Day-Use Picnic Area, and the informal shore access to the St. Clair River, as well as the modern 'Wagon Wheel Campground', a picnic area and the Archery and Trap Ranges.

- Natural Resources –In general, the natural resources can be modified to support visitor activities, provided it still falls within the guidance of the Stewardship Plan. In this zone, active recreation dominates with natural resource attributes enhanced as possible. This area is not designated for natural resource significance.

- Historic/Cultural Resources – **If any activity in this zone requires earthwork, it must first be reviewed and approved by Stewardship.**

- Recreation Opportunities – This is the focus of this zone. Camping, picnicking, archery, trap shooting, and general day-use activities are accommodated and encouraged. The Bridge-to-Bay Trail connects directly to this zone and provides visitors to the park a direct link to that linear trail system.

  Viewing of the St. Clair River boat activity is a popular recreational pastime in this zone, particularly for those campsites that have a direct view of the river. Boating access to the river is available at the Marine City Boating Access Site (BAS) and the North Channel BAS (near Algonac).

- Education Opportunities – In this most populated and visited of zones in the park is found the most opportunity for guidance to education and interpretation of the entire park. The 'State Park Explorer Program' takes advantage of this in recruiting interest from campers for their interpretive programming, and this can be expanded upon.

  This program to date has focused on the prairie and the natural resources of this unique park. The opportunity exists for an expanded educational focus in this zone on the Great Lakes boating/shipping activity that many are so interested in viewing.

  The park is lacking facilities for group education, or a common or centralized location for educational purposes. Past remedies have been to rent a tent to conduct a slide show for interpretive programming.

- Visitor Experience – With the focus of this zone being the developed campgrounds and other attributes, the visitor will experience a high level of encounters with other park visitors during the summer months. As with many parks, early and late season use is diminished. **Hunting is not allowed in this zone.**

- Management Focus – Maintain the infrastructure that serves the intense public uses of this zone. Provide educational opportunities in the zone for the entire park, develop / maintain ADA access in the zone, and maintain public safety and good hospitality practices.

- Development – Provide ADA improvements as needed to attain 'program' accessibility. Improve facilities to compliment education. All development will meet the approval requirements of the planning process.

Scenic Zone

This zone is comprised of the shoreline frontage of the park on the St. Clair River where viewing of Great Lakes freighters and other watercraft is extremely popular.

- Natural Resources –In general, the natural resources can be modified to support visitor activities, provided it still falls within the guidance of the Stewardship Plan, and it does not hinder the scenic opportunities provided.

- Historic/Cultural Resources – **If any activity in this zone requires earthwork, it must first be reviewed and approved by Stewardship.**

- Recreation Opportunities – Development of strategic view locations along the scenic corridor should be pursued in the interest of optimizing viewing opportunities and assuring public safety in the process.

  Improvements for visitor access to the river for shore fishing represent a potential for improved viewing in conjunction with expanded recreational opportunities in the park.

- Education Opportunities – There is a great opportunity for interpretive signage at key location(s) along the river frontage. Education today is focused on what happens inland. Education targeting Great Lakes shipping and boats is equally important and appropriate to both the Scenic Zone and the Developed Recreation Zone.

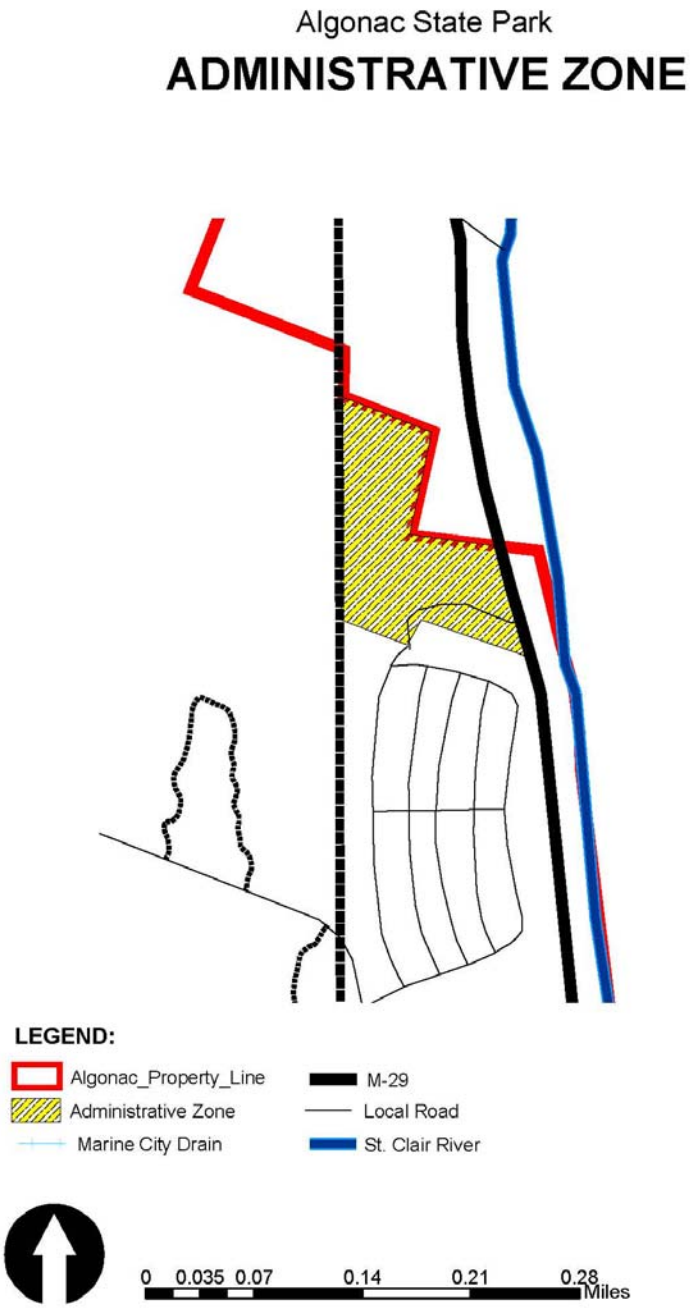
- Visitor Experience – Bounded by M-29, the visitor will experience the high summer traffic of the road while viewing the St. Clair River and boating activity. Boating activity, particularly that of Great Lakes shipping (freighters), is the primary focus of this zone.

- Management Focus – Particularly with the busy summer traffic of M-29 and the fast moving currents of the St. Clair River, public safety must be a high priority. Management must also focus on maintenance of the views.

- Development – Any development in this zone must compliment the viewing opportunities. Educational kiosks and improvements to augment educational opportunities are desirable actions. All development will meet the approval requirements of the planning process.

Visitor Services Zone

This zone is well defined, lying at the north end of the Riverfront Campground. There is a separate entrance to it from M-29.



The zone encompasses the developed areas required for program administration and operations. Typically it will include offices, contact stations, maintenance facilities and all related land base required to conduct the business of running a state park or recreation area. At Algonac, a holding of undeveloped land immediately north of the current shop area has been included in this zone for purposes of future expansion.

- Natural Resources – In general, the natural resources can be modified to support the needs for administration of the park.

- Historic/Cultural Resources – **If any activity in this zone requires earthwork, it must first be reviewed and approved by Stewardship.** A known archaeological site exists next to the current manager's residence.

- Recreation Opportunities – None

- Education Opportunities – Educational materials can be made available in the office 'public space', and office staff can provide verbal information. There is a great opportunity to direct visitors to other informational locations in the park.

- Management Focus – Provide public access (ADA) to the office from the campground and office parking lot, and (ADA) access within the building. Assure security of offices, facilities and equipment. Provide a safe working environment for staff.

- Development – Development in this zone will be for purposes of complimenting the administrative needs of the park. All development will meet the approval requirements of the planning process.

FUTURE PLAN INSERTS

10-Year Action Plan (LONG-RANGE ACTION GOALS TO ATTAIN GMP) - Phase-2 of the Management Planning Process

5-Year Action Plan (SPECIFIC ACTIONS TO IMPLEMENT) - Phase-3 of the Management Planning Process

Annual Action Plan and Progress Report - Phase-4 of the Management Planning Process

Operational/Management Resources - The following categories are established as a guide for the park manager to use to supplement this working document. Other categories can be added as needed.

- Annual Work Plan (NOTE…this should reflect the values and emphasis of the Zones established for the park and tie-in with Phase 4 – Annual Report of Management Planning)
- Staffing
- Budget
- Equipment
- Training
- Public Relations / Marketing / Outreach
- Programming (ie. special events, MCCC, volunteers, etc.)
- Public Health, Safety, and Welfare
  - Water system
  - Wastewater system
  - Electrical system
  - Law enforcement
  - Emergency access plans
  - Wildfire plan
- CRS
- FOIA
- Infrastructure Inventory (when available)
- Raster Image Index
- Raster Images of historic park plans
- Other…

SUPPORTING ANALYSIS

<u>Park Setting</u> -

- <u>LOCATION AND SURROUNDING COMMUNITY</u> – Algonac State Park is located on the west shore of the St. Clair River, approximately one mile north of the City of Algonac, in St. Clair County. The northerly part of the park lies in Cottreville Township, while the majority of the park rests in Clay Township. The park is accessed by State Highway M-29, which follows the shores of Lake St. Clair and the St. Clair River, from New Baltimore to Marysville. This is a two-lane paved unlimited access road. A secondary route of access to the western portions of the park is from Marsh Road, a county road that is a two-lane paved unlimited access road.

Situated near the confluence of the St. Clair River with Lake St. Clair, Algonac State Park is within the area noted as the St. Clair Flats, the largest freshwater delta system in the world. It is also on the border with Canada, and one of the six access points to Canada within the county, Roberts Landing, is immediately north of the park.

The city of Algonac, to the south of the park, has a 2000 Census population of 4,613. Marine City, approximately three miles to the north, has a 2000 Census population of 4,652. The 2000 Census population of St. Clair County is 164,235, which reflects a 12.8% increase over the 1990 Census figures. The relative density of the county at 226.7 persons per square mile (p/sm), exceeds the state average of 175 p/sm, but is low compared to other counties in the greater metropolitan Detroit area.

- GENERAL HISTORY OF THE PARK – Algonac State Park was established in 1937 with initial State acquisition of 373 acres of land along the St. Clair River, just north of the city of Algonac. Over the next ten years, additional acquisitions increased the park size to approximately 980 acres, when in the mid-1940's, development efforts began. Today, the park is comprised of approximately 1,400 acres of land with nearly 3,400' of frontage on the St. Clair River.

  That initial development set the footprint of what is seen in the park today, with developed day-use and camping concentrated along the area with views to the river. This orientation to the St. Clair River with its draw of Great Lakes boat traffic, was one of the primary reasons for including this ownership in the system of state parks. Additionally, its proximity to the population of greater metropolitan Detroit was seen as an overall benefit to meeting the recreational needs of the region.

- LAND OWNERSHIP AND ISSUES – The 1,400 acres of state ownership includes a significant wetland complex and prairie/oak savannah remnants in the 'back' area of the park, west of the old railroad bed that now serves as a component of the "Bay to Bridge Rail-Trail". Various acquisition sources have been utilized over the years, including:

  - Land and Water Conservation Fund (LWCF) – With this federal funding, four parcels were acquired. A 3.5 acre parcel with frontage on the St. Clair River (park manager residence), and three adjacent parcels at the north and west end of the park were acquired for 'general recreation purposes'. With inclusion of federal LWCF dollars at Algonac (also used for development), the entire park falls under the boundary definition for the fund source, and thereby all of the park is bound by the restrictions of LWCF that protects against "conversion of use".

- Special Legislation – More than half of the total park acreage has been acquired with this source. It is utilized for general program purposes.

- Michigan Natural Resources Trust Fund (MNRTF) – Is utilized for general program purposes.

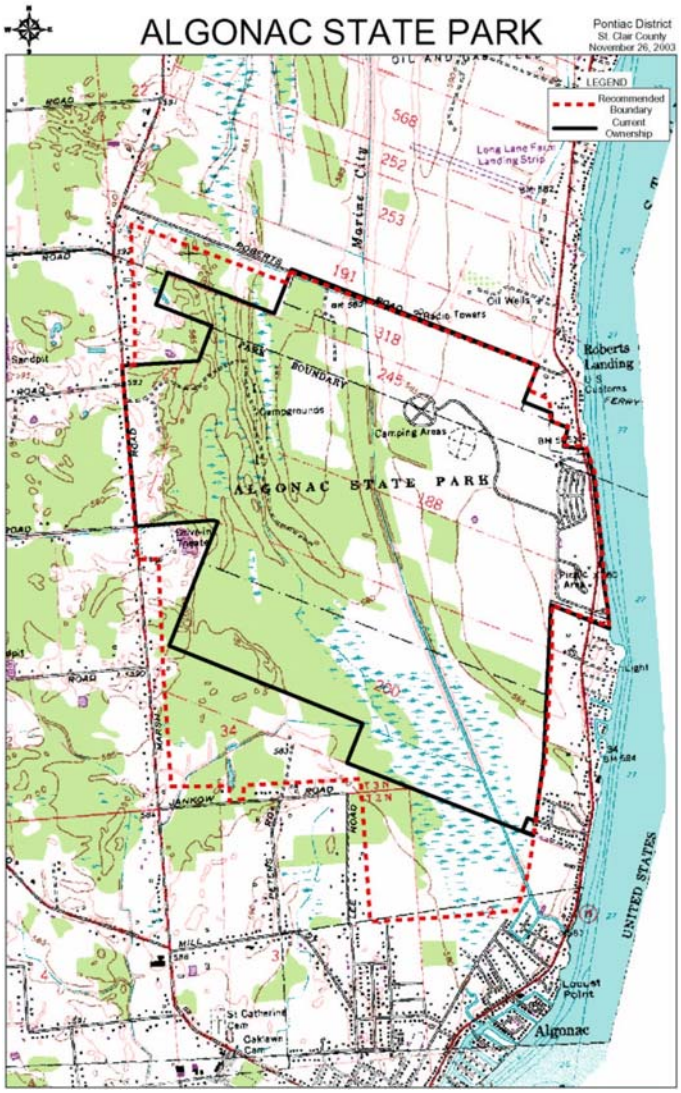
- State Game and Fish Fund – Acquisition of lands with this funding source are for purposes of wildlife habitat and recreation opportunities.

Significant to Algonac State Park is the Natural Resource Commission designation of six (6) areas in the park west of the rail-trail as 'Natural Areas', four for use as 'Managed Tracts' and two for use as 'Study Areas'. These account for approximately 62 acres. Additionally, 360 acres have been proposed for protection under the "Natural Resources and Environmental Protection Act" (PA 451 of 1994). Having been proposed for designation, by law it is considered to be protected as if it were so designated.

Finally, the unique natural resource conditions found in Algonac State Park are not confined to the park boundaries. Those same qualities extend to the north and south. The Stewardship Management Plan for Algonac recommends acquisition of inholdings (private land within the park boundaries) and lands outside the park boundaries to reduce fragmentation of habitat.

The Natural Resource Commission has subsequently approved a recommended boundary change for the park that includes additional land to the south and at the northwest corner of the park.

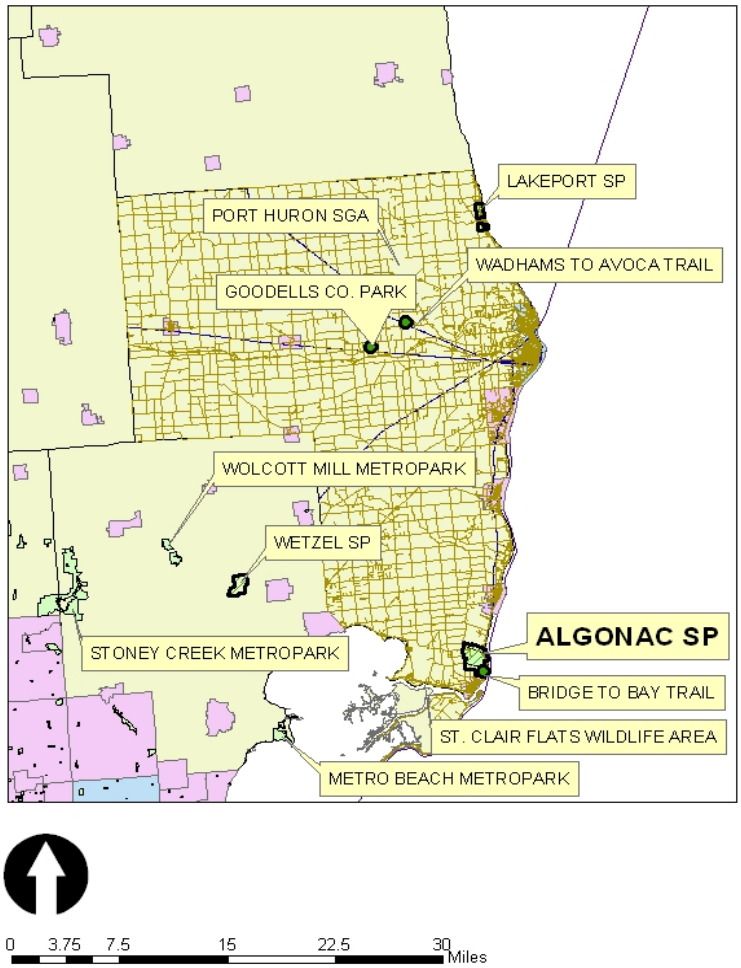
NEW PARK BOUNDARY



- <u>RELATIONSHIP OF ALGONAC SP TO OTHER PARK RESOURCES</u> – In St. Clair County, there are two DNR parks, Algonac and Lakeport. Lakeport SP is located approximately 45 miles north of Algonac (seven miles north of Port Huron) on the Lake Huron shoreline. This 565 acre park provides camping and day-use recreation on approximately one mile of shoreline. In the greater Detroit metropolitan area, the next closest state parks are Wetzel SP in Macomb County, a minimally developed 900 acre park approximately 20 miles from Algonac, and Bald Mountain Recreation Area, in Oakland County, a 4,637 acre recreation area approximately 50 miles to the west.

State recreational boating facilities exist along the St. Clair River and at strategic locations on Lake St. Clair. Proximate to Algonac SP are Boating Access Sites at North Channel, west of Algonac, and Marine City, north of the park. Small hunter access sites can also be found on Harsen's Island and Dickinson Island.

OTHER PARK RESOURCES



Other DNR lands in the county are managed by Wildlife Division. These include the St. Clair Flats Wildlife Area and St. Johns Marsh, located approximately five miles south of Algonac SP, and the Port Huron State

Game Area located approximately five miles west of Port Huron and 35 miles from Algonac SP.

There are no federally owned or managed recreational areas in the area.

The Huron-Clinton Metropolitan Authority (HCMA) is a major provider of public outdoor recreation opportunities in southeast Michigan. HCMA has three of its thirteen Metroparks within fifty miles of Algonac State Park. These three HCMA parks are located in Macomb County and are known as Stoney Creek Metropark, Wolcott Mill Metropark, and Metro Beach Metropark (on Lake St. Clair).

St. Clair County provides day-use recreation at Godell's County Park, a 327 acre historic village with day-use activities located in the center of the county, approximately 15 miles west of Port Huron. The county also manages the Wadhams to Avoca Trail, a ten mile linear trail that is currently under development. This trail is approximately five miles west of Port Huron. Most significantly, St. Clair County has taken a leadership role in the advocacy and implementation of the Bridge to Bay Trail, a 54 mile pave trail from Lakeport State Park to New Baltimore. In cooperation with 13 local units of government, the St. Clair County Parks and Recreation Commission helps to plan and promote trail development through the local units of government.

The DNR was a cooperating partner in this effort with the development of approximately 4,200 lf of Bridge to Bay Trail within Algonac State Park.

- CURRENT LAND USE – Algonac State Park is considered a multi-use park with recreational opportunities that include camping, picnicking, hiking, fishing, hunting, trapping and archery and trap ranges. The most intensive development of the 1,400 acre park is east of the Bridge to Bay Trail and bordered by the St. Clair River. Day-use and camping activities are most intensively pursued in this area.

  West of the Bridge-to-Bay Trail, are additional camping facilities (the 'Wagon Wheel Campground'), the organization campground and the archery and trap ranges. Hiking trails into the natural areas begin from this developed area.

  The vast majority of park acreage is untouched, but actively managed for the purpose of restoring this unique habitat to its natural state of lake plain prairie and oak savannah.

  Outlying land use is characterized as residential and farmland. The area is developing rapidly and several new homes have been built along the park boundaries.

Natural Resources -

- ECOREGIONAL CONTEXT – This topic is most effectively discussed in the "Stewardship Management Plan". In general, best management of natural resources requires an understanding of the relationship of the Algonac SP ecosystems with regional climate, landforms, topography, soils, and vegetation of the site. (hotlink to Stewardship Plan)

- WATER RESOURCES – Algonac State Park provides approximately 3,400' of frontage on the St. Clair River, within the St. Clair Flats Delta, the largest freshwater delta in the world. This St. Clair River frontage offers extraordinary opportunities for viewing of Great Lakes shipping activity.

  Fishing and recreational boating opportunities are available at the Marine City Boating Access Site (BAS), three miles to the north, and at the North Channel BAS, three miles to the south. At these locations, park visitors can launch boats for access to both the St. Clair River and Lake St. Clair for recreational boating and access to the excellent walleye and perch fisheries of the St. Clair River and Lake St. Clair.

  Within the park, the Marine City Drain bisects the park from north to south, terminating into the St. Clair River approximately one mile south of the park. This drain varies in water flow and depth seasonally and is dependent upon Great Lakes water levels. In 2004, the low Great Lakes water levels are reflected in the drain carrying minimal water levels and flows.

  Associated with the drain, a significant portion of the park at the south boundary is classified as "Great Lakes Marsh" and "Lakeplain Prairie (wet and wet-mesic)". Both of these classifications are considered "imperiled" in the state.

- CLIMATE – The average annual precipitation is 31 inches, with average annual snowfall of 42 inches. Winds are generally out of the southwest. During the primary use season of the park, May through September, the average temperatures range from 59.7 degrees f to 74.1 degrees f. High temperatures range from 69.6 to 83.3 and low temperatures range from 50.0 to 64.9. In a calendar year, there will be an average of 13 days above 90 degrees f and 5 days below 0 degrees f.

- GEOLOGY AND TOPOGRAPHY – The surface geology of Michigan is made up of glacial deposits. Algonac State Park lies on primarily clay lake plain, with areas of sand beach ridges on top, particularly along the western edge of the park. The overall landscape of the park is flat, with very little topographic relief.

The only noticeable changes in topography are the old beach ridges, low dunes, and swales found in the west part of the park. These are attributed to historic shorelines established in high water conditions and the formation of the St. Clair Delta over time. The elevation of the park ranges from 577 feet above sea level at the shore of the St. Clair River to 598 feet at the west edge of the park along Marsh Road.

- SOILS – Soils in the park are predominately clay and loam with some occurrences of sandy soils on old beach ridges, low dunes, and outwash channels. The wet clayey and loamy soils generally require artificial or mechanical drainage for agricultural use. The Marine City Drain serves this purpose. The land that is now Algonac State Park, and its hydrology, are impacted by old agricultural drain tiles that tie into the Marine City Drain.

- FLORA – Algonac State Park has scattered intact remnants of oak openings, lakeplain prairie, and Great Lakes marsh. Once the predominate feature in pre-settlement history, these landcover conditions are fragmented and extremely rare on a statewide basis. Of the 1,500 to 2,000 acres of *restorable* lakeplain prairie and oak openings in the state, approximately 250 restorable acres are found at Algonac. This represents 12.5% - 16% of all potential *restorable* lakeplain prairie known to exist in Michigan. Of lesser impact at Algonac is the Great Lakes marsh. This has been impacted by the Marine City Drain which subjects the marsh directly to the varying water levels of the Great Lakes. The marsh in the park today (2004) is relatively small due to extreme low water conditions.

  It is beneficial to understand the pre-settlement land cover conditions of the park to appreciate the significance of what now exists. From the Michigan Natural Resources Inventory (MNFI) report for Algonac, lakeplain prairies are characterized by native low grassland on saturated, level sites. These prairies are among the most diverse communities in Michigan with 200 or more species of plants in a single high-quality prairie. The dominant plant species found in lakeplain prairies include; big bluestem, Indian grass, little bluestem, blue-joint grass, switch grass, and sedges. Several forbs of lakeplain prairies found at Algonac include; swamp milkweed, Sullivant's milkweed, marsh blazing star, tall coreopsis, Missouri ironweed, common mountain mint, colic root, Culver's root, Ohio goldenrod, and others.

  The oak openings associated with lakeplain prairies occur on the sand ridges and deposits inland from the prairie. This community is dominated by widely spaced trees with sparse understory. The dominant plant species found in these oak openings include; bur oak, pin oak, and swamp white oak on more poorly drained soils, and black oak, white oak and

scarlet oak on the drier sand ridges. Pennsylvania sedge, sweet blueberry, and early goldenrod are common groundcover plants.

Plant materials in the Great Lakes marsh at the south end of the park are impacted greatly by water levels. In low water conditions, the marsh plants include; cat-tail, bulrush, arrowhead, bur-reed, and wild rice. Sedge meadow is typically associated inland of the emergent marsh.

From the Michigan Natural Resources Inventory (MNFI) report for Algonac, the landcover at Algonac SP today represents a highly fragmented condition. The pre-settlement lakeplain prairies and oak openings have been severely altered, fragmented, degraded or destroyed due to the conversion of lakeplain prairie to agriculture, and the suppression of natural processes such as wildfire and hydraulic fluctuation. Residential and commercial development has also negatively impacted the current landcover.

Current landcover is characterized as follows; in the developed portion of the park east of the Bridge to Bay Trail, the vegetation are scattered maple and ash with lesser occurrence of oak and cottonwood. In the developed portion of the park west of the trail, the vegetation is a forest of predominately ash, maple and oak. Scattered throughout these sections of the park are occasional walnut and fruit trees.

In the eastern half of the park (and generally west of the Trail) are found dogwood, hawthorn and prickly-ash, with shrub thickets and young ash, maple and elm trees interspersed with some openings of prairie species. There are scattered remnants of mature oak trees in areas that were once swamp in pre-settlement times. These areas were cleared over time and are now dominated by young second-growth forest.

The western portion of the park is oak, maple, cherry and ash forest with thick shrub and red-maple undergrowth. Some pockets of intact, high quality oak opening and prairie are found in this area.

The Great Lakes marsh in the south end of the park contains some intact shallow emergent marsh and sedge meadow openings, but is impacted greatly by Phragmites (giant reed).

Rare plants identified by MNFI survey work of Algonac SP include:

- Clinton's bulrush (Scirpus clintonii) – State special concern
- Dwarf-bulrush (Hemicarpha micrantha) – State special concern
- Few-flowered nut-rush (Scleria pauciflora) – State endangered
- Gattinger's gerardia (Agalinis gattingeri) – State endangered

- Gentian-leaved St. John's-wort (Hypericum gentianoides) – State special concern
- Northern appressed clubmoss (Lycopodiella subapressa) – State special concern
- Purple milkweed (Asclepias purpurascens) – State special concern
- Seedbox (Ludwigia alternifolia) – State special concern
- Short-fruited rush (Juncus brachycarpus) – State threatened
- Skinner's gerardia (Agalinis skinneriana) – State endangered
- Sullivant's milkweed (Asclepias sullivantii) – State threatened
- Tall nut-rush (Scleria triglomerata) – State special concern
- Three-awned grass (Aristida longespica) – State threatened

See Appendix B of the "Stewardship Management Plan" for a complete listing of flora identified at Algonac SP.

- FAUNA – Mammals commonly found at Algonac State Park include white-tailed deer, gray and fox squirrels, eastern chipmunk, eastern cottontail, woodchuck, muskrat, and beaver. A variety of birds, including downy woodpeckers, eastern wood-pewees, red-eyed vireos, black-capped chickadees, white-breasted nuthatches, northern cardinals, and red-tailed hawks frequent the park.

  Insects are abundant within the park, and include at least five rare prairie-dependent species: blazing star borer moth, culver's-root borer moth, red-legged spittlebug, and two rare leafhopper species. One special concern bird, the cerulean warbler (*Dendroica cerulea*) lives in the oak openings in the western portion of the park. A listed snake, the eastern fox snake (*Elaphe vulpina gloydi*) occupies the lakeplain prairies and marshes. See Appendix C of the "Stewardship Management Plan" for a complete listing of fauna identified at Algonac SP.

Historic/Cultural Resources

- PHYSICAL ENVIRONMENT – Few remnants exist of earlier occupation. At the Park Headquarters, there is evidence of an old foundation from European-American settlement, and History, Arts, and Libraries (HAL) has identified several Native American archaeological sites primarily where the wooded sand ridges exist along the western potion of the park. Scattered old fruit trees are indications of the fact that the land was once farmed.

- CULTURAL ENVIRONMENT – Native Americans occupied the St. Clair Flats delta area over a long period of history and hunted, fished and farmed the area. The area surrounding Algonac SP was likely occupied by the woodland Iroquois from 1400-1600AD, the Missauga and Ojibway by 1720, and the Pottowatomi and Ottawa in the mid 1800's.

European-American settlement began in 1780 when Thomas and Margaret Cox were deeded 12,400 acres of land from local Ojibwa headmen. This land was sold to Alexander Harrow in 1794, who subdivided it and sold two parcels (PC 318 and PC 245). Mr. Harrow retained PC 188 and PC 200.

These four PC's (Private Claims) are what make up the majority of Algonac SP ownership. They reflect the 'French Claim' pattern of land ownership, which is relatively narrow along the waterfront, to ensure close proximity to neighbors, and deep to provide area for farming and other land use.

In the 18th and 19th centuries, these lands were farmed, and with river frontage, commercial boat use was found as well. Roberts Road which bounds the north property line of the park ends at Roberts Landing on the St. Clair River, where in 1876 there was a small post office, commercial fishing, and cordwood production.

- ARCHAEOLOGICAL RESOURCES – In 1999, an archaeological survey of Algonac SP was commissioned. Conducted by Great Lakes Research Associates, Inc., the "Phase I Archaeological Survey, Algonac State Park, St. Clair County, Michigan" concluded the following:

  "Despite the fact that the Algonac State Park study area has been subjected to a wide variety of developmental impacts since its initial settlement in the 1790's, this modest Phase I survey has proved that numerous, significant, prehistoric and historic period archaeological resources remain extant within the park setting. By extrapolation, this survey suggests that similar archaeological sensitivities and potential remain extant in nearly all of Michigan's so-called 'developed' areas, both urban and suburban. This finding is particularly relevant to the identification and management of both Native American and early Euro American settlement sites in southeast Michigan.

  However, it should be remembered that, as contracted, this survey should not be considered an exhaustive assessment of the park's highest archaeological site probability areas. Other archaeological resources almost certainly remain to be discovered within its bounds. Although further development activities within the Algonac State Park can and should be guided by the findings of the current document, it should be stressed that the identification of additional significant archaeological properties within the park most certainly may occur. In the event that additional resources are identified, that information should be immediately communicated to the

Michigan SHPO (State Historic Preservation Office) or the State Archaeologist at the Michigan Historical Center for further management review."

Archaeological sites of Native American occupation are primarily found in the park interior toward the western boundary, in areas of historic sand ridges.

Archaeological evidence of European-American occupation is limited due to the high level of site disturbance along the river waterfront (areas most likely occupied historically). A foundation does exist immediately south of the park manager's residence, and other occurrences unknown may exist as well.

Based on the recommendations of this Phase 1 Study, and the Stewardship Plan, **any land change activities in the park that involve excavation of soil, such as construction of burn lines for controlled burns in prairie restoration, installation of underground utilities, or installation of building foundations (to name a few) must undergo an archaeological review to determine their potential impact on the cultural/historic resources of the park.**

- BUILDINGS AND STRUCTURES – The only structures found in the park is the above referenced foundation near the park manager residence.

- HISTORIC LANDSCAPE – Some remnants of the farming activities exist today with evidence of old drainage swales for improved farming and scattered fruit and walnut trees in the park.

Education and Interpretation

- 'KIDS IN PARK' PROGRAM - This statewide program is available at all state parks in Michigan. It offers 4th grade teachers the park as an outdoor classroom in support of the Department's popular L.A.P.'s program. While the opportunity exists at Algonac SP, to date, no school programs have utilized the park for this purpose.

- INTERPRETIVE PROGRAMMING AND DISPLAYS – Algonac SP is one of 40 parks in Michigan where the "State Park Explorer Program" is an active part of the educational experience. At Algonac SP, the interpreter conducts outdoor classroom sessions, and has focused on the prairie and its restoration as a key element of those learning experiences.

  Interpretive signage and informational kiosks have been developed by Education and Outreach, again, targeting the lakeplain prairie conservation/restoration efforts.

Interpretation of Great Lakes shipping and boating is absent to date from these efforts.

Interpretation of Native American and early European life has been conducted through the means of historic re-enactments held at the park since 1992.

- VOLUNTEER PROGRAMS – Algonac SP is very popular with the 'Campground Host Program' whereby volunteers, often retirees, stay at a campground and provide visitor services for the campers. They greet campers, provide information on campground rules and regulations, promote educational and interpretive opportunities in the park, and offer a social gathering (coffee hour) once a week. There are two separate Campground Hosts at Algonac, one at the Riverfront Campground and one at the Wagon Wheel Campground. Over the course of the camping season, a total of eight Campground Hosts (usually couples) are utilized at Algonac State Park.

  Algonac SP benefits from volunteer activities for park clean-up days from Boy Scout troops. These same kinds of assistance are also provided through local 'Community Service' requirements placed by the court system on local offenders.

  The Downriver Recreation group does volunteer work in the park for youth and seniors to provide activities, and local volunteers participate in the various 'events' that are scheduled throughout the year in the park.

  Finally, the extensive Stewardship focus on Algonac SP for restoration of the Lakeplain prairie is dependent upon use of native seed for plantings. Volunteers are utilized at Algonac and other state park locations for collection of native seed from these plants.

Recreational Resources

- DEVELOPED OPPORTUNITIES – Algonac State Park offers a diverse array of recreational opportunities with both day-use activities and camping. Following are the recreational features of this park:

  - Camping – There are three campgrounds in the park. Two are fully modern facilities served by flush-type toilet/shower buildings connected to municipal water & sewer. Each site has electrical pedestals, fire rings and picnic tables. The third is a rustic organization campground with vault-type toilets and municipal water supply to spigots in the campground.

The modern “Riverfront Campground” provides 220 campsites along the St. Clair River. This is the most popular of the campgrounds with excellent viewing of the Great Lakes freighter and recreational boat activity on the river. In 2004, with funding through the Clean Michigan Initiative (CMI), a new Toilet/Shower Building was completed as well as upgraded electrical, water, and sewer service.

The modern “Wagon Wheel Campground” is located in the forested area north and west of the Riverfront Campground, and west of the Bridge to Bay Trail. This campground provides 76 sites, three of which are paved and meet ADA requirements. Through CMI, water and sewer service was upgraded in this campground.

These modern campgrounds are served by a Sanitation Station located near the entrance to the park.

The “Organization Campground” is located north of the Wagon Wheel Campground, with controlled access through a lockable gate. It is used for group camping and events.

- Day-use Picnic Area and Shelter – Immediately south of the Riverfront Campground are day-use facilities to serve large group picnic and shelter needs as well as those of individuals. The shelter is fully utilized on weekends during the summer, and the area is also used by non-campers who want to view the freighters and boats on the river. Individual picnic tables and grills serve smaller numbers of users. Play ground equipment is also available in this area. The day-use area is also popular for events.

- Archery and Trap Ranges – A popular component for both day-users and campers are the archery and trap ranges. These are conveniently located between the two modern campgrounds and have parking available. The Archery Range has target stands, while the Trap Range offers no improvements. Trap Range users bring their own throwing equipment.

- Hunting and Trapping – During the fall and winter seasons, from September 14 to April 1, Algonac State Park is open for hunting of small and large game species. Small game hunting is primarily for rabbit and squirrel, and large game for deer. With improved prairie conditions west of the Marine City Drain, upland bird populations are expected to improve, which would benefit hunting of primarily a pheasant population. Some trapping activity takes place in the

marsh areas in the south end of the park and along the Marine City Drain.

Waterfowl hunters target nearby Harsens Island and related areas for their hunting efforts, and often utilize the camping facilities of Algonac SP.

- Fishing – The St. Clair River is well known for excellent walleye fishing. Boating access for fishing the river is available three miles to the north at the Marine City Boating Access Site (BAS), and three miles to the south at the North Channel BAS at Algonac. Limited shore fishing takes place in front of the park on the river's edge.

- Trails – There are two defined trail loops in the park. The "Blazing Star Prairie Trail" is a short (0.5 mile) loop trail near the Archery Range. This trail is a self-guided educational walk through a restored section of lakeplain prairie. At the trailhead is a kiosk with information about the lakeplain prairie, its significance, and the restoration efforts that are being implemented at Algonac SP.

  The "Oak Savannah Trail" is a 2.5 mile loop that is also self-guided. The theme of this walk is the oak openings (savannahs) that are integrally associated with lakeplain prairies. This trail loops to the south of the developed portion of the park, and stays on the east side of the Marine City Drain.

  A third trail within the park is not a loop. The "Lakeplain Prairie Trail" extends to the west across the Marine City Drain into the Lakeplain Prairie restoration area. It is approximately one mile in length and joins with a service road that comes into the park from Marsh Road.

  A fourth trail available to visitors is the "Bridge to Bay Trail", which comes into the park from the south from Algonac. This is a paved trail serving non-motorized use (walking/jogging, bicycling and rollerblading). It is a very popular access route in both directions. Park visitors use this trail to access conveniences in Algonac, and Algonac residents use it to access the features of the park.

  The internal park trails are used not only by park campers and traditional day-use visitors, but are also accessed by visitors who come to the park by way of the Bridge to Bay Trail.

- Park Headquarters – This administrative area for park operations and maintenance is located immediately north of the Riverfront

Campground. It includes the main office, shop and storage areas. The office is open to the public during normal working hours for information needs.

- AREAS OF CONFLICT – With diverse use for multiple interests comes the potential for conflict betweens users and/or between users and the natural resource or historic/cultural values of the park. Algonac State Park is no exception. Following are the identified conflict issues for this park:

  - Neighbor intrusions – Algonac SP is bordered along the west boundary and parts of the north boundary by private properties. These holdings have the State Park as their backyard neighbor, and are the primary source of ORV trespass in the westerly area of the park.

  - Dissimilar operating hours – the Bridge-to-Bay Trail is open 24/7 and is used at all hours of the day and night. The park is closed to visitor entry between the hours of 10:00P and 8:00A. This has manifested into operational problems in the park.

  - Dissimilar operating rules - the Bridge-to-Bay Trail allows bicycle use. The park trails are for hiking only…no bicycles. Visitors from the rail-trail enter the park and continue onto the park path system in conflict with the operating rules of the park.

  - Snowmobile activity – occurs in the prairie restoration area west of the Bridge to Bay Trail. This is in conflict with the Natural Areas Act, under which a large portion of this part of the park is designated. Snowmobile activity also takes place in the more developed parts of the park, such as the Day-Use and Camping areas. This activity leads to damage to the surface materials (natural and man-made) and it is not un-common for damage to occur to site improvements, such as electrical pedestals, water hydrants, and signage, to name a few.

  - Trap range use – this popular day-use activity takes place at a location sited between the two modern campgrounds. Camper complaints of excessive noise from the range are common.

Park Use Statistics and Economic Impacts

(NOTE...for the following analysis, 2003 data was used. In 2004, a portion of the high-use Riverfront Campground was closed for construction of a new toilet/shower building and water and sewer improvements.)

- PARK USE – Algonac SP is within one hour's drive of greater metropolitan Detroit and 42% of the population of Michigan. That proximity helps to account for why more than 341,000 people visited the park in 2003. Of these, 37% were campers and 63% were day-users. Total revenues (Motor Vehicle Permits and Camping Fees) generated by the park in 2003 exceeded $528,000.

  Characterization of park use is described as follows: (based on MDNR-Park Attendance Statistics)

  - Summer Use Season – This is defined as the three month period of June through August, when schools are not in session. 55% of all camping and 54% of all day-use takes place during these months.

  - Fall Use Season – At Algonac SP, the fall season is defined by the months of September through November. September and October are the highest use months of this season that accounts for 33% of all camping activity in the park. The same is true of day-use, with 32% of all day-use taking place in primarily the first two months of this season.

  - Winter Use Season – December through February mark a significant decline in park activity, accounting for only 1.5% of camping use and 2.5% of day-use.

  - Spring Use Season – March through May shows increasing park use in both categories. Camping use is at 10.5% and day-use is at 11.5%. In this season, use continually increases as the weather warms up in May.

  From "MI CRS Statistics 2003" report by Spherix, the state contractor that administers the Campground Reservation System (CRS), Algonac SP was the second highest ranking park in the Southeast Michigan Region of Michigan with 9,804 campground reservations in 2003. Lakeport was first of the fourteen parks in the region with 11,266, and Waterloo Recreation Area was third with 8,451.

  From the same source, the following statistics (2003 data) are attributable to Algonac SP:

  - Nearly 25% of campground use is from locations in the metropolitan Detroit area. The majority of these come from Warren, Chesterfield, Roseville, Sterling Heights, Clinton and Macomb.

- Algonac SP ranked #12 of all state parks for gross revenue from camping. Of the $528,096 generated by camping in 2003, $468,848 came from the Riverfront Campground, $57,350 from the Wagon Wheel Campground, and $1,898 from the Organization Camp.

- The average amount paid per reservation at Algonac was $48.00, less than the state average of $54.88. The high in the state system was $100.80 at Grand Haven SP on Lake Michigan, and the low was $18.34 at Highland Recreation Area.

- The average number of people per reservation was 2.87, less than the state average of 3.03.

- The average length of stay was 2.6 days, slightly higher than the state average of 2.46 days. The high in the state was Holland SP with 4.02 days and the low was Straits SP with 1.69 days.

- ECONOMIC IMPACTS - Michigan State University (Dr. Dan Stynes) developed an economic analysis model known as "MGM2". This model is an update of the MGM model developed by Dr. Ken Hornback for the National Park System in 1995. The purpose of the updated MGM2 model is to estimate the impact of park visitor spending on the local economy. These economic impacts are reflected in terms of sales, income, employment, and value added.

  This analysis tool, like others, relies on three primary factors in the common equation:

  > Economic Impact of Tourism Spending = Number of Tourists (x) Average Spending per Visitor (x) Multiplier (to estimate extended effects of direct spending).

  For our purposes of conducting a very basic review of impacts, we have utilized the "MGM2-Short Form" version of the program, which simplifies the extent of analysis required for input, and utilizes more generalized multipliers for spending outputs. For the non economist, this provides an excellent tool for establishing a baseline assessment of the economic impacts of our parks.

  Economic impacts of Algonac SP to the local community are significant. St. Clair County is a low density county relative to its metropolitan neighbors, with approximately 40% of the county in farm land. The area around Algonac State Park is characterized as rural. With Algonac State Park drawing the great majority of users from outside the county, local business benefits from the influx of this 'new' money to the local economy.

Following are the relative economic impacts (based on 2003 data) of Algonac SP to the economy of St. Clair County: ("MGM2-Short Form" for Algonac)

- DIRECT ECONOMIC EFFECTS TO THE COMMUNITY

  - Direct spending attributable to Algonac SP visitors totaled $8,192,000, of which $2,038,000 came from Day-Use, and $6,154,000 from Camping.

  - Jobs totaled 194, with 48 related to Day-Use activity and 146 to Camping. (Note…jobs are not full-time equivalent. They include part-time and seasonal positions.)

  - Personal Income total is $2,952,000, with $734,380 associated with Day-Use of the park and $2,217,300 associated with Camping.

  - Value added (total income plus business taxes) totaled $4,481,000. Day-Use accounted for $1,114,810 and Camping accounted for $3,365,890.

- TOTAL ECONOMIC EFFECTS TO THE COMMUNITY (NOTE…this reflects 'Direct Effects' plus the 'Secondary Effects' of visitor spending on the local economy. Secondary Effects (sometimes called 'Multiplier Effects') capture economic activity that results from the re-circulation of money spent by the park visitors in the community.

  - Total spending = $12,665,000 (55% over direct spending)

  - Jobs = 256 (32% over direct job impacts)

  - Personal Income = $4,576,000 (55% over direct spending)

  - Value added = $7,246,000 (62% over direct value added)

  NOTE….for purposes of updating economic values, the Consumer Price Index (CPI) is often used to adjust values over time. Through the following link, [**http://www.bls.gov/home.htm**] a CPI Inflation Calculator is located in the category of "Inflation and Consumer Spending".

Stakeholder Input

- DNR PROGRAMS – Algonac SP has a long history of cooperative management with other Department programs, the most significant of which is with Wildlife Division and the Fire Management side of Forest, Minerals, and Fire Management (FMFM).

  Before PRD had a Stewardship Program, Wildlife Division was actively involved with efforts to manage Algonac SP for re-establishment of Lake Plain Prairie and Oak Savannahs. In the 1989/90 timeframe, the Natural Areas Program of Wildlife Division initiated the first controlled burn at Algonac. This was, as all controlled burns are, conducted by the FMFM Fire Officer.

  In 1994/95, when PRD Stewardship took over management of the restoration efforts, Wildlife participation shifted to their field biologist staff. That relationship continues today.

  Another DNR program with a stake in Algonac SP is 'Education and Outreach (EO). Algonac is one of many parks where an "Explorer Guide" is located. This person conducts educational programming for park visitors, tailored to the unique resources of the park. In addition to this hands-on educational approach, EO also contributes to educational opportunities with the development and placement of information kiosks and bulletin boards.

- OTHER STATE AGENCY PROGRAMS - The Michigan Department of Transportation (MDOT) is a stakeholder with M-29 (running north/south along the St. Clair River shoreline) incorporated in our 'Scenic Zone'.

- FEDERAL PROGRAMS - In concert with our Stewardship Program and Wildlife Division, the U.S. Army Corps of Engineers has initiated a project at Algonac SP and the St. Clair Flats Wildlife Area to research effective control techniques for phragmites at Algonac SP.

  An unusual stakeholder is the US Border Patrol. Algonac SP, with its 3,400' of frontage on the St. Clair River, is an attractive target for potential illegal border crossings from Canada.

- LOCAL AGENCY PROGRAMS – The Marine City Drain bisects the park from north to south. This St. Clair County Drain falls under the pervue of the County Drain Commission.

  Another local agency with an interest in the park is the St. Clair County Parks & Recreation Department. They were instrumental in the development of the Bridge-to-Bay Trail that goes through the park.

- PRIVATE SECTOR – All adjoining property owners are categorically a stakeholder. Additionally, local business interests in both Algonac and Marine City are as well. Park users don't spend their money just at the park…a significant amount of commerce takes place at local stores, restaurants and lodging locations. The Bridge-to-Bay Trail has been an asset for local business in Algonac, providing access for park users directly into Algonac.

- SPORTING CLUBS – MUCC has a long-standing interest at Algonac with the archery and trap ranges. These elements receive use year-round, with more intense use in the fall prior to bird and deer seasons.

- SPECIAL INTERESTS – Historic re-enactments have been conducted for the past twelve years by the St. Clair Flats Re-enactment Group. These are aimed at providing an educational experience about the lives of the native Americans and early European settlers who once occupied this area of the state. The Fourth of July antique car show has been conducted at Algonac SP for the past eight years, and the Fall Harvest Campout at the Riverfront Campground has been successfully conducted for the last eleven years. Other special event activities are held as well.

- PUBLIC – Many of the 340,000 +/- park visitors who come to Algonac SP each year are repeat customers. This is true system wide. From the Public Policy Associates 1997 "Michigan State Parks Study", 80% to 89% of visitors to State Parks in Southeast Michigan are "Likely" to return to the park within twelve months. From the same study, the likelihood of a park visitor 'recommending' a particular park to others was also high in Southeast Michigan, with a range of 85% to 88% saying that they would recommend visiting the park.

APPENDIX

REPORTS

- Stewardship Management Plan
- Economic Impact Analysis

MEETINGS

- 7/9/2003 Start-up Meeting
- 9/26/2003 Stakeholder Meeting
- 11/6/2003 Stakeholder Meeting
- 7/20/2004 Public Information Meeting
- 11/10/2004 Planning Team review of 'Draft' GMP
- 4/19/2005 Presentation of Final GMP to PRD-Management Team
- 5/3/2005 Presentation of Final GMP to Statewide Council
- 5/12/2005 Presentation of Final GMP to Citizen's Committee for State Parks