

St. Clair Flats Wildlife Area

Master Plan

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MICHIGAN DEPARTMENT OF NATURAL RESOURCES

WILDLIFE DIVISION

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Introduction

The **St. Clair Flats Wildlife Area (SCFWA)** is located at the southern tip of St. Clair County. The SCFWA contains the Harsens Island unit, St. John's Marsh unit, Dickinson Island, and Great Lakes Marsh that surrounds the area locally known as the "Flats".

The marshlands and islands within SCFWA are a river delta formation resulting from St. Clair River flow into Lake St. Clair. Located between the St. Clair and Detroit Rivers, Lake St. Clair has a total area of 28,400 mi² and is a significant portion of the connecting waters between Lakes Huron and Erie. Approximately two-thirds of Lake St. Clair lies within Canadian boundaries. Waters of the Lake St. Clair / St. Clair River system are an annual ancestral migration route for thousands of ducks, geese, swans and various shore and wading birds. The diverse habitat of a wetland delta system allows for suitable habitat for a wide variety of wildlife species. While SCFWA is widely known for its outstanding waterfowl hunting opportunities, there are many other values provided, from other recreational pursuits such as quality deer hunting, to critical habitat for rare, threatened and unique species. This includes black, Forster's, and common terns, sandhill cranes, glossy ibis, osprey, bald eagles, king rails, eastern fox snakes, American bittern, least bittern, cattle egret, green herons, black-crowned night heron, loon, cormorant, short-eared owl, snowy owl, yellow spotted turtle and eastern bluebird. Harsens Island in particular has one of the highest populations of the threatened eastern fox snake. SCFWA provides an incredible amount of habitat value and recreational opportunities outside of its well-known waterfowl benefits.

Purpose of the plan

The primary purpose of this Master Plan is to ensure that federally and state mandated legal obligations to manage for the stated purpose of the wildlife area management are fulfilled.

Additionally, this management plan was written to fulfill the mission of the Michigan Department of Natural Resources, Wildlife Division as it pertains to the St. Clair Flats Wildlife Area. This plan states the Wildlife Division's purpose, direction, priorities, goals and objectives, plus allows for long term trials and experimentation by Division biologists and managers.

Michigan Natural Resources Commission Statement

The Natural Resources Commission (NRC), as the governing body for the Michigan Department of Natural Resources (DNR), provides a strategic framework for the DNR to effectively manage your resources. The NRC holds monthly public meetings throughout

Michigan, working closely with its constituencies in establishing and improving natural resources management policy.

Five Goals of the DNR

- Protect natural and cultural resources.
- Ensure sustainable recreation use and enjoyment.
- Enable strong natural resource-based economies.
- Improve and build strong relationships and partnerships.
- Foster effective business practices and good governance.

DNR Mission Statement

The Michigan Department of Natural Resources is committed to the conservation, protection, management, use and enjoyment of the state's natural and cultural resources for current and future generations.

Wildlife Division Mission Statement

To enhance, restore and conserve the State's wildlife resources, natural communities, and ecosystems for the benefit of Michigan's citizens, visitors and future generations.

Federal Aid in Wildlife Restoration Program

The Federal Aid in Wildlife Restoration Act of 1937 authorizes a grant program with state fish and wildlife agencies for restoration of wild birds and mammals and to acquire, develop and manage their habitats; for the education of hunters; and the development and management of shooting ranges.

Management Emphasis

Wildlife Division Strategic Plan: "Guiding Principals and Strategies" (GPS)

In 2010, the Wildlife Division created a document detailing our division wide goals and priorities known as the Guiding Principles and Strategies (GPS) to better focus our efforts, increase the Division's transparency with the public, and allow us to more easily report our goals, objectives and accomplishments. Our primary goals on the St. Clair Flats Wildlife area are to manage game populations and provide hunting and trapping opportunities while maintaining populations in balance with available habitat, land use practices, and stakeholder values (GPS Goal 1.1); improve and preserve wetland habitat for game and non-game species (GPS Goal 2); provide a refuge and food supply for migrating waterfowl, shorebirds and wading birds (GPS Goal 2); provide sportsmen/women with maximum hunting opportunities while maintaining quality hunting experiences (GPS Goal 4.3); help meet the Wildlife Division's goal of providing statewide wildlife recreational opportunities for the citizens of Michigan and visitors from

other areas (GPS Goal 4); and increase collaborations with conservation partners and volunteers to implement wildlife goals (GPS Goal 6.1).

More Bang for your Buck

As a result of the new license package in 2014, Wildlife Division developed “More Bang for your Buck” (MBFYB). This is a list of public benefits and “deliverables” that the Division stated would happen as a result of the new license package.

The following are (but are not the only) ways in which MBFYB relates to the St. Clair Flats:

- Fully implementing the Michigan Waterfowl Legacy Program.
- Updating water control structures at managed waterfowl and wetland areas, so that more hunters can pursue more waterfowl.
- Developing new managed waterfowl areas at high-quality wetlands near population centers.
- Improving hunter access to waterfowl hunting areas by deepening access channels to address low Great Lakes water levels.
- Expanding hunting information through technology such as “Mi-Hunt”.
- Expanding cooperative youth events with partners.
- Increasing mentoring programs with conservation partners.
- Expanding events at our “Wetland Wonders”, our 7 existing managed waterfowl areas across the State.

Prominent Partner Groups (GPS 6.1.1)

The St. Clair Flats has a history of cooperation and partnerships between sportsmen and conservation groups that led to the success of high quality habitat management and high level of quality public recreation on the area. The Wildlife Division of the DNR is committed to maintaining and increasing the level of relationships with these organizations.

The following is the list of groups that have given assistance in past years which allowed Wildlife Division to accomplish our management goals:

- Harsens Island Waterfowl Hunters Association
- St. Clair Flats Waterfowlers, Inc.
- Michigan Duck Hunters Association, Blue Water Chapter
- Ducks Unlimited
- Waterfowl USA Chapter #1
- MUCC District 8
- National Wild Turkey Federation, Black River Chapter
- Pheasants Forever
- Southeast Michigan Council of Governments

Public Use of Area

Public use of the area consists of hunting, trapping, wildlife viewing, fishing, photography, hiking, boating, swimming, and canoe/kayaking.

Benefits to Local Economy

The town of Algonac and the community on Harsens Island rely on tourism dollars to drive the economy. Many businesses thrive on the business brought in during the summer by boating and fishing enthusiasts. Instead of the economic flow slowing after the normal summer boating months end, the Harsens Island Managed Hunting unit and the rest of the St. Clair Flats continues to draw in a regular stream of income to the local economy. Our managed hunting operation on the island alone sees 7,000-9,000 hunter trips a year, apart from the thousands of trips made by hunters on the surrounding St. Clair Flats area.

Threats

Current threats include invasive plants such as phragmites, invasive animals such as mute swans, and wetland degradation and loss. This plan incorporates the restoration of critical Great Lakes marsh habitat within the Lake St. Clair basin. Lake St. Clair supports two major natural communities that form the coastal wetland complexes: Lake Plain Prairie and Great Lakes Marsh. Both of these communities are very rare and are considered to be globally imperiled. The obvious threats to the lake and associated wetlands are human induced habitat alterations through dredging, sea walling, residential and commercial building. Future sources of degradation may include contaminants and the spread of new exotic/invasive species.

Management Goals and Objectives

The management goals and objectives of the St. Clair Flats Wildlife Area are written with the basic principals in mind:

- 1** To ensure that the legal obligations to manage the stated purpose of the wildlife area are fulfilled.
- 2** To ensure that the Department's goals and mission along with Wildlife Division's mission, strategic plan (GPS), new licence package-"More Bang for Your Buck" and policies are carried out on the St. Clair Flats Wildlife Area.

What follows is the strategic direction for St. Clair Flats Wildlife Area. This plan describes the goals or desired future condition for the area, the objectives under each goal, and the actions associated with each objective. Goals should come mostly from

the featured species and habitat issues relevant for the given SGA, but could also come from recreational infrastructure needs or natural communities. For the purposes of this master plan, the following definitions will be used:

Goal – A desired future condition of the area.

Objective – A management approach or strategy that the best science suggests can be used to move the area toward the goal. An objective is a quantifiable input to be completed within a defined timeframe that contributes towards accomplishing the goal.

Action – An operational means to accomplish an objective. An action is a step needed to complete an objective and is described in sufficient detail to inform implementation in operational and annual work plans. It is expected to take approximately ten years to complete all the objectives.

Goals/Objectives/Actions (listed as highest priority to lowest)

Goal I. High Quality Wildlife Habitat through Protection, Restoration, and Management

Rational: There has been over a 75% loss of historic wetlands in the Lake St. Clair Area since pre-settlement times (circa 1800). The habitat that remains is vital to many resident and migratory wildlife species, provides public outdoor recreation opportunities, and serves as an important driver of local economies due to the importance of public outdoor recreation for area users.

Metrics: Habitat is measured in acres of habitat that is managed/maintained, protected, and/or restored. Number and type of artificial nest structures.

Objectives:

- Increase populations of waterfowl and other wetland wildlife by protecting, restoring and enhancing wetland and associated upland habitats.
 - **Actions:**
 - Maintain and/or improve rare and threatened remnant habitats such as Lakeplain Prairie at St. John's Marsh by improving access for equipment, controlling water levels, carefully planning herbicide and prescribed fire treatments.
 - Maintain upland tallgrass prairie to provide cover for nesting waterfowl by mowing, disking, seeding, and prescribed fire.
 - Allowing our stands of forest to age and develop cavities for natural wood duck habitat.
 - Provide and maintain artificial nest structures in and near marsh units where natural nesting habitat is lacking.
- Identify opportunities and funding sources that will facilitate the development and/or expansion of new managed waterfowl areas on the St. Clair Flats.

- **Actions:**
 - Restore wetlands over the next 10 years that will facilitate increased waterfowl use and wildlife recreational opportunities,
 - with emphasis on hunting/trapping.
 - Contact private landowners with adjacent lands suitable for restoration and pursue acquisition opportunities that will facilitate the expansion of the St. Clair Flats Wildlife Area in a manner that will allow us to meet our goals and increase overall public ownership.
 - Work collaboratively with partners on ways to restore and enhance habitat and hunting/trapping opportunities.
- Maintain existing and/or replace ageing infrastructure to maintain water control over portions of the area to allow for manipulation of levels, provide resiliency from threats such as climate change and subsequent control of the vegetative succession and invasive species.
- **Actions:**
 - Restore remnant dikes at St. John's Marsh which surrounded the historic 1943 Golf Course in order to provide water level control on an additional 332 acres of that unit.
 - Maintain and/or improve water supply ditches and channels to provide adequate water to pumps.
 - Inspect infrastructure as necessary and schedule regular work to maintain the integrity of functioning dikes.
 - Acquire proper permits for area maintenance and improvements.
 - Fix or replace faulty water control structures.
- To protect, restore, and enhance unique eco-types such as lakeplain prairie, wet prairie, shallow moist soil marsh, and hemi-marsh.
- **Actions:**
 - Maintain and/or improve rare and threatened remnant habitats such as Lakeplain Prairie at St. John's Marsh by improving access for equipment, controlling water levels, carefully planning herbicide and prescribed fire treatments.
 - Work with partners and wildlife staff to incorporate modern techniques or methods to enhance wetlands on appropriate sites.
 - Staff needs to stay current with emerging research and techniques on ways to improve habitat by engaging other staff, attending conferences and training courses.

- Provide habitat that is vital for annual spring and fall waterfowl peak populations of 20,000-40,000 waterfowl.
 - **Actions:**
 - Maintain a minimum of 400 acres of refuge at Harsens Island and St. John's Marsh combined.
 - Farm and maintain adequate acres of crops and moist soil plants to provide food sources for migrating waterfowl.
 - Maintain sufficient water level control within cropped areas to allow utilization by waterfowl.
- Maintain agricultural practices in a cost-effective manner.
 - **Actions:**
 - Maintain sharecropping agreement with Harsens Island Waterfowl Hunters Association.
 - Collaborate with partners on farming practices, equipment and materials purchases, and future investments in a strategic manner.
- Enhance diked wetlands for wildlife.
 - **Actions:**
 - Utilize drawdowns, flooding, burning, and natural water level fluctuation to maintain hemi-marsh conditions and/or to promote moist soil plant growth
- Implement a featured species approach, emphasizing waterfowl production through habitat improvement.
 - **Actions:**
 - Conduct habitat improvement practices with a focus on waterfowl, namely mallard and wood duck.
- Prioritize waterfowl and other migratory bird use when conducting habitat improvement.
 - **Actions:**
 - Conduct habitat improvement practices with a focus on attracting and providing resources for waterfowl and other migratory birds during breeding and transient periods in spring and fall.
- Control undesirable exotic species.
 - **Actions:**

- Remove mute swans from wildlife area opportunistically, and by utilizing other agencies and DNR divisions to strategically and efficiently reduce numbers.
- Actively incorporate methods that will effectively reduce/manage phragmites.
- Continue to stay educated on emerging control methods and techniques for managing/reducing exotic/invasive species through training sessions and seminars.
- Monitor for new and emerging exotic/invasive threats.

Goal II. Enhance and Improve Wildlife Related Recreational Activities

Rationale: According to the 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation there were approximately 4.4 million Michigan residents and nonresidents 16 years old and older fished, hunted, or wildlife watched in Michigan. In 2011, state residents and nonresidents spent \$6.1 billion on wildlife recreation in Michigan. Public access at St. John's Marsh decreased as a result of the reconstruction of M-29 following the historic high Lake St. Clair water levels in 1986.

Metrics: Track, record, and estimate number of participants utilizing the area for outdoor related activities through tools such as number of area permits, staff observations, sign-in sheets, and car counts.

Objectives:

- To provide for the orderly harvest of waterfowl, furbearers and upland game.
 - **Actions:**
 - Utilize existing permit structure to maintain organized hunting and high quality experiences for the public.
 - Monitor the effectiveness and efficiency of managed hunting operations on the Flats.
 - Work with partners to identify ways to maintain and/or improve the hunting quality on the Flats.
- Provide educational opportunities for people interested in wetland and upland ecosystems and associated wildlife.
 - **Action:**
 - Provide interpretive signs and educational materials at public accesses and facilities.
- Work with partners to increase public awareness.

- Maintain and/or improve hunter and public access by deepening access channels, providing signage, and updating area maps.
 - **Actions:**
 - Re-construct parking/public access site at St. John's Marsh off M-29 near monument, that provides public boat and foot access.
- Identify areas that need access improvements.
- Dredge channels and ditches as needed.
- Update area maps as needed.
- Maintain current partnerships and identify new opportunities with local hunter and conservation groups, university and government studies, and other DNR divisions which will help achieve recreational related wildlife goals and objectives.
 - **Actions:**
 - Area staff will stay engaged with current organizations and identify new opportunities for partnerships, especially with non-consumptive user groups.
 - Strive to foster relationships with under-represented user groups such as trappers by initiating contacts and determining interest.
- Provide opportunity for maximum hunter and trapper use days dependent on season dates and season lengths.
 - **Actions:**
 - Actively manage public use through permit system which will minimize conflicts while striving to optimize opportunities where needed.
- Provide seasonally flooded cropland/moist soil areas for hunter recreation.
 - **Actions:**
 - Actively farm, flood, and maintain infrastructure which will attract waterfowl for high quality hunting opportunities.
- Increase opportunities and facilities for wildlife viewing that are compatible or don't interfere with hunting objectives.
 - **Actions:**
 - Increase public awareness of current opportunities through open houses, literature, web based and social media, and signing.
 - Develop new opportunities for outdoor public recreation by restoring access at St. John's Marsh.
- Provide educational and/or area tours as requested and facilitate "open house" programs to increase or strengthen public relations.

- **Actions:**
- Provide a minimum of 2 open houses annually at Harsens Island.

Goal III. Protect Rare, Unique, or Threatened/Endangered Species

Rationale: Rare species are unique and important for the State of Michigan and we have an obligation to provide habitat for these imperiled species.

Metrics: Presence and absence of or increases and decrease of rare species.

Objectives:

- Collaborate with partners to identify, restore, and protect endangered, threatened and special concern species and their habitats.
 - **Actions:**
 - Work with DNR Endangered Species Coordinator, USFWS, and other partners when needed.
 - Monitor abundance of rare species.
 - Continue controlling invasive species.
- Protect and preserve special natural features and community types.
 - **Actions:**
 - Incorporate management techniques that will reduce/eliminate threats.
 - Purchase lands that are critically important rare community types.
 - Work with conservation partners to protect lands that are critical for rare species, i.e. “conservation easements”.
 - Conduct habitat management that will enhance conditions for rare species.

Goal IV. Maintain and Improve Facilities and Infrastructure

Rationale: There has been a significant investment in current infrastructure and facilities at Harsens Island and St. John’s Marsh that is needed for wildlife habitat maintenance and public outdoor recreation.

Metrics: Annually inventory and maintain 6 buildings, including manager’s residence, 4 pump stations, dikes and associated water control structures.

Objectives:

- Operate and maintain facilities in a cost-effective manner.
 - **Actions:**
 - Track utility and maintenance bills and identify ways for cost savings.
 - Routine cleaning of facilities.

- Identify faulty office and work space furniture and equipment and replace as needed.
- Provide access with maintained dikes, roads, and parking areas.
 - **Actions:**
 - Mow parking lots and dikes.
 - Grade access roads.
 - Repair dikes as needed
- Maintain dike and ditch system, pumps, and water control structures for desired water level manipulation.
 - **Actions:**
 - Identify faults in infrastructure and repair/replace.
 - Grease pumps when recommended and inspect as needed.
 - Routinely send in pumps for overhaul and maintenance.
- Provide well defined area boundary and informational signs throughout the area.
 - **Actions:**
 - Post signs on area to delineate boundaries, parking areas, wildlife refuge, and directions.
 - Annually inspect, replace/maintain signs as needed.
- Maintain all facilities/capitol improvements to meet or surpass state and federal standards.
 - **Actions:**
 - Conform to MIOSHA standards.
 - Conform to ADA standards where appropriate.

Goal V. Wildlife and Habitat Monitoring

Rationale: Without monitoring of wildlife and habitat abundance it is uncertain if one is reaching goals and if new threats to wildlife are emerging.

Metrics: Invasive species presence/absence, wildlife abundance estimates through observations, and tracking of game species harvest.

Objectives:

- Band waterfowl to achieve statewide banding goals.
 - **Actions:**
 - Trap and band ducks and geese annually

- Monitor wildlife populations as needed.
 - **Actions:**
 - Aerial surveys of waterfowl on the Flats and Lake St. Clair.
 - Aerial surveys of deer on Harsens and Dickinson Islands DMU 174.
 - Weekly ground surveys of waterfowl during migration.
- Collect biological data as needed to attain population monitoring goals.
 - **Actions:**
 - Collect waterfowl age/species information at check station.
 - Register deer per State's accomplishment directives
 - Monitor deer harvest at Harsens Island Managed Hunting Area.
- Monitor the effects of habitat management techniques on marshland and grassland communities.
 - **Actions:**
 - Record management techniques and monitor results to determine level of success.
 - Modify techniques as needed to reach goals.
 - Monitor effects of control measures on invasive species.

Goal VI. Regulation of Non Wildlife Related Recreational Activities

Rationale: The State is legally mandated to manage lands for the purposes in which that land was acquired.

Metrics: Number of public complaints, observed displacement of wildlife, number of hunter harassment/interference complaints.

Objectives:

- Ensure that non-wildlife related recreational activities do not interfere with the designated purpose for which this area was acquired or constructed – the restoration, conservation, management, and enhancement of wild birds and mammals, and providing for public use of and benefits from these resources.
 - **Actions:**
 - Inform the public that wildlife habitat, hunting, trapping, and wildlife viewing are the highest priorities on the area.
 - Provide adequate educational materials and signs that inform the public.
 - Manage, minimize or eliminate activities that interfere with wildlife habitat and hunting/trapping priorities.

- Control unauthorized vehicle traffic and area use.
 - **Actions:**
 - Maintain and/or install gates, barriers, and signs on area that prevent unauthorized use.
 - Monitor unauthorized use and inform persons, report use to authorities as necessary.

- Control prohibited activities as described under “State Land Rules for State Lands Other than State Parks and Recreation Areas.”
 - **Actions:**
 - Post clear signs and information for the public.
 - Monitor area for prohibited use.

Acquisition and Disposal of Land

Overall, the goal will be to expand public lands around the St. Clair Flats Wildlife Area. Emphasis will be placed on opportunities to purchase large parcels such as the 350 acre “Hunt Club” on Harsens Island.

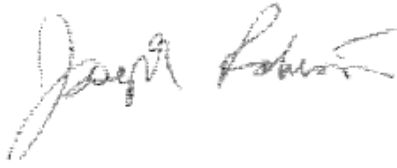
- Purchase land within the acquisition boundary that will increase our ability to achieve stated goals.

- Review and divest of parcels that lack the capacity to meet DNR and/or Wildlife Division goals.

Public Input

This plan was available for public review and comment on the DNR website between June 13, 2016 and July 11, 2016. Copies were also available at the Mt. Clemens and Harsens Island Field Offices. During this period, two comments were received and considered before finalizing this plan. No comments required modifications to the draft plan.

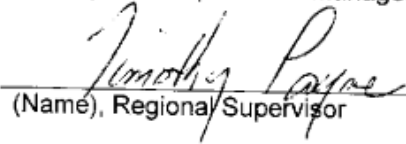
Approvals



(Name), Field Operations Manager

2-27-2017

Date



(Name), Regional Supervisor

2-27-17

Date



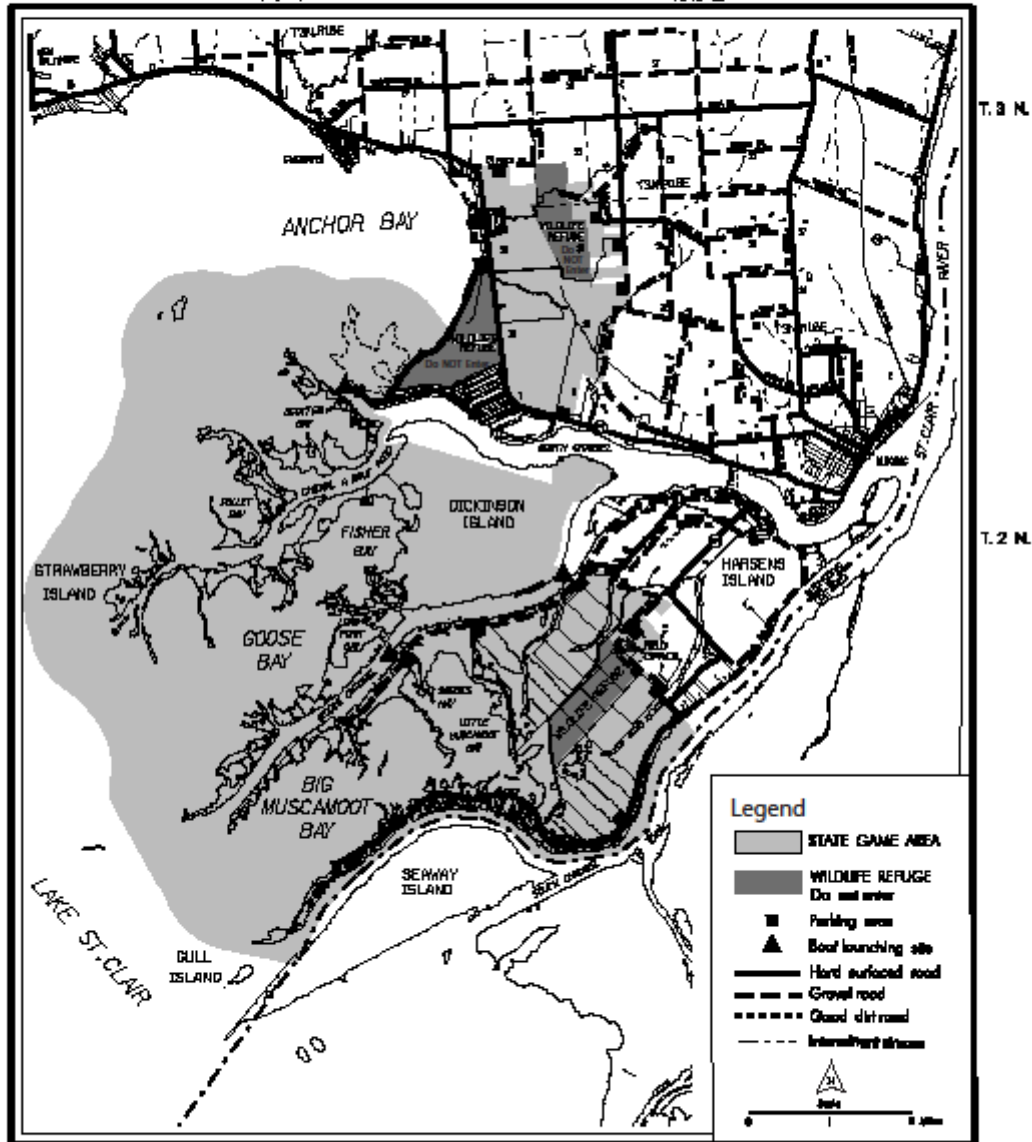
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Hunter Monies Made This Area Possible

DNR-Wildlife Map 740100 (was 1007) Rev. 9/2006-MLS

