FISHING PLAN

OTTAWA NATIONAL WILDLIFE REFUGE

CEDAR POINT NATIONAL WILDLIFE REFUGE

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF SPORT FISHERIES AND WILDLIFE

FISH AND WILDLIFE SERVICE

OAK HARBOR, OHIO

FACT SHEET

OTTAWA NATIONAL WILDLIFE REFUGE
CEDAR POINT NATIONAL WILDLIFE REFUGE
OHIO - REGION 3

PUBLIC FISHING PLAN

I. ESTABLISHMENT

The Ottawa National Wildlife Refuge was established in 1961 to preserve Lake Erie Marshes and to provide a resting and feeding place for migratory waterfowl in the Mississippi Flyway. Land acquisition is incomplete with about 200 acres yet to be acquired. Cedar Point National Wildlife Refuge was acquired by donation to the Bureau of Sport Fisheries and Wildlife on December 18, 1964.

II. AREA TO BE OPENED

Designated areas, posted as Public Fishing Areas, in open Water Areas on Lake Erie will be open to boat fishing only and along Crane Creek will be open to bank fishing only. These designated areas include approximately 120 acres or about 5% of Ottawa Refuge acreage and approximately 100 acres, about 22% of acreage of Cedar Point.

III. ROLE OF REFUGE IN MANAGEMENT

The refuge was established to preserve and improve a portion of remaining Lake Erie Marshes for the benefit of nesting and migrating waterfowl.

Secondary objectives are to provide sanctuary for nesting bald eagles, provide habitat for other migratory birds and resident wildlife species and to provide public use activities so long as compatible with the primary objectives.

Principal Wildlife Classes:

1. Waterfowl: Major waterfowl species are Canada Geese, whistling swans, mallards, black ducks and wood ducks. Other species include blue and snow geese, pintails, American Widgeon, blue-winged teal, green-winged teal, and limited numbers of diving ducks.

2. Other Migratory Birds: Limited use of refuges is made by coots, gallinules, woodcock and snipe.

3. Upland Game Birds: Small populations of ring-necked pheasants and bob-white quail are found on the refuge under normal conditions.

4. Bald Eagles: Eagles have nested on the refuges in recent years, and are year round residents.

5. Big-Game Animals: White-tailed deer are the only big game animals native to the area and are present in very limited numbers.

6. Fish: All common species are represented in refuge waters. Limited numbers of game fish species, mainly wall-eyed pike and great northern pike, are present but major fish populations are made up of rough species, mainly carp and suckers.

IV. RELATIONSHIP TO OTHER FEDERAL AND STATE REFUGES

The Shiawassee National Wildlife Refuge in Michigan is 140 airline miles to the northwest and The Erie National Wildlife Refuge in Pennsylvania is 165 miles to the east. There are eight public hunting areas administered by Ohio Department of Natural Resources, Division of Wildlife, within a 50 mile radius of the refuge and many public fishing sites, also administered by the Ohio Division of Wildlife.

V. EXISTING PUBLIC FISHING OPPORTUNITIES

There are at least 61 public fishing areas administered by the State, County or Municipal Governments, plus Lake Erie, within a 50 mile radius of the refuge, so public fishing opportunity is practically unlimited in this area.

VI. JUSTIFICATION

Warm water fishing, as a recreational pursuit, is a refuge objective. While opportunity for public fishing is unlimited in this area, the refuge can provide the opportunity for fishing in pleasant surroundings for those individuals that prefer to not travel far for the sport. Proposed public fishing sites are located in areas where there will be minimal conflicts with other objectives.

VII. RECOMMENDED REGULATIONS AND CONTROLS

All public fishing will be in conformance with state regulations, and a valid Ohio fishing license will be required of all fisherman.

VIII. SPECIAL ACTION REQUIRED OF THE STATE

None will be required as all regulations are in conformance with, or more restrictive than state regulations.

IX. SPECIAL CONDITIONS

1. Fishing will be limited to designated locations which will be posted as "Public Fishing Area."

2. Fishing will be permitted during daylight hours only, from May 1 through September 30 annually. The refuge will be closed to public fishing from October 1 through April 30.

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FISHING PLAN

OTTAWA NATIONAL WILDLIFE REFUGE

INTRODUCTION

A. Location and General Description

The Ottawa National Wildlife Refuge is located along the southwestern shore of Lake Erie in North Central Ohio. Refuge lands lie in an old lake plain which formerly was a part of a large prairie marsh that extended from Detroit, Michigan to Sandusky, Ohio, known to early settlers as the "Black Swamp." At the present time, there are 7,940 acres contained within the Ottawa Refuge, including its satellite areas, Cedar Point NWR, the Navarre Unit, and the Darby Unit. Much of this acreage was private hunting club lands at time of acquisition. Land acquisition was initiated in 1961 and has progressed until only about 200 acres remain to be acquired to complete land acquisition.

The Ottawa Refuge complex serves as a pivotal point for migrating waterfowl, as here the Atlantic and Mississippi Flyway populations separate to reach wintering grounds to the south. The Shiawassee National Wildlife Refuge in Michigan is 140 airline miles to the northwest and The Erie National Wildlife Refuge in Pennsylvania is 165 miles to the east. Jack Miner's Sanctuary is across Lake Erie to the north. The Crane Creek Wildlife Experiment Station bounds the refuge on the east and Metzger Marsh bounds the refuge on the northwest. Both are managed by the Ohio Department of Natural Resources.

Soils are of glacial and lacustrine dervation. The dark topsoil was derived from lake deposited silt and clay, which is generally calcareous. Some marsh soils consist of soft clayey black peat. Subsoils are mainly brown and gray colored clays, which are highly fertile, but heavy textured and relatively impervious.

The refuge lies in the former bed of a post-glacial lake and the topography is extremely flat with a low gradient, sloping gently from Lake Erie southward at a rate of two to five feet per mile. Surface run-off waters from a 70 square mile drainage area to the south, pass through the refuge by way of Crane Creek and several large ditches. Crane Creek enters the refuge from the west, bisects the area, and empties into Lake Erie at the northeast corner of the refuge. Surface run-off waters are seldom a problem, except during the spring thaw. Lake Erie

water levels directly affect refuge operations as during times of high lake levels, back waters can flood Crane Creek and ditches limiting drainage of waterfowl marshes, and low lake levels limit filling of marshes.

At the present time refuge habitat types consist of 1,400 acres of open water, 3,900 acres of marsh, 250 acres of woodlands, 300 acres of grasslands and 2,000 acres of croplands.

B. History

The "Black Swamp" was a part of an estimated original 300,000 acres of marshlands which extended from near Detroit, Michigan to Sandusky, Ohio. This was the last area to be settled in the Northwest Territory.

The first efforts to drain the "Black Swamp" were initiated about 1850, as farming interests were tempted by the favorable climate, influenced by Lake Erie, and fertile soils of the area. Timber was removed and extensive drainage systems were developed so that lands could be converted to crop production. By 1870, more than 30 miles of shoreline marshes had been drained through construction of canals and pumping facilities. Continued expansion for industry and recreation and urban expansion followed until only about 30,000 acres of marshes remained. Most of this remaining marshland was preserved as a narrow fringe along Lake Erie for waterfowl hunting and commercial fur trapping by private hunting clubs, some of which have been in existance nearly 100 years.

Development for crop production required extensive drainage systems so marshes were ditched, diked and tiled and pumping facilities to pass surplus waters were provided. With proper drainage, and protection from Lake Erie, productivity was high and risks low, as climate and soils are favorable for production of cereal grains, truck crops, fruits, sugar beets, and hay.

PART I. PROGRAM RELATION TO REFUGE OBJECTIVES

A. Refuge Objectives

The Ottawa National Wildlife Refuge was established to preserve and improve a portion of remaining Lake Erie Marshes for the benefit of nesting and migrating waterfowl so this great natural heritage can continue to be enjoyed by the American Public. The primary objectives are to provide food, water, and cover for breeding and migrating waterfowl. Secondary objectives are:

(1) Provide sanctuary for nesting bald eagles.
(2) Provide habitat for other migratory birds and resident wildlife species.
(3) Provide the public an opportunity to observe wildlife in its natural habitat.
(4) Provide other day use recreation so long as such use is compatible with the primary refuge objectives.

Specific Wildlife Management Objectives are as follows:

Whistling Swans: To provide food and protection during migration periods, and to discourage feeding in old hunting club marshes where lead shot is easily picked up.

Canada Geese: To develop and maintain adequate resting and nesting habitat capable of supporting an annual peak of 25,000 geese with 1,500,000 use-days, and to enhance nesting opportunities for annual production of 500 goslings, while discouraging prolonged fall use by geese to prevent a winter terminus.

Blue Geese and Snow Geese: To provide habitat for peak populations up to 5,000 with 200,000 use-days annually. Management will be coincident with Canada Goose Management.

Ducks: To improve habitat sufficient to support a peak of 50,000 ducks with 4,200,000 use-days annually, and the production of 1,800 ducklings annually.

Other Wildlife Species: No specific management practices are contemplated since adequate food and cover will be provided as a side benefit from waterfowl management practices. Population will be kept in balance through manipulation of habitat type or if necessary through control programs.

Fish: Maintenance of fish populations compatible with all refuge objectives will be accomplished under guidance of Fishery Management Services and Ohio Department of Natural Resources.

B. Principal Wildlife Classes on the Refuge

Whistling Swans: Management will be directed to assure the maintenance of adequate feeding and resting areas for spring use of swans as they migrate northwest to their breeding grounds in the Artic.

Geese: Management objectives are stated above. Land and water management will be directed to provide sufficient

foods and sanctuary to favor Canada Goose use of the refuge during spring and fall migration periods, and to discourage development of a winter terminus at this latitude. Blue and Snow Geese are common fall migrants and significant numbers use the refuge in some years. Management practices for Canada Geese should also favor the Blue and Snow Geese.

Dabbling Ducks: The most common dabblers using the refuge are Mallards and Black Ducks, followed by American Widgeon, Wood Ducks, Pintails, and Blue-winged Teal. Other common species are also represented. Management of croplands and marshes will be directed to maintenance and improvement of nesting and migration habitat for these species.

Diving Ducks: Canvasbacks, Redheads, Ring-necked Ducks and Scaup are common migrants through this area and concentrate in large rafts in the lake during the migration periods. Management to provide deep water pools will afford additional food and sanctuary for these species.

Other Migratory Birds: Limited use is made of the refuge by Coots, Gallinules, Woodcock and Snipe. Management practices will be to maintain present utilization.

Upland Game Birds: Small populations of Ring-necked Pheasants and Bob-white Quail are present on the refuge. Waterfowl management practices will furnish sufficient habitat for these species.

Bald Eagles: Bald Eagles, which have nested on the refuge in recent years, will receive special management attention to enhance their survival prospects in northwestern Ohio.

Big-Game Animals: The only big game species present is the White-tailed Deer, and these are present in very limited numbers. The limited habitat for Deer on the refuge will be maintained to encourage an increase in the small herd now using the area.

Predators: Common predators are foxes, raccoons and skunks. Management will be directed towards holding numbers to minimum levels.

Fish: There is no fishery management program at this refuge at the present time. Limited populations of game fish are present, but rough fish form the most abundant group of species. Considerable interest is present in fishing for the rough fish species as well as for game fishes.

C. Role of the Refuge in Flyway Management

The Ottawa Refuge is in an excellent location to contribute to our waterfowl resource by providing migration and breeding habitat for diving ducks, dabbling ducks, and Canada Geese. It can also furnish migration habitat for Whistling Swans. The refuge will preserve a significant portion of the remaining Lake Erie Marshes and, through development and improvement of these wetlands, mitigate losses of wetlands habitat in the flyway.

By providing intermediate food and snactuary to migrant waterfowl the refuge will contribute to the preservation and expansion of the waterfowl resource, and facilitate the orderly migration of waterfowl, its utilization, and enjoyment by the public throughout the flyway.

D. Public Fishing as a Refuge Objective

Secondary management objectives of the refuge include provision for other day-use recreation so long as such use is compatible with the primary refuge objectives. Demands for such recreational pursuits will far exceed what might be provided, if quality standards are to be maintained. The primary role of fishing as a refuge objective at the present time would not be a management function, but would fulfill recreational needs. Limited fishing programs, under restrictive regulations, can be established at Ottawa Refuge with little detrimental effect on the primary objectives.

E. Waterfowl Status and Utilization

Utilization of the refuge by waterfowl species has been increasing annually. The mix of marshes and croplands, plus sanctuary, is the major reason for these increases. Management practices will enable this refuge objectives of 1,500,000 annual goose use-days and 4,200,000 duck use-days to be attained and supported in future years.

The bulk of the duck population will consist of Mallards and Black Ducks, but other major species will be American Widgeon, Wood Ducks, Pintails and Blue-winged Teal. Divers are also present in refuge marshes periodically, but numbers have been insignificant. The goose population will be primarily Canada Geese, with limited numbers of Blue Geese and Snow Geese.

Waterfowl utilization of refuge habitat has been concen-

trated in the refuge marshes and croplands throughout the entire refuge acreage.

F. General Fishing Regulations

Any and all programs should be conducted in conjunction with sound management and in conformance with the refuge objectives. Fishing programs will be initiated and conducted as recreational opportunities, as outlined in the refuge objectives, when the demand is present.

Public fishing will be permitted only in designated and posted areas of the refuge in conformance with current State fishing regulations. Further restrictions as to length of season and time fishing is permitted will be developed under Federal regulations governing public use of National Wildlife Lands.

PART II. PROGRAM POLICIES AND ADMINISTRATIVE CONTROL

All public fishing activity on refuge lands will be subject to policies and administrative procedures described as follows.

Public fishing may be conducted on lands and waters of the Ottawa Refuge when demand dictates, or where the opportunity for public use is present and such use will not be detrimental to the primary refuge objectives. In certain instances, public fishing programs may be management tools.

Public fishing programs, when established, will be permitted under the following considerations and guidelines:

1. When fishing activity is not detrimental to primary refuge objectives.

2. When populations prove to be detrimental to primary refuge objectives.

3. When total numbers within a population are in excess of breeding stock required to maintain desired balanced populations.

4. When populations may be subjected to extreme losses from weather or desease.

5. When censuses reveal harvestable populations.

6. When demand dictates the need for recreational use.

Refuge public fishing will be non-restrictive in that permits will not be required.

General regulations and policy control for refuge fishing programs will be as follows:

A. Fishing:

1. General: Public fishing will be of the non-restriction type (no permit required) at designated Public Fishing Areas only, during daylight hours only, and will be conducted in accordance with current State fishing regulations and special Federal regulations limiting the length of season on refuge waters.

2. Eligibility: Public fishing opportunity at the designated public fishing areas will be available to any person in possession of a valid State fishing license.

3. Locations: Public fishing sites will be located as shown on Maps in The Appendix. On Ottawa Refuge, activity at Site 1, will be limited to bank fishing, and at Site 2, only boat fishing will be permitted. Boat fishing only will be permitted at Cedar Point Refuge, Site 3. Public fishing will not be permitted at the Navarre and Darby Units.

4. Access and Parking: A public parking area will be provided south of Site 1 on Ottawa Refuge and access will be limited to that area. Boat access from Lake Erie will be necessary for Sites 2 and 3.

5. General Regulations: Special regulations, more restrictive than State regulations, will be issued limiting fishing activity to daylight hours only, and public fishing permitted annually from May 1 through September 30 only.

PART III. PROGRAM DESCRIPTION - PROBLEMS AND SOLUTIONS

A. Refuge Ecology:

The original vegetation of the Ottawa Refuge was natural marshes and bottomland hardwoods, common to the Central Hardwoods Region. The "Black Swamp" contained dense stands of oak, elm, ash, hickory and maples. Practically all the timber was cut and marshes drained to permit development of lands for farming, starting about 1850.

Ecological types now found on the refuge are as follows:

Croplands	2,000 acres
Grasslands	390 acres
Marsh	3,900 acres
Water	1,400 acres
Woodlands	250 acres

B. Justification of Program:

Title 50 CFR 33.1 states "Wildlife refuge areas are opened to sport fishing, except when determination has been made that such activity is detrimental to the objectives for which the area was established." Warmwater sport fishing is a refuge objective to be considered strictly a recreational activity. Public fishing sites are limited and subsequent removals of fish by angles will be insignificant to the overall fish population.

C. Refuge Development:

All but about 200 acres within the approved refuge boundary have been acquired and are being managed for wildlife at this time (1972). The basic facilities for operations and maintenance programs are present on the area and future development will complete program facilities.

At the present time only Pools 1 and 2 have unbreached dikes where it is possible to manage water levels, a total of approximately 560 acres. Future development which calls for dike rehabilitation and pumping facilities for Pools 3, 4, 5 and 6 will provide 1,150 acres of controlled marshes. This controlled marsh area, along with croplands, will permit attainment of the primary waterfowl objectives.

D. Public Reaction to the Program:

There are large numbers of individuals interested in warmwater fishing for the relatively undesirable fish species available to them on refuge waters. The proposed public fishing areas are located in areas with a history of heavy fishing use prior to establishment of the refuge. Adverse public reaction is to be expected if the opportunity for fishing is denied on refuge lands.

E. Benefits and Conflicts:

A variety of benefits will result from initiation of public fishing programs on refuge lands. Expected benefits include:

1. Helps to sell the refuge program. Local people will become aware of overall refuge operations if they can participate in and reap benefits from the program.

2. Stimulates wildlife populations by a reasonable harvest and removal of surplus animals. This will insure a more balanced ecological relationship between species.

3. Eases enforcement problems in that numbers of fishermen and fishing areas are restricted.

4. Facilitates the collection of certain research data.

Management conflicts expected from public fishing programs include:

1. Increased enforcement effort with more detailed posting and administration requiring additional funds and manpower.

2. Creation of people problems and demands for more.

3. Unforeseen effects on Wildlife populations, and thus on refuge objectives.

F. Waterfowl Habitat Affected:

Fishing programs will be time and space zoned to insure minimum conflict with waterfowl use of primary habitat units. Proposed public fishing sites are in areas of low waterfowl use, and season will be limited to times of the year when waterfowl populations are low.

PART IV. PROGRAM UNITS

A. Fishing:

1. Program Units: Three public fishing sites will be located as shown on attached maps, two at Ottawa Refuge and one at Cedar Point Refuge.

2. Management Objectives: No special wildlife management practices are contemplated for public fishing sites. Establishment of these sites will fulfill recreational aspects of the refuge objectives. Areas will be maintained in suitable condition.

3. Takes and Kills: An accurate estimate on fishing take is impossible at this time. More intensive patrol and enforcement activity will yield more detailed information. Major fishing activity will be for rough fish species.

4. Expected Participation: Refuge objectives indicate potential participation of 80,000 fisherman annually, with non-restriction type participation in the activity.

PART V. PHYSICAL PLANT AND EQUIPMENT USE REQUIREMENTS

A. Physical Facilities:

Implementation of public fishing programs will require new construction of one parking area and future maintenance, plus necessary posting of the boundaries of the public fishing areas.

B. Equipment Use Requirements:

Equipment needs will be met through utilization of equipment presently assigned to this station. There will be no acquisition of equipment specifically for the fishing programs.

PART VI. FUNDS AND MANPOWER REQUIREMENTS ($6,000 Annually)

A. Manpower Needs: ($5,000 Annually)

A total of 7.7 man months will be required annually to implement and enforce all recommended fishing programs. Costs are estimated at $5,000 for manpower for operation of programs each year.

B. Materials, Equipment and Operation: ($1,000 Annually)

Annual operation and maintenance costs, exclusive of manpower, are estimated at $1,000 for operation of all fishing programs. This includes materials and operational costs for posting, facilities maintenance, litter control, equipment operation, depreciation and miscellaneous costs.

Initial construction costs estimates for fishing programs are included in the following tabulation:

Item	Number	Estimated Cost	Annual Maint. Costs
Parking Areas	1	$3,000	$200
Toilets	1	500	50
TOTALS:		$ 3,500	$250

PART VII. APPENDIX

APPENDIX I - Waterfowl Use Data

APPENDIX II - Map - Public Fishing Areas

APPENDIX II

WATERFOWL USE DATA - OTTAWA NATIONAL WILDLIFE REFUGE

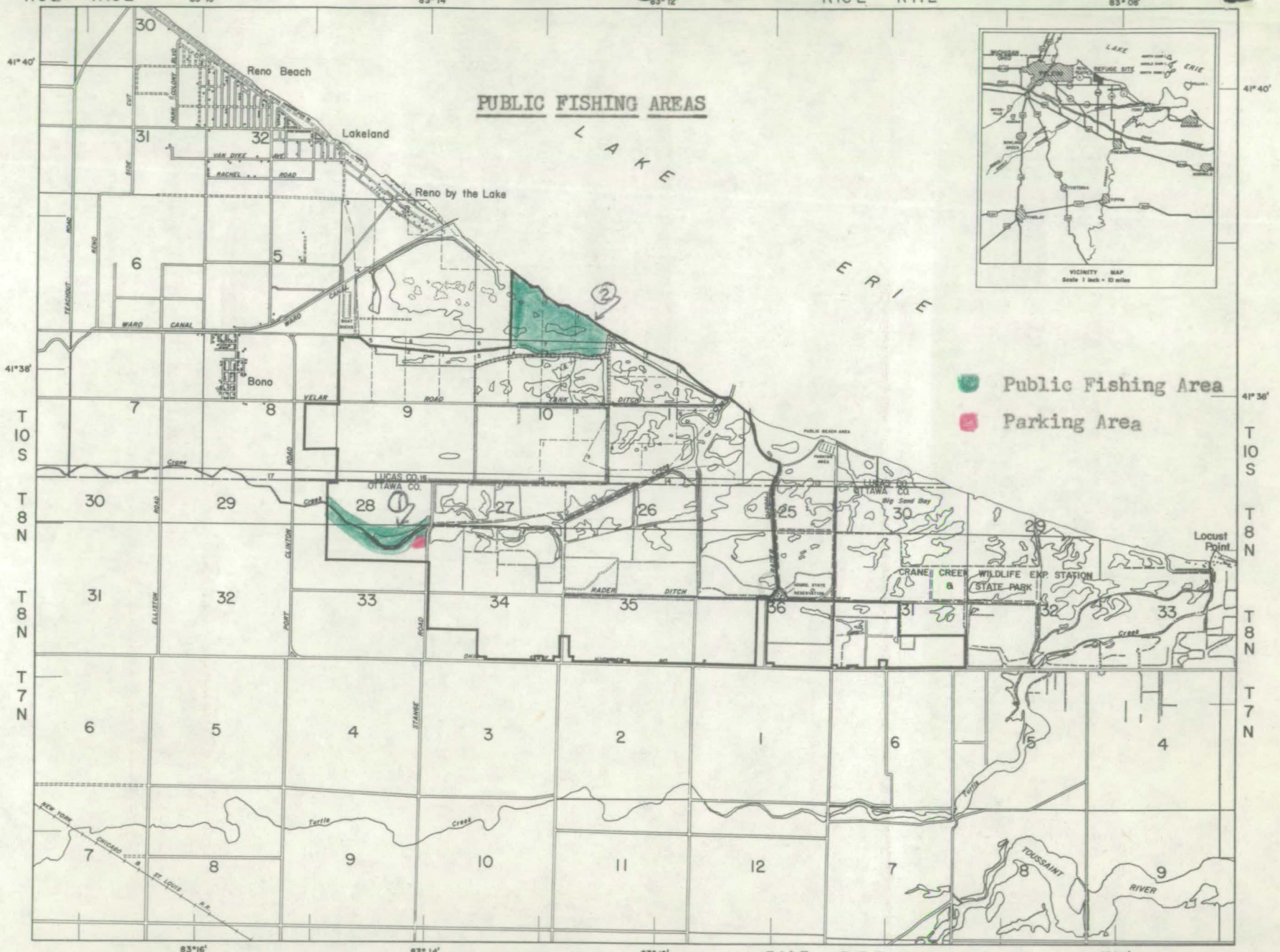
Year	WHISTLING SWANS		GEESE		DUCKS		COOTS	
	Peak Number	Total Use-Days	Peak Number	Total Use-Days	Peak Number	Total Use-Days	Peak Number	Total Use-Days
1961	- -	- - -	2,000	15,000	5,000	350,000	2,500	25,000
1962	1,000	24,700	2,000	80,900	13,100	999,750	3,000	150,100
1963	2,500	42,400	3,000	114,350	15,050	1,639,400	1,000	93,900
1964	2,000	18,100	2,725	225,650	23,750	1,992,400	1,000	99,250
1965	350	5,075	3,700	218,650	27,900	3,049,560	1,000	103,800
1966	250	7,400	7,000	383,730	42,000	4,331,150	1,000	141,750
1967	1,000	18,000	5,100	497,990	31,600	3,143,700	3,000	235,900
1968	1,000	12,950	14,500	910,620	50,300	3,942,250	1,500	182,470
1969	1,200	32,550	19,000	1,471,180	49,000	6,446,160	10,400	726,145
1970	1,000	28,021	21,400	1,336,500	45,000	4,308,850	10,000	737,278
1971	3,000	58,246	26,500	2,020,300	69,500	6,061,072	5,750	310,870

OTTAWA NATIONAL WILDLIFE REFUGE

LUCAS AND OTTAWA COUNTIES, OHIO

UNITED STATES
DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE
BUREAU OF SPORT FISHERIES AND WILDLIFE



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FROM AERIAL PHOTOGRAPHS AND SURVEYS
BY THE U.S.G.S.

MINNEAPOLIS, MINNESOTA

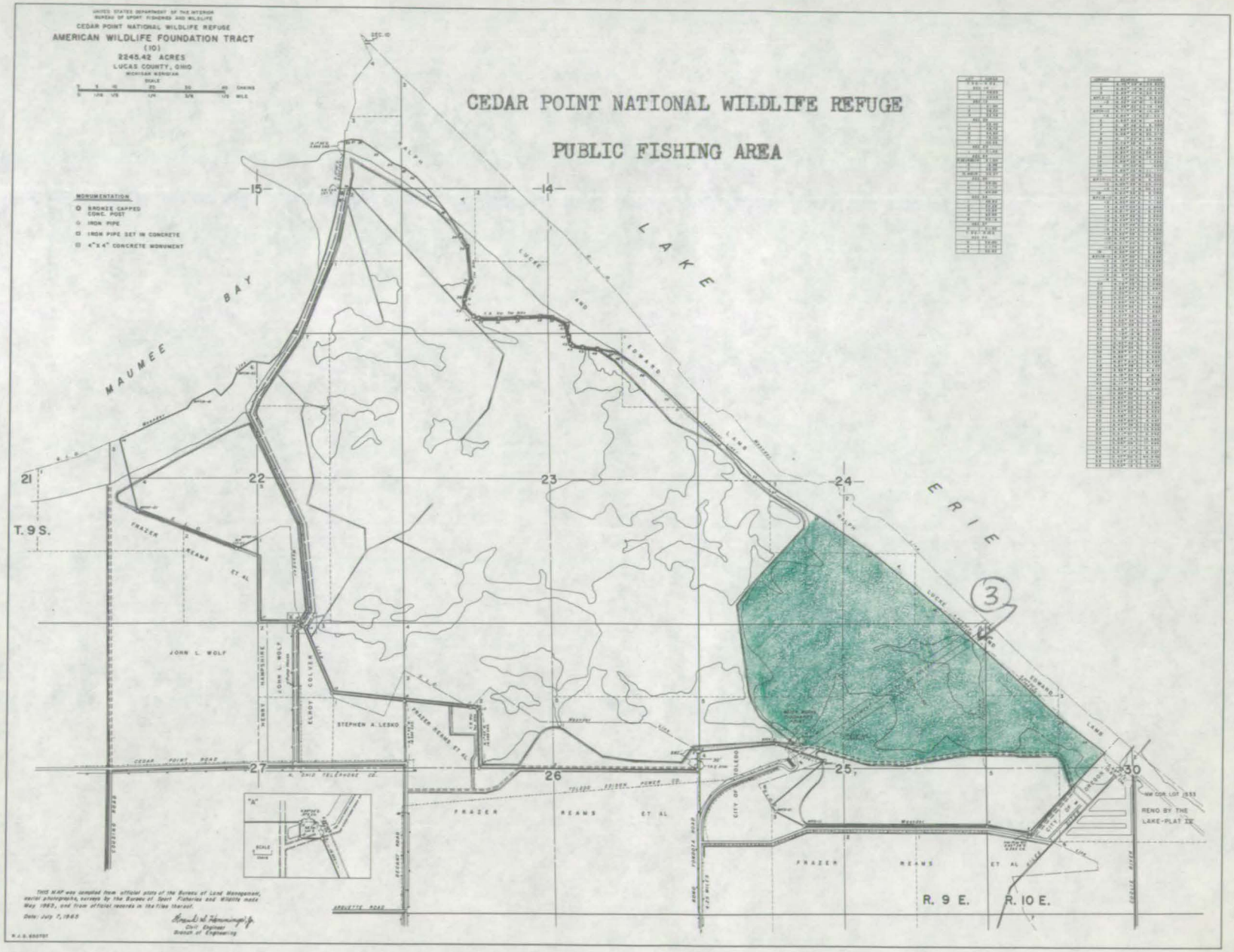
SEPTEMBER, 1960

MICHIGAN AND FIRST PRINCIPAL MERIDIANS

Scale 0 20 40 80 120 160 CHAINS
0 1/4 1/2 1 1 1/2 2 MILES

TOWNSHIP DIAGRAM

MEAN DECLINATION 1960


UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SPORT FISHERIES AND WILDLIFE
CEDAR POINT NATIONAL WILDLIFE REFUGE
AMERICAN WILDLIFE FOUNDATION TRACT
(10)
2245.42 ACRES
LUCAS COUNTY, OHIO
MICHIGAN MERIDIAN
SCALE
CHAINS
MILE
MONUMENTATION
BRONZE CAPPED CONC. POST
IRON PIPE
IRON PIPE SET IN CONCRETE
4"X4" CONCRETE MONUMENT
CEDAR POINT NATIONAL WILDLIFE REFUGE
PUBLIC FISHING AREA
LAKE ERIE
MAUMEE BAY
LUCKE AND EDWARD LAMB
RALPH A. LUCKE
EDWARD LAMB
FRAZER REAMS ET AL
JOHN L. WOLF
HENRY HAMPSHIRE
ELROY COLVER
STEPHEN A. LESKO
CEDAR POINT ROAD
R. OHIO TELEPHONE CO.
TOLEDO EDISON POWER CO.
CITY OF TOLEDO
ARQUETTE ROAD
CITY OF WILDERSON
RENO BY THE LAKE-PLAT IX
NW COR LOT 1533
T. 9 S.
R. 9 E.
R. 10 E.
21
22
23
24
25
26
27
30
14
15
3
"A"
SCALE
THIS MAP was compiled from official plats of the Bureau of Land Management, aerial photographs, surveys by the Bureau of Sport Fisheries and Wildlife made May 1963, and from official records in the files thereof.
Date: July 7, 1965
Chief Engineer
Branch of Engineering