

# Ohio Sea Grant

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## A STRATEGY TO EXPORT SALMONOIDS AND IMPORT DOLLARS IN NORTHEAST OHIO

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OHSU - TS - 8

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The Ohio State University  
Sea Grant Program  
February 1984





Sea Grant technical summaries are published by the Ohio Sea Grant Program at the Ohio State University and are partially supported through a grant from the National Sea Grant College Program at the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce. These summaries are designed to transmit research results from Sea Grant sponsored and related investigations to users of coastal and offshore resources. The U.S. Government is authorized to produce and distribute reprints for governmental purposes notwithstanding any copyright notation that may appear hereon.

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## A STRATEGY TO EXPORT SALMONIDS AND IMPORT DOLLARS IN NORTHEASTERN OHIO

Recreational sportfishing may be conceived of as an export industry to be developed in northeastern Ohio's Lake Erie region. The ultimate goal in the development of the sport fishing industry would be to attract (import) non-local recreational fishermen and their dollars and export trophy-size sportfish. This could provide jobs and income to northeastern Ohio and take advantage of Lake Erie's recreational potential. Presently the recreational fishery in the central basin is not successful in attracting non-local anglers to a significant extent.

Economic growth and development occurs when non-local sport fishermen are attracted into a region to fish. They bring their recreational dollars, spend them in the area in which they are fishing and take home trophy-size fish. The Great Lakes states of Michigan and New York have recognized this and are committed to developing multi-million dollar export fisheries based on species (salmon and trout) that are attractive to non-local anglers. For its part, Ohio has developed an attractive recreational fishery based on the export of sport-caught walleye from the western basin of Lake Erie.

Beginning in the 1970s, changes in the Ohio Department of Natural Resources (ODNR) regulations have favored sport fishing in Ohio's Lake Erie waters. Since the mid 1970's, we have seen a dramatic increase in the economic growth of the western basin sport fishery. The "fishable" walleye population (walleye greater than 14½ inches long) in the western basin of the Lake has increased from less than 9 million fish in 1975 to approximately 25 million in 1982. Sport angler effort has increased over that same period from 7.4 million angler hours to 13.6 million angler hours. The ODNR reports that most of this increased effort has been directed at walleye fishing. The annual Ohio sport fishing harvest of walleye increased from 113,000 fish in 1975 to 3,056,000 fish in 1982.

In a very real way, northwestern Ohio is exporting sport-caught Lake Erie walleye and is importing angler dollars. This export fishery is big business. Based on economic research conducted by Ohio Sea Grant Researcher, Dr. Leroy Hushak, total angler expenditures for walleye fishing, including gas, meals, lodging, supplies, equipment, and bait, were almost \$51 million in the western basin in 1981.

The following results of this 1981 western basin study can be compared to a similar study conducted by Dr. Hushak in the central basin.

The typical western basin boat angler was male, 43.6 years old, had an average income of \$26,516, and had been fishing for 8 years. He made 7.7 trips per year to the western basin to fish and traveled an average of 86.3 miles one way. The average trip length was 1.8 days. The average fishing time was 7.4 hours per day on the Lake. He spent \$47 per fishing day to catch a reported 2.3 walleye and 5.3 yellow perch per person per day of fishing.

The western basin walleye angler is an experienced non-resident fisherman willing to travel repeatedly to where the fish are and spend approximately \$30 per trip for the opportunity to catch a highly desirable sport fish. A reasonable chance of success at catching walleye may be the key to attracting non-local anglers to the western basin.

In contrast, the typical central basin boat fisherman is male, 44.5 years old, had an average income of \$24,295 and is an experienced fisherman. He made 28.5 trips to the central basin per year and he traveled an average of 16.8 miles one way to fish there. The average trip length was 1.1 days. He fished 5.3 hours per day on the Lake. He spent \$16 per fishing day to catch a reported 0.2 walleye and 2.4 yellow perch per person per day of fishing.

The typical central basin fisherman is experienced, from the local area, makes frequent trips to fish the central basin, but spends only  $\frac{1}{2}$  of the money per trip as does the western basin angler. His reported fishing success for walleye and yellow perch is less than the western basin walleye angler.

In addition, the central basin angler makes 6 trips per year outside the central basin to fish. He travels to the western basin 3.2 times per year; to the eastern basin of Lake Erie 0.8 times per year; and to sites other than Lake Erie 2.1 times per year.

Fishermen may select their fishing location based on a number of factors including:

1. distance,
2. fish populations,
3. fishing promotion and information,
4. shore and boat access,
5. business services, and
6. environmental amenities.

Development of programs to increase the attractiveness of the fishery in Lake Erie's central basin could include action on most of the items noted above. Perhaps the key to attracting non-local fishermen is the size of the fish population from which potential sport harvest is taken.

One major reason why the central basin area has not attracted large numbers of non-local anglers and loses anglers to other Lake Erie fishing sites is that the fishing has not been of comparable quality to that of the western basin. The central basin lacks the reef structure which is the major reason for the successful walleye fishery of the Western Basin. Proposed man-made reefs for the central basin may act to concentrate sport fish for the fishermen. However, concentrations of walleye in the central basin approaching the magnitude of those found in the western basin is not likely.

In the 1982 Sea Grant Central Basin Angler Survey, fishermen were asked why they boat and/or fish in the central basin. They were asked to select their two highest priority reasons for fishing in the central basin. Their responses included:

1. close to home 86%
2. quality fishing 36.8%
3. easy boat access 34.5%
4. improved water quality 25.3%
5. not crowded 12.6%
6. only place for salmon/trout/steelhead 5.9%
7. other 7.0%

Distance appeared to be the overriding reason for fishing the central basin with quality fishing and easy boat access ranking a distant second and third. Slightly over 5% said they fish the central basin because that is where they can catch salmon/trout/steelhead.

A look at Michigan's results show that salmon and trout fishing is highly attractive to local and non-local anglers alike. In fact, the first Ohio Sea Grant Salmon Fishing Seminar in 1981 attracted over 350 fishermen. This fishery offers a large potential to attract non-local anglers to the central basin for the following reasons:

1. Salmon and trout grow to trophy size fish within a few years. In 1982, walleye caught in Ohio's Lake Erie waters averaged 1.8 lbs. In 1974-79, coho salmon adults caught in the Chagrin River averaged 5.5 lbs and 22 3/4" in length.
2. Salmon and Trout are excellent sport fish highly desired by anglers for their fighting ability. They are also good to eat.
3. Salmon and Trout are anadromous. They return to Lake Erie tributaries to spawn. This brings them close to the angler -- a boat is not essential to catch salmon or steelhead. Beach, pier, and river bank fishermen have access to a hard fighting trophy-size fish. An offshore large boat fishery in the central basin has not yet developed.
4. The primary salmon and trout fishing streams are located in the central basin. Most are concentrated in Northeastern Ohio, close to large population centers -- Cleveland, Akron, Canton, Warren, and Youngstown are less than 2 hours away. Pittsburgh, PA, Wheeling, WV, and Columbus, OH are less than 4 hours away.
5. The salmon/trout fishing season is primarily in the fall and spring. This avoids conflict with the western basin walleye season (May-August). There would be little direct market competition with Ohio's summer walleye fishery.

Development of the central basin salmonid fishery into an export fishery attractive to non-local anglers may require the accomplishment of the following goals:

1. Salmon/Trout Population Enhancement
2. Habitat Improvement
3. Development of Boat and Shoreline Access
4. Promotion/Information/When, Where, How to Fish
5. Business Development/Charter Boats

Population Enhancement. What you stock is what you get. Increased stocking of non-native trout and salmon may be essential for the central basin to improve its competitive fishing position and become more attractive to non-local anglers. Increased cold water hatchery capacity would be required for Ohio to dramatically increase its Lake Erie salmonid stocking program. Improved survival rates of stocked salmonids and improved rates of return of surviving salmonids will also aid in increasing the number of non-local angler trips hosted by the central basin. Fishermen will travel to where the fish are.

How many salmon and trout can Lake Erie support? Of 64 salmon stomachs examined in the New York waters of Lake Erie, 70% contained smelt. In 1982, commercial harvest of smelt in Canadian waters of Lake Erie was in excess of 37 million pounds. An adequate forage base is needed for salmonid survival. More research is needed to help answer the question, "How many salmonids can Lake Erie support?"

Habitat Improvement. Improvement of stream and harbor water quality and fish habitat may open up new streams for salmonid stocking and provide increased angler access.

Development of Boat and Shoreline Access. Eighty-six percent of the respondents to the 1982 Central Basin Angler Survey thought that more and/or better boat launching sites was a priority item for development. Also, 23.4% stated that more shoreline and pier fishing facilities were needed.

Promotion/Information. Twenty-five percent of the anglers surveyed in 1982 needed additional fishing information for the central basin. Better weather information was a priority item listed by 23.4%. Tourist development boards, marine businesses, economic development commissions and the local chamber of commerce could work to promote the unique fishing opportunities offered by Lake Erie salmon and trout in Northeastern Ohio. Active promotion of the fishery in key target areas (cities) will help increase the market share of non-local anglers fishing the Central Basin.

Business Development. Twenty-five percent of the anglers surveyed in 1982 thought that more marinas with permanent dock space was a priority item. The forced closure (September, 1983) of the only marina on the Chagrin River, which was open to the general public emphasized the limited access to Lake Erie. For about one month, the major salmon fishing stream in Northeastern Ohio was inaccessible by boat. It was reported that hundreds of would-be fishermen/boaters were turned away on the weekends when the marina was closed.

There are many other things that could be done to improve business -- adequate dockage facilities for charter boats could be provided and the development of a viable charter fishery in August, September, and October would

greatly increase the attractiveness of the fishery to non-local fishermen. Also, adequate bait, tackle, and fish cleaning facilities could increase the likelihood of repeat trips to the central basin.

Are the above development goals economically justifiable? This is a good question worthy of further research in Ohio. If the goals are economically justified, then private enterprise, local and state government officials, and state resource agencies can work together to achieve them. Constraints to the development of the fishery in the central basin will be identified and overcome. Recreational sport fishing for salmonids in the central basin will become more competitive in importing non-local fishermen and the dollars they spend. Trophy-size sport fish will be exported and jobs and income will be generated in Ohio. Further research into the economic, biological, and environmental impacts of the central basin's potential export fishery is needed to ensure the maximum wise utilization of Lake Erie's recreational resources.

