

An American & Canadian Heritage River

A Conservation Vision for the Lower Detroit River Ecosystem



John D. Dingell
U.S. Congressman
16th District of Michigan



Herb Gray
Deputy Prime Minister of Canada
Member of Parliament for
Windsor-West, Ontario



Peter W. Stroh
Chairman, Executive Committee
of the Greater Detroit American
Heritage River Initiative



Susan Whelan
Member of Parliament for
Essex, Ontario, Canada



We are proud to present this binational conservation vision for the Lower Detroit River Ecosystem. Our Detroit River not only links the Upper Great Lakes to the Lower Great Lakes, but it also connects Canadians and Americans through an inseparable, international border. This connection is highlighted by the river's designation as both a Canadian and American Heritage River — giving the Detroit River the distinction of being the first international heritage river system in North America.

Our heritage river is being rediscovered as an invaluable, multifaceted resource that serves as the foundation of our economies, provides numerous recreational opportunities and ecological values, and enhances "quality of life." Recognizing that we need to protect and be good stewards of this significant and sensitive natural resource, we convened a binational workshop to articulate and reach Canada-United States agreement on a conservation vision for the Lower Detroit River Ecosystem. As you will see on the following pages, the vision which emerged presents strategic direction for a cooperative, coordinated, binational approach to enhancing and protecting our region's unique and most valuable natural asset.

Our common linkage through the Detroit River and our long-standing, binational, working relationships made it relatively easy to reach agreement on a Lower Detroit River Conservation Vision. Attaining this vision, however, will require that people on both sides of the river realize that ecosystem integrity is the foundation for healthy economies and communities. We are united in our commitment to communicating that important message and helping achieve the Lower Detroit River Conservation Vision. Please join us in working toward conserving our common natural resource and realizing the vision for our internationally recognized river.

Sincerely,

John D. Dingell
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Metropolitan Affairs Coalition (MAC) published this document in support of the Canadian/United States visioning process for the Lower Detroit River as part of its program management of the Greater Detroit American Heritage River Initiative. MAC is a public/private partnership of business, labor and governmental leaders that facilitates solutions to regional issues affecting the economic vitality and quality of life in Southeast Michigan.

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EXAMPLES OF ECOLOGICALLY SIGNIFICANT AREAS AND POTENTIAL REHABILITATION SITES

Note: Ojibway Shores is presently being assessed for its biological significance and habitat values; it may be appropriate to add this site to the map based on the outcome of this assessment.



U.S.A.

- 1 *Mud Island*
- 2 *Wyandotte National Wildlife Refuge*
- 3 *Grassy Island*
- 4 *Hennepin Marsh*
- 5 *Black Lagoon*
- 6 *Solutia Property*
- 7 *DaimlerChrysler Property*
- 8 *Humbug Complex*
- 9 *Humbug Island*
- 10 *Calf Island*
- 11 *Sturgeon Bar*
- 12 *Celeron Island*
- 13 *Sugar Island*
- 14 *Gibraltar Bay*
- 15 *Stony Island*

CANADA

- 16 *Detroit River Wetlands*
- 17 *Fighting Island*
- 18 *Grass Island*
- 19 *Turkey Island*
- 20 *Canard River Marsh*
- 21 *Crystal Island & Bay*
- 22 *White Sands*

The Detroit River is one of North America's greatest rivers in the heart of the Great Lakes Basin. It connects the Upper Great Lakes to the Lower Great Lakes. More than that, it links Canadians and Americans through an inseparable border. The Detroit River is an invaluable, multifaceted resource that serves as the foundation of our economies, provides numerous recreational opportunities and ecological values, and enhances "quality of life."

Native peoples first lived along the Detroit River to benefit from the water supply, the natural resources, and the transportation route. These same benefits attracted European settlers in the 1600s and 1700s. When Cadillac established Detroit in 1701, the river had extensive marshes along its banks and considerable upland habitats that supported numerous wildlife. The Detroit River Remedial Action Plan (RAP) notes that over 95 percent of the historical, coastal wetlands along the river have been lost to development. As a result, the RAP identified "loss of fish and wildlife habitat" as one of nine impaired beneficial uses of water.

Therefore, it is urgent to protect the remaining coastal wetlands and other ecological features before they are lost to further development, and to rehabilitate degraded ones. The purpose of this document is to outline a conservation vision for the Lower Detroit River to help achieve that end.

Image: US Army
Corps of Engineers

Map: Wayne County
Geographic Information
System Management Unit



Lower Detroit River is Unique and Important

The Lower Detroit River is the downstream reach of the river, from the confluence of the Rouge River to the mouth at Lake Erie. It contains shipping channels and numerous shoals that support dense stands of aquatic plants, and many islands. These distinct channels and other unique habitats and ecological features (see map) attract and sustain many fish and wildlife species.

THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ONTARIO MINISTRY OF NATURAL RESOURCES recognize the Detroit River as having one of the highest diversities of wildlife and fish in all of the Great Lakes. More than 29 species of waterfowl and 65 kinds of fish make their home in the Detroit River.



Situated at the intersection of the Atlantic and Mississippi Flyways, the Detroit River is an important migration corridor for hundreds of fish, butterfly, raptor, neo-tropical bird, and waterfowl species. An estimated three million ducks, geese, swans, and coots migrate annually through this region.

Home to many waterfowl, fish, and wildlife

The Detroit River and Western Lake Erie contain extensive feeding and nesting habitats for waterfowl. For example, over 300,000 diving ducks stop each year to rest and feed on beds of wild celery in the Lower Detroit River during their fall migration from Canada to the east and south. In 1960, the international importance of this area was manifested in the U.S. Congressional designation of the 460-acre Wyandotte National Wildlife Refuge in the lower river. Near this refuge is the Canard River Marsh Complex in Canada, another important waterfowl staging area. These habitats are internationally significant because they are among the main resting and feeding areas for canvasback ducks migrating from their nesting grounds in the Canadian prairies to the east coast. Many canvasbacks also overwinter in the area. The Canada-United States North American Waterfowl Management Plan has identified the Detroit River as part of one of 34 Waterfowl Habitat Areas of Major Concern in the



(Top) Ringneck Ducks
Ducks Unlimited, Inc.

(Inset Lower Right) Merganser Duck
Ducks Unlimited, Inc.

(Right) Yellow-headed Blackbird, Pte. Mouille State Game Area
Michigan Department of Natural Resources

A Diverse Ecosystem

United States and Canada (i.e., Lower Great Lakes-St. Lawrence Basin). In addition, marshes along the Lower Detroit River and Northwest Ohio have been declared part of a Regional Shorebird Reserve by the Western Hemispheric Shorebird Reserve Network.

A diverse ecosystem

The Michigan Department of Natural Resources and Ontario Ministry of Natural Resources recognize the Detroit River as having one of the highest diversities of wildlife and fish in all of the Great Lakes. More than 29 species of waterfowl and 65 kinds of fish make their home in the Detroit River. The Detroit Audubon Society has documented over 300 species of birds in the Detroit-Windsor area. About 150 bird species nest near the river.



In 1998, the Canada-U.S. State of the Lakes Ecosystem Conference identified the Detroit River-Lake St. Clair ecosystem as one of 20 Biodiversity Investment Areas in the entire Great Lakes Basin Ecosystem because it supports an exceptional diversity of plants, fish, and birds, and the requisite habitats to support them. Biodiversity Investment Areas are unique areas around the Great Lakes with exceptionally high ecological values that warrant special attention to protect them from degradation. High ecological values include:

- *Communities of unique plants and animals found in places such as coastal wetlands and islands;*
- *Species of special interest and rare, threatened, or endangered species;*
- *High species and habitat diversity; and*
- *High levels of ecological connectivity, both along the shoreline and to island or offshore natural features.*



Calf Island, Trenton Channel
US Army Corps of Engineers
(Inset) Sugar Island, South Shore
Grosse Ile Nature
and Land Conservancy
(Inset Lower) Bufflehead Duck
Ducks Unlimited, Inc.
(Inset Top, Right Center)
Great Blue Heron
Don Breneman, National Park Service
(Inset Right Center)
Professional Walleye Trail,
National Record Walleye
Mike Barkley,
Downriver Walleye Federation

Citizen benefits

The diversity of biota and habitats in the Lower Detroit River provides numerous benefits to the over five million people who live near it. The Lower Detroit River has an international reputation for duck hunting.



In 1991, retail sales related to waterfowl hunting in Michigan were estimated at \$20.1 million. Also during 1991, bird watching, photography, and other non-consumptive uses of waterfowl contributed an additional \$192.8 million to Michigan's economy. Similar statistics from 1998 for

hunting and fishing for the Essex region (i.e., City of Windsor and Essex County) show that spending for these activities totaled \$2.2 million, while an additional \$14.6 million was spent on non-consumptive activities, including naturalist activities.

Over 870,000 pleasure boats are registered in Michigan and about half of those are used on the Lake St. Clair, in part to fish for the river from Lake Erie each renowned sport fishery. In 1999,



Detroit River and the estimated 10 million walleye that ascend spring to spawn, creating an internationally the City of Trenton hosted a major walleye fishing tournament called "Walleye Week," attracting people from all over North America to compete for \$240,000 in prize money. It is estimated that walleye fishing alone brings in \$1 million to the economy of communities along the Lower Detroit River each spring. In 2000, the Windsor Canadian Pro-Am Bass Fishing Tournament generated \$163,000 in direct spending and an overall economic benefit of \$360,000 on the Canadian side of the Detroit River.

Urgency and Opportunity

Despite increased awareness and science supporting their importance, fish and wildlife habitats in the Lower Detroit River continue to be destroyed and degraded. There is a sense of urgency and a unique opportunity to protect the remaining high-quality habitats before they are lost to

Canard River Marsh, Ontario
Essex Region Conservation Authority

"Walleye Week,"
Trenton, Michigan
Gerald Laura



Michigan State Representative
George Mans and Congressman
John Dingell



Vision

Crystal and Stony Islands (North End)
U.S., Canadian border
Visual Image Productions, Windsor, Ontario
(Inset) Canard River Marsh, Ontario
Essex Region Conservation Authority



HERITAGE RIVER DESIGNATIONS

In 1998, all of these natural resource values and socioeconomic benefits were acclaimed when the Detroit River was designated an American Heritage River. On July 19, 2001, the Detroit River received a Canadian Heritage River designation, making it the first river system to receive dual heritage river designations in North America.

further development, as well to rehabilitate and enhance those already degraded. This is essential to sustain the “quality of life” that attracts so many people to the Detroit River corridor.

The Essex Region Conservation Authority and its partners in Southwestern Ontario, Canada along with the U.S. Geological Survey’s Great Lakes Science Center, have inventoried and developed spatially referenced databases and thematic maps to identify the unique and significant ecosystem features. These efforts provide the information needed to establish priorities to conserve and action now and remain to rehabilitate habitats. The scientific rationale for exists. However, any action must be guided by true to a conservation vision.



Yellow Perch,
P. Ceisel, Shedd Aquarium

It is hoped that a conservation vision will further binational coordination of efforts to protect desired fish and wildlife populations, and to preserve biodiversity. Further, it is hoped that this conservation vision will encourage all stakeholders to manage inland watersheds since those watersheds also impact on the Detroit River. The time is right for agreement on a conservation vision for the Lower Detroit River Ecosystem.

The Vision Statement

A vision is a clear image of a desired future state. This conservation vision for the Lower Detroit River Ecosystem will:

- *Provide strategic direction for habitat conservation programs in the Lower Detroit River and support linkages with similar efforts in tributaries and their watersheds;*
- *Further binational coordination of efforts to conserve natural resources in this internationally significant region;*
- *Provide the rationale and direction for local conservation and land use planning initiatives, and illustrate their role in achieving this conservation vision; and*
- *Catalyze actions in both Canada and the United States to conserve and protect unique habitats and ecological features for the benefit of present and future generations.*

Eastern Box Turtle
National Park Service



Recognizing the importance of the Lower Detroit River Ecosystem in sustaining “quality of life,” the following conservation vision was developed to provide strategic direction for management:

In 10 years the Lower Detroit River Ecosystem will be an international conservation region where the health and diversity of wildlife and fish are sustained through protection of existing significant habitats and rehabilitation of degraded ones, and where the resulting ecological, recreational, economic, educational, and “quality of life” benefits are sustained for present and future generations.

This conservation vision is supported by the following elements that further define the desired future state of the Lower Detroit River:

- *Remaining marshes, coastal wetlands, islands, and natural shorelines are protected in perpetuity from development;*
- *Degraded marsh, wetland, island, and shoreline habitats are rehabilitated, wherever and whenever possible, and protected in perpetuity;*
- *An International Wildlife Refuge has been established and is managed in a partnership consistent with this vision statement;*
- *The environment is clean and safe for all wildlife, fish, and other biota, including humans;*
- *Fish and wildlife communities are healthy, diverse, and self-sustaining;*
- *Levels of toxic substances do not threaten wildlife, fish, or human health;*
- *Economic development and redevelopment is well planned, aesthetically pleasing, and environmentally sustainable; and*
- *Public access and recreational and educational uses are seen as priorities for achieving “quality of life.”*

Next Steps

This document presents a broad vision of the future of the Lower Detroit River. Further discussions are necessary to develop specific partnerships and to achieve this vision and ensure that all stakeholder groups participate. actions should capitalize on and even flow out of existing initiatives. Detroit River Canadian Cleanup Committee, the U.S. RAP Team for the



River Ecosystem. projects that will enable us. As much as possible, future. Examples include the Detroit River, the Greater

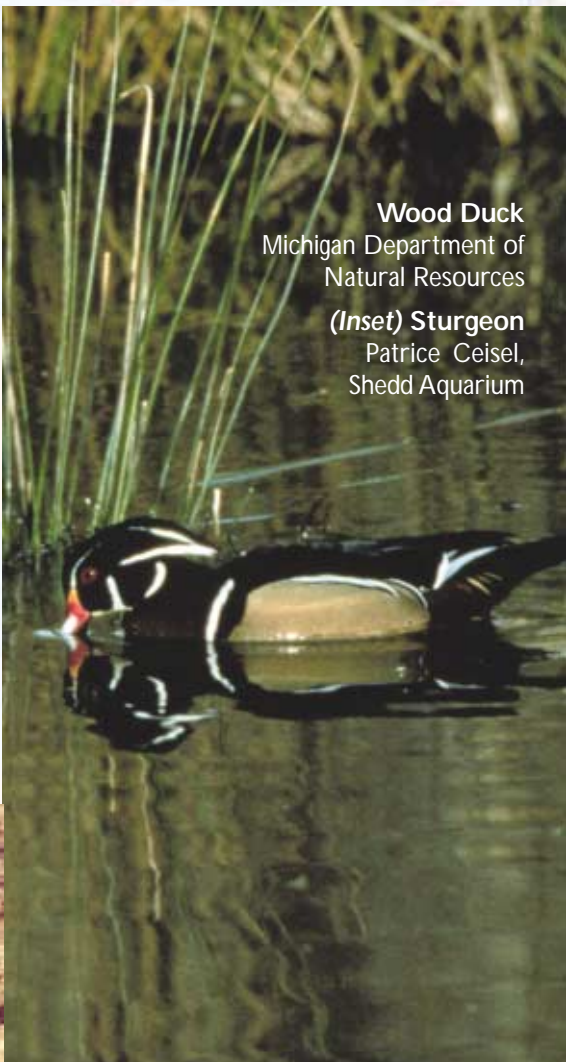


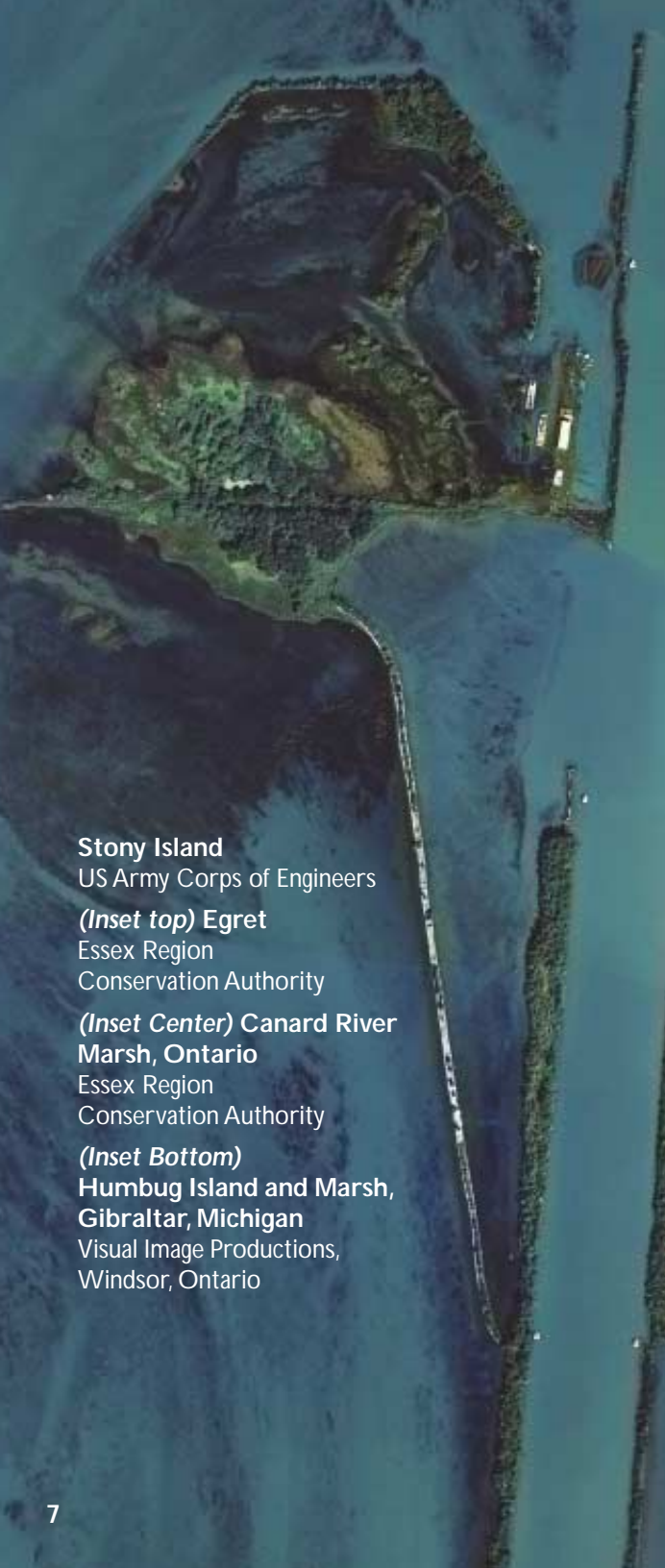
Wildlife Service at a ceremony in July 2001 is an important step forward in realizing the Lower Detroit River Conservation Vision.



US Army Corps of Engineers

Wood Duck
Michigan Department of
Natural Resources
(Inset) Sturgeon
Patrice Ceisel,
Shedd Aquarium





Stony Island
US Army Corps of Engineers

(Inset top) Egret
Essex Region
Conservation Authority

**(Inset Center) Canard River
Marsh, Ontario**
Essex Region
Conservation Authority

**(Inset Bottom)
Humbug Island and Marsh,
Gibraltar, Michigan**
Visual Image Productions,
Windsor, Ontario

Detroit American Heritage River Initiative, and the Canadian Heritage River Initiative for the Detroit River. The present binational effort to develop delisting criteria for restoring beneficial uses of water (i.e., environmental and natural resource, rehabilitation targets) should provide good direction.

Future activities can be broadly organized into two categories. The first focuses on habitat protection, whereby existing high-quality habitats or features are protected before their functions are lost. Protecting existing habitats or features is a higher priority than rehabilitating degraded ones — although all stakeholders recognize the critical importance of rehabilitating degraded habitats along the river. Most of the remaining habitats or features are irreplaceable to the Lower Detroit River Ecosystem. Their protection is essential if the Detroit River is to maintain the significant fish and wildlife it possesses. The map identifies a number of areas which are in urgent need of protection. Another priority is to rehabilitate areas in accordance with the recommendations for the Biodiversity Conservation Strategy for the watershed) and the habitat inventory recently completed for the U.S. side of the river by the U.S. Geological Survey's Great Lakes Science Center.



Achieving the Vision

Achieving this conservation vision will require that people on both sides of the Detroit River recognize that ecosystem integrity is the foundation for healthy economies and communities. All stakeholders are encouraged to champion binational and regional cooperation, stewardship. New partnerships for monitoring will be essential and practice to measure and celebrate progress. Use of Geographical Information Systems and internet technologies will provide essential information and powerful analytical tools to help stakeholders make informed decisions. Innovative education and outreach programs will be necessary for municipalities, businesses, and citizens to understand their important roles and their individual responsibilities in making this conservation vision a reality.





(Clockwise From Top)

Redhead Duck

Ducks Unlimited, Inc.

**Livingstone Ship Channel,
Crystal and Stony Islands**

Visual Image Productions,
Windsor, Ontario

Spotted Turtle

J. Paynter,

National Park Service

Walleye Fishermen

Dave Brenner,

Michigan Sea Grant

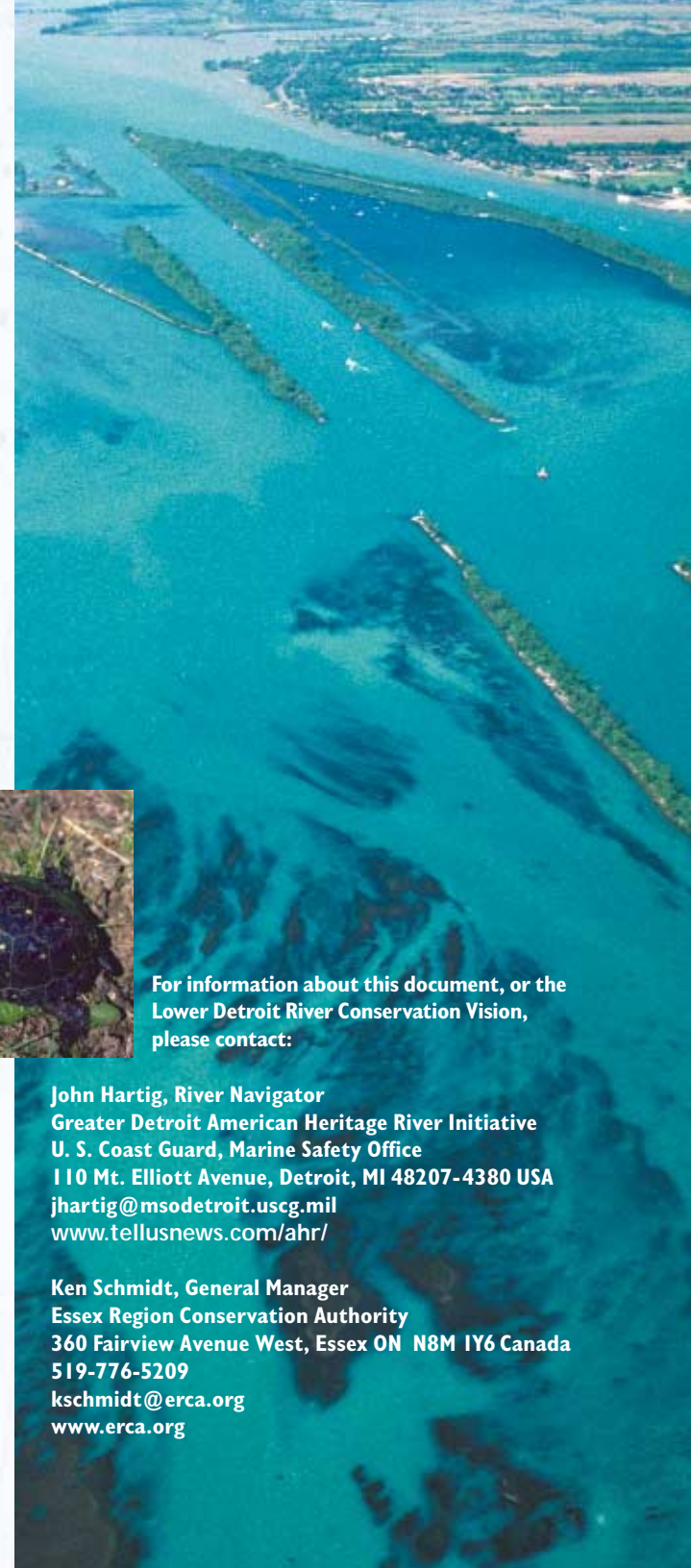
Lake Sturgeon

Patrice Ceisel, Shedd Aquarium

Canard River Marsh, Ontario

Essex Region

Conservation Authority



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In 10 years the Lower Detroit River Ecosystem will be an international conservation region where the health and diversity of wildlife and fish are sustained through protection of existing significant habitats and rehabilitation of degraded ones, and where the resulting ecological, recreational, economic, educational, and “quality of life” benefits are sustained for present and future generations.

Vision Statement