



***IOWA WATER TRAILS: Connecting  
People with Water and Resources***



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Mimi Wagner, Iowa State University Department of Landscape Architecture and Nate Hoogeveen, Iowa's Department of Natural Resources co-authored this plan.

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*Waterways have long held high importance in Iowa from prehistoric to current times for livelihoods, travel, recreation, and settlement patterns. The concept of a water trail formalizes our current culture's ideas about a floating journey and our relationship with water. Low-head dams, by definition, are small dams that are overtopped across the width of a river. Iowa's state-designated system of water trails is emerging to meet a variety of needs including social and family experiences, sublime solitude, or an exciting adventure through swift waters. Our program relates strongly to a national movement promoting waterway recreation while integrating regional priorities such as water quality and stream and watershed restoration. Increased public access to waterways leads to new energy for realizing the potential of our waters and a spirit of volunteerism to care for them.*

## *INTRODUCTION*



It seems we have a trend developing that is taking us full circle on how we think of rivers and streams. Iowans are rediscovering their “river address.” Prior to European settlement, before railroads, highways, and airports, Iowans identified their address in relationship to running waterways. “Go north on the Des Moines, take the South Skunk fork, and we’re about half-a-mile up Squaw Creek.”

People divided the land by waterways and geographic features. Water was the center of commerce and community life. Mills grinded our grain and dams provided what limited power we needed beyond horses and oxen.

Then, the industrial revolution. Road builders divided the landscape for our vehicles, steam-driven backhoes tilled and drained our soils for production agriculture, and the trend started toward urbanization.

These changes, positive in terms of productivity and convenience, distanced people from their public waters and the natural landscape. And now, some parts of our society seem to be returning to our natural heritage. Water quality is a phrase that most in Iowa understand, and generally are not satisfied with the quality of our rivers, streams and lakes. In a fresh survey by Iowa State University’s Center for Agriculture and Rural Development, nearly half of Iowans recreate along rivers. Real political will to improve our public waters is increasing. Financial resources, although still insufficient to deal with our problems, have been increasing in recent years, with foreshadowing of perhaps greatly increased opportunities in the near future.

Take, for example, the exploding interest and participation in the water trails program. From a small group of enthusiasts, paddle sports of canoeing and kayaking are enjoying a rapid expansion. In 2005, there were no miles of designated water trails. Today, we have more than 600 miles of designated trails and hundreds more under development.

And it is not just environmentalists advocating this movement. Workforce development experts recognize quality of life as one of the key drivers to attracting and maintaining a well-educated and diverse workforce. Economic and rural development advocates recognize the powerful economic engine behind these attractions, contributing to the health of our tourism industry (including bed and breakfasts, hotels, restaurants, etc.) and our local economies ranging from gas stations to grocery stores. For example, in 2004 there were 23 “liveries,” or paddling outfitters, in Iowa. Currently, this number is 60, and growing at a rate of one a month!

In-water improvements and ways to help people safely connect with rivers (riverwalks, dam safety, etc.) are becoming important in our cities. I believe this urban component, matched with our new approaches outlined in these plans for water trails and dam safety, will make this a destination state and a signature accomplishment of this legislature and Governor Culver’s administration.

My lifelong love of paddling sports, and my firm belief that a healthy economy is dependent on a healthy ecosystem, give me hope that Iowa is prepared to take seriously our commitment to water quality and reconnecting to our local water bodies. As this trend continues, I believe Iowa will compete nationally for some of the best river experiences in the country.

Sincerely,

A handwritten signature in black ink, reading "Richard Leopold". The signature is fluid and cursive, with the first name "Richard" being larger and more prominent than the last name "Leopold".

Richard Leopold, Director of the Iowa DNR



The resulting work includes three primary documents:

1. A fully illustrated manual “**Developing Water Trails in Iowa**” for water trails developers, including planning guidance, standardized signage design, and incorporation of stream restoration and stormwater management concepts in access construction
2. The state water trails plan “**Connecting People with Water and Resources,**” documenting the historic and present day of importance of Iowa’s navigable waters, with comparisons of relevant data and strategies for adding value to Iowa’s system
3. The **2010 Dam Mitigation Plan**, relating the function and importance of dams historically to today, a current inventory of Iowa’s dams, design templates for several approaches to mitigating hazard and improving fish passage at low head dams, criteria and general priorities for dam removals and modifications, and a statewide strategy and action steps laid out to improve river connectivity over coming years

Lakes and wetland systems will provide important loop trails for kayaking and canoeing opportunities within Iowa’s water trail system. The majority of water trails in Iowa, however, will be located on rivers simply because of the more than 18,000 navigable river miles present. The majority of low-head dams in the state are also located on rivers. The majority of focus in these tools, therefore, focuses on river corridors.

Taken together, this work responds to increased demand in Iowa for safer water-based recreation, as well as the need for conserving Iowa’s aquatic resources. Together, these contribute to economic development and a higher quality of life for Iowans. •

# What Is the Role of the State Water Trails Plan?



New frameworks for water trails and low-head dam mitigation provide exciting opportunities to usher in a new legacy of enjoyment, respect, and care for the navigable waters of Iowa. Iowa’s water trails and low-head dam mitigation statewide plan incorporates many visions shaped into one, much like small creeks empty into larger rivers. It points the way toward increasing the volunteer spirit, increasing local pride in local rivers, and learning more about how rivers function naturally.

The Iowa Department of Natural Resources was mandated in 2008 to undertake development of a statewide plan for the water trails program and the low-head dam public hazard program. Elements were to include an inventory of low-head dams, various design templates and construction guidelines for working in and along rivers and recommendations for volunteers, communities, water trail developers, and dam owners.



# *The Vision for Water Trail Opportunities*

*Iowa's vision was developed using a thoughtful process involving thousands of Iowans.*

Social assessment tools developed both through public input meetings and questionnaires. Nearly 1,000 Iowans participated in an internet-based survey developed by Iowa State University's Department of Landscape Architecture to construct strategies and

goals for water trail and low-head dam programs (Appendix A). Stakeholders included anglers, paddlers, natural resource agency staff, economic development and tourism staff and the general public. Mailed surveys and telephone interviews implemented by Iowa State University's Center for Agricultural and Rural Development (CARD) estimated Iowa's river use and preferences from 4,775 participants. Economic effect estimates of river use patterns will be developed in the near future using user intercept

surveys. Numerous experts in stream restoration, environmental education, law enforcement, fisheries, aquatic invasive species, water quality, public land management, tourism, and economic development also contributed insights and knowledge. Statewide committee members guided both the vision and resulting planning tools through participation in social assessment, review meetings, trainings, and draft reviews. •

Iowa's river corridors appear to be both highly valued and well-used according to both sets of studies. Protecting and restoring rivers and watersheds and reducing the number of dam-related drownings were the top priorities identified. CARD estimates that nearly half of all Iowans logged at least one trip to an Iowa river in the past year.

We know that successful experiences on Iowa water trails include attention to what people want to experience in the landscape, how well use expectations were met, and the characteristics of the physical stream setting. Studies for this plan demonstrate that Iowans value clean water that is safe for human contact, waters surrounded by primarily natural settings, with good habitat for game fish. Of those surveyed by CARD, trip takers reported 12 percent of their activities were spent canoeing or kayaking on a river, while 44 percent of the time was spent fishing. Wildlife watching is also a very important component of experiences for people along Iowa's waterways. Because Iowa's navigable river segments represent a vast array of conditions – from narrow prairie or woodland streams to the Mighty Mississippi River –

sensible planning can respect the variety of uses on Iowa rivers and streams.

Iowa's vision for the future of water trails links multiple benefits and avoids setting up conflicts. It's about providing options for exercise for Iowans, providing economic development through tourism, maximizing opportunities for Iowans to reduce stress, and using the landscape as an outdoor classroom for children and adults. The vision is also about rekindling the connection between people's interactions with the landscape and their respect and understanding of resource conditions and functions. •



## IOWA'S FUTURE FOR WATER TRAILS WILL...

- ...provide recreational opportunities to experience the variety found on Iowa's streams, wetlands, and lakes
- ...be developed and managed in ways that protect and enhance Iowa's aquatic and riparian resources
- ... demonstrate broad stakeholder engagement in planning, development and management
- ...provide users with information to plan a trip that meets their expectations and contributes to strong local economies
- ... provide an entry point to education and awareness about what challenges face Iowa's waterways

