Understanding the Usage Patterns and Most Desirable Characteristics of Iowa’s Rivers and Streams

IOWA HAS AN EXTENSIVE NETWORK of rivers and streams running through all geographic regions of the state, but relatively little has been understood about the overall pattern of river usage by Iowa’s citizens, including which aspects of rivers and streams are most used and what activities citizens most participate in while on site. To provide this information, researchers from the Iowa State University Department of Economics and Center for Agricultural and Rural Development, with funding from the Iowa Department of Natural Resources and the U.S. Environmental Protection Agency, conducted a large, random population survey of Iowans called the “Iowa Rivers and River Corridors Survey—2009.”

The survey collected information from respondents about their patterns of use of rivers and streams and their preferences for river and stream recreation. Survey findings should provide important insights for discussions concerning prioritization of streams for protection and restoration, the economic and health benefits of river recreation to Iowans and local communities, the implementation of regulations on Total Maximum Daily Loads (TMDL), watershed level discussions concerning land use, and the assessment of water quality regulations at the local, watershed, and state levels. A complete copy of the survey can be found online at http://www.card.iastate.edu/environment/nonmarket_valuation/iowa_rivers/.

Some key findings from the survey

1. About 48% of respondents reported taking a trip to at least one of the 73 identified river/stream segments, and only 8% of the trips reported were longer than one day.

2. The average number of trips reported was about six per person.

3. The most visited include segments of the Mississippi, Des Moines, and Cedar Rivers. Other popular segments include portions of the Missouri, Iowa, and Wapsipinicon.

4. Usage varies notably by demographic groups. The heaviest usage was reported by younger, more educated, and higher-income individuals, and men reported more visits than did women.
5. The most popular activities reported were relaxation, fishing, trail-related activities, and wildlife viewing, although there was variation across river segments and demographic groups.

6. Proximity to home was the single most important consideration in selecting a river to visit, with water quality and habitat being the second most important factor.

7. The most negative factors influencing river/stream choice were related to water quality issues, with the top three being
   - abundant algae,
   - possible sediment and nutrient contamination, and
   - possible bacterial contamination.

8. The most positive factors influencing river/stream choice were
   - water quality safe for human contact,
   - natural setting dominating river banks, such as forest, prairie, etc., and
   - abundant game fish.

Sample Survey Result

Survey Streams, Stream Segments, and Stream Corridors

[Map of survey streams, stream segments, and stream corridors is shown.]

River/stream segment number (see table on reverse side of map)
- Numbered river/stream segments
- Numbered river/stream segment junctions
- Interstate highways
- Cities