

Water Trails and Low-head Dam Mitigation



DNR River Programs
Land and Waters Bureau



IOWA DEPARTMENT OF
NATURAL RESOURCES

Solving dam problems, engaging with water trails and restoring rivers

What goes on in the program?

- **Water Trials** serves recreational river and lake users
- **Dam Mitigation** serves communities and state interests for safer, ecologically sound approaches
- **Protected Water Areas program** works toward voluntary riparian corridor protection in five scenic river segments
- Team supports **river clean-ups**
- **River Safety Education**, including train-the trainer- naturalist schools, livery classes
- Team has grown abilities in **stable channel design/river restoration**

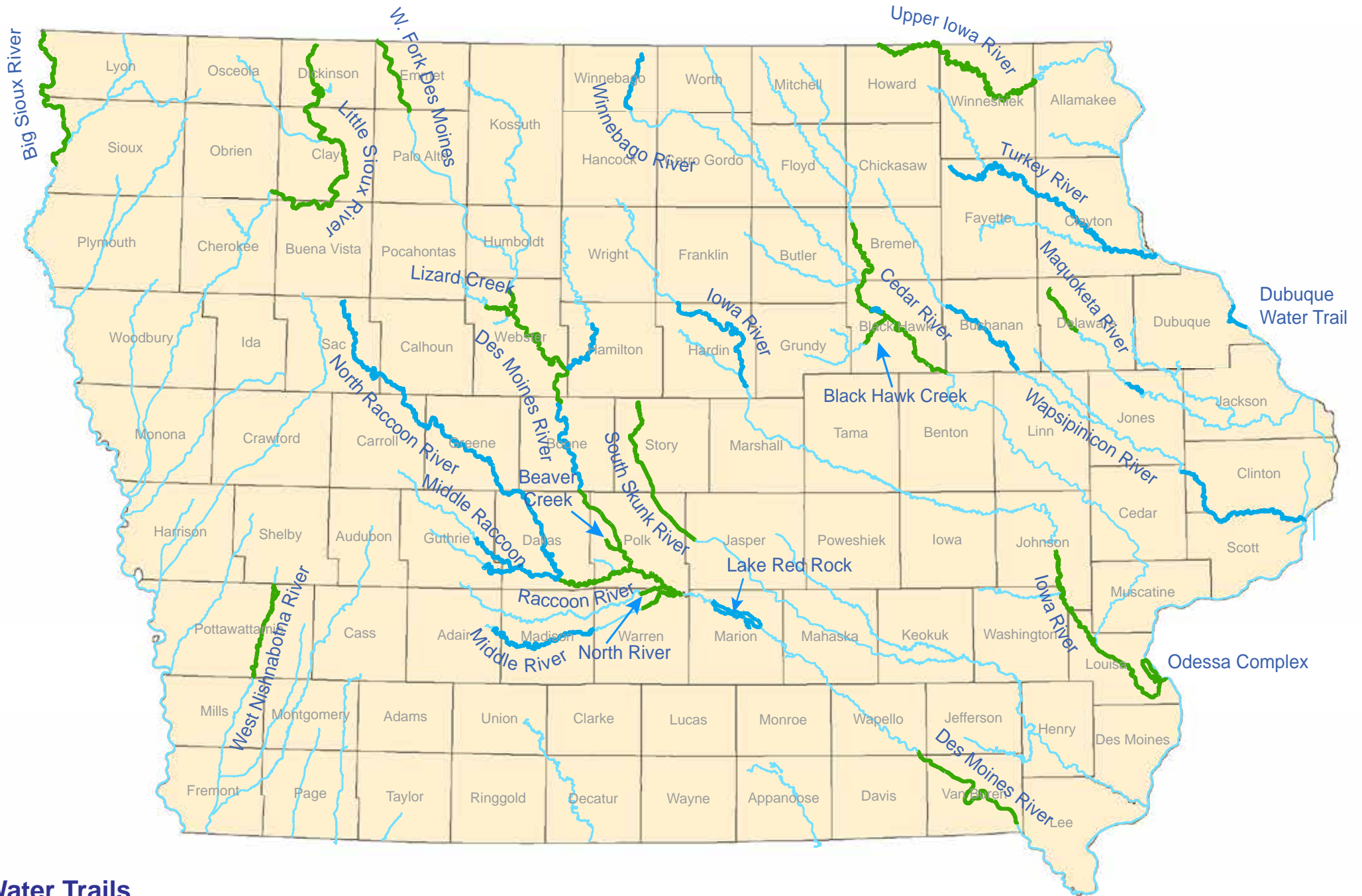
Iowa Code 464A.11

- Instructed DNR to establish a water trails and low head dam public hazard program (2008)
- Study waterways for river use and develop statewide plans
- Develop criteria for prioritizing dam mitigation and water trail development
- \$250,000 appropriated

Program History (appropriations)

Fiscal Year	Appropriations	Notes
2008	\$200,000	
2008	\$250,00	Funds to develop plans
2009	<i>\$1,000,000</i>	Used by Gov in flood relief program
2010	\$800,000	
2010	\$850,000	I-JOBS funds
2011	\$0	
2012	\$75,000	Vetoed
2013	\$1,000,000	
2014	\$2,000,000	
2015	\$1,750,000	
2016	<i>\$1,000,000</i>	Zeroed out, then restored

2016 Water Trails & Water Trail Study Areas

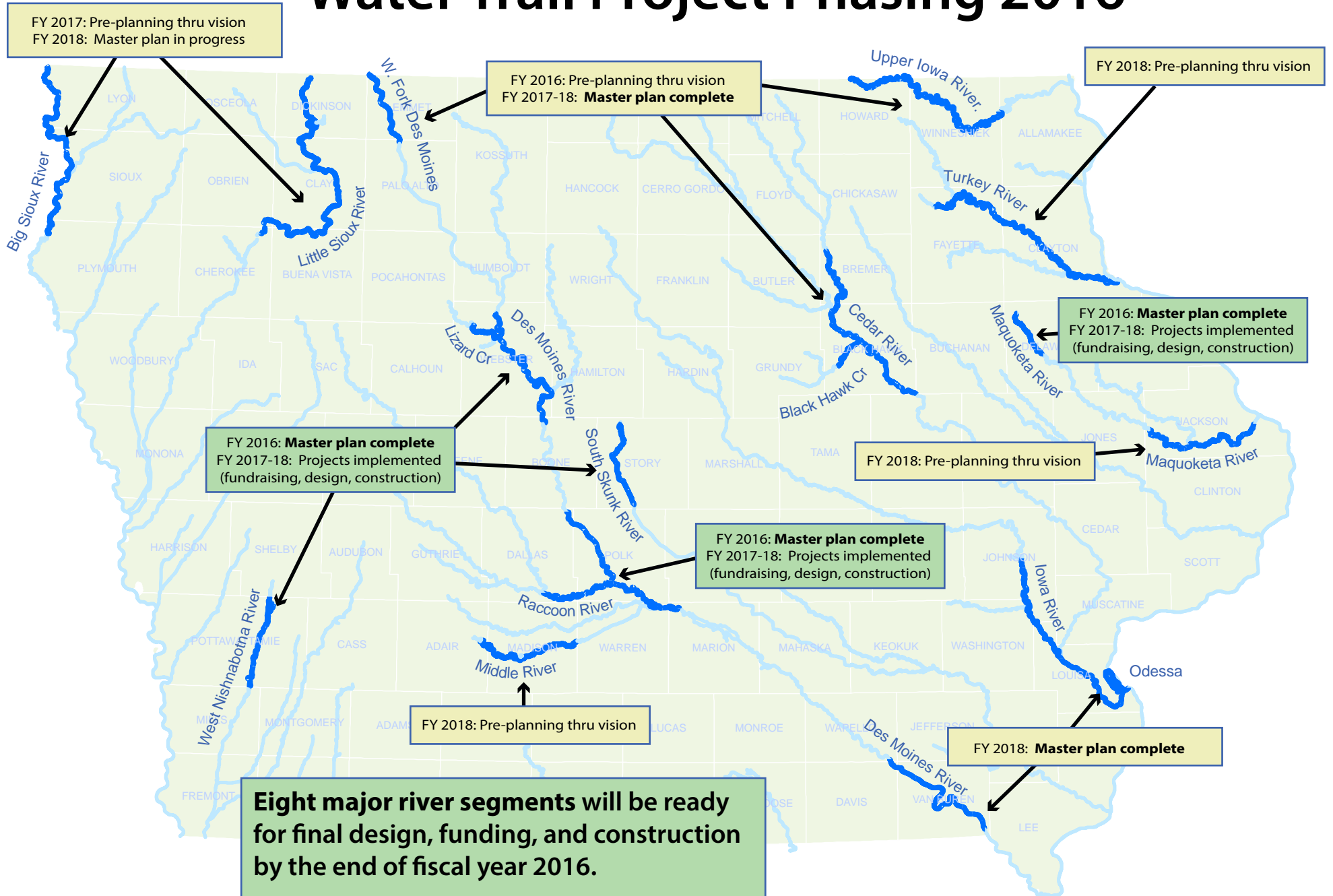


Water Trails

 Water Trail Study Areas (807 miles)

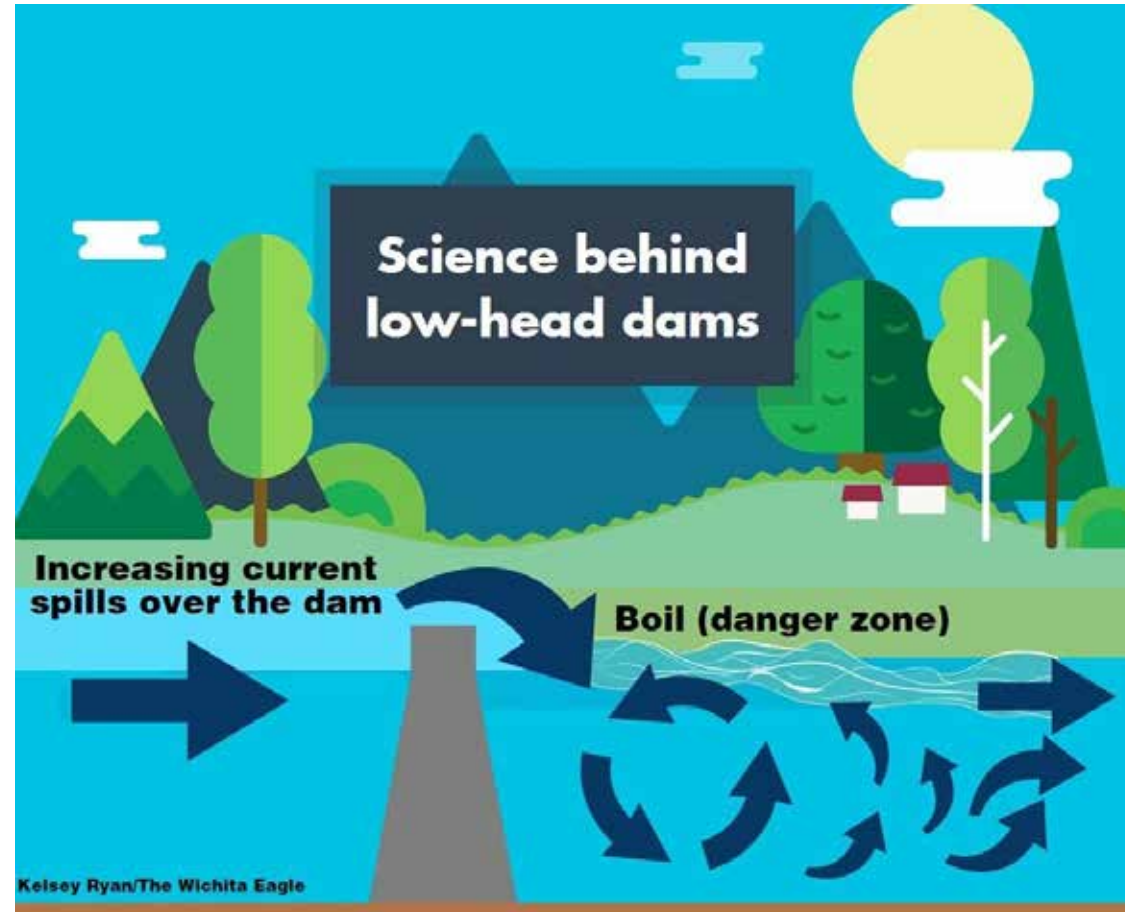
 Designated Water Trails (916 miles)

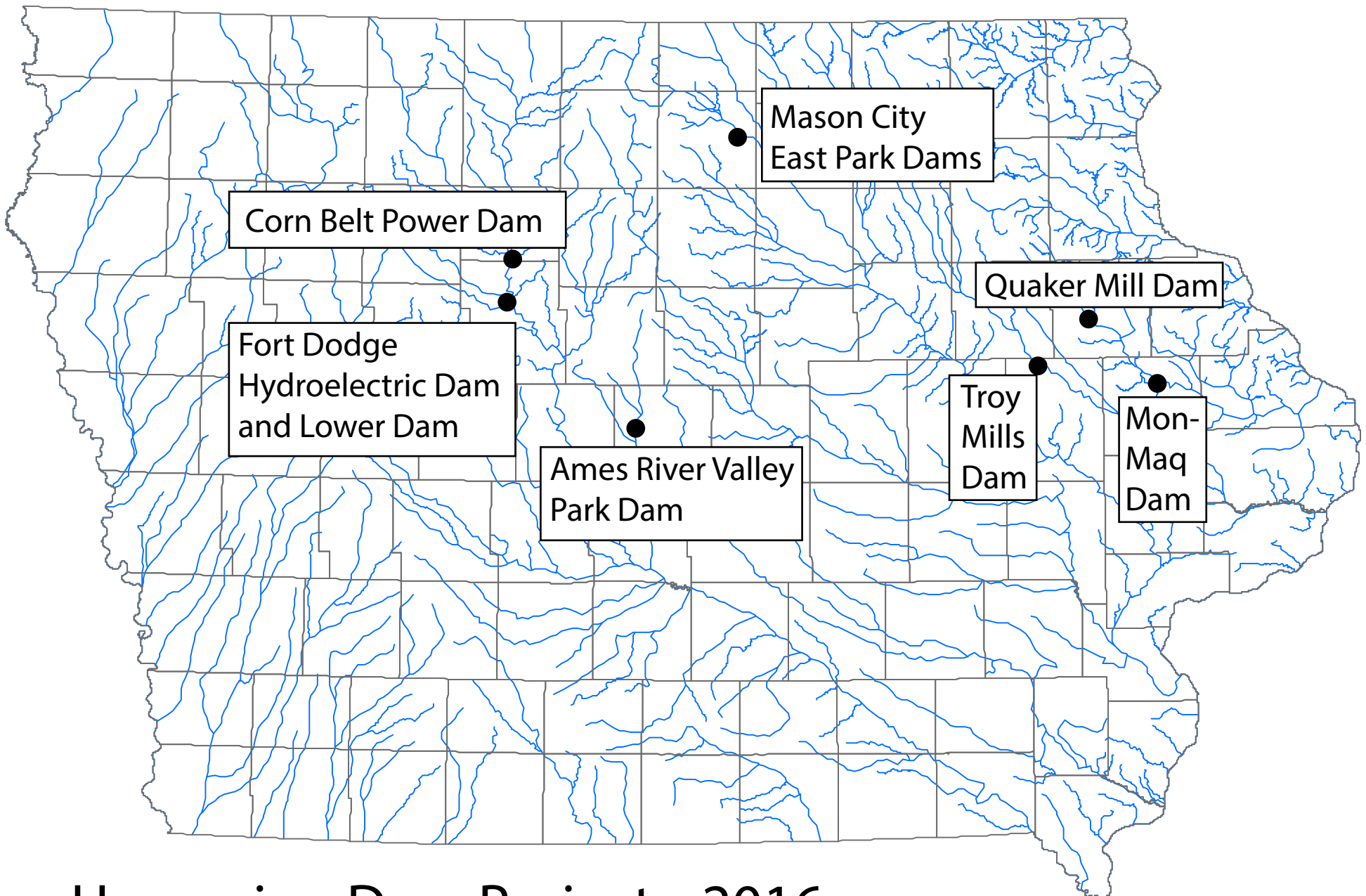
Water Trail Project Phasing 2016



A water trail...

- Helps Iowans find water adventures, family fun and a remote sense of solitude
- Creates economic development and quality of life opportunities for a modest investment
- Provides a good outlet for those who need to get out in the wild event when gas prices are high (stay-cation)





Upcoming Dam Projects, 2016

Dam Mitigations for FY2013

Project Name/Dam	Sponsor	Awarded	Project Total
Cedar Lake Dam Portage Trail	City of Nashua	\$7,896	\$9,870
Rockford Dam Removal	Floyd CCB	\$30,000	\$108,560
Design Phase-Burlington Street mitigation and whitewater park	City of Iowa city	\$50,000	\$310,000
Whitewater and Habitat Improvements at the Marion Street Dam	City of Manchester	\$200,000	\$1,600,000
Quasqueton Rock Arch Rapids	City of Quasqueton	\$48,521	\$356,330
Mon Maq Dam Modification-Maquoketa River Restoration	Jones CCB	\$43,521	\$156,625
Palasades-Kepler Park Dam	Iowa DNR	\$180,000	\$400,000
Totals		\$560,000	\$2,941,385

Partnerships in Advocacy

- Iowa has 177 low-head dams in 57 of the state's 99 counties. "Low-head" dams span the river and are less than 20 feet high (many just 2-5 feet high). The dams often are deceptively dangerous "drowning machines." Since 1900, at least 163 people have been killed in the deadly recirculating currents that form below these dams — 31 since 1998. The drop below the dam can be nearly invisible from upstream, and the treacherous "boil" below the dam can appear harmless.
- Dams also block the movement of fish and other aquatic life up and down rivers, harm the health and biodiversity of Iowa's rivers, require costly repairs, and pose major liability concerns.
- Iowa Rivers Revival has created the "Iowa Low-head Dam Modification Success Stories". The booklet includes stories and details of 13 low-head dam modifications in towns across Iowa — 12 since 2010. Stories include local partners and decision-making, cost of modification, funding sources, design features and photos. The booklet also discusses the history of low-head dams in Iowa, benefits of dam modification, sources of planning assistance, and a guide for community action. Dam modification success stories included in the booklet are dams at Boone, Charles City, Elkader, Goldfield, Klondike Mill (Lyon Co.), Manchester, North Washington (Chickasaw Co.), Quaker Mill (Delaware Co.), Quasqueton, Rockford, Story City, Vernon Springs (Howard Co.), and Warner's Ford (Allamakee Co.).