

# UNMET NEEDS

HOW THE NATURAL RESOURCES &  
OUTDOOR RECREATION TRUST FUND CAN  
ADDRESS OUR BIGGEST CHALLENGES

DECEMBER 2016



## EXECUTIVE SUMMARY:

In November 2010 Iowa voters supported a constitutional amendment to create the Natural Resources and Outdoor Recreation Trust Fund with 63% of the vote. Once funded the trust fund – which had broad bipartisan support in the legislature and support from Iowa farmers, businesses, sportspeople and conservationists – would improve Iowa’s water quality, protect our soil, enhance our wildlife habitat and strengthen outdoor recreation. Similar funds have been created across the country, including in neighboring Missouri in 1984 and Minnesota in 2008.

The only catch is Iowa’s trust fund remains unfunded six years after it was created. Iowa law requires the legislature to pass and the governor to sign into law a sales tax increase of 3/8ths of a cent to fund the trust fund. Raising the sales tax will generate an estimated \$200 million annually in protected conservation funding. Polling shows increasing the sales tax is supported by more than 60% of Iowans, and Iowa’s Water and Land Legacy is a coalition of business leaders, conservationists, sportspeople, farmers, Republicans and Democrats coming together to urge Iowa’s leaders to finally increase the sales tax to fund the trust fund.

As state budgets continue to tighten Iowa’s challenges related to water quality and soil erosion continue to grow. Iowa farms lose approximately 5 tons of topsoil every year due to erosion, and recent data provided by the DNR show that more than 60 Iowa cities and towns have struggled with high nitrate levels over the past five years. Soil erosion and poor water quality directly impact our economy and the condition of the state we leave for future generations of Iowans.

These are the issues making headlines, but there are other challenges we face related to our natural resources. Employers across the state are trying to attract skilled workers to accept open positions, but studies show college graduates are looking for outdoor recreation opportunities ranging from simple hiking trails to mountain bike trails not offered in many parts of Iowa. Additionally, small towns are looking to bring back hunters and anglers who are now opting for South Dakota and Minnesota as Iowa’s fish and wildlife habitat continues to deteriorate.

These challenges are real and they affect our quality of life. The good news is the voters of Iowa created a solution – the Natural Resources and Outdoor Recreation Trust Fund – to provide reliable, sustainable and protected funding towards conservation on an annual basis.

**Currently there are at least \$673.3 million in shovel-ready projects identified by Iowa’s Water and Land Legacy ready to implement today if funding were available.**

“Unmet Needs: How the Natural Resources and Outdoor Recreation Trust Fund can address our biggest challenges” is a study detailing specifically how the trust fund could be spent if the sales tax is increased by 3/8ths of a cent. The projects range from large, unfunded Watershed Management Authority projects that would directly support Iowa’s Nutrient Reduction Strategy to smaller cover crop requests that are unmet due to lack of funds to support the high demand from farmers, with data provided by the Iowa Department of Natural Resources and the Iowa Department of Agriculture and Land Stewardship.

### THE TRUST FUND & THE NUTRIENT REDUCTION STRATEGY – A PERFECT MATCH!

In 2013 the State of Iowa released The Iowa Nutrient Reduction Strategy, a science and technology-based approach to assess and reduce nutrients delivered to Iowa waterways and the Gulf of Mexico. The strategy is designed to direct efforts to surface water from both point sources, such as wastewater treatment plants and industrial facilities, and nonpoint sources, including farm fields and urban areas.

Funding from the Trust Fund would provide essential and dependable funding in maximizing the cost-effectiveness of The Nutrient Reduction Strategy – a strategy that without proper funding will never foster the cooperation required between the public sector, private sector, and individual landowner to attain the strategy’s goals.



# WATER QUALITY & SOIL CONSERVATION: \$492.8 MILLION IN SHOVEL-READY PROJECTS

How do we improve water quality and conserve soil?

- Watershed Management Plans (WMP): \$434 million in plans ready to implement
- Watershed Management Authorities (WMA): \$36.2 million needed
- Iowa Conservation Reserve Enhancement Program (CREP): \$5.4 million needed
- Cover Crops and other cost share programs: \$17.2 million needed

## **Watershed Management Plans (WMP): \$434 million in plans ready to implement**

“We all live in a watershed, an area of land that drains to a lake or stream. What we do on that land—whether it’s a yard, farm, business or factory—affects the health of our lakes, streams and rivers. It impacts our drinking water, recreation, economic development, fish and wildlife, and our quality of life. Clean water starts with us.” -- Iowa DNR: Working for Clean Water 2015

It all starts with the community coming together and finding solutions that integrate social, economic and conservation concerns so that everyone can benefit from cleaner water. Since the mid-2000s, Iowans have been working with technical assistance from the Iowa Department of Natural Resources (DNR) and the Iowa Department of Agricultural and Land Stewardship (IDALS) to develop voluntary, locally-led plans that lay out a clear path to assessing water quality problems and proposing solutions. Known as Watershed Management Plans, these plans have been well tested and proven successful in numerous watersheds around Iowa. However, funding has not followed pace with planning. Today there are **over 400 million dollars** in quality Watershed Management Plans waiting to be funded across Iowa, but only \$1.7 million per year allocated for WMP funding.

- **A CLOSER LOOK – The Rathbun Watershed:** Following the Chariton River in south central Iowa, the Rathbun watershed protects the primary source of water for the Rathbun Regional Water Association (RRWA) – one of the largest rural water systems in the United States - which provides clean drinking water for 80,000 residential, agricultural, and business users in 18 counties. Since 2002, 330 landowners in the Rathbun Lake Watershed have participated in best management practices including improved grazing practices and installations of wetlands, riparian buffers, and terraces. There is a detailed plan in place to continue the strong partnerships that have developed around clean water and ensuring the long-term health of the watershed, but funding must follow suit. Today the Rathbun Lake Watershed Management Plan still carries an unmet need of \$35 million dollars.

## **Watershed Management Authorities (WMA): \$36.2 million needed**

Similar to the Watershed Management Plans, Watershed Management Authorities (WMAs) have continually faced substantial funding gaps leaving communities with a plan in hand with little, to no financial support. WMAs were created by the Iowa legislature in 2010 to allow cities, counties, Soil and Water Conservation Districts (SWCDs) and stakeholders, such as businesses, farmers and local residents, to cooperatively engage in watershed planning and management. There are currently **17 WMAs in Iowa in need of funding** at various stages of development from watershed prioritization, design, implementation and evaluation. In highlighting one these projects we can see the comprehensive approach and long-term vision these plans take on, it just needs to be put into action.

- **A CLOSER LOOK – The Turkey River Watershed:** Identified as a priority watershed in the Nutrient Reduction Strategy, the Turkey River WMA was formed in 2012 with stakeholders from 23 cities, five counties and seven soil and water conservation districts all coming together voluntarily to find solutions in mitigating flood risks and improving water quality. After extensive research and stakeholder involvement, a comprehensive 20-year, \$32 million plan to protect **a million-acre**

**watershed in NE Iowa, mitigate flood risk that could save millions of dollars in damage to public and private infrastructure - sits unfunded.**

#### **Iowa Conservation Reserve Enhancement Program (CREP): \$5.4 million needed**

The Iowa Conservation Reserve Enhancement Program (CREP) is a proven voluntary and cost effective method of reducing nitrate loads in our streams and drinking water by strategically locating wetlands that intercept tile-drainage from cropland. Iowa State University and demonstration projects across the state have shown that wetlands can remove 40-90% of the nitrates from upper lying cropland and provide other benefits such as, wildlife habitat and flood protection. Due to the proven success of this innovative natural infrastructure investment, the Nutrient Reduction Strategy calls for 4000 – 7000 wetlands (in addition to other practices) to achieve a 45% reduction in nitrogen. At current funding levels achieving the necessary number of wetlands will take 100 years.

- **A CLOSER LOOK – Wetlands in Action:** Over the past 14 years of the CREP program, 77 wetlands have been completed and 18 are under development in 2016. Collectively these represent 891 acres of wetland that will protect over 122,300 watershed acres and remove an estimated 100,300 tons of nitrogen over their lifetimes. While a great demonstration of success, the protected watershed acres from the CREP program represent roughly the area of 1/3 of one Iowa County. In order to reach the Nutrient Reduction Strategies' goals, we need substantial and dependable funding to scale up the program. Currently there is **five-year waiting list of landowner applicants** and an unmet need of **\$5.4 million dollars** in shovel ready projects.

#### **Cover Crops and other cost share programs: \$17.2 million needed**

Cover crops and other cost share practices such as the Water Protection Fund (WPF) Program, which is funded through REAP, are extremely popular, with much more demand than there is money available. More than **17 million dollars** last year requested from the Iowa Department of Agriculture and Land Stewardship (IDALS) for cost share on cover crops, bioretention, windbreaks, no-till, storm water swales, terraces, and water and sediment control basins **was left pending**. These cost share practices slow soil erosion, enhance water availability, increase biodiversity and bring a host of other benefits to our working lands and communities.

- **A CLOSER LOOK – Strong Interest from Farmers:** In 2015, interest was so strong from farmers and landowners for cover crop cost share that **\$3.5 million dollars** made available through IDALS was **obligated within five business days**. Cover crops such as winter wheat, cereal rye, and hairy vetch help farmers protect their soil against erosion, reduce nutrient runoff, and suppress weed growth. Additional funding for cost share will help incentivize more farmers to try out new practices, such as cover crops, that require changing inputs and implementing new soil management plans.

# OUTDOOR RECREATION:

## \$44.5 MILLION IN SHOVEL-READY PROJECTS

How do we strengthen outdoor recreation to attract highly-skilled workers to Iowa?

- Iowa's County Conservation System: \$23 million needed
- Iowa's multi-use trail system: \$16.7 million needed
- Iowa's Resource Enhancement and Protection Program: \$4.8 million needed
  - City Parks and Open Space Account
  - County Conservation Account

### Iowa's County Conservation System: \$23 million needed

Iowa's County Conservation System has been in existence since 1955. County Conservation creates and supports healthy life style opportunities to keep people of all ages outdoors, healthy and active. Each of Iowa's 99 counties has a conservation board, which acquire, develop and make available county parks, preserves, playgrounds, forests, wildlife and other conservation areas to Iowans across the state. The quality of life provided by these amenities is invaluable, but there is also a significant economic component to the public recreation and outdoor conservation education that this system provides.

The county system saw 24 million visitors last year. Both rural and urban counties reap the benefits of increased local spending by residents and visitors due to the presence of local county parks and facilities. It is estimated that this system has generated \$851 Million in economic impact, through its visitors, camping, trail users, and hunting. Additionally, 5,800 jobs are supported by associated spending while using county parks, and \$167.5 Million of personal income is generated by this spending impact.

The County Conservation System has a large backlog of unmet needs throughout the state that have been outlined by their users and elected boards in order to maintain, renovate and grow Iowa's County Conservation System. With the passage of the Trust Fund, the County Conservation System could begin alleviating that backlog and has identified 22 years' worth of projects they could accomplish at the \$23 million per year funding level.

- **A CLOSER LOOK – Poweshiek County:** Diamond Lake was constructed in 1953 and also serves as a reservoir for the City of Montezuma – water quality is essential. The lake and associated park infrastructure are in need of significant renovation/upgrades amounting to \$4.6 million. The number of applications for dwindling grant programs has made competition for matching dollars extremely difficult.
- **A CLOSER LOOK – Hamilton County:** Years of significant budget cuts has challenged the Hamilton County Conservation Board to generate other revenues to support operations. Crumbling infrastructure in some of Iowa's oldest county parks are tops on priority lists that have scarce opportunities for funding, and an estimated \$7.3 million is needed to address the current infrastructure challenges. Aging ground water supplies are creating urgency for installation of rural water for many recreation areas.

### Iowa's Multi-Use Trial System: \$16.7 million needed

Iowa may not have oceans or mountains, but we have gained a reputation for having an impressive, 8,000-mile trail system throughout the state. Promoting our trail system and outdoor recreation opportunities has become increasingly important as employers struggle to find recent graduates to fill technical job openings. Trails also promote a healthy lifestyle. Not surprisingly people are more likely to exercise if they have access to a trail. Physical inactivity costs the state of Iowa about \$5.3 billion through lost worker productivity, increased medical costs and increased workers compensation.

Additionally, the economic vibrancy created by trails and what trail users spend on their sport, in the towns they go through and to get to their destination is significant. A recent study of Woodward, Iowa showed a 33% increase in taxable sales for the period of 2011 – 2015 following completion of the popular, 89-mile Raccoon River Valley Trail which goes through the town. Iowan's love for their trails is evident in the number of communities/organizations submitting grant requests to the Iowa Department of Transportation for their State Recreational Trails Program. Over the past six years, on average, communities and organizations **submitted annual requests for funding worth \$19.7 million, with only \$2.5-\$3.0 million available annually to meet those needs.** Some trail projects that did not receive funding during the last State Recreational Trails grant cycle are highlighted below.

- **A CLOSER LOOK – Five Island Trail (Palo Alto County):** The Five Island Trail project plans is to continue construction of a recreational trail on the northwest side of Emmetsburg and Five Island Lake. This request was for Phase 6 of the project and proposed to construct an additional 2,200 feet (approximately 1/2 of a mile) of trail. The Five Island Trail will wind along one of the most scenic lakes in Iowa, connecting several parks and lake access points. Five Island Lake is the 11th largest natural lake in Iowa. \$127,125 has been requested.
- **A CLOSER LOOK – Iowa Great Lakes Connection Trail:** This project was seeking funding to complete the "Iowa Great Lakes Connection Trail" from the City of Spencer to the Iowa Great Lakes Trail in Dickinson County. The proposed project entailed construction of approximately 8 miles of dedicated trail that included trail development within the City of Spencer, construction of trail north through Clay County connecting to the City of Fostoria, and ultimately connecting to the beginning of the Iowa Great Lakes Trail in Dickinson County. \$1.9 million has been requested.



**Resource Enhancement and Protection Program: \$4.8 million needed**

REAP was put into place over 26 years ago. It is recognized as one of the premier environmental programs in the country. It is funded from the state's Environment First Fund (Iowa gaming receipts). It provides funding for projects directly to state agency budgets and also in the form of grants. REAP encourages private contributions which leverage state funding by a minimum of 3 to 1.



It invests in the enhancement and protection of the state's natural and cultural resources. The County Conservation and City Parks and Open Space accounts contribute directly to outdoor recreation opportunities in Iowa, which also have an impact on water quality and habitat development.

- **A CLOSER LOOK – County Conservation, Mahaska County, Vos Addition:** The Mahaska County Conservation Board requested a REAP Grant in the amount of \$395,000 for the purchase of a 202 acre land acquisition directly adjacent to The Russell Wildlife Area and Mahaska County Conservation Center. The Landowner, Ronald Vos, wanted to transfer the property to the Mahaska County Conservation Board because it was not cost-effective for him to farm it. The property consists of a farmed upland slope that is 54 acres of highly erodible crop ground that is significantly terraced. That land would be converted to permanent ground cover. There is also an upland timber, a riparian timber and a floodplain wetland, and is bordered on the south by the South Skunk River. Over 100 acres of this bottom land was enrolled in CRP because of the frequency of flooding. This project would increase Iowan's access to recreational land, especially given its proximity to the Russell Wildlife Area, and improve water quality and habitat.
- **A CLOSER LOOK – City of Bondurant, Winter Recreation Facility:** Northern and eastern Polk County lacks a public winter recreation area. Winter is a time when people are less active. This project would provide a place for families to enjoy an Iowa winter and get some exercise at the same time. While located in Bondurant, this facility would likely draw people from many miles around. The project repurposes a former waste water lagoon site and would turn what would be an unusable property into a community benefit. This project would provide an area for sledding, cross country skiing, snow shoeing and winter hiking. The sledding area would have several elevation levels. An unheated shelter structure and lighting were to be included.
- **A CLOSER LOOK – City of Allison, Rolling Prairie Trail:** The project would help complete the six-mile trail segment from Wilder Park in Allison to the City of Bristow. In total, the Rolling Prairie Trail corridor is an unfinished 43 mile project. It stretches over four counties (Franklin, Butler, Black Hawk, and Fayette) as well as passing through several communities and connects Beeds Lake to Henry Woods State Park. 15.7 miles east of Allison, passing through the cities Shell Rock and Clarksville are complete. Projects such as this increase recreational opportunities while connecting Iowa's communities.

# WILDLIFE HABITAT: \$136 MILLION IN SHOVEL-READY PROJECTS

How do we enhance Iowa's wildlife habitat?

- \$88 million over 10 years for the Conservation Reserve Program (CRP)
- \$48 million for lake restoration projects

Information from the USDA shows that between 1990 and 2015 Iowa lost 2,984 square miles of potential pheasant habitat. This habitat was a mix of small grains, hay land, and Conservation Reserve Program (CRP) acres. To put this loss in perspective, 2,984 square miles is a strip of habitat 10 miles wide that would stretch from Omaha to Davenport.

Thanks to a pair of mild winters and favorable springs, Iowa's pheasant numbers have rebounded somewhat the past few years. Unfortunately, the state's habitat base has continued to erode and one bad winter could be catastrophic. In fact, the annual August roadside survey index continues to illustrate the population is 48% below the long-term average going back to 1962. Furthermore, some specific regions of the state have shown an even steeper decline such as the 85% long-term average decline in southwest Iowa. The graph below shows the trend in both the August pheasant counts as well as the statewide harvest numbers. In just 10 years, the annual pheasant harvest **declined more than 85%** from 1.08 million birds in 2003 to an all-time low of 166,000 birds in 2013 (source: Iowa DNR).

## Statewide Pheasant Trends

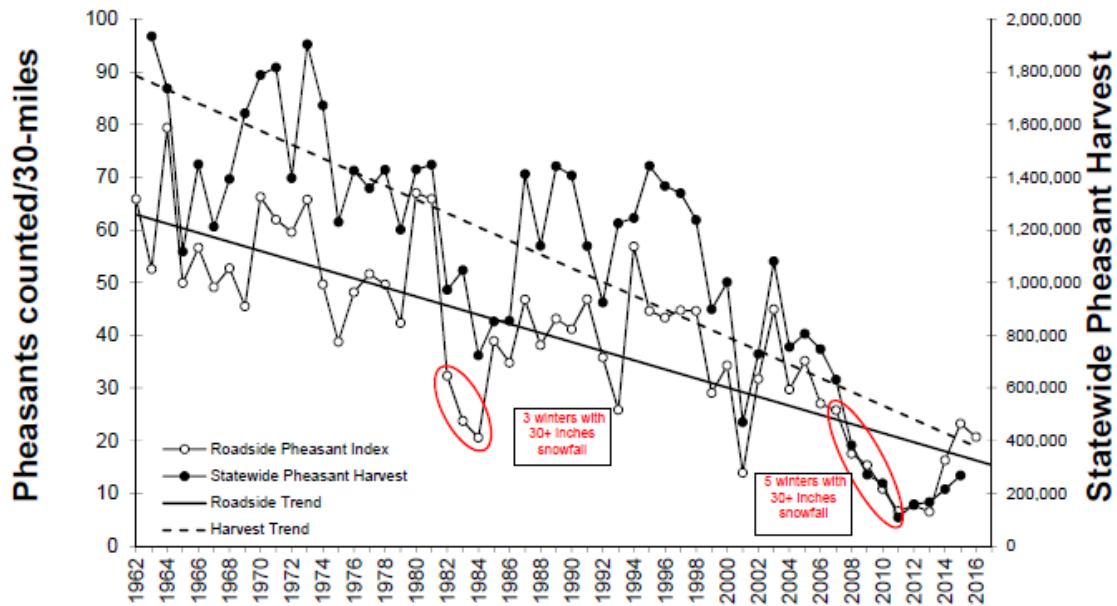


Figure 3. Mean number of pheasants counted on 30-mile August roadside survey routes, statewide, 1962-present compared to total statewide pheasant harvest.

### Conservation Reserve Program: \$88 million over ten years needed to meet demand

The Conservation Reserve Program (CRP) is a land conservation program administered by the Farm Service Agency (FSA). In exchange for a yearly rental payment, farmers enrolled in the program agree to remove environmentally sensitive land from agricultural production and plant species that will improve environmental health and quality. Contracts for land enrolled in CRP are 10-15 years in length. The long-term goal of the program is to re-establish valuable land cover to help improve water quality, prevent soil erosion, and reduce loss of wildlife habitat.



“Acres enrolled in the CRP help preserve the land for future generations by keeping soil where it belongs: protecting the steepest most erodible ground from runoff. CRP acres also provide cleaner air and water, benefitting all Iowans.” – Iowa Department of Natural Resources

Currently there are 63,391 acres of Iowa land being offered for the CRP by Iowa farmers, but only funding available to enroll 9,725 acres, leaving 53,666 acres of potential CRP land on the table. The average cost per acre for CRP in 2015 was \$164.12, which means \$8.8 million per year is needed to meet the farmer demand for CRP in Iowa.

- **A CLOSER LOOK – CRP Making a Difference:** Names of individuals who have requested CRP funding is confidential. However, the Iowa DNR did share a success story: “[Dave Hansen of Clear Lake] has been fighting a small field on steep ground for years. As equipment grew larger, this piece above the Winnebago River grew more difficult to farm. ‘I was at a soil commissioners meeting and all of the sudden the solution hit me – CRP.’ Hanson says putting the small field into native prairie grasses and wildflowers pays off in more than updated rental rates. ‘It also protects water quality in the river and provides habitat for grassland birds.’”

#### **Lake Restoration: \$48 million needed for 21 projects**

Iowans and out-of-town tourists value water quality and desire safe healthy lakes that provide a full complement of aesthetic, ecological and recreational benefits. A recently completed water-based recreational use survey by Iowa State University found that six of 10 Iowans visit our lakes multiple times each year and spend \$1.6 billion annually in their pursuit of outdoor lake recreation, with fishing and wildlife viewing among the most popular activities. The number of household trip visitations to Iowa lakes continues to increase; lake use in 2009 was 27% greater than visitation rates from 2002 through 2005. In addition, visitations at lakes that have completed watershed and lake improvements efforts continue to exceed the state average and their own pre-renovation visitation levels.

- **A CLOSER LOOK – Upper Pine Lake, Hardin County:** Upper Pine Lake is the cornerstone of Pine Lake State Park, one of the oldest and most popular state parks in Iowa. Unfortunately, this 69-acre lake suffers from very poor water quality and regular algal blooms. DNR’s Lake Restoration Program, with input from Hardin County and local supporters, has developed a conceptual plan to build a sediment control structure above the lake to reduce sedimentation and nutrient flow into the lake. The project needs an estimated \$500,000 in state funding; however, the plan has yet to be funded because of competing demands for other lake restoration projects across the state.
- **A CLOSER LOOK – Morse Lake, Wright County:** This 98-acre shallow lake (<6’ max depth) is currently a turbid, wind-swept lake with limited habitat for fish or wildlife populations. Iowa DNR is developing a plan to restore this lake to its historic condition by removing exotic rough fish and restoring native wetland vegetation. This action will greatly improve the quality of water flowing into the nearby Iowa River and enhance the quality of wildlife habitat in the Lower Morse Lake Grasslands and Birds Conservation Area. The project will need approximately \$250,000 in state funding.
- **A CLOSER LOOK – Ducks Unlimited’s Living Lakes Initiative (LLI):** The Living Lakes Initiative in Iowa is a nationwide high priority for DU’s conservation mission in North America. Iowa’s prairie pothole region provides critical breeding, migration and staging habitat for millions of waterfowl, which supplies a billion-dollar waterfowl hunting economy. The goal of LLI is to provide high quality aquatic food and habitat resources for waterfowl, which will benefit other fish and wildlife as well. Currently, Ducks Unlimited has a list of 33 shallow Iowa lakes in need of restoration. These projects would restore 13,500 acres of living lake habitat at an estimate cost of \$13.7 million. Once complete, these projects would provide high quality fish and wildlife habitat, excellent fishing and hunting opportunities and access, as well as provide cleaner, healthier water for people.