

NATIONAL PARKS, SEASHORES, AND LAKESHORES: HOW ANIMAL AGRICULTURE IS AFFECTING AMERICA’S BEST IDEA

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Abstract

The business of managing waste from large-scale animal agriculture proposes a well-known threat to our nation’s waterways, coastlines and ocean health. National Parks, Seashores and Lakeshores are not immune. This poster looks at examples of current and potential impacts to America’s Best Idea, our National Parks.

As we celebrate the National Park Centennial in 2016, as a nation we must renew our commitment, expressed in the National Park System Organic Act, to conserve our natural and cultural heritage “to provide for the enjoyment of the same in such manner and by means as will leave them unimpaired for the enjoyment of future generations.”

The health of our national parks depends on the health of the water that surrounds and flows through them. However, outside park boundaries, the health of these waters is being jeopardized by various threats, such as nutrient pollution from animal agriculture. More than half of all national park sites have waterways considered “impaired” by EPA, failing to meet Clean Water Act water quality standards.

Nutrient runoff from agriculture production is a major contributor to pollution in waterways around the country, including park waterways. As impacts of animal agriculture are more publicized and climate conditions change, large-scale animal integrators are looking for new sites for production, generally in isolated rural communities, and in some cases upstream of national park waters. Runoff from concentrated animal feeding operations (CAFO) add to impairment of national park waters.

Cumulative impacts include deoxygenation, algae blooms, fish kills, unsafe shellfish and threatened biodiversity. If park waters are managed for primary contact such as swimming, they may be unsafe for children, elderly, and people with compromised auto immune systems.

There are 65 units in the national park system where water is a primary resource integral to the park’s values, ecosystem, cultural or historical integrity.

Apostle Islands National Lakeshore - Northern Wisconsin

- The park features pristine stretches of sand beaches and coves, spectacular sea caves, some of the largest stands of remnant old-growth forests in the upper Midwest, a diverse population of birds, mammals, amphibians, and fish, and the largest collection of national register lighthouses and lighthouse complexes in the national park system.
- The purpose of the park is “to conserve and develop for the benefit, inspiration, education, recreational use, and enjoyment of the public” the islands and their related geographic, scenic, and scientific values.
- Apostle Islands National Lakeshore encompasses 69,372 acres, of which 27,323 acres are submerged lands in Lake Superior; the park boundary extends a 0.25 mile from the shore of the mainland and from each island.
- Eighty percent of the land area of the park is designated wilderness. The islands range in size from 3-acre Gull Island to 10,054-acre Stockton Island. The islands are spread out over a portion of Lake Superior nearly 290,000 acres in size—an area larger than Rocky Mountain National Park or Mount Rainier National Park.
- A variety of scenic features can be found on the islands, including examples of some of the earliest and latest events of geologic history in the lower 48 states.
- More than 232,000 visitors spend \$36 M a year visiting Apostle Islands National Lakeshore

Concentrated Animal Feeding Operations: Cattle and calves, Hogs and pigs

- In 2015, an Iowa hog producer applied for a Wisconsin Pollutant Discharge Elimination System (WPDDES) permit application to house approximately 7,500 sows, 18,750 pigs, and 100 boars in Bayfield County, WI.
- Concerns include odor and the threat of water pollution from the 6.8 million gallons of liquid manure that will be spread annually on more than 800 acres in the White River and Fish Creek watersheds, which flow into Lake Superior.
- Lake Superior holds 10% of the world’s fresh water. It is the cleanest and clearest of all of the Great Lakes. The Lake Superior waters are designated as “Outstanding Resource Waters” by the state pursuant to Chapter NR 102.10 (1m) of the Wisconsin Administrative Code. Per NR 102.10 (2), these waters “may not be lowered in quality.”
- The federal government has contributed millions of dollars through the Great Lakes Restoration Initiative for restoration projects, toxin clean-up, invasive species work and other projects on Lake Superior. A CAFO operation at the doorstep of this lake should be scrutinized in light of these great investments. The EIS must fully analyze and document the potential impacts to the water quality of Lake Superior from this operation.

Buffalo National River - Northwest Arkansas

- The Buffalo is America’s first national river.
- It was designated to preserve, conserve and interpret a clear, clean, free-flowing river.
- BNR contains a dense array of karst features including 360 caves and thousands of sinkholes, springs and other natural features related to karst processes.
- Endangered Gray Bats, Indiana Bats, and Ozark Big-eared Bats reside in cave areas along the Buffalo and forage for emergent aquatic insects from the river, its tributaries, and springs.
- Buffalo is a water-based park, which encompasses a narrow “shoestring” boundary around the river for 135 miles. In addition to offering visitors water based activities with multiple launch points along the river, the park is home to more than 60 species of warm-water fish.
- More than 1,400,000 visitors spend \$62 Million a year visiting Buffalo National River.

Concentrated Animal Feeding Operations: Turkeys, Poultry, Hogs and pigs

- Newton County is home to over 300,000 turkeys, 17,000 cattle and calves, and 6,000 hogs and pigs. The Buffalo River Watershed extends through 9 counties which produce millions of units of poultry, and thousands of head of cattle.
- Only 11% of the watershed of this free-flowing river is within National Park Service (NPS) ownership; 60% of the watershed is in private ownership, and the remaining 29% is under state or U.S. Forest Service (USFS) protection.
- Water quality on the river and some of its tributaries is degrading due to the rapid conversion of forested land to agricultural land in the watershed.
- In 2012, Arkansas’s first large hog CAFO was permitted to be built on Big Creek, a major tributary of Buffalo National River. This CAFO houses 6,500 swine, and generates over 2 million gallons of manure, litter, and wastewater annually.
- The Arkansas Pollution Control and Ecology Commission issued a five year moratorium on permits for additional large hog CAFOs in the Buffalo River watershed in 2015.
- NPCA and partners filed a federal lawsuit based on Farm Service Administration and the Small Business Administration’s inadequate National Environmental Protection Act process. While NPCA won in Federal Court, USDA’s environmental assessment issued a Finding of No Significant Impact (FONSI), and reinstated federal loan guarantees for the construction of the hog CAFO.

Mammoth Cave National Park - Central Kentucky

- Mammoth Cave is the world’s longest known cave system, located in the heart of the South-Central Kentucky karst. It is an integrated set of subterranean drainage basins covering more than 1,050 square kilometers – 400 square miles.
- Animals in the cave include 42 species of troglobites, animals adapted exclusively to life in the darkness. The diversity of cave animals in the Mammoth Cave area rivals the richness of any caveland region in the world.
- Mammoth Cave National Park is divided into two nearly equal halves by the deep gorge of the Green River, about mid-way in the river’s course to the Ohio.
- Part of Mammoth Cave’s mission is to protect and preserve for the future the extensive limestone caverns and associated karst topography, scenic river ways, original forests, and other biological resource
- More than 550,000 visitors spend over \$48 Million a year visiting Mammoth Cave National Park.

Concentrated Animal Feeding Operations: Poultry

- Barren, Edmondson and Hart County have more than a million broilers, layers and pullets. In 5 years (1997-2002) Barren County went from producing less than 1,500 units of poultry to more than 1 million.
- Over a decade of water quality monitoring at Mammoth Cave National Park indicates that the non-point source runoff from agricultural lands is the leading cause of chronic contamination of the karst aquifer with respect to nutrients, bacteria, sediment, and pesticides.
- In studies as recent as October 2002, detailed DNA fingerprinting of E. coli bacteria was performed on a sample from the discharge of the Turnhole Spring watershed. Of the five colonies isolated for this test, four were of animal origin, and one human.
- In 1990, a group of private citizens drafted a document listing agricultural practices in the park’s groundwater sheds and associated water quality concerns. From this group, the Natural Resources Conservation Service (NRCS) secured funding of \$1M to install animal waste best management practices (BMPs) on farms within the watershed. Over 80 animal waste BMPs were installed in the form of solid waste stack-pads and liquid waste lagoons.

Pipestone National Monument - Southwest Minnesota

- Visitors can view active quarry pits where American Indians continue the traditions of the past by quarrying pipestone.
- For centuries, tribes across North America traveled to this site to quarry red pipestone for making pipes and effigies from the easily carved material. Red pipestone is a valuable spiritual resource to many American Indians.
- Pipestone’s remnant tallgrass prairies host many plants and animals that once flourished throughout the Midwest. It is home to a federally threatened flower, the Western prairie-fringed orchid and an endangered fish, the Topeka shiner, an endangered species of native prairie minnow. Many state-listed rare plant and animal species also call Pipestone National Monument home.
- More than 70,000 visitors spend over \$4 Million a year visiting Pipestone National Monument.

Concentrated Animal Feeding Operations: Hogs and pigs, Cattle and calves

- Pipestone Creek, inside the National Monument is closed to human contact.
- Pipestone County, MN has 50 farms with an inventory of 267,097 hog and pigs, and 273 farms with an inventory of more than 54,000 cattle and calves.
- The Pipestone Creek watershed is within the Northern Glaciated Plains eco-region and is a sub watershed of the Big Sioux River Watershed of the Missouri River Basin.
- The Minnesota Pollution Control Agency (MPCA) listed three stream reaches in the Pipestone Creek Watershed as not meeting the aquatic recreation and life beneficial uses due to excess fecal coliform bacteria and turbidity. It was determined that overgrazed pasture, and surface-applied manure had the best potential for delivering bacteria to Pipestone Creek.

Minidoka National Historic Site - South Central, Idaho

- Minidoka National Historic Site was established to protect a unique and irreplaceable historical resource which protects historic structures and objects that provide opportunities for public education and interpretation of an important chapter in American history - the internment of Japanese Americans during World War II.
- The national monument is a compelling venue for engaging in a dialogue concerning the violation of civil and constitutional rights, the injustice of forced removal and incarceration, the history of racism and discrimination in the United States, and the fragility of democracy in times of crisis.
- The park does not have visitor center yet but planning is in the works. Park staff estimate 15-20,000 people a year visit the site. When the visitor center is complete in 2019, NPS estimates that they will have 88,000 visitors a year.

Concentrated Animal Feeding Operations: Cattle and calves

- Jerome County Idaho is home to nearly 215,000 cattle and calves.
- Friends of Minidoka, NPCA and allies oppose a recent proposal by Southview Dairy to install at a 13,000-head feedlot on 240 acres one mile upwind of Minidoka.
- In 2012, the Idaho Supreme Court upheld Jerome County’s decision to issue a permit to allow the proposed CAFO. The decision capped several years of litigation led by Friends of Minidoka in partnership with the Japanese American Citizens League, National Trust for Historic Preservation, National Parks Conservation Association, and Idaho Concerned Area Residents for the Environment (ICARE), Preservation Idaho and local families.
- CAFO threats to the national monument include odor, flies, and flooding of receiving wells into the aquifer when neighboring land owners apply waste over snow and frozen land. Manure slurry created by flooding run off contaminates the underlying aquifer.
- The proposed dairy property is currently for sale with the permit attached. Because dairy prices are low and the land owner is asking 4 X what the purchased price, the land has not sold. The permit expires at the end of the 2016 calendar year.

