# America's Most Endangered Rivers™ 2009 EDITION







**American Rivers** 





# Transformational Moment

# For Our Nation's Rivers and Water Infrastructure

WATER. What could be more important and fundamental to our health, our communities and our lives?

Clean water is the lifeblood of our communities and our environment, yet our nation's water infrastructure - our drinking water, wastewater and stormwater systems, dams and levees - are seriously outdated.

## CONSIDER:

- The American Society of Civil Engineers gives water and wastewater systems a D-, the lowest grade of any infrastructure category.
- According to the U.S. Environmental Protection Agency, every year an estimated 1.8 million to 3.5 million people get sick from contact with sewage from sanitary sewage overflows while swimming or playing in our waterways.
- We lose more than six billion gallons of water each day because of leaky, aging pipes.
- Despite spending more than \$25 billion on levees and other flood control structures, flood losses continue to rise.

Our water infrastructure is stuck in the 19th century and many communities are suffering the consequences, whether it's polluted streams, increased flood losses or water restrictions.

Global warming threatens to make the situation worse, bringing more floods, droughts and waterborne diseases. Adding to this "perfect storm," we continue to lose crucial elements of our natural systems healthy rivers, wetlands, forests and floodplains that filter clean water and provide flood protection for free.

America's Most Endangered Rivers™: 2009 Edition demonstrates the hazards of outmoded infrastructure, and the perils of ignoring the economic, health and safety benefits that healthy rivers provide. Take the number one river, the Sacramento-San Joaquin. Thanks to poor river management, California's capital city faces the greatest flood threat in the nation, the drinking water supply for more than 26 million Californians is at risk, and the river system is on the verge of ecological collapse.

We are at a transformational moment. It is time to bring our water infrastructure into the 21st century - on the Sacramento-San Joaquin, and on rivers across the country. As a nation, we need to invest more in water infrastructure, but we need to invest more wisely, too. We will make a terrible mistake if we simply rebuild 19th and 20th century water systems that are costly and inflexible, and modeled on outdated designs and assumptions. Instead, we need a 21st century approach that integrates green solutions, recognizes changing climatic conditions, and helps ensure community safety and security.

PHOTO CREDITS (above, from left to right): Photo 1: Susan Richardson Photo 2: Ron Ahle Photo 3: Scott Church Photo 4: Ryan Hagerty

Traditional water infrastructure like flood walls, dams and underground stormwater tunnels will continue to play a role, but it is static, solves only one need, and requires a huge expense to build and maintain. Plus, it can cause significant harm to rivers.

21st century green infrastructure incorporates natural systems that can supply clean water, reduce polluted runoff, reduce sewer overflows, minimize flooding and enhance community health and safety often at the same time.

#### What is the 21st century solution?

- It's planting trees and installing green roofs, rather than enlarging sewers or building a costly new treatment plant. The rainwater captured on a green roof can be used for building cooling systems and toilet-flushing.
- It's restoring floodplains and wetlands instead of building taller and taller levees. One wetland acre can absorb up to 1.5 million gallons of floodwater.
- It's retrofitting buildings and homes with water-efficient plumbing instead of constructing an expensive water supply dam. Per gallon, water supply dams can cost up to 8,500 times more than water efficiency investments.

By optimizing traditional infrastructure and maximizing green infrastructure, communities can meet their water needs and protect public health and safety. Green infrastructure also saves money and creates good jobs. For example, an economic analysis, conducted by the Alliance for Water Efficiency, estimates that a direct investment of \$1 billion in water efficiency programs can boost U.S. employment by 15,000 to 22,000 jobs.

And green solutions can bring the added benefits of more attractive communities, fish and wildlife habitats, and an overall higher quality of life.

The following principles should drive our water infrastructure investments at the federal, state and local levels:

**1. Nature works best:** Rivers, streams, wetlands, floodplains, and forests provide a suite of critical services like clean water and flood protection, and should be viewed as essential and effective components of our water infrastructure. New York City has high-quality tap water because the city invested in water protection by purchasing land around its Catskills reservoirs, rather than building expensive treatment plants. That strategy ensured that polluted runoff from roads and lawns doesn't enter the water supply and saved the city more than \$6 billion in capital and maintenance costs.



2. Don't waste money: Spending money wisely means investing in multi-purpose solutions that lower costs and provide more benefits. By restoring wetlands, planting trees, and disconnecting downspouts to limit stormwater flows into its combined sewer system, Indianapolis will be able to install much smaller sewer pipes, saving more than \$300 million.

#### **3. Enhance community safety** and enjoyment: Traditional infra-

structure isn't designed to handle the increased floods and droughts that come with global warming, so we need a modern approach to protect public health, safety, and quality of life. Green solutions give communities the flexibility and security they need to deal with climate change extremes. Napa, California solved flooding prob-

lems by choosing to restore the Napa River's natural channel and wetlands, rather than lining the river with concrete. The effort has protected 2,700 homes and prevented \$26 million in flood damages each year. Cary, North Carolina instituted a series of water efficiency measures including adding rain sensors to landscape irrigation systems, a turf buy-back program and smart landscaping education initiative. The city reduced per capita water consumption by 17 percent critical during recent severe droughts - and was able to delay \$50-60 million in infrastructure costs to expand its water treatment plant.

Parking lot swales (left) and green roofs, like the one on Chicago's City Hall (right), are costeffective ways to improve both the quality and quantity of our water supplies.



Americans want to make sure our taxpayer dollars are spent wisely and they care about safeguarding our natural heritage for future generations. That means protecting the "natural infrastructure" - healthy rivers - that give us so many benefits. It means stopping misguided efforts like the proposed dams on Georgia's Flint River, the highway to fuel poorly planned development on Maryland's Mattawoman Creek, and mining and oil development on Montana's Flathead, Mississippi's Pascagoula, and Alaska's Beaver Creek.

We must take a stand to protect America's Most Endangered Rivers of 2009, and use this transformational moment to ensure a future of healthy rivers and clean water nationwide.

## America's Most Endangered Rivers

### Sacramento-San Joaquir **River System** CALIFORNIA

#### THREAT: Outdated water and flood management

The largest watershed in California is on the verge of collapse, threatening the water supply for more than 26 million people, placing the capital of the nation's most populous state at high risk of flooding, and damaging a once productive and healthy ecosystem that supported the nation's most diverse salmon runs. Climate change, population growth, irrigation demands and declining fish populations have brought this outmoded water and flood management system to the brink. The California Department of Water Resources, and their federal partners, the Bureau of Reclamation and U.S. Army Corps of Engineers, are undertaking an overhaul of water management in the basin. Rather than repeating the mistakes of the past, such as more and larger levees and dams, they need to invest in sustainable options that protect water supply, farms and cities, while restoring the health of this great river system and its estuary. PHOTO BELOW 🔻

#### CONTACT INFO

Steve Rothert, American Rivers, 530-478-5672 srothert@americanrivers.org





## Flint River GEORGIA

#### THREAT: Proposed water supply dams

Well loved by anglers, boaters and Georgia families, the Flint River is one of the state's most valuable natural treasures. But a two-year drought in the Southeast has revived calls to dam the Flint, even though more effective water supply solutions would save Atlanta as much as \$700 million. Congress must deny attempts to authorize new dams on the Flint, and Metro Atlanta must make water efficiency the backbone of its water supply strategy. PHOTO ABOVE 🔺

#### CONTACT INFO:

Mark Woodall, Flint Riverkeeper, 706-674-2242. markwoodall@alltel.net

April Ingle, Georgia River Network, 706-549-4508, ingle@garivers.org

Jenny Hoffner, American Rivers, 404-373-3602, jhoffner@americanrivers.org

#### Lower Snake River IDAHO OREGON WASHINGTON

#### THREAT: Four dams

Four dams on the lower Snake River have caused dramatic declines in the Snake River basin's once magnificent salmon runs and stymied efforts to restore these fish. Removing the four dams and restoring a free-flowing lower Snake River will not only revive the salmon runs and a multi-million dollar fishery, it will eliminate a growing flood threat in Lewiston, Idaho and create an opportunity to modernize the region's transportation and energy systems. The Obama administration and the Northwest congressional delegation must convene negotiations to forge a river restoration plan that will work for communities and salmon in light of the threats posed by the dams and global warming. PHOTO RIGHT

#### CONTACT INFO

Amy Kober, American Rivers, 206-213-0330, akober@americanrivers.org

## Mattawoman Creek MARYLAND

#### THREAT: Proposed highway to fuel poorly planned development

Mattawoman Creek is one of the few tidal. freshwater tributaries to the Chesapeake Bay that remains healthy and unspoiled. Although Maryland's Department of Natural Resources has concluded that Mattawoman should be protected from overdevelopment, a proposed highway in Charles County threatens the creek's clean water and popular fishing and recreation opportunities. Unless the Maryland Department of the Environment and U.S. Army Corps of Engineers deny a key permit for the proposed highway, Maryland will lose this treasured gem and the goal of a healthy Chesapeake Bay will slip further from reach. PHOTO BELOW V

#### CONTACT INFO:

Terry Cummings, Chesapeake Bay Foundation, 410-268-8816 ext.2169. tcummings@cbf.org

Bonnie Bick, Sierra Club Maryland Chapter, 301-752-9612, bonniebick@gmail.com

Jim Long, Mattawoman Watershed Society, 301-283-0447, jp.long@earthlink.net

Scott Sewell, Maryland Bass Federation Nation, 410-598-7177, nitro1707@comcast.net

Katherine Baer, American Rivers, 202-347-7550, kbaer@americanrivers.org





## North Fork of the Flathead River MONTANA

#### THREAT: Proposed mines

The Wild and Scenic North Fork of the Flathead River is a magical place of exceptional wilderness value that has seen only limited development. In the United States, the North Fork is one of the best-protected watersheds in the country. But the river remains unprotected where it originates in British Columbia, and mining and industrial coalfield development proposals threaten the entire river downstream. The U.S. State Department must keep President Obama's campaign commitment to oppose mining in the headwaters of the North Fork. British Columbia might be urged to extend permanent protections for the river and stop harmful mining proposals that would spoil this international treasure. PHOTO BELOW 🔻

#### CONTACT INFO:

Will Hammerguist, National Parks Conservation Association, 406-862-6722, whammerguist@npca.org Casey Brennan, Flathead Coalition, 250-423-2603, casev@wildsight.ca

Caitlin Jennings, American Rivers, 202-347-7550, cjennings@americanrivers.org



#### Saluda River south carloina

THREAT: Sewage pollution

6 The drinking water source for more than 500,000 people and a hot spot for boaters and anglers, the Saluda River is choking from phosphorous pollution found in human waste. Wastewater treatment plants are dumping excessive amounts of phosphorous into the river, threatening property values, fish and wildlife, and popular recreational activities. The South Carolina Department of Health and Environmental Control must impose meaningful phosphorous limits on all wastewater treatment plant permits to protect the health of the Saluda River and communities that depend on it. PHOTO RIGHT



CONTACT INFO



John Tynan, Upstate Forever, 864-250-0500, jtynan@upstateforever.org Matt Rice, American Rivers, 803-771-7206, mrice@americanrivers.org

## Why These 10 Rivers?

Each year, American Rivers staff and scientific advisors review nominations for the America's Most Endangered Rivers™ report from river groups and concerned citizens across the country. Rivers are selected based on:

- The magnitude of the threat to the river,
- A major decision point in the coming year, and
- The significance of the river to people and the environment.

The report is a call to action and emphasizes solutions for the rivers and their communities. By shining the spotlight on key decisions that will impact the rivers and by providing clear actions the public can take on their behalf, the report is a powerful tool for saving these important rivers.

## Laurel Hill Creek

PENNSYLVANIA

#### THREAT: Excessive water withdrawals

Laurel Hill Creek is a Pennsylvania treasure that brings valuable recreation and tourism dollars to local communities. But the creek lacks safeguards to protect it from excessive water withdrawals for development and energy extraction. Unless water planners heed the sound water management advice in Pennsylvania's new State Water Plan, water withdrawals could irreparably harm the clean water fish and wildlife, and recreation here and downstream on the popular Youghiogheny River. PHOTO BELOW V

#### CONTACT INFO:

Krissy Kasserman, Youghiogheny Riverkeeper/ Mountain Watershed Association, 724-455-4200, vrk@mtwatershed.com

Deb Simko, Chestnut Ridge Trout Unlimited 724-787-5628, debsimko@yahoo.com

Liz Garland, American Rivers, 717-763-0742, Igarland@americanrivers.org





nerican Rivers would like to thank ert and Barbara Cohn for their long-ti upport of this campaign. By helping us hine a spotlight on threats to America's vers, their generosity helps ensure a etter future for these critical resources



### Beaver Creek ALASKA

#### THREAT: Proposed oil and gas development

Wild and Scenic Beaver Creek is a wilderness gem, home to abundant salmon and other wildlife, and a spectacular destination for anglers, boaters, skiers and hunters who seek its solitude. But Beaver Creek's wild character may soon be traded for oil and gas development by the very agency mandated to protect it — the U.S. Fish and Wildlife Service (USFWS). Although the creek is enveloped within three national conservation areas, a secretlynegotiated deal initiated under the Bush administration to transfer protected lands into corporate hands could result in the proliferation of hundreds of miles of roads, pipelines, airstrips and drilling wells that would cause irreparable harm to the creek and threaten the Yukon River downstream. The USFWS, under new leadership, must halt this misguided project and protect the people and businesses that depend on a healthy Beaver Creek. PHOTO ABOVE

#### CONTACT INFO:

Pamela Miller, Northern Alaska Environmental Center, 907-452-5021 ext. 24, pam@northern.org Caitlin Jennings, American Rivers, 202-347-7550, cjennings@americanrivers.org



#### **Pascagoula River** MISSISSIPP

#### THREAT: New petroleum storage

Known as Mississippi's "Singing River", the Pascagoula flows freely through the heart of the state's ancient bottomland swamps before reaching the Gulf of Mexico in a rich network of channels and bayous. The river is an important nursery for fish and wildlife and supports a fishing industry worth hundreds of millions of dollars. But this natural treasure could be lost if the U.S. Department of Energy uses the river to hollow out natural salt domes for future storage of 160 million barrels of oil as part of a project initiated under the Bush administration. The Obama administration and key members of Congress should deny this misguided project that would waste taxpaver dollars on outdated oil infrastructure and threaten the clean water and health of the Pascagoula River, and instead focus efforts on reducing the nation's dependence on oil. PHOTO ABOVE

#### CONTACT INFO

Raleigh Hoke, Gulf Restoration Network, 504-525-1528 ext. 204, raleigh@healthygulf.org Caitlin Jennings, American Rivers, 202-347-7550. cjennings@americanrivers.org



## Lower St. Croix National Scenic Riverway

MINNESOTA WISCONSI

#### THREAT: Loss of Wild and Scenic **River protections**

The Lower St. Croix National Scenic Riverway provides a rare natural retreat in a growing urban area. It is a favorite destination for boaters, anglers, and families seeking a natural, outdoor experience. Recreation dollars brought in by the Riverway provide a healthy boost to the regional economy. But the state-managed section of this gem of the Wild and Scenic Rivers Act is in danger. Short-sighted zoning decisions along a 26-mile stretch of this protected river threaten to damage the very qualities that make the river so special and appealing to residents and visitors. Minnesota and Wisconsin must renew their commitment to this nationally recognized river segment and work with riverfront counties, townships and municipalities to ensure development is responsibly planned so that the river remains protected for future generations. PHOTO BELOW

#### CONTACT INFO:

Dan McGuiness, St. Croix River Association, 651-260-6260, info@ stcroixriverassociation.org

Caitlin Jennings, American Rivers, 202-347-7550, cjennings@americanrivers.org



## **American Rivers**

### **National Office:**

1101 14th Street NW, Suite 1400 Washington, DC 20005 Phone: (202) 347-7550 Toll free: 877-347-7550 outreach@AmericanRivers.org www.AmericanRivers.org

## **Regional Offices:**

California **Great Lakes Mid-Atlantic** Northeast Northwest Southeast

America's Most Endangered Rivers<sup>™</sup>: 2009 Edition Sponsor:

PORTING TRADITIONS

### **About American Rivers**

American Rivers is the leading conservation organization standing up for healthy rivers so communities can thrive. American Rivers protects and restores America's rivers for the benefit of people, wildlife and nature. Founded in 1973, American Rivers has more than 65,000 members and supporters, with offices in Washington, DC and nationwide.

TAKE ACTION AT AmericanRivers.org



Printed on paper that contains 30% post-consumer recycled fiber.

DESIGN: Levine & Associates, Washington, DC www.levinedc.com

COVER PHOTO CREDITS (from left to right): Photo 1: Leye-Noph, USFWS Photo 2: Montana Public Image Library Photo 3: Elise Smith, USFWS Photo 4: Mattawoman Watershed Society