America's Most Endangered Rivers™

2008 EDITION

American Rivers
Thriving By Nature

About the Report

The *America's Most Endangered Rivers™* report is one of the best-known and longest-lived annual reports in the environmental movement — but it is much more than that. Each year, grassroots river conservationists team up with American Rivers to use the report to save their hometown river, consistently scoring policy successes that benefit these rivers and the communities through which they flow.

American Rivers solicits nominations from thousands of river groups, environmental organizations, outdoor clubs and others for the *America's Most Endangered Rivers™* report. Our staff and scientific advisors review the nominations for the following criteria:

- The magnitude of the threat to the river
- A major decision point in the coming year
- The regional and national significance of the river

The report highlights ten rivers whose fate will be decided in the coming year, and encourages decisionmakers to do the right thing for the rivers and the communities they support. The report presents alternatives to proposals that would damage rivers, identifies those who make the crucial decisions, and directs the public to opportunities to take action on behalf of each listed river.

Barbara Cohn

American Rivers would like to thank **Barbara Cohn** for her dedicated financial support of this campaign. By helping us spread the word about threats to America's rivers and highlight rivers in particular jeopardy, Cohn's generosity helps ensure a better future for these important resources. As in years past, we expect this report will contribute to positive outcomes for the rivers featured on its pages.

About American Rivers

American Rivers is the only national organization standing up for healthy rivers so our communities can thrive. Through national advocacy, community-oriented solutions and our growing network of strategic partners, we protect and promote our rivers as valuable community assets that are vital to our health, safety and quality of life.

American Rivers has more than 65,000 supporters nationwide, and offices in Washington, DC and the Mid-Atlantic, Northeast, Midwest, Southeast, California and Northwest regions. Learn more at www.AmericanRivers.org.

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TABLE OF CONTENTS

AMERICA'S 10 MOST ENDANGERED RIVERS™ OF 2008

1 Catawba-Wateree River
2 Rogue River
3 Cache la Poudre River
4 St. Lawrence River
5 Minnesota River
6 St. Johns River
7 Gila River
8 Allagash Wilderness Waterway
9 Pearl River
10 Niobrara River

WHAT DOES GLOBAL WARMING MEAN FOR RIVERS?

Fifteen years ago, in November 1992, 1,700 of the world's leading scientists, including the majority of Nobel laureates in the sciences, issued an ominous warning to the world:

"No more than one or a few decades remain before the chance to avert the threats we now confront will be lost and the prospects for humanity immeasurably diminished." *

One thing is certain, if global warming is not addressed, rivers as we know and love them, will all be endangered.

Because, when drought causes the water taps to run dry, panicked community leaders will reach for 19th and 20th century solutions, like diversions and reservoirs, unless 21st century solutions, like efficiency and reuse, have been proven and government policies and programs support their widespread use.

When floodwaters kill people and destroy property, panicked leaders will look to outmoded levees and dams, unless better options like natural flood protection have been proven more effective.

This year's *America's Most Endangered Rivers™* are ten examples of the choices communities must make between failed methods of the past, or proven approaches to a better and more sustainable future.

As the nation's leading river conservation organization, American Rivers offers communities proven approaches to adapting to global warming and gaining many valuable benefits in the effort. As more and more communities adopt these approaches, together we will create a path to a sustainable future.

AMERICAN RIVERS

Global warming means our work protecting rivers is even more important today and in the future. We have adopted the audacious goal that by 2023, we will have changed public policy and practice so that natural land cover is increasing, total water consumption is decreasing, and outmoded infrastructure is being replaced with green infrastructure, like rain gardens, green roofs and stream buffers all across America.

As a result of this major change in public policy and practice, healthy rivers will provide the resilience needed by communities to survive global warming and thrive.

These ten endangered rivers need your help. Together we can demonstrate a better way to protect communities from the impacts of global warming by protecting their rivers.

I hope we can count on each of you to join with us, and take action.

Thank you.

Rebecca R. Wodder
President
American Rivers

IDAHO CONSERVATION LEAGUE

* Union of Concerned Scientists

"2007 MARKED BY EXTREME RECORD-BREAKING WEATHER"

So read headlines at the end of a year marked by an ominous succession of extreme weather. The residents of southwest Washington who saw the Chehalis River rise to record levels and wash away homes and livestock certainly wouldn't disagree. Neither would residents of the Southeast who watched their reservoirs dwindle throughout a record-setting drought. Across the country, 2007 brought record floods, droughts and high temperatures. New high temperature records were set at 263 weather stations around the country. These events may foretell the future we will face in a changing climate. Global warming isn't just about polar bears, ice caps and hurricanes; it will affect every American river and, therefore, every American community.

This year's *America's Most Endangered Rivers™* face a variety of immediate threats from actions such as harmful logging and water diversions, but they all share one unified threat — global warming. The changing climate is altering water levels, increasing concentrations of pollution and decreasing each river's capacity to respond to the local threats it faces. The impacts of global warming, combined with the ill-conceived projects described in this report, could destroy the rivers' abilities to provide clean water, benefit local economies, and support wildlife.

Rivers in danger from excessive water withdrawals such as the Gila River in Arizona and New Mexico may increasingly run dry as shifting precipitation patterns increase the intensity of droughts.

Those threatened by rapid development and runoff like the Pearl River in Mississippi and Louisiana will grow more polluted as stronger storms wash pollutants off urban and agricultural lands.

The remote, wild rivers on this list such as Maine's Allagash and Oregon's Rogue gain even more importance in light of global warming. We can ill afford to lose these last, pristine ecosystems as the changing climate alters wildlife habitat and destroys biodiversity around the country. Just as important, we cannot afford to lose the benefits that they provide by absorbing flood waters and

ROBERT IZ/FLICKR.COM

NATIONAL PARK SERVICE

Global warming will cause more frequent and more intense droughts and floods, like this flood in 2007 on Washington's Nisqually River.

buffering against droughts.

Bleak though these predictions may be, there is hope. We have many strategies that can help healthy rivers and the communities that depend on them adapt to moderate levels of global warming — working with nature instead of against it. But we all must recognize that there is no adapting to more extreme scenarios. Protection of healthy watersheds, restoration of damaged rivers, and enhancement of water efficiency can contribute to making American communities resilient in the face of these increasingly volatile conditions.

AN UNCERTAIN FUTURE

Global warming will have many impacts on rivers, and these changes will in turn affect water supply, agriculture, recreation, power generation and numerous other spheres. Global warming will be most disruptive to communities that are already vulnerable because of dam construction, deforestation, sprawl, unsustainable water use, untreated wastewater and polluted runoff. Already weakened by past damage to their rivers, many communities will have a harder time adapting to the following impacts brought on by global warming.

Drought

Warmer temperatures will increase evaporation, melt snowpack earlier, lower surface water levels and decrease recharge to aquifers. The frequency and intensity of droughts will increase as a result. Some areas will receive less precipitation, while others will see rainfall shift to winter and spring, leaving summer months drier. In river basins such as the Rogue and Colorado's Cache la Poudre that originate in mountainous areas, snowpack acts as a natural reservoir that stores winter precipitation and releases it throughout the drier summer months when demand is highest. Warming temperatures will turn snow to rain and melt snowpack earlier in the season. As a result, many communities, especially in the western United States, will have less water in the dry summer and early fall months. In the Southeast, the 2007 drought has already cost farmers hundreds of millions of dollars and closed power plants due to a lack of cooling water. These same shortages also threaten species and ecosystems that have evolved over thousands of years to depend upon historical cycles.

Flooding

While water shortages will affect some regions, excessive rainfall will plague others. More frequent and more powerful storms will increase flooding in many regions of the country. Some areas will experience both drought and flooding in the same year. Earlier snowmelt and higher winter and spring precipitation will make mountainous areas particularly likely to experience increased flooding. These floods will claim lives and destroy property, especially in communities built in floodplains. Although flooding has always been part of a healthy river system, these "extreme" floods will likely be destructive as opposed to restorative, harming fish and

WHAT'S IN A NAME?

Why global warming and not climate catastrophe? There are many alternatives, each effectively describing one part of the problem while neglecting another. Many scientists opt for "climate change" because it describes the wide range of shifts in the climate. Others use "global warming" to stress the dire nature of the problem and convey a sense of urgency. We have chosen to use "global warming" throughout this report. It is meant to encompass a wide range of shifts in the climate from altered rainfall patterns to prolonged droughts, not merely a rise in temperatures.

> **...there is hope. We have many strategies that can help healthy rivers and the communities that depend on them.**

wildlife, as well as people and property.

Water Quality

A changing climate poses a number of threats to clean water in our rivers and streams. Heavy rains will wash metals, toxins and other pollutants off of streets and into waterways. They will also overburden sewer systems and send raw sewage into local rivers and streams. The Catawba-Wateree River of North Carolina and South Carolina, which is contaminated with untreated sewage and other pollutants, will likely experience more algal blooms and declining water quality as more water is taken by evaporation and withdrawals for human use. Sea-level rise will infiltrate coastal aquifers with salt water. These sources of pollution will in turn put drinking water supplies, vital habitat for fish and wildlife, and the recreational use of rivers at risk. Municipalities will need to invest more money and energy in infrastructure systems to protect clean water.

THE WAY FORWARD: RESILIENT COMMUNITIES

Confronting global warming demands urgent action on two major fronts. We must get serious about reducing greenhouse gas emissions. But even after we bring emissions under control, some warming is inevitable because greenhouse gasses from the past 100 years of intense fossil fuel use will remain in the atmosphere for many decades. We must, therefore, take immediate action to help both human and natural communities adapt to inevitable climate changes by being smart about how we manage our precious freshwater resources and working with nature instead of against it.

How do we adapt given the uncertainty of knowing how much the climate will change in any given place over any given time? We adapt by building resilience into communities and ecosystems so that they can withstand significant changes or disasters and respond in a productive manner. We can build resilience to the consequences of global warming by protecting and restoring healthy watersheds, increasing water conservation and efficiency and improving the quality of our infrastructure.

Increase the Amount of Natural Landscapes

Healthy rivers, grasslands, forests and wetlands perform a variety of essential functions for communities and wildlife. They act as natural sponges that absorb flood waters and release them during dry periods, buffering against droughts. By absorbing and slowing flood waters, they also act as barriers between storm surges and communities. Even having four to five percent wetland coverage in a watershed can reduce peak floods by 50 percent. In addition, healthy watersheds and wetlands filter water and remove pollutants. They provide untold economic benefits by raising property values and providing venues for boating, fishing, hunting and countless other recreational activities. Finally, freshwater ecosystems provide a critical refuge for fish and wildlife. More than 70 percent of all species rely upon rivers and streams for some part of their life cycle.

America is still blessed with many healthy, free-flowing and intact headwaters, watersheds, wetlands and floodplains. We must preserve these intact ecosystems and promote them as a vital part of our water supply and flood protection infrastructure, especially important during an era of global warming. Counterproductive responses such as building more levees and dams should only be used where green infrastructure is proven to be insufficient. At the same time, we must rehabilitate rivers and streams that have been damaged by these misguided approaches in the past. Dams and levees impair the ability of watersheds to provide water supply, flood control and pollution reduction services, but these benefits can be recaptured by restoring degraded rivers and streams. By preserving and restoring healthy watersheds and stream channels, communities will grow more resilient and will be better able to withstand the impacts of global warming.

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MEL THORNTON

MAPLEWOOD PUBLIC UTILITIES

Increasing the amount of natural landscape will make communities more resilient, benefiting people and the fish and wildlife that depend on healthy rivers.

Reduce Per Capita Water Consumption

To ensure that we have enough water to go around, even during times of scarcity, we must be smarter and more efficient about how we use water. Unfortunately, many communities assume that new reservoirs are the only option for increasing water supplies, that large centralized projects are worth the enormous expense, and that the loss of free flowing rivers is a price we must pay to have enough water. Reservoirs will be even less effective in a warming climate, as higher temperatures will increase losses to evaporation. There are better ways to manage our water resources. As with energy, efficiency should be the first principle applied to water resources. The U.S. Environmental Protection Agency's new WaterSense Program, modeled after the successful EnergyStar labeling system, will provide national water efficiency standards and will help the public select water-efficient products. Replacing older toilets with high efficiency models could save 900 billion gallons of water a year — enough to supply 10 million homes.

While domestic water efficiency can help buffer against droughts, agricultural and industrial water use must also be addressed. Agriculture accounts for 80 percent of water consumption in this country and more than 90 percent in arid western states. There have been some increases in agricultural water use efficiency, but there is still great room for improvement.

As we increase water efficiency, some of the water savings need to be returned to the rivers so that they can be resilient in the face of a changing climate, remain healthy and provide their many benefits. Wildlife and ecosystems have evolved to depend on a range of flows, and their survival will be in jeopardy if river flows are always kept at a bare minimum. Increasing efficiency and boosting river flows will provide a buffer that will enhance human and ecosystem resilience and ensure healthy watersheds and adequate water supplies even during droughts.

NAPA FLOOD AND WATER CONSERVATION DISTRICT

Improve the Quality and Mix of Infrastructure

Throughout much of American history, rivers have been treated as problems that must be "solved" through large-scale engineering projects. As a result, rivers have been clogged with dams, straightened and channelized, severed from their floodplains or even buried underground. Unfortunately, these approaches have often exacerbated the very problems they were meant to solve. For example, despite spending more than $25 billion on federal levees and dams, national flood losses continue to rise. A similar pattern is evident for wastewater treatment. Rather than treating pollution at its source, we have often opted for complex and expensive treatment systems or have ignored the problem and used rivers as a dumping ground for untreated waste.

When it comes to floods, traditional "hard" infrastructure should be the last line of defense. Engineered solutions can be very costly and inflexible, responding to a very narrow range of anticipated conditions. Rather than building new levees and reservoirs, we need to restore wetlands, remove incentives for floodplain development, and allow rivers to follow natural, meandering channels. Napa, California solved flooding problems by restoring their river to its natural floodplain, and the city has saved lives and money in the process.

Other communities have used rain gardens and green roofs to retain stormwater and reduce the need for costly sewer expansion projects. Investment in hard infrastructure will still be needed in coming years as old projects reach the end of their lifespans. However, it is essential that we develop a mix of traditional and green approaches.

HOPE FOR THE FUTURE

In the coming decades we face a warming climate and an uncertain future. But there is hope. We have tried-and-true tools at our disposal that can help us adapt. We also know what needs to be done to stop global warming from reaching catastrophic levels. Our limitations are not technical, but political. The real challenge is to find the will to make it happen in time.

TOLEDO ENVIRONMENTAL COUNCIL

AMERICA'S MOST ENDANGERED RIVERS™ SUCCESS STORIES

Penobscot River
MAINE

The Penobscot, New England's second largest river, was listed every year from 1989 to 1996 because of existing or proposed dams. Our efforts, along with those of our strong local partners, blocked new dams and helped spur a landmark agreement in 2004 to remove two dams and improve operations on a third. In the last year we were able to secure $10 million from the federal government which matches the funding previously raised from private and public sources and assures that the power company will relinquish three of its dams, making the restoration of the river inevitable. These efforts will help bring back the fabled Atlantic salmon and other fish and wildlife, and will create new economic opportunities connected to a healthy river.

PENOBSCOT RIVER, TOM SMITH/FLICKR.COM

Columbia River's Hanford Reach
WASHINGTON

The Hanford Reach is the last free-flowing stretch of the Columbia River and supports the only reliably harvestable runs of chinook salmon in the upper Columbia and Snake rivers. The Hanford Reach was listed in 1997 and was number one in 1998 because of the threat of harmful land development. Our advocacy helped create the Hanford Reach National Monument in 2000, protecting the 51-mile Hanford Reach and almost 200,000 acres of surrounding lands.

HANFORD REACH, USFWS

Clarks Fork of the Yellowstone
MONTANA, WYOMING

The Clarks Fork of the Yellowstone was number one on the list for three straight years from 1994 to 1996. The river and nearby Yellowstone National Park were threatened by the pro-

CLARKS FORK, CARTER GOWL

SUSQUEHANNA RIVER, DON WILLIAMS

posed New World gold mine. Toxic waste from the mine would have posed an unacceptable risk to clean water, fish and wildlife, and the millions of Americans who enjoy the park. In 1996 our efforts culminated in a Presidential Action to stop the mine and protect this national treasure.

Susquehanna River

NEW YORK, PENNSYLVANIA, MARYLAND

At risk from sewage pollution and dam construction, the Susquehanna was number one on the list in 2005. Within days of the report's release, the U.S. Environmental Protection Agency dropped its proposal to adopt a new policy which would have legalized the dumping of partially treated sewage into the Susquehanna and other rivers across the country. In 2008, the U.S. Army Corps of Engineers denied the permit to construct an inflatable dam on the river, killing the ill-advised proposal.

Blackfoot River

MONTANA

The threat of a cyanide heap-leach gold mine landed the Blackfoot, one of Montana's great trout streams and recreation destinations, on the list in 1998. The mine, which would have been developed less than a quarter-mile from the river's edge, carried the risk of pollution from cyanide and acid mine drainage. Shortly after the report's release, voters in Montana enacted a ballot initiative banning the use of cyanide in extracting gold in the state.

Wolf River

WISCONSIN

At risk from a zinc and copper sulfide mine, the Wolf River, one

WOLF RIVER, EIDI HANSEN FLICKR.COM

of the last wild rivers in the Midwest, was on the list in 1995, 1997 and 1998. The mine, located at the Wolf's headwaters, would have dumped 44 million tons of waste into this National Wild and Scenic River, threatening trout, sturgeon, and the area's recreation and tourism. Mine pollution also threatened wild rice beds and sacred lands of the Menominee, Sokaogon Chippewa, and Potawatomi tribes. Thousands spoke out against the mine, and in 2003 two tribes bought the mine site. The land purchase killed the mine proposal, and ensured the area will be protected to support clean water, tourism jobs and tribal culture.

Altamaha River

GEORGIA

ALTAMAHA RIVER, TIM PALMER

Proposals for new dams and power plants that would reduce river levels, destroy habitat and concentrate pollution put the Altamaha on the list in 2002. Our report highlighted the need for increased water and energy efficiency as an alternative to these irresponsible proposals. Following the listing, the U.S. Army Corps of Engineers rescinded its permit for a new reservoir on a tributary of the river.

BLACKFOOT RIVER, EDITH OBERLEY OF BITTERROOT AND BERGAMOT/FLICKR.COM

MCCRYSTAL CREEK, NAMIET NYRASINE/FLICKR.COM

McCrystal Creek
NEW MEXICO

The threat of coalbed methane drilling put McCrystal Creek in the Valle Vidal region of New Mexico on the list in 2005. Shortly after the report's release, the state of New Mexico took action to protect this pristine and beautiful stream from drilling and other harmful development by designating all the surface waters of the Valle Vidal as Outstanding Resource Waters.

SAN MATEO CREEK, SAVESANONOFRE.COM

Canning River
ALASKA

Flowing through Alaska's Arctic National Wildlife Refuge, the Canning River, threatened by oil exploration and drilling, was listed in 2001 and 2002. For the Canning, energy development would have meant the pumping of millions of gallons of water, huge new gravel mines in its floodplain, and serious disturbance to fish, polar bears and other sensitive wildlife. So far, Congress has blocked several attempts by drilling proponents to open the refuge to oil and gas development.

CANNING RIVER, AMERICAN RIVERS PHOTO LIBRARY

San Mateo Creek
CALIFORNIA

A proposed toll road landed San Mateo Creek number two on the list in 2007. The 16-mile long road would have cut through the creek, causing significant damage to the watershed and to surfing at the world-famous Trestles Beach, whose reef depends on the creek for sand and cobbles. The voices of thousands of Californians helped convince the California Coastal Commission to deny the road proposal in February 2008.

ONE TO WATCH...

Yazoo River and Big Sunflower River
MISSISSIPPI

For almost 70 years, the U.S. Army Corps of Engineers has been trying to push through a plan now estimated to cost $220 million to drain more than 200,000 acres (an area greater than all five boroughs of New York City) of wetlands in northwestern Mississippi to enhance production of subsidized crops. The threat of this enormously destructive "Yazoo Pumps" project landed the Yazoo River in the AMERICA'S MOST ENDANGERED RIVERS™ report in 1997, 2002, 2003 and 2004 and the Big Sunflower River in the report in 1997. Fortunately, the U.S. Environmental Protection Agency has begun a Clean Water Act veto process to kill the proposal. When this boondoggle is buried for good, it will be a victory for fish and wildlife, natural flood protection, and common sense.

BIG SUNFLOWER RIVER, LOUIE MILLER

AMERICA'S MOST ENDANGERED RIVERS™: 2008 EDITION SUMMARIES

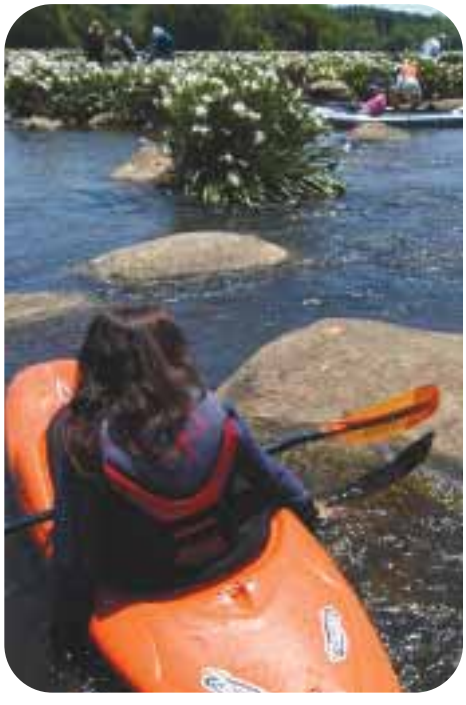
NUMBER 1

CATAWBA-WATEREE RIVER

NORTH CAROLINA, SOUTH CAROLINA

THREAT: OUTDATED WATER SUPPLY MANAGEMENT

The Catawba-Wateree River has served communities in the Southeast for thousands of years. This regional treasure was home to some of the first Native American tribes encountered by Europeans in the United States. The river now provides drinking water to millions, supports a myriad of local industries, and sustains the high quality of life residents enjoy. However, under this rich exterior, the Catawba-Wateree River is being drained away by water mismanagement and explosive population growth. These threats, combined with predictions of more frequent droughts due to global warming, impair the river's health and its ability to provide for residents in the future is at risk. North Carolina and South Carolina have a choice: they can continue to demonstrate ineffectual river management and move toward a future of water scarcity and uncertainty, or embrace river protection and sustainable water use to ensure a thriving economy and high quality of life for years to come.



NANCY PIERCE

NUMBER 2

ROGUE RIVER

OREGON

THREAT: LOGGING AND ROAD CONSTRUCTION

The Rogue River is one of the most renowned rivers in the country, famous for its exceptional scenery, biodiversity, world-class fishing, and thrilling whitewater boating. One of the eight original rivers protected in the national Wild and Scenic Rivers System in 1968, the Rogue supports a thriving recreation economy and draws thousands of anglers, boaters and hikers each year. But proposals to clearcut old-growth forest along key streams that feed the Rogue threaten to choke the river with sediment and destroy the river's wild character. Unless Congress kills these destructive logging plans and permanently protects Rogue River tributaries, the amazing and unique wonders of the wild Rogue will be lost to future generations.

KEN MORRISH

NUMBER 3

Cache la Poudre River

COLORADO

Threat: water diversion and reservoir project

Colorado's only Wild and Scenic River, the Cache la Poudre River, or "Poudre," is the lifeblood of the cities and farms it serves. But its future is threatened by a water diversion scheme that would stretch the river beyond its limits in order to quench future development elsewhere. The U.S. Army Corps of Engineers must deny this flawed proposal, and ask involved Colorado cities and water districts to implement simple water conservation and efficiency measures instead. If they do not, communities, agricultural operations, and other businesses may no longer be able to enjoy the myriad benefits the Poudre River now offers.

SAVETHEPOUDRE.ORG

NUMBER 4

St. Lawrence River

NEW YORK, CANADA

Threat: outdated dam management plan

The St. Lawrence River provides drinking water, scenic beauty, recreation and economic opportunities for millions of people in the United States and Canada. But an outdated management plan created half a century ago has harmed the river's health and is threatening its lucrative tourism and recreation economy, and quality of life. For the first time in 50 years the management plan is up for revision. The International Joint Commission, an independent, bi-national organization established by the Boundary Waters Treaty of 1909, must choose a plan that will restore the river's health and benefit its many communities.

SKYE MOREY HERITAGE

NUMBER 5

Minnesota River

SOUTH DAKOTA, MINNESOTA

Threat: proposed coal-fired power plant

The Minnesota River is treasured by thousands of residents and visitors who swim, boat, fish and hunt in and along the river. But a proposed coal-fired power plant threatens the health of the river and nearby communities. In addition to spewing greenhouse gases and other toxins, cooling and scrubbing mechanisms within the plant would require billions of gallons of water every year. The Minnesota Public Utilities Commission must deny the Certificate of Need and instead encourage the use of energy efficiency measures and renewable energy resources.

JOHN WARTMAN/FLICKR.COM

NUMBER 6

St. Johns River

FLORIDA

Threat: unsustainable water appropriations

The St. Johns River provides scenic beauty, recreational opportunities, and important fish and wildlife habitat. But the river is threatened by a water withdrawal proposal that would cost taxpayers billions, fuel more runaway sprawl, and damage the river's ecology. Instead of taking precious freshwater from the fragile St. Johns, water managers should implement proven conservation and efficiency measures that will not only save the river's health, but protect the long-term sustainability of community water supplies.

ST. JOHNS RIVERKEEPER

COURTESY OF GILA CONSERVATION COALITION

NUMBER 7

Gila River

NEW MEXICO, ARIZONA

Threat: water development project

New Mexico's last free-flowing river, the Gila is threatened by an archaic and costly water diversion project despite the fact that future water supply needs can be met through cheaper alternatives. The unnecessary diversion would not only harm the river's health but would negatively impact a region where the economy and residents' quality of life increasingly depend on natural values. New Mexico Governor Bill Richardson must continue to protect the Gila River and ensure that state decisionmakers consider and implement cheaper, more effective, and less damaging water supply alternatives.

NUMBER 8

Allagash Wilderness Waterway

MAINE

Threat: loss of Wild and Scenic River protections

Once a crown jewel of the nation's Wild and Scenic Rivers System, the unique character of the Allagash Wilderness Waterway in northern Maine is in jeopardy. State river managers are being pressured to dilute or strip protections that safeguard the river's recreational, economic and ecological values. In 2008, the 40th anniversary of the Wild and Scenic Rivers Act, the state must strengthen, not weaken, protections for the Allagash and, by example, help uphold the integrity of rivers protected under the Wild and Scenic Rivers Act nationwide.

DEAN BENNETT

DAVID LEGG

NUMBER 9

Pearl River

MISSISSIPPI, LOUISIANA

Threat: irresponsible floodplain development

The Pearl River is a recreation oasis for nearby communities, an important source of drinking water, and an essential refuge for fish and wildlife. But developers want to dam and dredge the river to create artificial lakes and islands for private development at a staggering cost to taxpayers. This boondoggle would destroy vital floodplain wetlands, cause irreparable harm to the Pearl River, and actually place people in the path of potential floods. The U.S. Army Corps of Engineers and local governments need to reject this proposal for private profit at taxpayer expense and instead champion a comprehensive plan to protect and restore the Pearl River and its natural flood protection attributes.

NUMBER 10

Niobrara River

WYOMING, NEBRASKA

Threat: unsustainable irrigation diversions

The Niobrara River is one of only two Wild and Scenic Rivers in Nebraska and is a regional and national treasure for its fish and wildlife, recreation opportunities, and tourism. But excessive irrigation diversions, largely a result of rising corn prices for ethanol production, are shrinking its flows and threatening these values. Water managers must act to prevent excessive withdrawals to protect the river's health and the many quality of life benefits it provides to human and natural communities.

NATIONAL PARK SERVICE

GLOBAL WARMING AND MISGUIDED HUMAN ACTIONS BOTH THREATEN RIVERS, BUT

YOU CAN MAKE A DIFFERENCE.

PATRICIA PENNELL

Learn about America's Most Endangered Rivers™ of 2008 and then take action to encourage decisionmakers to do the right thing for these and all rivers and the communities they support at www.AmericanRivers.org/EndangeredRivers.

SHUTTERSTOCK.COM

NUMBER 1

Catawba-Wateree River

NORTH CAROLINA, SOUTH CAROLINA

THREAT: OUTDATED WATER SUPPLY MANAGEMENT

Summary

The Catawba-Wateree River has served communities in the Southeast for thousands of years. This regional treasure was home to some of the first Native American tribes encountered by Europeans in the United States. The river now provides drinking water to millions, supports a myriad of local industries, and sustains the high quality of life residents enjoy. However, under this rich exterior, the Catawba-Wateree River is being drained away by water mismanagement and explosive population growth. These threats, combined with predictions of more frequent droughts due to global warming, impair the river's health and its ability to provide for residents in the future is at risk. North Carolina and South Carolina have a choice: they can continue to demonstrate ineffectual river management and move toward a future of water scarcity and uncertainty, or embrace river protection and sustainable water use to ensure a thriving economy and high quality of life for years to come.

The River

The Catawba River originates in the fabled Blue Ridge Mountains of western North Carolina and flows through the Charlotte metropolitan area before reaching South Carolina, where its name changes to the Wateree River. It eventually reaches its confluence with the Congaree River southeast of the city of Columbia. The river supplies drinking water to 1.3 million people on its heavily populated lower reaches, including the towns of Morganton, Hickory and Charlotte, North Carolina, and Rock Hill, Lancaster and Camden, South Carolina. The basin is home to threatened and endangered species such as the shortnose sturgeon, robust redhorse, Schweinitz's sunflower and the Carolina heelsplitter mussel. The Catawba-Wateree River sustains the world's second-

CATAWBA-WATEREE RIVER AT-A-GLANCE

RIVER LENGTH: 300 miles

WATERSHED AREA: 5,665 square miles

LARGEST CITY IN THE WATERSHED: Charlotte, NC (pop. 695,995)

DID YOU KNOW? The Catawba-Wateree River watershed is the most populated in North Carolina.

©NANCY PIERCE

Tribal connections to the Catawba-Wateree River run deep. The river has been central to local Native American communities for thousands of years.

largest population of the rare rocky shoals spider lily. Each spring, residents and visitors flock to see the lilies blanket the river with their showy white blossoms. The river's fish, wildlife, beauty and serenity attract 10 million visitors from across the region annually. Boating, swimming, fishing and hiking along the river generate more than $95 million for local communities every year and provide 1,700 jobs in recreation-based businesses.

The Catawba-Wateree basin has supported human communities for thousands of years. The river was originally home to the Catawba Indian Tribe, self-identified "people of the river" and the Wateree Tribe, whose name comes from a Catawban word meaning "to float on the water." The Catawba-Wateree River was and is central to tribal identity.

In modern times, the river also has been heavily developed for energy production and impounded by 11 hydropower dams. Four coal and two nuclear power plants as well as paper, chemical and textile manufacturing plants depend on the river for water supply. These industries and others that depend on the Catawba-Wateree River provide thousands of jobs and millions of dollars in revenue to local communities.

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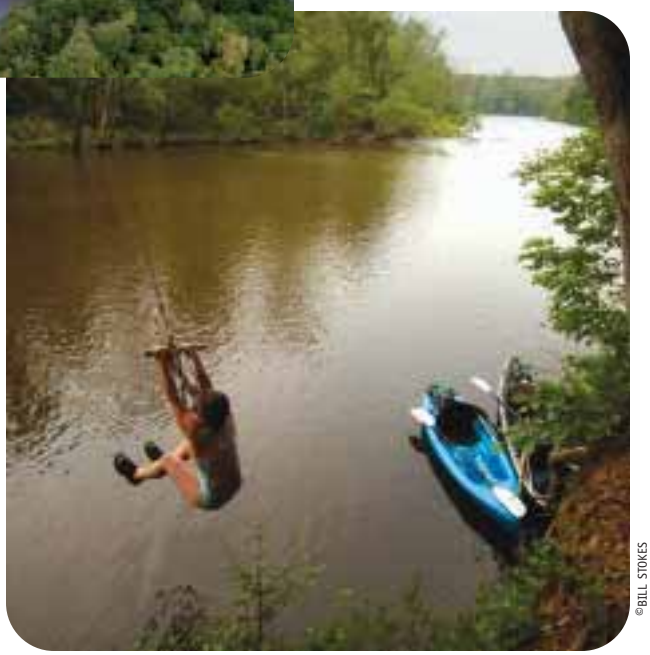
The Threat

The Catawba-Wateree River basin is experiencing unprecedented demand for clean water due to exponential population growth of the Charlotte metropolitan area, which spans several counties in both North and South Carolina. The heart of the city is in Mecklenburg County, one of two North Carolina counties that rank among the ten fastest-growing counties in the nation. The city is expected to grow by 40 percent over the next decade.

On top of this pressure, the Carolinas are experiencing one of the most severe droughts in recorded history and, despite spring rains, drier than average conditions are expected to continue. Climate scientists predict devastating droughts like this one will become more frequent and severe with global warming. Lack of rain and over-tapped water supplies are combining to create a



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dangerous situation for North and South Carolina communities.

In the midst of 21st-century progress, Southeast residents are still burdened by a 19th-century approach to water supply. North and South Carolina are not prepared to manage their water resources under current conditions, let alone deal with the new long-term consequences and effects of global warming. Most local leaders call for water use reductions only after the onset of drought. In the absence of adequate planning, communities are forced during these periods to make desperate grabs for clean water, which only serve to reinforce their wasteful habits. One recent example is the permitted transfer of 10 million gallons per day from the Catawba-Wateree River to the cities of Concord and Kannapolis, North Carolina, located in the Yadkin-Pee Dee River basin. Robbing water from the Catawba-Wateree and rerouting it to a separate watershed will deprive downstream human and natural communities of a vital flow of water. Moreover, some of this water will go to support wasteful uses such as a new water park in the city of Concord. Siphoning off the Catawba-Wateree River will only lead to even lower water levels, poorer water quality, and decreased recreational access and industrial productivity. If the states continue to squander their water resources, the river will not be able to sustain the communities, fish and wildlife that depend on it.

What's At Stake

The Catawba-Wateree River is the epicenter in the collision between limited water supply and unchecked development in the Southeast. Already, South Carolina and North Carolina are battling for control over more water from the Catawba-Wateree basin in the U.S. Supreme Court. If both states don't substantially improve river resource management, the ecological, industrial and recreational values of the river will be drained away.

The current drought, combined with water supply mismanagement and overallocation, has dewatered thousands of acres of aquatic habitat, left muddy shorelines devoid of vegetation, and eliminated boating access in many rivers throughout the Southeast.

Without adequate river flows, utility companies, mills, and manufacturing facilities that depend on the Catawba-Wateree River will founder, the region's robust recreation industry will crumble, quality of life will diminish, and plant and wildlife populations will suffer.

What Can Be Done

Implementation of sensible water supply and efficiency policies throughout the Catawba-Wateree River basin and passage of effective statewide water withdrawal regulations in North Carolina and South Carolina could put this high-speed train to water scarcity onto a smarter course.

North Carolina and South Carolina must develop and adopt progressive state water efficiency plans that empha-

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Rapid development in the Catawba-Wateree River basin threatens to drain away the river's ecological, industrial and recreational values.

The Catawba-Wateree and Global Warming

Removing more water to fuel poorly planned development would further reduce water levels and inhibit the river's ability to adapt to global warming. Already, recent droughts have produced record low water flows in tributary streams and reservoirs on the river. Water efficiency and conservation planning can help meet current demands without sacrificing the Catawba-Wateree River or the communities and wildlife that rely on it.

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size conserving water year-round rather than only when drought has already arrived. These plans must direct funding towards infrastructure upgrades and distribution of water-saving appliances to users at reduced cost. Industries and municipalities must be required to utilize proven water efficiency technologies. Such policies will enable communities to live within realistic "water budgets" and maintain healthy water resources, eliminating the need for future interbasin transfers from the Catawba-Wateree River and others.

As a necessary first step towards maintaining healthy flows, North Carolina and South Carolina must track the amount of surface water each user withdraws and establish enforceable guidelines regarding maximum withdrawals. The South Carolina Legislature must enact new surface water laws that establish withdrawal regulations and guarantee that enough clean water remains in rivers and lakes to fully support all users including anglers, boaters and wildlife. The goal should be to maximize community health — not water withdrawals. The North Carolina Legislature should update current surface water regulations during the 2009 legislative session, which begins in January. This update must include water flow requirements that adequately protect the ecological, recreational and economic values of the state's rivers.

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CONTACT INFO

Gerrit Jöbsis, American Rivers, 803-771-7114, gjobsis@AmericanRivers.org
C. David Merryman, Catawba Riverkeeper Foundation, 704-679-9494, david@catawbariverkeeper.org
Amy Pickle, Southern Environmental Law Center (NC), 919-967-1450, apickle@selcnc.org
Blan Holman, Southern Environmental Law Center (SC), 919-302-6819, bholman@selcnc.org

NUMBER 2

Rogue River

OREGON

SCOTT HARDING/WWW.SCOTTHARDINGPHOTO.COM

THREAT: LOGGING AND ROAD CONSTRUCTION

Summary

The Rogue River is one of the most renowned rivers in the country, famous for its exceptional scenery, biodiversity, world-class fishing, and thrilling whitewater boating. One of the eight original rivers protected in the national Wild and Scenic Rivers System in 1968, the Rogue supports a thriving recreation economy and draws thousands of anglers, boaters and hikers each year. But proposals to clearcut old-growth forest along key streams that feed the Rogue threaten to choke the river with sediment and destroy the river's wild character. Unless Congress kills these destructive logging plans and permanently protects Rogue River tributaries, the amazing and unique wonders of the wild Rogue will be lost to future generations.

The River

Originating from high mountain springs in the Cascade Mountains of southern Oregon, the Rogue River — one of the wildest and most stunning rivers in North America — flows 200 miles to the Pacific Ocean. The Rogue boasts a diversity of plants and wildlife unmatched anywhere in the Pacific Northwest. The river is also Oregon's largest producer of Pacific salmon outside of the Columbia River, with nearly 100,000 salmon and steelhead returning each year. Tributary streams that feed the lower Rogue are critically important spawning and rearing habitat for winter and summer steelhead and coho salmon. These fish are the backbone of a sport and commercial fishing economy worth millions annually.

The national Wild and Scenic Rivers System, a "national park system" for rivers, has protected 84 miles of the lower Rogue since 1968. The lower Rogue is revered for whitewater rafting and it is a destination for visitors to the historic wilderness cabin left behind by famed adventure author Zane Grey. This stretch of river supports a strong tourism and recreational boating industry, generating more than

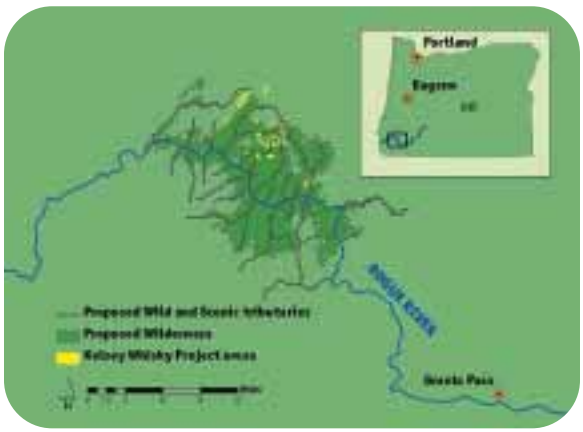
ROGUE RIVER AT-A-GLANCE

RIVER LENGTH: 200 miles

WATERSHED AREA: 5,169 square miles

LARGEST CITY IN THE WATERSHED: Medford, OR (pop. 75,675)

DID YOU KNOW? The Rogue River is one of the eight original rivers protected in the national Wild and Scenic Rivers System.



The Rogue and Global Warming

Exposing the Rogue to additional logging and road construction will destroy stream buffers that cool the river. Powerful storms produced by global warming will multiply the effect of logging activities by washing sediment into the river. These pressures could wipe out one of the most vibrant salmon fisheries in the Northwest, which is expected to lose much of its cold-water fish habitat as temperatures warm. Protections that guard the river's pristine state should be increased, not relaxed, to protect the human and natural communities that rely on the Rogue River.

$13 million annually for the local economy.

The Threat

The Wild and Scenic River designation protects a half-mile corridor along the Rogue River, but important uplands and tributaries remain open to destructive logging, road-building and other development that would have serious impacts on the river.

The Bureau of Land Management (BLM), which manages more than 20 miles of the most beautiful and wild stretch of the Rogue, is proposing to log old-growth forest on key Rogue River tributaries. The BLM's Kelsey Whisky Project would build roads and log hundreds of acres of old-growth forest in the Kelsey, Whisky, Bunker and Meadow creek drainages, degrading important salmon and steelhead habitat and water quality.

Construction of new logging roads and clearcutting old-growth trees will increase the likelihood of sediment flushing into Kelsey and Whisky creeks, choking salmon and steelhead habitat. The BLM has ignored its own specialists who formally recommended keeping intact roadless areas and large interconnected tracts of old-growth trees such as those found in the Kelsey Whisky Project area to protect the health of the Rogue River.

The BLM also has proposed a long-term management plan that further threatens the river. The Western Oregon Plan Revisions (WOPR) could open significant portions of the Rogue River's roadless area, ancient forests and free-flowing streams to clearcut logging, road building and mining. In addition to the threats this poses to the Rogue's delicate ecosystem, these harmful activities would scar the hillsides of the Rogue's impressive canyon country, marring the scenery that attracts so many to the river.

What's At Stake

The Rogue River is one of the crown jewels of the Pacific Northwest's and America's natural heritage. It is a rare place where families, boaters and anglers can experience and connect with wild nature. The river is essential to the recovery of imperiled Pacific salmon runs, and home to an astonishing variety of plants and wildlife. It is the economic engine for local communities and businesses. More than 50 businesses recently signed a letter to Oregon's congressional delegation, asking for increased protection for the Rogue and its tributaries.

If we can't protect one of our nation's most beautiful and best-loved rivers, what can we protect? If we let the Rogue's wild character be destroyed, we will not only diminish one of our most outstanding rivers, but also the integrity of the Wild and Scenic Rivers Act — our nation's foremost river protection tool.

What Can Be Done

Congress, led by Senator Ron Wyden (D-OR) and Representative Peter DeFazio (D-OR) must grant Wild and Scenic River protections to 98 miles of vital tributaries in the lower Rogue canyon and designate the unprotected roadless areas in the Rogue canyon as Wilderness Areas. These protections would safeguard these important streams, and the wild character of the Rogue, from proposals like the BLM's Kelsey Whisky Project as well as other harmful logging and development.

Additionally, the BLM must scrap the current land management alternatives in the Western Oregon Plan Revisions and come up with a better plan that will protect the clean water, fish and wildlife habitat, and recreation values of the Rogue River and its tributaries.

KEN MORRISH

CONTACT INFO

David Moryc, American Rivers, 202-347-7550 ext. 3069, dmoryc@AmericanRivers.org
Amy Kober, American Rivers, 206-213-0330 ext. 23, akober@AmericanRivers.org
Joseph Vaile, Save the Wild Rogue, 541-488-5789, joseph@kswild.org

NUMBER 3

Cache la Poudre River

COLORADO

SAVETHEPOUDRE.ORG

THREAT: WATER DIVERSION AND RESERVOIR PROJECT

Summary

Colorado's only Wild and Scenic River, the Cache la Poudre River, or "Poudre," is the lifeblood of the cities and farms it serves. But its future is threatened by a water diversion scheme that would stretch the river beyond its limits in order to quench future development elsewhere. The U.S. Army Corps of Engineers (Corps) must deny this flawed proposal, and ask involved Colorado cities and water districts to implement simple water conservation and efficiency measures instead. If they do not, communities, agricultural operations, and other businesses may no longer be able to enjoy the myriad benefits the Poudre River now offers.

The River

The Poudre flows 140 miles from its protected headwaters in Rocky Mountain National Park to its confluence with the South Platte River. The river's unusual name comes from French fur trappers who, as they warred with local Indian Tribes, hid their gunpowder near the mouth of the river's canyon. They named the river the Cache la Poudre, or "hiding place for powder." Today, the Poudre's upper reaches sustain a hotspot for fly fishing, boating, camping, hiking and a scenic respite from city life. However, as the Poudre exits the foothills and winds through the rapidly-growing communities of Laporte, Fort Collins, Windsor and Greeley, the river becomes a sluggish remnant of its mountain glory. This unprotected section of the river has more than 20 irrigation and municipal water projects that divert water from the river and substantially reduce its flow.

The Threat

The Poudre River is endangered by a proposal known as the Northern Integrated Supply Project (NISP)/Glade Reservoir. This project would

POUDRE RIVER AT-A-GLANCE

RIVER LENGTH: 140 miles

WATERSHED AREA: 1,882 square miles

LARGEST CITY IN THE WATERSHED: Fort Collins, CO (pop. 135,000)

DID YOU KNOW? The Cache la Poudre River is the only Wild and Scenic River in Colorado.

The Poudre and Global Warming

As temperatures rise, snowpack will decrease and melt earlier in the spring. As a result, there will be less snowpack to feed the Poudre during the dry summer months. Taking additional water from the river for the NISP/Glade project or other diversion schemes only increases surrounding communities' vulnerability to global warming. Improving municipal and agricultural water efficiency is a better solution for ensuring a consistent water supply under warming conditions.

take an average of 40,000 acre-feet from the river every year before it reaches Fort Collins. A huge pumping station would be constructed on the mainstem of the Poudre to pump and divert the water to the Glade Reservoir. The 177,000-acre-foot-capacity off-stream reservoir would be created in what is now a scenic valley to store water from the Poudre River. A major highway that runs through the valley would be rerouted from the proposed reservoir site at a cost of tens of millions of dollars. In addition to removing much-needed water from the river, NISP/Glade would also eliminate the "June Rise," a natural increase in flows that occurs when mountain snowpack melts in the spring that is critical to sustaining a dynamic and healthy river.

Moreover, NISP/Glade would divert water not to existing communities, but to fuel future growth, the majority of which would be outside of the Poudre River basin and in suburbs north of Denver. Municipalities and water districts financing the proposal have not implemented significant water-saving measures such as tiered water rates that provide an incentive for customers to use less water. This, coupled with the use of water-saving appliances and implementation of agricultural water efficiency technologies such as pivot or drip irrigation could help eliminate need for NISP/Glade altogether. If utilized, such measures would allow these communities to thrive using less water from the Poudre River and grow in a smart and sustained manner.

What's At Stake

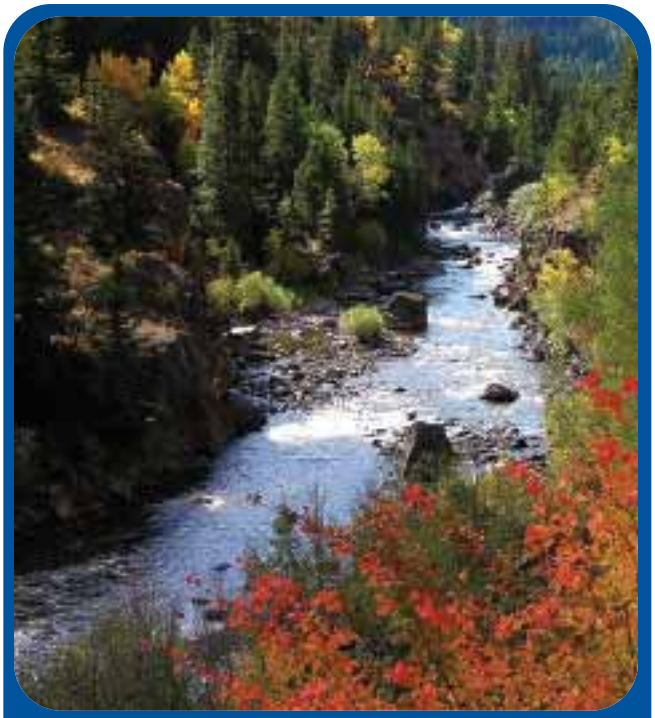
Fort Collins considers the Poudre River to be one of its "economic engines" due to the river's recreational and commercial values as well as its proximity to downtown. Dozens of Fort Collins businesses have direct economic ties to both the upper and lower Poudre. If completed, NISP/Glade, in combination with existing water projects on the river's lower reaches, will reduce the Poudre to a mere trickle before it reaches the city, and eliminate the resource upon which these businesses depend.

Due to the many existing water diversions, wetlands are stressed and invasive algae infestations are common. Stretches of the river run dry at certain times of year, causing widespread fish kills. Surrounding cottonwood and willow forests, which cool the water, filter urban runoff, and slow storm flows, are already declining due to insufficient water. These problems will be exacerbated if NISP/Glade is constructed.

What Can Be Done

Communities and water districts financing this misguided project must implement comprehensive water conservation and efficiency measures before considering new water pumping or storage. If they do not, the Corps must heed public concern and refuse to issue the necessary section 404 Clean Water Act permit for NISP/Glade.

There are several bills moving through the Colorado Legislature that would help permanently allocate water to Colorado rivers. State legislators from Fort Collins are deeply committed to protecting the Poudre, and other members of the state legislature should support these bills for the future of all Colorado's rivers.



WARREN RUSSELL/FLICKR.COM

CONTACT INFO

Darcy Nonemacher, American Rivers, 206-213-0330 ext. 16, dnonemacher@AmericanRivers.org

Gary Wockner, Save the Poudre Coalition, 970-218-8310, garywockner@comcast.net

NUMBER 4

St. Lawrence River

NEW YORK, CANADA

SAVETHERIVER.ORG

THREAT: OUTDATED DAM MANAGEMENT PLAN

Summary

The great St. Lawrence River provides drinking water, scenic beauty, recreation and economic opportunities for millions of people in the United States and Canada. But an outdated management plan created half a century ago has harmed the river's health and is threatening its lucrative tourism and recreation economy, and quality of life. For the first time in 50 years the management plan is up for revision. The International Joint Commission (IJC), an independent, bi-national organization established by the Boundary Waters Treaty of 1909, must choose a plan that will restore the river's health and benefit its many communities.

The River

Forming the border between Canada and the northeastern United States, the St. Lawrence River flows 744 miles from Lake Ontario into one of North America's largest estuaries, the Gulf of St. Lawrence. The river has an enormous drainage area — 518,996 square miles — and forms the outflow for the Great Lakes, the world's largest freshwater system. The river is known throughout the Northeast as one of the great freshwater sport fishing grounds for pike, bass and muskellunge, and also hosts a commercial fishery for American eel, the harvest of which has dramatically declined in recent years due to eel population losses. In fact, the American eel has recently been considered a candidate for listing under the Endangered Species Act, in large part due to the impact of dams and other habitat destruction. The river is home to many other endangered and threatened species such as the lake sturgeon, Eastern sand darter and peregrine falcon.

The St. Lawrence River has served as a major transportation corridor for more than 200 years. Today, the

ST. LAWRENCE RIVER AT-A-GLANCE

RIVER LENGTH: 744 miles

WATERSHED AREA: 518,996 square miles

NUMBER OF CITIES WITH POPULATION GREATER THAN 100,000: 10 cities

DID YOU KNOW? The St. Lawrence River drains the planet's largest freshwater body, the Great Lakes.

The St. Lawrence and Global Warming

Global warming is expected to significantly alter the Great Lakes and St. Lawrence River. Warmer water temperatures and decreased ice cover will result in lower water levels that will threaten water supply, wildlife and recreation. Adopting Plan B+ will have a significant and direct positive impact on coastal wetlands, in turn, creating a river ecosystem that is able to thrive. A thriving ecosystem is critical if a healthy St. Lawrence River is to "weather" the serious threats posed by global warming. Recommended implementation would enable Plan B+ to evolve in response, ensuring that water levels controlled by the dam are not harmful to the St. Lawrence River ecosystem. This would safeguard communities from another static 50-year management plan that doesn't reflect the most up-to-date science — a necessity in an era of climactic uncertainty.

river provides drinking water and a vital tourism-based economy for communities in the United States and Canada. As the river emerges from Lake Ontario, its path forms a unique island paradise known as the Thousand Islands, which provide habitat for a wide variety of wildlife and sustain a $445 million annual tourism economy. This region and others along the St. Lawrence provide some of the best recreational experiences in the Northeast, including swimming, camping, boating, hunting, scuba diving and world class fishing.

The Threat

Constructed in 1958 to harness hydropower on the St. Lawrence River, the Moses-Saunders Dam controls outflows and water levels on the river and Lake Ontario. Until now, the river has been managed to benefit a few special interests such as commercial navigation and hydropower. Since environmental considerations were not part of the planning process in the 1950s, operation of the dam does not allow for the variations in natural flow that are essential to a healthy river.

After 50 years, this antiquated management plan is now up for revision. One proposed management alternative, Plan B+, would allow water flows to more closely mimic natural conditions. These natural rhythms are critical to the river's health and its web of life. The IJC's own five-year study, released in 2006, found that the current artificially-constrained water level fluctuation has significantly reduced the diversity of plant species in river wetlands, which in turn has impacted populations of many fish and other wildlife. The study, based on research from more than 180 scientists from the United States and Canada, concluded that more natural flow is necessary to reverse 50 years of damage to the region's coastal wetlands, and that a diverse environment will better resist other environmental threats to the Great Lakes. Fortunately, Plan B+ lays out a way to do this while continuing to deliver consistent economic benefits from hydropower and commercial navigation.

Plan B+ has been endorsed by a majority of the study board members as well as regional elected officials, federal and state agencies, and local and national conservation organizations, and has enjoyed broad public support throughout the region. Yet the IJC is shying away from making the responsible choice.

What's At Stake

Despite growing threats, the St. Lawrence River still sustains a high quality of life and vital economy for residents, and is home to many fish and wildlife species. However, as long as this antiquated management plan remains in place, it will continue to degrade one of North America's great river ecosystems and increase the likelihood of further damage to the St. Lawrence River, the Great Lakes and communities that depend on the river's health for sustenance and economic vitality. If the river's ecology is further compromised, drinking water supplies, commercial and sport fisheries, tourism revenues, and the high quality of life residents now enjoy may be diminished.

What Can Be Done

The outdated river management plan must be replaced with a new, sustainable water level regulation plan, as supported by the U.S. Fish and Wildlife Service, the New York State Department of Environmental Conservation, and many conservation groups. The IJC is expected to make the final decision by the summer of 2008. The Commission must follow the recommendations of the study and endorse Plan B+.

SKYE MOREY HERITAGE

CONTACT INFO

Stephanie Lindloff, American Rivers, 518-482-2631, slindloff@AmericanRivers.org

Jennifer Caddick, Save the River/Upper St. Lawrence Riverkeeper, 315-686-2010, jennifer@savetheriver.org

NUMBER 5

Minnesota River

SOUTH DAKOTA, MINNESOTA

RON BOLDAUN

THREAT: PROPOSED COAL-FIRED POWER PLANT

Summary

The Minnesota River is treasured by thousands of residents and visitors who swim, boat, fish and hunt in and along the river. But a proposed coal-fired power plant threatens the health of the river and nearby communities. In addition to spewing greenhouse gases and other toxins, cooling and scrubbing mechanisms within the plant would require billions of gallons of water every year. The Minnesota Public Utilities Commission (PUC) must deny the Certificate of Need and instead encourage the use of energy efficiency measures and renewable energy resources.

The River

The Minnesota River runs 335 miles from the Minnesota-South Dakota border to St. Paul, Minnesota where it joins the Mississippi. The Upper Minnesota River valley is considered to be one of the largest intact ecosystems in the Upper Midwest and contains the nation's oldest exposed rock outcroppings, estimated to be 3.4 billion years old. According to sportsmen and resource conservation professionals, the Minnesota River is today supporting a resurgence of wildlife not seen along the river for 100 years, including the American eel, lake sturgeon, bald eagle, cougar, coyote and river otter.

Moreover, the Minnesota, literally "land where the water reflects the skies" in the native Dakota language, is an extraordinary recreational resource. The river is becoming one of Minnesota's fast-growing tourist destinations due to its wild and undeveloped reaches. Tourism brings hundreds of millions of dollars into the regional economy, much of which depends on a healthy Minnesota River.

The Threat

Five private and municipal power companies have proposed a $1.6 billion coal-fired power plant known as Big Stone II (BSII) at the river's headwaters in South Dakota's Big Stone Lake. The new 500-580 megawatt

MINNESOTA RIVER AT-A-GLANCE

RIVER LENGTH: 335 miles

WATERSHED AREA: 15,000 square miles

LARGEST CITY IN WATERSHED: Bloomington, MN (pop. 85,000)

DID YOU KNOW?
The Minnesota River is the state's largest tributary to the Mississippi River. Where the Minnesota River flows into the Mississippi River, the flow of the Mississipi doubles.

The Minnesota and Global Warming

In the near term, water withdrawals for the proposed coal-fired power plant will compound evaporative losses resulting from higher temperatures, threatening the river's water supply and recreation benefits. The plant also would intensify global warming impacts in the future. If built today, this plant will likely be in operation for 50 years. Five decades of greenhouse gas emissions will make it more difficult to avoid catastrophic climate change. Wind and biomass energy would be a safer choice for the Minnesota River and surrounding communities both now and in the future.

plant would withdraw up to 3.2 billion gallons of water per year. South Dakota has granted permits for this water withdrawl without convening the Minnesota-South Dakota Boundary Waters Commission. The Commission is a two-state governing body that was established to settle such water use conflicts between the states when a nearby coal-fired power plant known as Big Stone I (BSI) went into operation in 1975.

Already, there is debate over whether BSII is needed. After a major utility backed out of the project last fall, questions have been raised about the remaining utilities' need for the plant. Likewise, the Minnesota Department of Commerce believes three of the five involved utilities do not need additional power. Power that is needed could be met more cheaply through improved energy efficiency, conservation and cultivation of renewable energy sources.

What's At Stake

BSII's enormous water consumption would have serious implications for the Minnesota River. By lowering water levels BSII is likely to increase the potential for fish kills, concentrate nutrient pollution and create conditions that are harmful to the health of the river downstream. This will be exacerbated by forecasts of drought brought on by global warming.

Coal-fired power plants are the largest emitters of mercury, a potent neurotoxin that can cause permanent brain damage, in the United States. The Minnesota River is already listed as an impaired fishery due to the presence of mercury. The smaller BSI plant is widely believed to be a major source, and if BSII is constructed, the level of mercury in the Minnesota River is likely to rise. Together, the BSI and proposed BSII plants are permitted to emit 400 pounds of mercury per year for the first three years of BSII's operation. Even if the involved utility companies follow through on their pledge to reduce emissions to 80-90 pounds per year thereafter, the plant will release more than 4,000 pounds of mercury over its 50-year-lifespan. In addition to spewing mercury, the BSII plant would release as much as 4.3 million tons of greenhouse gases every year — more than the output from half a million automobiles. This will negate efforts by Minnesotans to reduce carbon emissions and further contribute to global warming.

Communities in the region can obtain power in cheaper and more environmentally friendly ways. The region has high wind potential and is home to vastly undeveloped biomass energy resources, both of which could be tapped instead of building a new coal-fired power plant. Improved energy efficiency and utilization of renewables would serve as an investment in the future, while construction of the outdated BSII plant would be a step backwards for Minnesotans.

What Can Be Done

The Minnesota Public Utilities Commission will meet to decide whether or not to approve a Certificate of Need for the BSII plant this spring. The PUC must deny the Certificate on the grounds that energy could be more cheaply produced and the BSII plant poses too great a risk to the recreation, economic development, and ecology of the Minnesota River. If the PUC fails to protect this important public resource, Minnesota Governor Tim Pawlenty should reconvene the Minnesota-South Dakota Boundary Waters Commission to address this water use issue.

IZAAC HOLT

CONTACT INFO

Will Hewes, American Rivers, 202-347-7550 ext. 3054, whewes@AmericanRivers.org
Scott Sparlin, Coalition for a Clean Minnesota River, 507-276-2280, yasure@lycos.com
Patrick Moore, Clean Up our River Environment, 320-269-2984, cure-ed@info-link.net
Lori Nelson, Friends of the Minnesota Valley, 952-881-9065, lnelson@friendsofmnvalley.org

NUMBER 6

St. Johns River

FLORIDA

ST. JOHNS RIVERKEEPER

THREAT: UNSUSTAINABLE WATER APPROPRIATIONS

Summary

The St. Johns River provides scenic beauty, recreational opportunities, and important fish and wildlife habitat. But the river is threatened by a water withdrawal proposal that would cost taxpayers billions, fuel more runaway sprawl, and damage the river's ecology. Instead of taking precious freshwater from the fragile St. Johns, water managers should implement proven conservation and efficiency measures that will not only save the river's health, but protect the long-term sustainability of community water supplies.

The River

The St. Johns River is a slow-moving giant. The river drops only 30 vertical feet from origin to mouth and expands to more than three miles in width in its lower sections. The resulting low velocity creates a delicately-balanced estuary at the river's mouth. During seasonal lows in river flow this mix of fresh- and saltwater reaches more than 40 miles upstream from the Atlantic Ocean. In addition to hundreds of species of fish, amphibians and mollusks, this enormous estuary is also home to unusual river residents such as dolphins, manatees and stingrays.

The St. Johns River has been named one of 14 "American Heritage Rivers" due to the tremendous benefits it has provided Florida for generations. Water from the St. Johns augments municipal drinking water supplies for several small communities on its upper reaches. The health of the St. Johns River also is critical to the area's multi-million-dollar recreational and commercial fishing and tourism industries.

The Threat

Unprecedented growth and development threatens the health of the St. Johns River and its tributaries. Flagler County, until recently the fastest-growing county in the U.S., is one of several counties in the watershed experiencing explosive growth.

ST. JOHNS RIVER AT-A-GLANCE

RIVER LENGTH: 310 miles

WATERSHED AREA: 8,840 square miles

LARGEST CITY IN THE WATERSHED: Jacksonville, FL (pop. 834,789)

PUBLIC LANDS IN WATERSHED: More than 985 square miles

DID YOU KNOW? The St. Johns River is the longest river in Florida.

The St. Johns and Global Warming

The St. Johns' current pollution problems will only grow in a warmer climate. Precipitation in Florida is expected to decline, and warmer temperatures will increase evaporation. At the same time, severe storms will wash nutrients and other contaminants into the river. All of these changes will increase the risk of toxic algal blooms and may make the river unsuitable for recreation and water supply. Greater water efficiency could return more water to the river and reduce the amount of energy needed to transport and treat water.

Population in the St. Johns River watershed is likely to nearly double by 2025. The St. Johns River Water Management District (SJRWMD), a governmental body that oversees area waters, is looking to the St. Johns and its principal tributary, the Ocklawaha River, to fuel this growth. The SJRWMD claims communities will be able to withdraw 155 million gallons per day from the St. Johns River, in addition to 90 to 108 million gallons per day from the Ocklawaha. But the St. Johns cannot afford to lose flows. Water levels have hit historical lows in recent years, and the river's characteristic low velocity makes it slow to flush nutrients and other pollution. The Florida Department of Environmental Protection lists the lower St. Johns as impaired for nutrients, which feed periodic uncontrolled algal blooms in the river, deplete dissolved oxygen, and produce fish-killing toxins, which irritate human skin and can cause nausea and vomiting in cases of extended exposure.

Moreover, the SJRWMD likely does not need more water than it already has. Water conservation is not a priority of the SJRWMD. District residents now use 160 gallons of water per capita every day — 60 gallons more than the national average, and approximately 50 percent goes to water thirsty lawns and non-native landscaping.

What's at Stake?

The removal of massive volumes of freshwater will alter salinity in the St. Johns River and negatively impact its rich estuarine diversity. Communities that depend on the St. Johns to sustain fisheries, wildlife habitat, eco-tourism and recreational activities may lose these values the river now provides.

Water withdrawals may further reduce the river's ability to flush pollutants and sediments from its waters and increase the occurrence of damaging algal blooms. Additionally, because the St. Johns River has high salt and mineral content, most withdrawals will require reverse osmosis, meaning that salt and other pollutants will be removed from the water and discharged back into the St. Johns, increasing their concentrations. Finally, the proposed withdrawals will cost Floridians more than $4 billion, destroy the river's ecology, and provide drinking water needs for only 10 years.

Simple and cost-effective water conservation and efficiency measures must be utilized in the watershed before more water is taken from the river. Installation of low-maintenance landscaping, agricultural soil moisture sensors and reuse pipes in new development would go a long way towards bringing the region's per capita water use down to the national average. Other measures include tiered water rates that encourage ratepayers to use less water; rebates for low-flow appliances and fixtures; and incentives and opportunities for Low Impact Development practices for builders, developers and homeowners. Implementation of these measures would enable recreation, tourism and fishing industries to continue to thrive and protect the high quality of life local residents now enjoy.

What Must Be Done

Seminole County has already submitted its permit request, and several water managers are likely to submit withdrawal applications in 2008. The SJRWMD Board of Governors should deny this and all other withdrawal permits for the St. Johns River. Instead, Seminole County and others seeking more water from the St. Johns must develop more aggressive water conservation programs before being allowed to withdraw more water.

DR. GERRY BINTO, JACKSONVILLE UNIVERSITY

CONTACT INFO

Matt Rice, American Rivers, 803-771-7206, mrice@AmericanRivers.org

Neil Armingeon, St. Johns Riverkeeper, 904-256-7591, narming@ju.edu

NUMBER 7

Gila River

NEW MEXICO, ARIZONA

COURTESY OF GILA CONSERVATION COALITION

THREAT: WATER DEVELOPMENT PROJECT

Summary

New Mexico's last free-flowing river, the Gila is threatened by an archaic and costly water diversion project despite the fact that future water supply needs can be met through cheaper alternatives. The unnecessary diversion not only would harm the river's health but would negatively impact a region where the economy and residents' quality of life increasingly depend on natural values. New Mexico Governor Bill Richardson must continue to protect the Gila River and ensure that state decisionmakers consider and implement cheaper, more effective, and less damaging water supply alternatives.

The River

Originating in America's first wilderness area, New Mexico's Gila Wilderness, the Gila River is the lifeblood of its arid landscape. Once one of the longest desert rivers in the world at 649 miles, it now flows freely through New Mexico but is prevented from reaching the Colorado River due to dams and thirsty urban development in Arizona. On its upper reaches, the Gila sustains one of the most intact native fish communities in the Colorado River drainage and draws anglers to a robust sport fishery. The river harbors numerous threatened and endangered species and serves as vital stopover territory for more than 250 species of migratory birds.

The Gila River offers many benefits to the region, including clean water, natural beauty, recreation, tourism, educational opportunities, and a wealth of cultural and natural history. A relatively small amount of the Gila's water is used locally for agricultural irrigation and mining. Bird-watching and other recreational activities are increasingly popular along the Gila as healthy southwestern rivers that support strong wildlife populations grow rarer.

The Threat

A new federal subsidy could partially offset the high costs that have protected the upper

GILA RIVER AT-A-GLANCE

RIVER LENGTH: 649 miles

LARGEST CITY IN NM SECTION OF WATERSHED: Reserve (pop. 387)

PUBLIC LANDS IN NM SECTION OF WATERSHED: 3 million acres

DID YOU KNOW? Of New Mexico's six mainstem rivers, the Gila is the last without a dam or major water development.

The Gila and Global Warming

The dwindling precipitation, higher evaporation rates and reduced flow from mountain snowpack that will come with global warming could greatly reduce water levels in the Gila. Diverting water to surface reservoirs that will lose ever-increasing quantities of water through evaporation is particularly inefficient. Local leaders should instead look to increased water efficiency and ample, rechargeable groundwater supplies to meet local needs. As the flows of other Southwest rivers decrease, the Gila could be one of the last refuges in the region for many fish and wildlife species.

Gila River from development for decades. The Arizona Water Settlements Act (AWSA) of 2004 authorizes up to $128 million for implementation of any water project designed to meet New Mexico's future water needs. The New Mexico Interstate Stream Commission (ISC), a governmental body with broad powers to develop New Mexico's waters, has proposed a project that would divert up to 14,000 acre-feet of water from the Gila River and its tributary, the San Francisco River, every year. This project would require a diversion structure and huge pumping station, a power station, a massive pipeline and/or canal system, and an off-stream dam and reservoir. The cost is projected at more than $300 million — far exceeding the $128 million subsidy. The additional cost would be shouldered in part by local taxpayers and burden local government with debt.

Implementation of proven water efficiency measures would sharply reduce the amount of water needed and would be more cost-effective than the proposed diversion. Estimates show that Silver City, New Mexico, for example, can extend its municipal water supply by 10 years through reasonable water conservation measures — just switching to drip irrigation would save area farmers 30–50 percent of current water use. If, at some point, more water is needed, the region's future water needs can be met *sixteen times more cheaply* by developing groundwater from a regional aquifer that is recharged annually by rain and snowfall.

What's At Stake

The amount of water that would be diverted from the Gila River would dwarf what is needed by local industry, agriculture, and domestic use and would have severe ramifications. Subsequent lowering of the local water table could negatively impact groundwater wells used by valley residents. The diversion would impair the river's natural flows, impeding growth of streamside vegetation and threaten native birds and fish. Additionally, the industrial development required for this project would blemish a pastoral valley that has remained largely unchanged for the past century, threatening real estate values and recreational potential. Additional water is not yet needed in this relatively unpopulated region, and some fear that once Gila water is diverted under the guise of meeting local water needs the pipeline would be extended to water-guzzling urban sprawl in Las Cruces, NM or even El Paso, TX, instead.

What Can Be Done

The ISC has promoted a planning process under the AWSA focused solely on a Gila diversion. Recognizing the threat posed to this precious resource, Governor Richardson vetoed funds to develop Gila River water in 2007 and directed the ISC to include all stakeholders and analyze the full range of alternatives available — including a "no-diversion" alternative. The ISC must do as directed by Governor Richardson for the sake of communities who depend on a free-flowing Gila River.

Senators Pete Domenici (R-NM) and Jeff Bingaman (D-NM) have secured funding for planning under the AWSA. They should specify that these funds be used only to analyze and develop cost-effective and water-efficient alternatives to meet predicted local water supply needs rather than promoting unsustainable future growth elsewhere.

DENNIS O'KEEFE

CONTACT INFO

Eli Weissman, American Rivers, 202-347-7550 ext. 3010, eweissman@AmericanRivers.org

Gila Conservation Coalition Partners:

Allyson Siwik, Gila Resources Information Project, 575-538-8078, info@gilaconservation.org
Todd Schulke, Center for Biological Diversity, 575-574-5962 tschulke@biologicaldiversity.org
Dutch Salmon, Chair, Gila Conservation Coalition, 575-388-3763, dutch@high-lonesomebooks.com
Melanie Gasparich, Upper Gila Watershed Alliance, 575-313-2203, director@ugwa.org

NUMBER 8

Allagash Wilderness Waterway

MAINE

DEAN BENNETT

THREAT: LOSS OF WILD AND SCENIC RIVER PROTECTIONS

Summary

Once a crown jewel of the nation's Wild and Scenic Rivers System, the unique character of the Allagash Wilderness Waterway in northern Maine is in jeopardy. State river managers are being pressured to dilute or strip protections that safeguard the river's recreational, economic and ecological values. In 2008, the 40th anniversary of the Wild and Scenic Rivers Act, the state must strengthen, not weaken, protections for the Allagash and, by example, help uphold the integrity of rivers protected under the Wild and Scenic Rivers Act nationwide.

The River

The Allagash Wilderness Waterway is a 92-mile-long ribbon of rivers, lakes, and streams winding through the heart of the largest intact forest ecosystem east of the Mississippi. The banks of the Allagash are home to iconic species such as the pine marten, river otter, moose, loon, and the only breeding population of Canada lynx in the eastern United States. The clear waters of the Allagash provide ideal habitat for one of the largest native coldwater fisheries remaining in the eastern United States.

For generations the Allagash has been a top destination for multi-day wilderness canoeing trips. A thriving industry of outfitters and guides serves visitors from across the country who wish to float a river that shows few signs of civilization. These very characteristics made the Allagash Wilderness Waterway an obvious early choice for the National Wild and Scenic Rivers System. In 1970, the river became the first to be included in the state-administered component of the System. The Allagash's "wild" designation is reserved for rivers that are generally accessible only by trail, and represent vestiges of primitive America.

The Threat

Over time, the state of Maine has allowed a growing number of drive-up access points, boat launches, and other intrusions into the Allagash Wilderness Waterway despite a mandate

ALLAGASH RIVER AT-A-GLANCE

RIVER LENGTH: 92 miles

WATERSHED AREA: 1,240 square miles

LARGEST TOWN IN THE WATERSHED: Allagash, ME (pop. 277)

PERCENTAGE OF TREE COVER IN WATERSHED: near 100%

DID YOU KNOW? The Allagash Wilderness Waterway was the first state-managed waterway to be included in the state-administered component of the national Wild and Scenic Rivers System.

The Allagash and Global Warming

Allowing increased development along the Allagash would fragment this wild and self-sustaining ecosystem and reduce the watershed's ability to adjust to global warming. Tree cover is vital for controlling and absorbing storm runoff and providing shade that cools the water, protecting habitat for fish and wildlife. The Allagash contains some of the best remaining native brook trout fisheries in the Northeast and will provide a valuable reserve for these cold water fish as rising temperatures stress populations in more developed areas.

to manage the area for "maximum wilderness character."

An America's Most Endangered Rivers™ listing in 2002 helped initiate a process to bring the river's management plan into compliance with Wild and Scenic Rivers Act guidelines. Corresponding revisions to the Allagash management plan prepared by the Maine Department of Conservation (MDOC) were vetted through a stakeholder advisory council and were on track to be adopted. However, in 2006, pressured by lobbyists for motorsports groups and large landowners in the region, the Maine Legislature passed a bill that halted the process in its tracks. The new statute fundamentally shifted management of the Allagash Wilderness Waterway by declaring temporary structures and 30 summer and winter vehicle access points to be permanent features of the landscape. The law also prevents MDOC from implementing changes to the Allagash's management plan unless approved by the state legislature.

There have been other attacks on the pristine character of the waterway. A logging road along the Allagash was illegally bulldozed open in 2006. In 2008, the state plans to build a massive new logging bridge that will degrade the wilderness experience on a 47-mile stretch of river. There has been no meaningful analysis of alternative bridge locations outside the waterway.

What's At Stake

The Allagash Wilderness Waterway has provided inspiration to the hundreds of thousands who have experienced its wonder since Henry David Thoreau visited a century and a half ago. Many visitors hire guide services and buy supplies in towns in the region before and after their trips, boosting local economies. Besides being a recreation paradise and an economic asset, the Allagash provides extraordinary wildlife habitat and connects important ecosystems in Maine's North Woods region.

Upon request from the state of Maine, the Allagash Wilderness Waterway was included in the Wild and Scenic Rivers System to protect it for the benefit of present and future generations. Continued erosion of its wilderness character could harm the local recreation economy and irreparably corrupt one of our nation's most pristine water resources. This would be particularly troubling as the nation marks the 40th anniversary of the Act this year. If permitted in Maine, special interests in other states might view this as an invitation to reduce protections for their state-managed Wild and Scenic Rivers.

What Must Be Done

This is a critical year for the Allagash. The newly created Advisory Council expects to complete a strategic plan for the river by Fall 2008. The Council must encourage the state legislature to affirm the original mandate to enhance the "maximum wilderness character" of the Allagash. The plan should restrict motor access, reduce logging roads and bridges, preserve the native fishery, and designate areas for non-motorized winter recreation. Anti-wilderness interests will likely continue to press Maine's governor and legislature, the state's congressional delegation, and the U.S. Department of the Interior to downgrade protections for the Allagash. These parties must reject all efforts to reduce protections for America's premier state-managed, federally-designated Wild and Scenic River.

DEAN BENNETT

CONTACT INFO

Jamie Mierau, American Rivers, 202-347-7550 ext. 3003, jmierau@AmericanRivers.org

Jym St. Pierre, RESTORE: The North Woods, 207-626-5635, jym@restore.org

NUMBER 9

Pearl River

MISSISSIPPI, LOUISIANA

DAVID LEGG

THREAT: IRRESPONSIBLE FLOODPLAIN DEVELOPMENT

Summary

The Pearl River is a recreation oasis for nearby communities, an important source of drinking water, and an essential refuge for fish and wildlife. But developers want to dam and dredge the river to create artificial lakes and islands for private development at a staggering cost to taxpayers. This boondoggle would destroy vital floodplain wetlands, cause irreparable harm to the Pearl River, and actually place people in the path of potential floods. The U.S. Army Corps of Engineers and local governments need to reject this proposal for private profit at taxpayer expense and instead champion a comprehensive plan to protect and restore the Pearl River and its natural flood protection attributes.

The River

Rolling through river towns such as Jackson, Columbia, and Pearlington, MS and Bogalusa, LA, the Pearl River extends 490 miles from central Mississippi to the Gulf of Mexico, forming a piece of the Louisiana-Mississippi border. The river basin is home to a host of federally-listed threatened and endangered species including the Gulf sturgeon, Louisiana black bear, and ringed map turtle, and provides critical stopover habitat for migratory birds.

The Pearl River is extremely popular with canoeists, picnickers, fishermen and campers throughout the basin, and provides drinking water for many of Jackson's 185,000 residents. Forested wetlands sustained by the Pearl provide important services to the city, including natural flood protection and an estimated $6.8 million in rain and stormwater treatment services.

Of national significance, freshwater from the Pearl is essential for supporting oyster, shrimp and fish populations in Lake Borgne and the Mississippi Sound. The Pearl's waters also are vital for sustaining wetlands in the Gulf of Mexico, which provide hurricane and storm surge protection to coastal communities.

PEARL RIVER AT-A-GLANCE

RIVER LENGTH: 490 miles

WATERSHED AREA: 8,760 square miles

LARGEST CITY IN THE WATERSHED: Jackson, MS (pop. 185,000)

PERCENTAGE OF TREE COVER IN WATERSHED: 69%

DID YOU KNOW? The Pearl provides $6.8 million in stormwater treatment services to the city of Jackson.

The Pearl and Global Warming

Promoting development in the floodplain and destroying the natural flood protection benefits of wetlands has been a recipe for disaster for generations, but is particularly unwise as the climate crisis brings even more severe storms. Dams and levees can — and do — fail, and when they do the impacts can be catastrophic. Healthy rivers and wetlands buffer communities from drought and floods cheaply and more reliably than only dams and levees. Local leaders should protect healthy watersheds and boost the local economy by promoting recreation in natural areas along the Pearl River.

The Threat

A group of developers propose to dam and dredge the Pearl River in the Jackson area to create one or two lakes and construct as many as 25 islands for private commercial development. A number of variations on this plan also are being considered, including a proposal supported by the local levee board that involves construction of levees only along the Pearl. These projects, ranging in cost from $200 million to $1 billion, are being promoted as providing flood protection with the added benefit of development potential. In reality they would increase flood damages by placing development in low-lying areas and possibly the loss of wetlands, which provide natural flood protection. The artificial lakes created by these projects would also form a shallow, murky trap for litter, sewage from leaking lines, sediment and polluted runoff contaminated by oil and other chemicals from parking lots and streets. This will make the artificial lakes vulnerable to stagnation and summer algal blooms. Through the 2007 passage of the federal Water Resources Development Act, Congress gave the Corps the authority to spend $205 million of taxpayers' money to build this ill-conceived project. However, the Corps and local leaders can still put a stop to this destructive and costly proposal.

What's At Stake

This combination of dams, dredging, and development would have devastating impacts both locally and downstream. According to preliminary estimates, the project would dredge, fill or permanently flood almost 5,500 acres of federally designated wetlands and more than 3,400 acres of bottomland hardwood forests along the Pearl River. This would cause significant harm to the fish and wildlife they support, including a number of threatened and endangered species. The project could impair water quality in downstream communities through increased sedimentation and chemical runoff from developed areas and increase flooding along the Pearl and its tributaries. Loss of bottomland forest cover and new development would increase noise and air pollution and likely increase temperatures. The artificial lakes would inundate much of LeFleur's Bluff State Park and the trail system of the Mississippi Museum of Natural Science, which are enjoyed by more than 300,000 people each year.

Critical adverse impacts such as increased flooding and water pollution also could be felt as far downstream as Columbia, Mississippi. This proposal could affect the delicate salinity balance in Lake Borgne and the Mississippi Sound that is essential for the oysters, shrimp and fish living in the estuary, and for the economies of the coastal communities that depend on these resources. Freshwater from the Pearl is important for the survival of coastal wetlands, the best natural defense against storm surges.

What Can Be Done

Despite Congressional authorization of an articial lakes project, the Corps is not required to construct it. The Corps and local levee board should reject this misguided project and instead conduct a comprehensive watershed analysis that addresses all needs in the Pearl River basin, including ecological restoration and water quality improvement. In evaluating any needed approaches to reducing flood damages, this study should rely heavily on the use of nonstructural approaches that will both protect communities and improve the health of the Pearl River.

DAVID LEGG

CONTACT INFO

Melissa Samet, American Rivers, 415-482-8150, msamet@AmericanRivers.org
Cathy Shropshire, Mississippi Wildlife Federation, 601-206-5703, cshropshire@mswf.org
Stephanie Powell, Gulf Restoration Network, 504-525-1528, ext. 204, stephanie@healthygulf.org
Tom Pullen, 601-372-9133

NUMBER 10

Niobrara River

WYOMING, NEBRASKA

NATIONAL PARK SERVICE

THREAT: UNSUSTAINABLE IRRIGATION DIVERSIONS

Summary

The Niobrara River is one of only two Wild and Scenic Rivers in Nebraska and is a regional and national treasure for its fish and wildlife, recreation opportunities, and tourism. But excessive irrigation diversions, largely a result of rising corn prices for ethanol production, are shrinking its flows and threatening these values. Water managers must act to prevent excessive withdrawals to protect the river's health and the many quality of life benefits it provides to human and natural communities.

The River

Nebraska's longest river, the Niobrara flows 535 miles before emptying into the Missouri River near the town of Niobrara. A number of threatened and endangered species depend on the Niobrara, including the piping plover, least tern, and whooping crane. The river sustains wildlife refuges and state parks and in 1988 was named one of America's "10 best paddling rivers" by Outside Magazine. A 76-mile stretch of the Niobrara is designated as a National Wild and Scenic River, and today more than 65,000 people visit the river to float or explore this reach annually. In addition to the river's tourism and recreation benefits, thousands of Nebraskans obtain water for household use from underground wells near the Niobrara and its tributaries, and the river provides irrigation and power generation to the region.

The Threat

Water diversions to support crop production in the Niobrara River region's sandy soil have increased dramatically in the past decade, partially due to the rapidly growing demand for corn to make ethanol. In just the first six months of 2007, irrigators applied for more than five times the amount of water than had been granted during the entire decade between 1980 and 1990. While irrigation demands have increased, surface water levels have decreased. For the past five years, the river's flow rate has been below average, and the

Niobrara River At-a-Glance

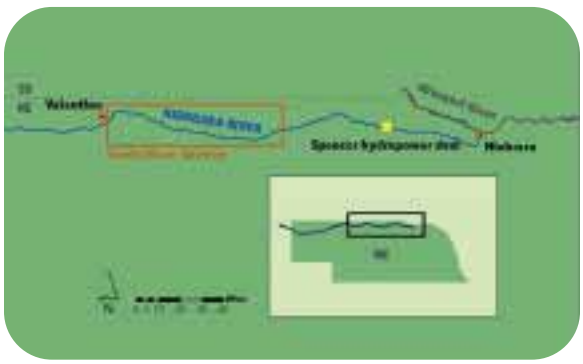
River length: 535 miles

Watershed area: 15,195 square miles

Largest city in the watershed: Valentine, NE (pop. 2,820)

Number of irrigated acres in watershed: more than 600,000

Did you know? The Niobrara River is one of only two National Wild and Scenic Rivers in Nebraska.



The Niobrara and Global Warming

Withdrawing water from the Niobrara to produce corn ethanol will do more harm than good. Corn ethanol production is an inefficient use of energy as well as water, and can release even higher levels of greenhouse gasses into the atmosphere than gasoline due to heavy use of fertilizers. Increasing water withdrawals also compound the negative impacts of global warming which will reduce water levels in the Niobrara through evaporation. Water planners should be exploring ways to return water to the river and protect the unique recreation benefits and wildlife habitat it provides to the region.

2006 level was the fifth lowest since 1950. Kayakers and canoeists today notice more exposed sandbars and rock ledges that make it hard to float this already naturally shallow river. As more of the river is appropriated by irrigators, the Niobrara's economic and recreational values are threatened.

The Ogallala Aquifer, the underground water table that sustains the Niobrara River is declining in areas where rates of groundwater pumping have far exceeded rates of replenishment. Recent reports warn that water withdrawals for growing corn and processing it to make ethanol fuel will put unsustainable pressure on the aquifer. Rising prices are driving an explosion in ethanol production. New corn ethanol plants planned and currently under construction in this region will increase ethanol production capacity by 900 percent. Taking more and more water from a finite source with little analysis of the sustainability of such actions just doesn't make sense in this arid portion of Nebraska. This strategy is already starting to damage the much-loved Niobrara and may deprive communities of all the benefits of a healthy river in the long run.

A public power company operating a dam near the mouth of the Niobrara has exercised its senior water right, meaning no new water can be taken from the river – for now. Nonetheless, a more permanent solution is necessary to protect this precious resource. The Nebraska Game and Parks Commission (NGPC) is researching the feasibility of securing an instream flow water right for the Wild and Scenic reach. While this water right would protect a minimum flow in only this particular reach it would, in effect, help to protect hundreds of river miles upstream of the Wild and Scenic River area. An instream water right would safeguard the river's health by preventing excessive water from being pumped out of a long stretch of river.

What's At Stake

As the water table drops, wells supplying water for domestic use are threatened. Current irrigation and power generation requires a flowing Niobrara River to support the economies of small area towns. Threatened and endangered species, and state parks and wildlife refuges, all depend on the Niobrara and particularly the protected section of the river. Recreation is vital to local communities and its value is growing. The loss of recreation and tourism to the river and its lush environs would be a damaging blow. In 2008, the 40th anniversary of the Wild and Scenic Rivers Act, we should celebrate the Niobrara and commit ourselves to protecting this integral part of Nebraska's and the nation's natural and cultural heritage.

What Can Be Done

NGPC must submit the application for an instream flow water right to the Nebraska Department of Natural Resources (NDNR). The NDNR, in turn, must grant an instream flow water right that allows current irrigators their share, but prevents never-ending applications for precious water.

The temporary halt on new surface and ground water use in the area, triggered the creation of an Integrated Management Plan for the Niobrara basin. Officials from the NDNR and the five Natural Resource Districts with authority in the Niobrara River basin must ensure that this plan balances preservation of the river's ecological quality with irrigation and other water use needs. These agencies have an opportunity and a responsibility to ensure that water appropriations don't drain the river dry, causing the Niobrara, and the assets it provides, to disappear forever.

NATIONAL PARK SERVICE

CONTACT INFO

Gary Belan, American Rivers, 202-347-7550 ext. 3027, gbelan@AmericanRivers.org
Bruce Kennedy, Nebraska Wildlife Federation, 402-796-2114, brucemargekenn@aol.com
Mel Thornton, Friends of the Niobrara, 402-477-7597, melthorn@alltel.net

American Rivers
Thriving By Nature

1101 14th Street, NW, Suite 1400
Washington, DC 20005

PHONE: 202-347-7550
FAX: 202-347-9240
EMAIL: Outreach@AmericanRivers.org

WWW.AMERICANRIVERS.ORG

PENNSYLVANIA FIELD OFFICE
355 N. 21st Street, Suite 309
Camp Hill, PA 17011
PHONE: 717-763-0741
sdeuling@AmericanRivers.org

OHIO FIELD OFFICE
348 S. Erie Street
Toledo, OH 43604
PHONE: 419-936-3759
kswartz@AmericanRivers.org

MASSACHUSETTS FIELD OFFICE
37 Phillips Place, #2
Northampton, MA 01060
PHONE: 413-585-5896
bgraber@AmericanRivers.org

NEW YORK FIELD OFFICE
1 Danker Avenue
Albany, NY 12206
PHONE: 518-482-2631
slindloff@AmericanRivers.org

SOUTHEAST REGIONAL OFFICE

COLUMBIA
2231 Devine Street, Suite 202
Columbia, SC 29205
PHONE: 803-771-7114
gjobsis@AmericanRivers.org

DURHAM
1006 Lancaster Street
Durham, NC 27701
PHONE: 919-286-2469
praabe@AmericanRivers.org

ATLANTA
501 Dancing Fox Road
Decatur, GA 30032
PHONE: 404-373-3602
jhoffner@AmericanRivers.org

NORTHEAST FIELD OFFICE
20 Bayberry Road
Glastonbury, CT 06033
PHONE: 860-652-9911
lwildman@AmericanRivers.org

CALIFORNIA FIELD OFFICES

WATER RESOURCES PROGRAMS
6 School Street, Suite 230
Fairfax, CA 94930
PHONE: 415-482-8150
msamet@AmericanRivers.org

DAM AND HYDROPOWER PROGRAMS
409 Spring Street, Suite E
Nevada City, CA 95959
PHONE: 530-478-5672
srothert@AmericanRivers.org

NORTHWEST REGIONAL OFFICE

SEATTLE
4005 20th Avenue West, Suite 221
Seattle, WA 98199
PHONE: 206-213-0330
arnw@AmericanRivers.org

PORTLAND
320 SW Stark Street, Suite 412
Portland, OR 97204
PHONE: 503-827-8648
bswift@AmericanRivers.org

CO-AUTHORS: Heather Hamilton, Amy Kober, Will Hewes
EDITOR: Lindsay Martin
MAPS: Kathryn Swartz
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