# DAM REMOVAL AFF

## 1AC

### Status Quo

#### Contention One: Snake River Logjam

#### Over 430 dams have been dismantled in the last decade thanks to conservationists

MSNBC 2011 (http://www.msnbc.msn.com/id/44554709/ns/us\_news-environment/t/largest-dam-removal-aims-bring-salmon-back/#.UAdWrjFWrnM, NBC, msnbc.com and news services, Largest dam removal aims to bring salmon back, ¶ 9/18/2011 2:26:17 AM ET)

There has been an acceleration in dam removal in recent years in the United States.

Numbers provided by American Rivers suggest the 1999 removal of Maine's Edwards Dam on the Kennebec River set the stage for more than 430 other such projects across the country in the past decade — more than three times the 130 taken down between 1990 and 1998.

Many of the dams have come up for federal relicensing, contributing to the removal trend. Conservationists and sporting groups encourage the removals, pointing to growing evidence of environmental harm caused by dams and questioning the safety of the impoundments, especially older ones.

#### The Army Corps of Engineers is currently breaking down Chippewa dam

Jeremy **Jones 6/28/2012,** Staffwriter for Montevideo American-News, June 28 2012 “Tentative Schedule set to remove Cheppewa River dam” Monte News, <http://www.montenews.com/news/x1915463138/Tentative-schedule-set-to-remove-Chippewa-River-dam>

Montevideo, MN —¶ Tuesday afternoon**, the U.S. Army Corps of Engineers**, MAAC Inc., the Minne­sota Department of Natural Re­sources, the city of Montevideo and the engineering firm of Rodeberg and Berryman **met to discuss the final details of a tentative schedule for the Chippewa River dam removal.¶ It was decided that the Army Corps of Engineers would throttle down the Lac qui Parle dam for six to eight weeks — except between Aug. 6 and 10** — to allow MAAC Inc. to begin work. Work will start on the week of July 9, when MAAC Inc. will but a notch in the dam to lower the water level behind it. Then, as water levels decline, they will begin bringing in rocks to build the rapids and destroy the dam bit by bit.¶ For more on this story and others subscribe or pick up a copy of the Montevideo American-News.

#### However, the federal government has chosen to maintain four major dams in the Snake River – despite the recommendation of an impartial judge

William Yardley, writer for New York Times, 4/26/2012 (April 26, 2012, “Now Off Case, Judge Weighs In on Dams”, <http://www.nytimes.com/2012/04/27/us/judge-says-snake-river-dams-should-go.html>)

SEATTLE — A federal judge who spent a decade presiding over one of the most contentious environmental court fights in the Northwest — the fate of endangered salmon in the Columbia River Basin and **four hydroelectric dams that interrupt their migration** — has said in a recorded interview that the dams should be removed to help the fish. ¶ “I think that we need to take those dams down,” the judge, James A. Redden of Federal District Court in Portland, Ore., told Idaho Public Television in an interview for a documentary to be released this summer. “And I’ve never ordered them, you know, or even tried to order them, that you’ve got to take those dams down, but I have urged them to do some work on those dams and they have done it.” ¶ Judge Redden, who is 83, handed over the case to another judge last fall, and his statement has no legal impact. But his comments stirred debate among those fighting to protect salmon and hydropower supporters, and they added context to his past rulings. Although he has never publicly said he favors removing the four dams, on the lower Snake River, a tributary of the Columbia, he has rejected parts of three plans the federal government has proposed for saving salmon. ¶ All of the proposals, under Republican and Democratic administrations, left intact the four dams, which provide power but also affect the ability of adult fish to make their way to spawning groups up river and young ones to make it to the Pacific Ocean. Advocates say other sources of power, including wind, can compensate for the lost hydropower. ¶ “It’s not very difficult,” the judge said of taking down a dam. “It’s a lot easier than it is putting them up. But even taking any one dam would be helpful.” ¶ Salmon advocates have long pushed to have the four dams removed and some hoped that Judge Redden would eventually order that. Congress would have to approve of removing the dams, which are federally owned. ¶ “I’m happy about what I’ve done although I know I haven’t done enough,” the judge said. “But there’s not much a judge can do. But you can raise hell, and I did.”

### Ecosystems Advantage

#### Contention Two: Snake River Ecosystems

#### The Snake River dams are killing sockeye salmon – it’s a keystone species

Gray, writer for Men’s Journal, 3/13/2012 (Kevin, “Last Chance to Save the Salmon” Mens Journal, <http://www.bluefish.org/lastsave.htm>)

On the Lower Snake River -- the Columbia River's largest tributary -- four dams in particular, built between 1961 and 1975, have had a devastating effect on the salmon population. They block the path to 2.4 million acres of pristine spawning grounds in a wilderness preserve in central Idaho. Largely because of those dams, the federal government had to put the Snake River's sockeye salmon on the endangered species list in 1991. Since then, 12 more runs of salmon in the Basin have been recognized as endangered or near extinction.

Conservationists have fought to prevent the loss of **this keystone species, which brings ocean nutrients hundreds of miles inland, feeding plants, insects, animals, forests, and**, yes, **human beings**. "When salmon decline, rivers and lakes become sterile, and that's what's happening in Idaho," says Bert Bowler, a former Idaho Department of Fish and Game biologist. **"You can cut trees and replant them. But once these fish are gone, they're gone."**

Advocates like Bowler, as well as the National Wildlife Federation and the Sierra Club, have called for the removal of the four dams on the Snake. "The government is trying hard to convince people that the dams are not a problem," says Tom Stuart, a longtime fisherman and salmon-recovery activist with Idaho Rivers United. "Of course, common sense and the best available science tell us it's a huge problem."

"**The largest swath of wild country in the Lower 48 is supposed to be teeming with wild salmon**," says Steven Hawley, a professional river guide and the author of Recovering a Lost River. "**But it isn't. The culprit is these gargantuan dams**."

#### 137 species rely on Snake River salmon for survival – including birds and land animals

Save Our Wild Salmon, environmental advocacy group, 3/6/2009 (“Why Restore Wild Salmon?”, Save Our Wild Salmon,

<http://www.wildsalmon.org/facts-and-information/faq/why-restore-wild-salmon.html>)

Salmon and steelhead represent a critical ecological nutrient link between our oceans and our rivers and streams and forests and wildlife. Here’s how: Wild salmon hatch from eggs in freshwater rivers and streams. While still small and young, they migrate downriver in the spring to the Pacific Ocean. Depending on the species of salmon (Chinook, coho, sockeye, chum, keta), they spend 2-5 years in the ocean, growing large and strong in preparation for their eventual journey back up river to the river or stream where life began.

Each year in response to lunar and solar triggers, adult salmon leave the ocean and begin a long migration back to spawn the next generation and die. Though just a few remain today, **Snake River salmon make the longest journey** – traveling nearly 1,000 miles and over 6,000 feet in elevation to return to Redfish Lake, their ancestral spawning grounds.

Not long ago, before any dams were constructed, up to 30 million salmon and steelhead would return in any given year. **This migration delivered every year hundreds of millions of pounds of high quality nutrients or fertilizer to the landscape and wildlife of the Pacific Northwest**. **A recent study documented 137 species that benefit from and utilize the ocean-origin nutrients that salmon deliver. Eagles and other raptors, bears, wolves, coyotes, a plethora of insects and aquatic species. Minerals from the ocean have been detected in the leaves at the tops of trees.**

**The severe Pacific salmon population declines in the Columbia Basin have cut off this once-massive delivery of nutrients from the ocean. This has in turn reduced the productivity of the region and impacted the diversity and size of wildlife populations. Restoring wild salmon and steelhead would reconnect this ancient connection between land and sea**, and again feed the people and wildlife of the Pacific Northwest.

#### Loss of biodiversity causes human extinction

Diner 1994

(Judge Advocate’s General’s Corps of US Army, David N., Military Law Review, Winter, 143 Mil. L. Rev. 161,)

No species has ever dominated its fellow species as man has. In most cases, people have assumed the God-like power of life and death -- extinction or survival -- over the plants and animals of the world. For most of history, mankind pursued this domination with a single-minded determination to master the world, tame the wilderness, and exploit nature for the maximum benefit of the human race. n67 In past mass extinction episodes, as many as ninety percent of the existing species perished, and yet the world moved forward, and new species replaced the old. So why should the world be concerned now? The prime reason is the **world's survival**. Like all animal life, humans live off of other species. At some point, the number of species could decline to the point at which the ecosystem fails, and then humans also would become extinct. No one knows how many [\*171] species the world needs to support human life, and to find out -- by allowing certain species to become extinct -- would not be sound policy. In addition to food, species offer many direct and indirect benefits to mankind. n68 2. Ecological Value. -- Ecological value is the value that species have in maintaining the environment. Pest, n69 erosion, and flood control are prime benefits certain species provide to man. Plants and animals also provide additional ecological services -- pollution control, n70 oxygen production, sewage treatment, and biodegradation. n71 3. Scientific and Utilitarian Value. -- Scientific value is the use of species for research into the physical processes of the world. n72 Without plants and animals, a large portion of basic scientific research would be impossible. Utilitarian value is the direct utility humans draw from plants and animals. n73 Only a fraction of the [\*172] earth's species have been examined, and mankind may someday desperately need the species that it is exterminating today. To accept that the snail darter, harelip sucker, or Dismal Swamp southeastern shrew n74 could save mankind may be difficult for some. Many, if not most, species are useless to man in a direct utilitarian sense. Nonetheless, they may be critical in an indirect role, because their extirpations could affect a directly useful species negatively. In a closely interconnected ecosystem, the loss of a species affects other species dependent on it. n75 Moreover, as the number of species decline, the effect of each new extinction on the remaining species increases dramatically. n76 4. Biological Diversity. -- The main premise of species preservation is that diversity is better than simplicity. n77 As the current mass extinction has progressed, the world's biological diversity generally has decreased. This trend occurs within ecosystems by reducing the number of species, and within species by reducing the number of individuals. Both trends carry serious future implications. Biologically diverse ecosystems are characterized by a large number of **specialist species**, filling narrow ecological niches. These ecosystems inherently are more stable than less diverse systems. "The more complex the ecosystem, the more successfully it can resist a stress. . . . [l]ike a net, in which each knot is connected to others by several strands, such a fabric can resist collapse better than a simple, unbranched circle of threads -- which if cut anywhere breaks down as a whole." n79 By causing widespread extinctions, humans have artificially simplified many ecosystems. As biologic simplicity increases, so does the risk of ecosystem failure. The spreading Sahara Desert in Africa, and the dustbowl conditions of the 1930s in the United States are relatively mild examples of what might be expected if this trend continues. Theoretically, each new animal or plant extinction, with all its **dimly perceived and intertwined affects, could cause total ecosystem collapse and human extinction**. Each new extinction increases the **risk of disaster**. Like a mechanic removing, one by one, the rivets from an aircraft's wings, [hu]mankind may be edging **closer to the abyss**.

#### Orca whales need the salmon – only removing the dams helps both species survive

Hawley, environmental journalist, 2010 (Steven, journalist, author of *Recovering a Lost River: Removing Dams, Rewilding Salmon, Revitalizing Communities*, quotes Ken Balcomb, director for the Center for Whale Research on San Juan Island in Puget Sound, “The Idaho Tide,” Summer, <http://www.patagonia.com/us/patagonia.go?&assetid=53761>, LVS)

The sin lies not in the wilderness, but in the dammed. Wild Idaho waters feed the Snake, which eventually joins the Columbia. These two rivers have been transformed into a series of eight slackwater impoundments behind as many obstructions in the long, slow ride between Lewiston, Idaho, and Portland, Oregon. For nearly two decades, a growing constituency of fishermen, farmers, business leaders, brave politicians and conservation groups like Save Our Wild Salmon have been backing a modest proposal: Take out half the dams. Just the four smaller ones on the Snake. With the grim prospect of climate change posing an added threat to the myriad Pacific ecosystems, many of which rely on salmon as a keystone species, removing the dams has become a mission that’s moved beyond regional borders.Ken Balcomb is the director for the Center for Whale Research on San Juan Island in Puget Sound. It’s a long way from here to Lewiston, but Balcomb sees the connection. He’s spent most of his time tracking the resident killer whales that cruise the sound in summer. He knows thatchinook are whale food.The health of these orcas and that of the chinook population in the nearby ocean neatly track each other. Unfortunately, it’s a track leading toward extinction.Orcas joined Snake River chinook on the Endangered Species list in 2006. “There used to be this huge biomass of chinook in the ocean, produced by all the rivers of the Pacific Coast; the Columbia was the big horse of all those,” Balcomb told me. **“**We’re down to less than one percent of historic abundance. Climate change doesn’t look good for salmon in the Klamath or the Sacramento. But there’s a lot of intact habitat left on the Snake. It’s our best shot. I think any reasonable biologist will tell you the only way to take advantage of it is to tear out the dams.”

#### Puget Sound orcas are key to the global ocean ecosystem

National Wildlife Federation 06 (“Orcas on the Edge,” 10/1, http://www.nwf.org/News-and-Magazines/National-Wildlife/Animals/Archives/2006/Orcas-on-the-Edge.aspx)

Saving Puget Sound orcas will require cleaning up toxic waste sites, stemming storm-water pollution and stopping global warming.The most critical step, **however,** is restoring salmon runs so orcas have enough to eat. **"**The Snake River basin once produced more than a third of all the chinook in the Columbia River basin,**" Schroeder says. "**If the federal government would take out the four outdated lower Snake River dams, it would go a long way toward recovering endangered Columbia River salmon and Puget Sound killer whales."¶ **A measure the government actually is taking also is likely to help the orcas. NMFS in June proposed new restrictions on development in about 2,500 square miles of inland waters, from Olympia, Washington, north to the Canadian border. The proposal, which covers almost all of Puget Sound, could be final as early as November, requiring any projects using federal funds or conducted under federal permits to include orca protections.¶ In the end,** orca conservation is about a lot more than saving the Puget Sound's magnificent killer whales. "We ignore this looming environmental problem at our own peril," **Balcomb says. "**The orcas are the ultimate indicator of the health of the marine ecosystem. And that ecosystem is two-thirds of our planet."

#### Marine ecosystem collapse causes extinction of all species

Craig, Associate Professor of Law, Indiana University School of Law, 2003 (Robin Kundis, Associate Professor of Law, Indiana University School of Law, 34 McGeorge L. Rev. 155)

Biodiversity and ecosystem function arguments for conserving marine ecosystems also exist, just as they do for terrestrial ecosystems, but these arguments have thus far rarely been raised in political debates. For example, besides significant tourism values - the most economically valuable ecosystem service coral reefs provide, worldwide - coral reefs protect against storms and dampen other environmental fluctuations, services worth more than ten times the reefs' value for food production. n856 Waste treatment is another significant, non-extractive ecosystem function that intact coral reef ecosystems provide. n857 More generally, "ocean ecosystems play a major role in the global geochemical cycling of all the elements that represent the basic building blocks of living organisms, carbon, nitrogen, oxygen, phosphorus, and sulfur, as well as other less abundant but necessary elements." n858 In a very real and direct sense, therefore, human degradation of marine ecosystems impairs the planet's ability to support life. Maintaining biodiversity is often critical to maintaining the functions of marine ecosystems.Current evidence shows that, in general, an ecosystem's ability to keep functioning in the face of disturbance is strongly dependent on its biodiversity, "indicating that more diverse ecosystems are more stable." n859 Coral reef ecosystems are particularly dependent on their biodiversity. [\*265] Most ecologists agree that the complexity of interactions and degree of interrelatedness among component species is higher on coral reefs than in any other marine environment. This implies that the ecosystem functioning that produces the most highly valued components is also complex and that many otherwise insignificant species have strong effects on sustaining the rest of the reef system. n860 Thus, maintaining and restoring the biodiversity of marine ecosystems is critical to maintaining and restoring the ecosystem services that they provide. Non-use biodiversity values for marine ecosystems have been calculated in the wake of marine disasters, like the Exxon Valdez oil spill in Alaska. n861 Similar calculations could derive preservation values for marine wilderness. However, economic value, or economic value equivalents, should not be "the sole or even primary justification for conservation of ocean ecosystems. Ethical arguments also have considerable force and merit." n862 At the forefront of such arguments should be a recognition of how little we know about the sea - and about the actual effect of human activities on marine ecosystems. The United States has traditionally failed to protect marine ecosystems because it was difficult to detect anthropogenic harm to the oceans, but we now know that such harm is occurring - even though we are not completely sure about causation or about how to fix every problem. Ecosystems like the NWHI coral reef ecosystem should inspire lawmakers and policymakers to admit that most of the time we really do not know what we are doing to the sea and **hence should be preserving marine wilderness whenever we can** - especially when the United States has within its territory relatively pristine marine ecosystems that may be unique in the world. We may not know much about the sea, but we do know this much: if we kill the ocean we kill ourselves, and we will take most of the biosphere with us.The Black Sea is almost dead, n863 its once-complex and productive ecosystem almost entirely replaced by a monoculture of comb jellies, "starving out fish and dolphins, emptying fishermen's nets, and converting the web of life into brainless, wraith-like blobs of jelly." n864 More importantly, the Black Sea is not necessarily unique.¶ The Black Sea is a microcosm of what is happening to the ocean systems at large. The stresses piled up: overfishing, oil spills, industrial discharges, nutrient pollution, wetlands destruction, the introduction of an alien species. The sea weakened, slowly at first, then collapsed with [\*266] shocking suddenness. The lessons of this tragedy should not be lost to the rest of us, because much of what happened here is being repeated all over the world. The ecological stresses imposed on the Black Sea were not unique to communism. Nor, sadly, was the failure of governments to respond to the emerging crisis. n865 Oxygen-starved "dead zones" appear with increasing frequency off the coasts of major cities and major rivers, forcing marine animals to flee and killing all that cannot. n866 Ethics as well as enlightened self-interest thus suggest that the United States should protect fully-functioning marine ecosystems wherever possible - even if a few fishers go out of business as a result.

### Plan

#### The United States Federal Government should remove the Ice Harbor, Lower Monumental, Little Goose, and Lower Granite dams.

### Solvency

#### Contention Three: Solvency

#### Removing the four dams helps salmon and allows boating

CNN 1999

(http://articles.cnn.com/1999-07-26/nature/9907\_26\_dam.enn\_1\_ice-harbor-dam-removal-dam-study?\_s=PM:NATURE)

The resolution is nonbinding, meaning the Army Corp of Engineers is not required to end consideration of dam removal. Federal and independent studies have shown that removing four dams on the lower Snake River in Washington state is the best option for saving Snake River salmon. The dams are **Ice Harbor, Lower Monumental, Little Goose and Lower Granite**.

**Dams are obviously an obstruction to free flowing water**. **You have to pick up your boat and carry it around the dam**. **There are people who would like to take multiday trips down the Snake to the ocean and they’re prohibited from doing that**, said Bell. Rivers tend to be better off when they are allowed to operate naturally than in manmade form.

[Bell = Scott Bell, program coordinator of conservation and public policy for the American Canoe Association]

Only removal can restore Snake River salmon

Blumm, professor at Lewis & Clark law school, 2012 (Faculty Scholar and Professor of Law, “The Real Story Behind the Columbia Basin Salmon Debacle: Dam Preservation Under the Endangered Species Act,” February 17, <http://elawreview.org/2012/02/the-real-story-behind-the-columbia-basin-salmon-debacle-dam-preservation-under-the-endangered-species-act/>, LVS)

**This review of Steven Hawley’s provocative book, Recovering a Lost River: Removing Dams, Rewilding Salmon, Revitalizing Communities, examines Hawley’s claim that** the best way to recover endangered Snake River salmon is by removing the four Lower Snake River dams.These dams, managed by the United States Army Corps of Engineers, impede access to more than 5300 miles of prime salmon habitat and operate with enormous public subsidies**, largely to maintain a seaport 465 miles inland at Lewiston, Idaho. Hawley’s book shows not only that additional public subsidies in the form of river dredging and new levees will be necessary to maintain the port, but also that** local residents are beginning to question the sustainability of relying on the port for their economic future. **The book explains how** Endangered Species Act procedures have resulted in only minor changes to dam operations and discusses the benefits of a restored Snake River by examining salmon runs in undammed Alaska as well as in California and Maine, where dams have been removed.Although the removal of the Lower Snake Dams faces long political odds, Hawley’s book is a reminder that both economically and ecologically it is the best means of restoring Snake River salmon, which has been federal and regional policy for more than three decades.

#### Removing the dams is the only cost-effective option

Mace, Inland Northwest Project Director @ Save Our Wild Salmon, advocacy organization, 4/1/2009 (Sam, “Stuck in the Mud” Wild Salmon

<http://www.wildsalmon.org/facts-and-information/the-problems/stuck-in-the-mud-growing-flood-risk-growing-costs-with-keeping-the-lower-snake-river-dams.html>)

CORPS’ PREFERRED SOLUTIONS: COSTLY, UNREALISTIC, OR BOTH

The Corps is looking at several options: 1) raising levees, 2) dredging sediment, 3) reducing incoming sediment, or 4) a combination of these. The costs in the 2002 EIS for combined dredging and levee-raising ranged from $2.27 million to $916.35 million.

While the Corps downplays the risks of flooding in the next 20 years, its own studies note that the risk of catastrophic outcomes greatly increases over time. Over the long term, managing for flood risk will require increasingly higher levees and more dredging. It is unlikely that the ultimate cost of addressing these problems will remain on the low end of the Corps’ projected range.

Levee-Raising Disruptive and Costly

If Lower Granite Dam remains in place, levees will need to be raised.  In the 2002 EIS, the Corps studied raising levees as little as 3 feet and up to 12 feet. A 3-foot raise will disrupt recreation trails and require some highways to be raised. If the levees require a raise to four feet or beyond, the costs and disruptions dramatically rise. In addition to highways, several bridges will need to be raised, including two four-lane structures, and significant property, private homes, buildings, and parks will become “sacrifice zones” and be inundated. Other buildings will require emergency flood protection measures (sandbagging, for example) during high water events.

In addition to raising and extending existing levees, under all scenarios additional levees will need to be built. The Corps has raised concerns about the structural integrity of both modified levees and new levees attached to existing ones, saying any potential overtopping of these levees in a flood event will render them structurally unsound and may cause them to fail completely. The Corps’ EIS estimated the cost to the federal government--and ultimately taxpayers—at more than $2.273 million to raise the levees 3 feet and more than $87.661 million for 12 foot levees. The Corps has only estimated levee needs through 2074, the designated project “life” of the Lower Granite Dam. Of course, the flood risk and associated costs will continue as long as the dam remains in place.

Dredging is Expensive and Unrealistic

The 2002 EIS studied the impacts of a variety of dredging scenarios for Lower Granite Reservoir: simply maintaining the navigation channel; dredging 3 million cubic yards annually; dredging 1 million cubic yards annually for 10 years and 325,000 cubic yards every year until 2074; or dredging 2 million cubic yards annually for 20 years and then 725,000 cubic yards annually through 2074.

With more than 3 million cubic yards of sediment depositing behind Lower Granite Dam every year, it is unrealistic to think such a large amount of material can be dredged and disposed of every year safely and affordably. The sediment problem goes well beyond keeping the navigation channel operational, as sediment is accumulating in the marinas and at the Port of Lewiston, and sediment deposited throughout the reservoir adds to the growing flood risk.

Sediment Reduction is a Laudable but Futile Goal

The Corps has also proposed an ambitious program to reduce the sediment fl owing into Lower Granite Reservoir. Reducing sediment is a laudable goal, especially in eastern Washington where agricultural practices cause extensive soil erosion. But the sediment fl owing into Lower Granite Reservoir primarily comes from a massive landscape of 32,000 square miles, large portions of which are relatively intact habitat. In fact, more than 25 percent of the land is in designated wilderness, where farming erosion is not an issue and sediment control is impractical or unnecessary.

**Furthermore, the Corps of Engineers has no ownership or jurisdiction over these lands. To rely on cooperative efforts among private landowners and multiple federal and state land agencies to control erosion in an effort to reduce downstream flood risk is unrealistic.**

DAM REMOVAL IS A COST-EFFECTIVE ALTERNATIVE

The Corps has refused to consider removal of Lower Granite Dam (and the other 3 lower Snake River dams) as a possible alternative to address the sediment and flood risk issues. **The Corps should consider dam removal as an alternative. They need to weigh both the benefits to salmon recovery and the saving of taxpayer dollars on dam operations and maintenance costs.**

**The Corps has estimated that taxpayers and Northwest ratepayers pay about $33.7 million annually to operate and maintain the lower Snake dams. And additional salmon recovery costs with the dams in place could run hundreds of millions of dollars a year.** These funds would be better allocated to much-needed repairs on other dams in the federal hydrosystem, including John Day Dam on the Columbia which needs $1 billion worth of repairs, and Dworshak Dam on the Clearwater, which has a poor safety rating and would wreak havoc in multiple towns downstream were it to fail.

SUMMARY

**The costs of maintaining the four lower Snake River dams now outweigh the benefits they provide. The economically sensible solution is to remove the four dams, replace their benefits, and invest in the transition to a free-flowing river. Citizens and decision-makers should direct the Corps of Engineers to evaluate dam removal as an alternative in the Corps’ ongoing planning process.** The Corps plans to release a draft environmental impact statement in 2008-9 if sufficient funding is secured.

### No War

#### Contention Four: No War

#### International conflict is obsolete - the costs far outweigh any benefits

**Mandelbaum**, Christian A. Herter Professor and Director of the American Foreign Policy program at Johns Hopkins University, **1999** [Michael Mandelbaum. “Is Major War Obsolete?” Great Debate Series. February 25, 1999. <http://www.ciaonet.org/conf/cfr10/>]

My argument says, tacitly, that while this point of view, which was widely believed 100 years ago, was not true then, there are reasons to think that it is true now. What is that argument? It is that major war is obsolete. By major war, I mean war waged by the most powerful members of the international system, using all of their resources over a protracted period of time with revolutionary geopolitical consequences. There have been four such wars in the modern period: the wars of the French Revolution, World War I, World War II, and the Cold War. Few though they have been, their consequences have been monumental. They are, by far, the most influential events in modern history. Modern history which can, in fact, be seen as a series of aftershocks to these four earthquakes. So if I am right, then what has been the motor of political history for the last two centuries that has been turned off? This war, I argue, this kind of war, is obsolete; less than impossible, but more than unlikely. What do I mean by obsolete? If I may quote from the article on which this presentation is based, a copy of which you received when coming in, “ Major war is obsolete in a way that styles of dress are obsolete. It is something that is out of fashion and, while it could be revived, there is no present demand for it. Major war is obsolete in the way that slavery, dueling, or foot-binding are obsolete. It is a social practice that was once considered normal, useful, even desirable, but that now seems odious. It is obsolete in the way that the central planning of economic activity is obsolete. It is a practice once regarded as a plausible, indeed a superior, way of achieving a socially desirable goal, but that changing conditions have made ineffective at best, counterproductive at worst.” Why is this so? Most simply, the costs have risen and the benefits of major war have shriveled. The costs of fighting such a war are extremely high because of the advent in the middle of this century of nuclear weapons, but they would have been high even had mankind never split the atom. As for the benefits, these now seem, at least from the point of view of the major powers, modest to non-existent. The traditional motives for warfare are in retreat, if not extinct. War is no longer regarded by anyone, probably not even Saddam Hussein after his unhappy experience, as a paying proposition. And as for the ideas on behalf of which major wars have been waged in the past, these are in steep decline. Here the collapse of communism was an important milestone, for that ideology was inherently bellicose. This is not to say that the world has reached the end of ideology; quite the contrary. But the ideology that is now in the ascendant, our own, liberalism, tends to be pacific.

#### Prefer our data – empirics disprove the vast majority of war and escalation claims

**Goldstein**, professor emeritus of international relations at American University, **and Pinker**, psychology professor at Harvard, **2011** [Joshua S. Goldstein and Steven Pinker. “War is really going out of style.” The New York Times. December 18, 2011. Lexis.] AP

THE departure of the last American troops from Iraq brings relief to a nation that has endured its most painful war since Vietnam. But the event is momentous for another reason. The invasion of Iraq was the most recent example of an all-out war between two national armies. And it could very well be the last one. The idea that war is obsolescent may seem preposterously utopian. Aren't we facing an endless war on terror, a clash of civilizations, the menace of nuclear rogue states? Isn't war in our genes, something that will always be with us? The theory that war is becoming passe gained traction in the late 1980s, when scholars noticed some curious nonevents. World War III, a nuclear Armageddon, was once considered inevitable, but didn't happen. Nor had any wars between great powers occurred since the Korean War. European nations, which for centuries had fought each other at the drop of a hat, had not done so for four decades. How has the world fared since then? Armed conflict hasn't vanished, and today anyone with a mobile phone can broadcast the bloodshed. But our impressions of the prevalence of war, stoked by these images, can be misleading. Only objective numbers can identify the trends. ''War'' is a fuzzy category, shading from global conflagrations to neighborhood turf battles, so the organizations that track the frequency and damage of war over time need a precise yardstick. A common definition picks out armed conflicts that cause at least 1,000 battle deaths in a year -- soldiers and civilians killed by war violence, excluding the difficult-to-quantify indirect deaths resulting from hunger and disease. ''Interstate wars'' are those fought between national armies and have historically been the deadliest. These prototypical wars have become increasingly rare, and the world hasn't seen one since the three-week invasion of Iraq in 2003. The lopsided five-day clash between Russia and Georgia in 2008 misses the threshold, as do sporadic clashes between North and South Korea or Thailand and Cambodia. Countries remain armed and hostile, so war is hardly impossible. But where would a new interstate war plausibly erupt? Robert Gates, the former secretary of defense, said this year that ''any future defense secretary who advises the president to again send a big American land army into Asia or into the Middle East or Africa should have his head examined.'' Chinese leaders would deserve a similar workup if they blew off the very basis of their legitimacy, namely trade-based prosperity, by starting a war. (China has not fought a battle in 23 years.) India and Pakistan came dangerously close to war in 2002, but they backed off when both sides realized that millions would die and have since stabilized relations. Neither North nor South Korea could win a war at an acceptable cost.

#### The media exaggerates violence – war is on the decline

**Goldstein 2011** [Joshua Goldstein, professor emeritus of international relations at American University. “Think again: war.” Foreign Policy. Sept/Oct 2011. <http://www.foreignpolicy.com/articles/2011/08/15/think_again_war?page=full>] AP

If the world feels like a more violent place than it actually is, that's because there's more information about wars -- not more wars themselves. Once-remote battles and war crimes now regularly make it onto our TV and computer screens, and in more or less real time. Cell-phone cameras have turned citizens into reporters in many war zones. Societal norms about what to make of this information have also changed. As Harvard University psychologist Steven Pinker has noted, "The decline of violent behavior has been paralleled by a decline in attitudes that tolerate or glorify violence," so that we see today's atrocities -- though mild by historical standards -- as "signs of how low our behavior can sink, not of how high our standards have risen."

## Topicality (Interpretation Cards Only – Add Standards)

### “Transportation Infrastructure” – 2AC

#### We meet: the plan is an investment that creates a new waterway for boating by converting the Snake into a freeflowing river.

#### It’s just like dredging a waterway—

Bowman 2002 (Margaret Bowman is Senior Director for Dams Programs for American Rivers, August 2002, “Legal Perspectives ¶ on Dam Removal”, Kenyon BioScience Journal Vol. 52 No. 8, http://biology.kenyon.edu/courses/envs461/02%2028%20BOWMAN\_MARGARET\_B%20dam%20removal.pdf)phol

Clean Water Act section 404 permit. Most dam removals¶ require a CWA section 404 permit, issued by the US Army¶ Corps of Engineers (Corps) for dredging of a navigable waterway (US Code, title 33, sec. 1344).

#### Interpretation: “Transportation infrastructure” is a precise category that includes waterways. Dams, on the other hand, are “water infrastructure.”

Musick 2010 (Nathan, Microeconomic and Financial Studies Division – United States Congressional Budget Office, Public Spending on Transportation and Water Infrastructure, p. 2)

Although different definitions of "infrastructure" exist, this report focuses on two types **that claim a significant amount of federal resources:** transportation and water**.** Those types of infrastructure share the economic characteristics of being relatively capital intensive and producing services under public management that facilitate private economic activity. They are typically the types examined by studies that attempt to calculate the payoff, in terms of benefits to the U.S. economy) of the public sector's funding of infrastructure.

For the purposes of CBO's analysis, "transportation infrastructure” includes the systems and facilities that support the following types of activities:

■ Vehicular transportation: highways, roads, bridges, and tunnels;

■ Mass transit subways, buses, and commuter rail;

■ Rail transport primarily the intercity service provided by Amtrak;\*

■ Civil aviation: airport terminals, runways, and taxi-ways, and facilities and navigational equipment for air traffic control: and

■ Water transportation: waterways, ports, vessel\*, and navigational systems.

The category "water infrastructure" includes facilities that provide the following:

■ Water resources: containment systems, such as dams, levees, reservoirs, and watersheds**; and sources of fresh water such as** lakes and rivers**; a**nd

**■** Water utilities: supply systems **for distributing potable water,** and wastewater and sewage treatment systems and plants**.**

#### We meet both accepted definitions of “waterway”

Merriam Webster No Date Given

(http://www.merriam-webster.com/dictionary/waterway)

Definition of WATERWAY

1: a way or channel for water

2: a navigable body of water

#### Boating on the Snake River is physically impossible now, and the plan allows it – that’s CNN 2009 from the 1AC

#### Snake River dam removal creates an active waterway

Working Snake River for Washington, advocacy group for dam removal, website created in 2008

(“Recreation and Tourism on a Working Snake River Dam,” http://www.workingsnakeriver.org/index.php?option=com\_content&view=article&id=88&Itemid=138, website created in 2008: http://www.networksolutions.com/whois-search/workingsnakeriver.org)

The lower Snake River runs through rugged canyons in the heart of southeast Washington. Whether gazing at mule deer on grassy slopes or watching blue herons along the river, the landscape and abundant wildlife provide tremendous recreation for local residents and visitors. Hunting, fishing, wildlife-watching, boating, hiking and sightseeing opportunities would greatly expand with dam removal and **the restoration of 140 miles of free flowing river** and 34,000 acres of prime riverside habitat and scenery.

As more local residents and visitors seek out recreation opportunities, a restored Snake River corridor will only increase in value to both local towns and urban hubs like Spokane. Towns like Walla Walla and Dayton already rely on a growing tourism economy supported by wineries as well as fishing, hiking and other activities. This new economy is a vital addition to the traditional farming and agriculture that still sustains eastern Washington towns.

In addition to attracting tourists from the Northwest and beyond, the quality of life healthy rivers, habitats and recreation opportunities provide boosts the regional economy.

Spokane’s business and civic leaders have recognized that nearby outdoor recreation opportunities and quality of life are some of the regional hub’s most valuable assets in attracting new businesses and talented professionals. More young people are moving to Spokane, or returning after their educations, recognizing that their hometown offers both economic opportunity and unparalleled quality of life.

Spokane residents, fish and boat on the Clearwater and Snake River above the dams, travel to Walla Walla for winery tours, and hike the desert scablands to enjoy wildlife, birds and wildflowers. Spokane promotes these amenities in its motto: “Near Nature, Near Perfect.”

These benefits aren’t just enjoyed by Spokane and eastern WA residents. Residents in Washington’s I-5 corridor and beyond also travel to eastern Washington for recreation. New and expanded opportunities to hike, bike, boat and fish in the beautiful desert and Palouse landscapes of eastern Washington provide quality of life economic benefits to the Westside as well.

Independent studies highlight the dollars a restored river and fisheries would bring to Washington. The lower Snake River reservoirs currently provide limited recreation opportunities worth about $36.6 million per year according to a 2000 study (link to 2000 Corps recreation study). According to the same Corps of Engineers study, a restored river would support annually $230-360 million dollars of recreation, including salmon fishing, hiking, boating, wildlife viewing, hunting and other higher value recreation.

When Lewis and Clark traveled the lower Snake River in 1806 they found a wild river with numerous large rapids, eddies, river bars and islands, supporting prolific wildlife, birds and fisheries.

Healthy rivers and fisheries support valuable recreation opportunities, greater quality of life and are economic drivers for Washington’s economy. The economic benefits of restoring the lower Snake River and its fisheries must be considered in the development of a long-term plan for restoring wild salmon and enhancing Washington’s economy.

Today that wild river is replaced by slow-moving slack water behind the four lower Snake River dams. Rapids are submerged and most islands are gone along with many of the sandy beaches and bars once found along the river.

Restoring the lower Snake River would return many rapids, beaches and islands, and provide Washington State with **140 miles of big river recreation for water recreationists including jet boaters**, **kayakers and canoeists**. Like the free-flowing Hanford Reach stretch of the Columbia River north of Richland WA, a restored lower Snake River would be a prized **destination for boaters** and four times the length.

#### Dam removal allows boating and kayaking

Garrity, Washington State Conservation Director @ American Rivers, the leading organization working to protect and restore the nation’s rivers and streams, No Date Given

(Michael, http://act.americanrivers.org/site/DocServer/snake\_econ\_factsheet\_06-05.pdf?docID=588)

RECREATION AND TOURISM (OTHER THAN FISHING): Before the lower Snake River dams were built in the 1960s and 70s, the lower Snake River had 68 named rapids. **Dam removal would allow new boating**, **canoeing**, **kayaking**, **and rafting opportunities along 140 miles of newly restored river**. The opportunity to once again experience a free-flowing lower Snake River would draw tourists from around the nation and the world. A 2002 study by the Army Corps of Engineers estimates nonfishing recreational benefits of up to $310.5 million per year.

#### That’s the core of the topic

Stevens, organizer for EcoOdyssey, a promotional campaign for alternate transportation, 4/26/2011

(Matthew, “Frequently Asked Questions,” http://www.ecoodyssey.info/Press/Frequently%20Asked%20Questions.pdf)

Ecotourism that utilizes non-motorized and alternative transportation modes such as bicycling, **kayaking**, horseback riding need supportive infrastructure. A good example is The Sonoma Marin Area Rail Transit (SMART) train, which is essential to transport ecotourist to Sonoma and Marin Counties in a fast, comfortable and enjoyable way. Multi-use trails, for bicycles, walking and horseback riding are also needed and should be integrated with the SMART system. **Water trails and watercraft access to rivers**, sloughs, bays and the ocean **should be considered an** 3 **essential part of transportation infrastructure**. Another type of infrastructure that is needed is green-certified lodging that is convenient to multi-use trails and SMART and supports bicycle, equestrian and electric-vehicle use. Green-certified vendors of bicycle, equestrian and water craft tours and also a part of the ecotourist industry. And speaking of history, cultural centers and wayfinding, and interpretive signs along multi-use pathways, will enhance the ecotourist experience.

### AT: Dams Create Navigable Waterways

#### [Read “Transportation Infrastructure 2AC.”]

#### The plan is not bidirectional, even if the dams help navigation—

#### Dams are water infrastructure, not transportation infrastructure

#### All transportation infrastructure investments trade off with other transportation – easier air travel means fewer cars on the road, more highway investments mean less money for railroad, etc.

#### It’s still an increased investment – even if it chooses waterways for recreational boating at the expense of waterways for waterborne freight.

### “TI” Extensions: Includes Kayaking

#### “Transportation infrastructure” includes recreationNational Recreation and Park Association No Date Given

(Parks and Recreation: Essential Partners in Active Transportation, http://www.nrpa.org/uploadedFiles/nrpa.org/Advocacy/Resources/Active-Transportation-Parks-Recreation.pdf)

For over thirty years, public parks and recreation has played an instrumental role in facilitating active transportation connections. Park and recreation agencies across the country have actively been involved in promoting the implementation and use of **active transportation infrastructure** through several routes. This sector undertakes a large role in advocating for and implementing active transportation infrastructure because parks, recreation and active transport have three overlapping characteristics: stimulating economic activity, building healthy sustainable communities, and promoting conservation and improving environmental quality. Park and recreation agencies have consistently championed for active transportation through project initiation and planning of trail networks. Due to the familiarity with their local jurisdiction, park and recreation agencies have the expertise and knowledge to create strategic trail plans. Furthermore, public parks and **recreation encourages the use of active transportation infrastructure since physical activity is a central theme for both public recreation and active transportation**. In addition to project initiation, planning, and implementation of projects, as well as and encouraging healthy physical activity, public parks and recreation also supports the use of active transportation to conserve public spaces for future environmental sustainability. Research continues to demonstrate that the benefits of active transportation are worthwhile for our communities. Active transportation meets the test of the triple bottom line: it promotes economic, social, and environmental benefits for all citizens.

#### That includes canoeing

National Recreation and Park Association No Date Given

(Parks and Recreation: Essential Partners in Active Transportation, http://www.nrpa.org/uploadedFiles/nrpa.org/Advocacy/Resources/Active-Transportation-Parks-Recreation.pdf)

What is active transportation? Active transportation is defined as human powered modes of transportation. The most popular modes of active transportation by far are walking and bicycling, however, skate boarding, canoeing, roller skating, etc. can all be considered forms of active transportation 1.

National Recreation and Park Association No Date Given

(Parks and Recreation: Essential Partners in Active Transportation, http://www.nrpa.org/uploadedFiles/nrpa.org/Advocacy/Resources/Active-Transportation-Parks-Recreation.pdf)

Park and recreation agencies play an integral role in the pursuit of the active transportation movement through facilitating the development of active transportation modes and supporting participation in active transportation as a form of recreation. Many park and recreation agencies have consistently promoted active transportation via marketing, programs, partnerships and **investments in active transportation infrastructure**. Parks and recreation agencies are important players in influencing the cultural shift towards active transportation through its ability to foster landscape architecture, park planning, recreational programming and other design decisions that encourage active transportation. Creating networks of trails, greenways, parks, and recreation areas in residential and commercial areas as well as establishing bicycle racks, helmet loan programs and installing pedestrian lighting are all some of the ways in which the public parks and recreation enables active transportation.

### “TI” Extensions: Opens Rivers for Boats

#### Dam removal creates a waterway for boats

Miller, REMI Northwest, consulting firm that provides economic analysis services in the Pacific Northwest, April 2012

(Alec, “Opportunities following Dam Removal- Rogue River Basin,” http://www.reminw.net/Files/New%20Rogue%20Economic%20Opportunities%2020120427.pdf)

The process of dam removal may best be thought of as strategic modernization of river basin management. Removal of obsolete structures consistent with modern priorities do not necessarily indicate any subsequent action and are not predictors of economic activity in the way that construction of a dam might. In the case of the three main-stem Rogue River dams, **navigation by small boats is made possible by dam removal**. It also seems likely that all four projects will improve fish runs and increase the effectiveness of other habitat restoration activities in the Rogue Basin. These improvements for boaters and fishermen are the primary direct economic benefits of the four dam removals.

#### Removing the dam connects the waterway for recreational boats

Secrist, Lieutenant Colonel in the Army Corps of Engineers, June 14, 2012

(Philip M., http://www.nap.usace.army.mil/cenap-pa/spotlight/docs/Bloomsbury%20Dam%20Removal%20Final%20EA.pdf)

OVERVIEW

The United States Army Corps of Engineers (Corps), Philadelphia District has evaluated the removal of the Bloomsbury Dam. The Bloomsbury Dam is situated within the Musconetcong River between the Borough of Bloomsbury in Hunterdon County, New Jersey and Greenwich Township in Warren County, New Jersey. It is located approximately 7.8 miles up-river from the confluence of the Musconetcong River with the Delaware River. PURPOSE AND SPECIFICATIONS The goal of the project is to remove the Bloomsbury Dam. **The objectives include: restore freeflowing conditions and increase connectivity of the Musconetcong River**; allow free passage of fish and other aquatic organisms in the location of the dam; restore riverine habitat and improve water quality in the impoundment area; restore the natural movement of materials (sediment, nutrients, woody debris) down the river; eliminate the existing public safety hazard and reduce the risk of accidental drowning; and eliminate risk of future catastrophic failure. There is considerable need for the project. The presence of the Bloomsbury Dam on the Musconetcong River creates a variety of problematic conditions that are typical of the obsolete, run-of-the-river, low head dams that are located on many rivers and tributaries throughout the northeastern U.S. The problems created by **the dam** include: impedes the free passage of aquatic organisms; obstructs the movement of materials (sediment, nutrients, woody debris) down the river; changes the condition of the impoundment from that of a riverine habitat with riffles and pools to that of a lacustrine habitat (similar to a lake); accumulates sediments in the impoundment which cover the natural substrate of the river and make the habitat less hospitable to the macroinvertebrates on which fish feed; warms the water in the impoundment by slowing its velocity and increasing its exposure to sunlight; degrades water quality in the impoundment by accumulating nutrients in the sediment, promoting the growth of algae, and lowering the levels of dissolved oxygen; creates a hydraulic roller at the bottom of the spillway that is a public safety hazard and drowning risk; and **prevents the passage of recreational boats** (e.g., kayaks and canoes).

#### Gold Ray Dam proves

Freeman, writer for the Mail Tribune, 7/2/2012

(Mark, “Raft of ideas: County looks for ideas about park planned for former dam site,” http://m.mailtribune.com/apps/pbcs.dll/section?category=WAP)

OK. So put him down for ... "Fix Boat Ramp."

That's one of hundreds of opinions Jackson County officials are soliciting this summer as they take the public's pulse on the kinds of improvements they would like to see along a 13-mile stretch of the Rogue, including a new park created by the removal of Gold Ray Dam.

**Spurred by the 2010 dam removal**, **which opened boating access to areas that had been blocked for 106 years**, the county and others are in the early stages of a recreation plan that will guide state, county and federal land managers in how they deal with public access without trampling the stretch's uniqueness.

#### Dam removal is an investment in waterways

Adelmann, executive director of Openlands, one of the nation’s oldest and most successful metropolitan conservation organizations, 6/6/2006

(Gerald, “Remove dams,” Chicago Tribune, http://articles.chicagotribune.com/2006-06-06/news/0606060248\_1\_dam-removal-four-dams-kayakers)

The sad truth is that the recent tragic deaths at the Glen D. Palmer Dam in Yorkville were preventable ("Perilous spot on Fox claims 3 more lives; Yorkville dam is at top of state's repair-project list," Page 1, May 29). The dam creates an unsafe condition, so much so that the deaths of 16 people at the site since 1960 have resulted in a plan to modify the dam to make it safer. But safer is not safe enough. The Glen D. Palmer Dam, as well as most other dams in northeastern Illinois, **pose a hazard to small water craft** yet provide little benefit to the region. **It is time to remove these dams and make our waterways truly safe**.

#### Dams are a hazard to boating

Commonwealth of Pennsylvania 1998

(http://fishandboat.com/damnot2.htm)

Under this law, the owners of dams identified by the Department of Environmental Protection (DEP) as meeting the statutory definition of a “run-of-the-river” dam must mark the dam and its environs with signs and buoys. The design and content of these signs and buoys is determined by the Pennsylvania Fish and Boat Commission (PFBC), after consultation with DEP. **The signs are intended to warn the** swimming, fishing and **boating public of the hazards posed by the dam**. Act 1998-91 provides that the PFBC shall publish the guidelines establishing the size, location and content of the signs and buoys as a notice in the Pennsylvania Bulletin and may from time-to-time modify them as circumstances require.

### “Investment” – 2AC

#### [NOTE: You probably want to read the “Transportation Infrastructure” interpretation as well.]

#### We meet: dam removal is capital expenditure, like building a road or bridge

Brian **Graber**,Director of The River Restoration Program, **2012** Northeast Region, May 10 2012, “River Restoration Creates Jobs,” American Rivers,<http://www.americanrivers.org/newsroom/blog/bgraber-20120510-river-restoration-creates.html>

**It takes a lot of professionals to remove a dam and restore a river**. Along with the project management and other technical assistance that we do at American Rivers, we and our project partners hire ecologists, engineers, geomorphologists, historians, archaeologists, accountants, lawyers, excavator operators, construction superintendents, and truck drivers to complete all of the scientific analysis, engineering design, permitting, contract management, and construction work necessary to complete dam removal projects.¶ We also need to purchase materials and rent or purchase equipment, such as erosion control fabric, silt fencing, dewatering pipes, pumps, large rock, large wood, plants, seed, mulch, excavators, trucks, port-a-potties, and more. All of that activity means that we are creating and supporting jobs with our river restoration work.¶ The Massachusetts Division of Ecological Restoration recently teamed up with Industrial Economics, Inc. to figure out just how many jobs, by analyzing four river and wetland restoration projects in a report titled The Economic Impacts of Ecological Restoration in Massachusetts [PDF]. American Rivers played a key role in the report’s two river restoration projects, the Briggsville Dam Removal and the Eel River Restoration Project.¶ While there are a lot of details in the report, the bottom line is that the equivalent of 12.5 jobs were supported per $1 million invested, averaged over the four projects. That includes direct job creation plus indirect jobs, those jobs supported by purchasing materials for projects.¶ How does this number compare to other studies of restoration projects? In 2010, a University of Oregon study [PDF] found that fish passage projects in Oregon supported 15.2 jobs per $1 million invested. Perhaps the most frequently cited report was produced by Restore America’s Estuaries [PDF] stating that aquatic ecosystem restoration creates 30 jobs per $1 million invested.¶ I had difficulty following their references to find the original source of that number, but the same number can be found in a 1997 Doppelt study found in the book, Watershed Restoration: Principles and Practices. Perhaps the difference in the number of jobs created between the 1997 number and the 2012 or 2010 numbers simply reflects inflation: $1 million does not go as far for job creation now than it did 15 years ago.¶ Taken together, ecosystem restoration projects support between 12.5 and 30 jobs per $1 million investment. The question that came to mind for me was: Is that a lot? The Massachusetts study found that the total economic activity produced by ecosystem restoration is **greater than or equal to other types of capital projects such as road and bridge construction**.¶ The Restore America’s Estuaries report shows that ecosystem restoration projects create more jobs than road construction (7 jobs per $1 million) and the oil and gas industry (5 jobs per $1 million).

#### Interpretation: “Investment” is spending government resources to develop infrastructure (in this case, waterways)

Laos 10 (Laos Ministry of Planning and Investment, “Manual For Public Investment Program (PIP) Program Management”, August, <http://www.jica.go.jp/project/laos/0700667/materials/pdf/ProgramManual/ProgramMa> nual\_eng.pdf)

Public investment is defined as investment from government resources, domestic or foreign, with the objective of development in the sector and/or region. Domestic PIP projects, ODA in forms of grant, technical assistance and loan are main components. Provision of public infrastructure (ex. roads, bridges, irrigation systems, public hospitals and schools, rural electrification etc.) and technical promotion (ex. training) is generally done using public investment.

#### Dam removal is investment

Klamath Riverkeeper, advocacy organization, 2007

(“Talking points on Klamath dam removal,” http://www.klamathriver.org/Dam-Removal-TalkingPoints.html)

The dam removal gravy train has left the station - and it's time for Siskiyou County to get on board. Supervisors should be advocating for local contracts and ensuring dam removal dollars feed the local economy, not fighting the inevitable.

Dam removal means a $200-500 million investment in deconstruction, which means new jobs in Siskiyou County and a huge cash influx to local businesses.

After that, as salmon runs recover, toxic algae disappears, and the river regains its natural look, fishermen and recreationalists will flock to the Klamath. The local tourism and angling industry is currently in decline, and this investment in the “restoration economy” will turn that around, drawing visitors to raft, explore and fish the Klamath’s famous waters.=

### “Investment” Extensions

#### Dam removal is investment

Strassman, American Rivers, the leading organization working to protect and restore the nation’s rivers and streams, 2012

(Sara, http://www.lccmr.leg.mn/RequestforProposals/2013/proposals\_received/strassman-sara\_0412-2-175-combined.pdf)

HOW: American Rivers will work with a leading ecosystem valuation firm, Industrial Economics, to collect existing ecological/economic data at completed or proposed dam removal sites across the state, and develop a tool for comparing potential dam removal-related **investments** (e.g., modifications or full removals). The results of this analysis can be applied to the list of projects maintained by MN DNR Dam Safety and Stream Habitat programs as well as to prospective projects identified in watershed and restoration plans. American Rivers’ staff will then conduct an analysis of state regulations, permitting procedures, public outreach processes, project costs and ecological benefits accrued in order to identify specific recommendations for programmatic and project-level restoration activities.

### “Substantially” – 2AC

It’s an investment of over $1 billion

Garrett No Date (Chris, cites an Army Corps economic prediction, “The Political Symbolism of Dams,” <http://www.whitman.edu/environmental_studies/WWRB/damsymbol.htm>, LVS)

At a “save our dams” rally in Kennewick, Washington this last fall, the chief rhetoric justifying the existence of the dams was economics. At this rally, the participants were reminding those present that the Snake River dams are a huge producer of electricity, producing a combined 1,200 megawatts of electricity, enough to power a city the size of Seattle.[16] These activists also warned of the sheer costs of dam removal, citing an Army Corps’ prediction exceeding $1 billion to remove the earthen portion of the dams.[17]

#### That dwarfs other waterway investments – no case would meet, and they have plenty of ground

Critz, congressman from Pennsylvania, 6/6/2012

(Mark, http://critz.house.gov/press-release/critz-and-doyle-advocate-investment-waterways-infrastructurefixing-trust-fund)

I am deeply trouble by the lack of funding for these projects, and specifically on the lack of progress on finding a solution to the funding shortfalls in the Inland Waterways Trust Fund. This fund generates roughly $85 million dollars per year through a fuel tax on barges, **yet falls well short of the $380 million per year** the Inland Waterways Users Board estimates is **needed to fully fund capital reinvestments in the system**.

#### "Substantial" means of real worth or considerable value --- this is the USUAL and CUSTOMARY meaning of the term

Words and Phrases 2 (Volume 40A, p. 458)

D.S.C. 1966. The word “substantial” within Civil Rights Act providing that a place is a public accommodation if a “substantial” portion of food which is served has moved in commerce must be construed in light of its usual and customary meaning, that is, something of real worth and importance; of considerable value; valuable, something worthwhile as distinguished from something without value or merely nominal

#### “Substantial” means considerable or to a large degree --- this common meaning is preferable because the word is not a term of art

Arkush 2 (David, JD Candidate – Harvard University, “Preserving "Catalyst" Attorneys' Fees Under the Freedom of Information Act in the Wake of Buckhannon Board and Care Home v. West Virginia Department of Health and Human Resources”, Harvard Civil Rights-Civil Liberties Law Review, Winter,
37 Harv. C.R.-C.L. L. Rev. 131)

Plaintiffs should argue that the term "substantially prevail" is not a term of art because if considered a term of art, resort to Black's 7th produces a definition of "prevail" that could be interpreted adversely to plaintiffs. [99](http://www.lexis.com/research/retrieve?_m=1421887dc00d6c0b78bddb20857a69fa&docnum=16&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzW-zSkAz&_md5=3f3ffe65eadff46b38ea49c40cb1037e&focBudTerms=definition%20of%20the%20term%21%20substantial%21%20or%20definition%20of%20the%20word%20substantial%21&focBudSel=all#n99) It is commonly accepted that words that are not legal terms of art should be accorded their ordinary, not their legal, meaning, [100](http://www.lexis.com/research/retrieve?_m=1421887dc00d6c0b78bddb20857a69fa&docnum=16&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzW-zSkAz&_md5=3f3ffe65eadff46b38ea49c40cb1037e&focBudTerms=definition%20of%20the%20term%21%20substantial%21%20or%20definition%20of%20the%20word%20substantial%21&focBudSel=all#n100) and ordinary-usage dictionaries provide FOIA fee claimants with helpful arguments. The Supreme Court has already found favorable, temporally relevant definitions of the word "substantially" in ordinary dictionaries: "Substantially" suggests "considerable" or "specified to a large degree." See Webster's Third New International Dictionary 2280 (1976) (defining "substantially" as "in a substantial manner" and "substantial" as "considerable in amount, value, or worth" and "being that specified to a large degree or in the main"); see also 17 Oxford English Dictionary 66-67 (2d ed. 1989) ("substantial": "relating to or proceeding from the essence of a thing; essential"; "of ample or considerable amount, quantity or dimensions"). [101](http://www.lexis.com/research/retrieve?_m=1421887dc00d6c0b78bddb20857a69fa&docnum=16&_fmtstr=FULL&_startdoc=1&wchp=dGLbVzW-zSkAz&_md5=3f3ffe65eadff46b38ea49c40cb1037e&focBudTerms=definition%20of%20the%20term%21%20substantial%21%20or%20definition%20of%20the%20word%20substantial%21&focBudSel=all#n101)

#### Substantial means “of considerable amount” – not some contrived percentage

Prost 4 (Judge – United States Court of Appeals for the Federal Circuit, “Committee For Fairly Traded Venezuelan Cement v. United States”, 6-18, http://www.ll.georgetown.edu/federal/judicial/fed/opinions/04opinions/04-1016.html)

The URAA and the SAA neither amend nor refine the language of § 1677(4)(C).  In fact, they merely suggest, without disqualifying other alternatives, a “clearly higher/substantial proportion” approach.  Indeed, the SAA specifically mentions that no “precise mathematical formula” or “‘benchmark’ proportion” is to be used for a dumping concentration analysis.  SAA at 860 (citations omitted); see also Venez. Cement, 279 F. Supp. 2d at 1329-30.  Furthermore, as the Court of International Trade noted, the SAA emphasizes that the Commission retains the discretion to determine concentration of imports on a “case-by-case basis.”  SAA at 860.  Finally, the definition of the word “substantial” undercuts the CFTVC’s argument.  The word “substantial” generally means “considerable in amount, value or worth.”  Webster’s Third New International Dictionary 2280 (1993).  It does not imply a specific number or cut-off.  What may be substantial in one situation may not be in another situation.  The very breadth of the term “substantial” undercuts the CFTVC’s argument that Congress spoke clearly in establishing a standard for the Commission’s regional antidumping and countervailing duty analyses.  It therefore supports the conclusion that the Commission is owed deference in its interpretation of “substantial proportion.”  The Commission clearly embarked on its analysis having been given considerable leeway to interpret a particularly broad term.

## Uniqueness Tricks

### Dam Removal Now

#### Not Unique-Army corps dams being removed now

Bob **Uphues 7/18/12**, Editor at Wednesday Journal Inc, July 18 2012, “ Dam Removal Continues at a Quick Pace” Riverside Brookfield Landmark <http://www.rblandmark.com/main.asp?SectionID=1&SubSectionID=1&ArticleID=9157>

Two weeks into the Hofmann Dam notching operation, crews have pretty much removed the portion of the concrete dam in the direction of Riverside.¶ Last week, workers with jackhammers chipped away at the concrete to create the edge of the northern "wing" of the dam. The large excavator that's been pounding away on the Riverside half of the dam will now turn its attention to the Lyons side.¶ Meanwhile, **on June 27 the Army Corps of Engineers determined that the remnants of the older** U-shaped **dam** that become visible behind the newer, straight concrete structure**, will be removed to bedrock**.¶ According to Jeff Zuercher, **the Army Corps' project manager, about two feet of stone will be removed and redistributed in the area between the two dams** on a "20-to-1 slope" to allow for passage of fish and help make that part of the river safely navigable.¶ "We're putting things in place for the river to shape itself naturally," Zuercher said.¶ The Army Corps is also assessing how to finish the placement of "toe stone," the large boulders along the banks of the river, upstream of the access road on the Riverside side of the Des Plaines River. The toe stone was placed on the banks upstream of the dam to stabilize sediment that has built up behind the dam over the decades and keep it from washing downstream.¶ The village has asked that no more trees be removed upstream of the dam, so the Army Corps will have to determine whether it can get a machine down the north bank from the Riverside access road. If not, said Zuercher, it may be possible to "ford" the river from the Des Plaines Valley Mosquito Abatement District property to install the toe stone on the opposite bank.¶ Also within the next two weeks, the contractor will begin to remove the gravel access roads on either bank of the river immediately upstream of the former dam. Those roads will be removed and the area smoothed out in preparation for planting, said Zuercher.¶ Planting already has begun farther upstream on both the Lyons and Riverside sides of the Des Plaines.¶ As for when the work to regrade Swan Pond Park will begin, it's anyone's guess at this point**.¶ While the Army Corps**, the Illinois Department of Natural Resources and ComEd **have signed a contract for the replacement of three power poles in the park, ComEd gave a tentative start date of July 23 for that work.**¶ The regrading work is on hold until that project is complete, which could take between two and three weeks.¶ Scalera and Zuercher both said that the Army Corps and IDNR are working to see if they can get ComEd to move up the date for the power pole replacement to start.

### Dam Failures Now

#### Many federal dams are failing now

Nic **Lane 08**, Anlayst in Natural Resources Policy Recourses, Science, and Industry Division, March 25, 2008, “CRS Report for Congress: Aging Infrastructure: Dam Safety,” Congressional Research Service, <http://www.fas.org/sgp/crs/homesec/RL33108.pdf>

While catastrophic dam failures are fairly infrequent, **states reported 1,090 dam¶ safety incidents — including 125 failures — between 1999 and 2004.¶ A number¶ of factors**, including age, construction deficiencies, inadequate maintenance, and¶ seismic or weather events, **contribute to the likelihood of dam failure**. For example,¶ some failures are the direct result of flows larger than the dams were built to¶ withstand. With the exception of seismic or weather events, age is a leading¶ indicator of dam failure. In particular, the structural integrity and operational¶ effectiveness of dams may deteriorate with age, and some older dams may not comply with current dam safety standards established in the 1970s.¶ **Overall, more¶ than 30% of all dams in the NID are at least 50 years old, the designed lifespan of¶ many dams, and more than 17,000 will cross this threshold over the next 10 years**.¶ (See Figure 2.) According to the Association of State Dam Safety Officials, in 2003,¶ **approximately 3,243 U.S. dams had deficiencies that left them more susceptible to¶ failure.**

## Biodiversity (Snake River Specific)

### Salmon: Snake River Dams Bad

#### Snake River dams hurt salmon – impartial judge says so

Craig Welch, Seattle Times environmental reporter, 4/26

(Times environment reporter, April 26, 2012, “Snake River dams should go, says judge now off the case,” http://seattletimes.nwsource.com/html/localnews/2018071867\_judge26m.html)

The federal judge who presided over a court battle that pitted Columbia River salmon advocates against hydropower supporters told a television interviewer that four controversial lower Snake River dams should be removed.¶ In his first interview since stepping down from the case last fall, U.S. District Court Judge James Redden told Aaron Kunz, of Idaho Public Television in Boise, "I think we need to take those dams down."¶ During the interview for a documentary to air later this summer, the Portland-based judge, who presided over the Columbia River case for more than a decade, said the government and the Bonneville Power Administration had made vast improvements for salmon by increasing the flow of water through the Columbia's hydropower system.¶ They have "done things with the dams, spent a lot of money on all the dams, the Columbia and the Snake River — the spills, which they do not like — that has been very helpful," Redden said. But "I think we need to take those dams down."¶ Redden seemed to imply that removing the Snake River dams could make a significant difference in the health of threatened and endangered salmon runs on the Columbia system. "Those four Snake River dams don't really get a lot of — it's not that needed," Redden said.¶ The judge's comments, released this week by the station as part of a collaboration with Northwest public-radio stations, seemed to suggest he agreed with environmentalists and salmon supporters who have argued for years that salmon declines won't be reversed unless the dams are removed. The statements prompted immediate praise and criticism.¶ "It's certainly a welcome announcement to see that's what he believes after basically studying this issue for 10 years," said Nicole Cordan, policy director for Save Our Wild Salmon. "It's reaffirming to have this very smart man who came to this issue unbiased and over the years has looked at the law and the scientific and policy choices and come to this conclusion. It feels good."

### Salmon: Snake River Dam Removal Solves

#### Snake River salmon extinction inevitable in the status quo – Only removal solves - empirics

VanDevelder, LA Times, 2009 (Paul, “Saving the Columbia and Snake river salmon,” July 6, <http://articles.latimes.com/2009/jul/06/opinion/oe-vandevelder6>, LVS)

If ever there were a story that foreshadowed the political and legal Waterloos that loom in seeking solutions to climate change, surely that cautionary tale is the one about the Columbia and Snake rivers' salmon and their imminent extinction. And like most stories about endangered species or environmental threats, this one is not only about fish and rivers -- it's about us.¶ The policy deadlock that has resulted from the debate among stakeholders along the Columbia and the Snake -- aluminum smelters, the Bonneville Power Administration, politicians, Indian tribes, states, conservation groups, fishermen, barge operators, agribusiness and wheat farmers -- has flushed billions of taxpayer dollars out to sea over the last 15 years while doing very little to prevent 13 endangered salmon stocks from going extinct.¶ In March, the federal judge responsible for herding all these cats toward a scientifically based solution that meets the requirements of the Endangered Species Act announced that he had heard enough bickering. District Judge James Redden summoned all the stakeholders to his courtroom in Portland, Ore., with the edict to take "aggressive action" and that "now is the time to make that happen."¶ In addition to being the judge in this case, Redden acts as the government's "special master" for the Columbia River basin, a network of rivers and streams that fans out over an area the size of France. In that role, he has the final say on any proposed changes to fish habitat and the uses of the rivers' payload: water.¶ At the March meeting in his courtroom, Redden wore both hats and congratulated all sides for getting "very close" to a final rescue plan for the fish. After losing precious years to political infighting and foot-dragging by the Clinton and Bush administrations, Redden noted that much progress had been made in recent years in formulating a workable plan -- "a biological opinion" -- to keep the salmon from becoming extinct.¶ However, he warned, there were still problems with the plan. For one thing, government scientists had relied too heavily on statistical sleight of hand to support their argument that endangered fish were trending toward recovery. For another, the removal of four dams on the lower Snake River must be included in the recovery plan in case all other remedies fail.¶ There it was. Out in the open and on the table. Dam removal -- a remedy that the Bush administration had rejected out of hand -- was back in play. Fax machines across the region came to life when Redden's letter reached the stakeholders.¶ "Federal law doesn't allow dam removal, and no Democrat-politician-turned-activist-judge can rewrite the law," wrote Rep. Doc Hastings (R-Wash.) The Northwest River Partners expressed dismay, and the Portland Oregonian's editorial board described Redden's letter as "puzzling."¶ "The letter is strongly critical of the key strategy in the plan to focus on habitat improvements to offset the harm that federal power-generating dams inflict on fish," the Oregonian wrote, expressing surprise at such a reaction while conveniently ignoring the fact that billions of dollars spent on habitat improvement, fish ladders and barging young fish around dams have done very little to increase salmon populations.¶ If anything, these measures have lengthened the odds against the salmon's survival by shifting the focus away from more politically explosive solutions, such as dam removal. Redden first issued his warning about the dams in 2004, when he threw out the first Bush rescue plan.¶ Politicians and stakeholders have steadfastly resisted the painful solution of dam removal while hoping for a miracle. That hope turned out to be a one-way road on a dead-end street, and in many respects they're now blaming the court for their current predicament. With few exceptions, the region's politicians, past and current, have been challenging the recommendations of scientists (including dam removal and increasing the spills over the dams) for more than a decade. Former Sen. Gordon Smith (R-Ore.) famously vowed to chain himself to a dam rather than surrender, a prospect relished by many conservation groups.¶ Throughout this stalemate, fish counts have continued to fall, and the underlying science is clear: In river after river where dams have been removed, native fish populations have rebounded and thrived. As the government's former chief aquatic biologist, Don Chapman, concluded, dam removal is the most effective strategy for saving endangered native fish stocks from extinction.

### Salmon: Key to Orcas

#### **Salmon are key to Orca whales**

Berta 20011 (last cited date) (Susan, Co-Founder of the Orca Network, “You Voice”, <http://www.workingsnakeriver.org/index.php?option=com_content&view=article&id=172&Itemid=205>)

The National Oceanic and Atmospheric Administration's NOAA's current plan to restore endangered salmon in the Snake River conspicuously avoids dam removal, even though that's an essential step if we wish to even stabilize those critically important salmon runs. These salmon are essential for the survival of the also endangered Southern Resident orcas.
Marine biologists have learned in the past few decades that there are multiple communities of orcas that each have their own social systems, mating patterns, vocalizations and diet. In just the past few years scientists have found that Southern Resident orcas survive on Chinook salmon almost exclusively.

Between 1995 and 2001 this clan of orcas declined by 20% to a precarious 78 individuals. The decline has been directly correlated with precipitous drops in Chinook salmon numbers during those years. Historically these orcas have depended on upper Columbia and Snake River Chinook for winter sustenance. Clearly, if salmon from the Snake River continue to decline as they have since the four dams were completed, the orcas will also decline.

## Biodiversity (General / Theoretical)

### Biodiversity Down Now: Tipping Point

#### Biodiversity is approaching the tipping point, now is key

Terra Daily 6/11/12 (Staff writers, TerraDaily: News About Planet Earth, <http://www.terradaily.com/reports/Study_predicts_imminent_irreversible_planetary_collapse_999.html>)

Using scientific theories, **toy ecosystem modeling and paleontological evidence as a crystal ball, 18 scientists**, including one from Simon Fraser University, **predict we're on a much worse collision course with Mother Nature than currently thought. In Approaching a state-shift in Earth's biosphere,** a paper just published in Nature, **the authors, whose expertise span a multitude of disciplines, suggest** [**our planet's**](http://www.terradaily.com/reports/Study_predicts_imminent_irreversible_planetary_collapse_999.html)**ecosystems are careening towards an imminent, irreversible collapse. Earth's accelerating loss of biodiversity, i**ts climates' increasingly extreme fluctuations, its ecosystems' growing connectedness and its radically changing total energy **budget are precursors to reaching a planetary state threshold or tipping point**. Once that happens, which the authors predict could be reached this century, the planet's ecosystems, as we know them, could irreversibly collapse in the proverbial blink of an eye.

### Wetlands: Dams Bad (2AC Add-on)

#### Dams regulate the natural flow of rivers, which destroys riparian zones and reduces rates of production and adaptation

Higgs et al 02 (Stephen Higgs of American Rivers, edited by Elizabeth Maclin and Margaret Bowman of American Rivers and Angela Bednarek of the University of Pennsylvania, “The Ecology of Dam Removal”, <http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf>)

Ecological Consequences of Dams Dams dramatically alter a river’s flow regime by blocking a river’s passage, storing water in both large and small artificial reservoirs, 4 and disrupting the cycles that many aquatic organisms depend upon. Bednarek’s paper points out that in rivers that have a regulated flow, dam releases are often timed to meet human demands for water supply, navigation, power production, and recreation, 5 disregarding the needs of the stream’s aquatic organisms. Consequently, altered fluctuation in flow caused by dams can result in an aquatic community limited to a few generalist species that are able to withstand the altered flow conditions of the river. In many cases, dams that produce hydroelectricity regulate rivers with an unnaturally high range in flow. 6 For example, the Tennessee Valley Authority (TVA) regulates the Ocoee River in the southeastern United States for white-water recreation, while at other times of the year TVA drains and redirects the river for power generation. 7 While flow fluctuations on the Ocoee River are seasonal, in many other cases, the flow regime on rivers is altered daily or hourly. Regulated seasonal, daily, and hourly flow management programs are damaging to river ecosystems, physically scouring aquatic organisms and reducing populations of river fauna. 8 Withholding water from the streambed for long or frequent periods further reduces river health by inhibiting riparian vegetation growth and stranding insects, fish, and bird nests. 9 Ecological Benefits of Dam Removal Bednarek’s paper indicates that **when natural flow fluctuations are restored to a river, biodiversity and population densities of native aquatic organisms increase. For example, Florida’s Dead Lake Dam on the Chipola River regulated the river to a more constant flow when compared to pre-impoundment flow conditions. Once the dam was removed, fluctuations in the natural flow of the river increased, and the diversity of species nearly doubled from 34 to 61 aquatic species**. 10 It is likely that the successful rebound of aquatic species diversity on the Chipola River is closely related to habitat restoration created by restoring the natural flows to the river. Following dam removal and during the naturally restored low flow periods of the river; vegetation growth (i.e., alligatorweed) recovered in the river. 11 This increase in vegetation improved the spawning habitat for largemouth bass and other native fish to the area, and may have been a factor in boosting fish populations. 12 In another example, **officials released a large flood from the Glen Canyon Dam on the Colorado River in 1996, one of the goals being to restore habitat for aquatic species**, which historically have depended upon the rivers naturally occurring and periodic high flows. **Studies following the release indicated that some restoration of beaches and riverine habitat occurred.** 13 According to Bednarek’s report**, wetlands adjacent to rivers also benefit from dam removal. Studies to remove the Rodman Dam in Florida stressed the need to restore natural flows, which serve to inundate terrestrial areas, such as flood plains. If the dam were to be removed, riparian areas would likely flood more frequently, promoting riparian plant growth, revitalizing inland wetlands, and creating small ephemeral ponds which serve as nurseries for aquatic species. Furthermore, the rise in riparian vegetation would create new habitat and food for a wide range of species**, including Florida’s endangered panthers and black bears. 14 Coastal rivers can also be positively impacted by dam removal. Many dams prevent ocean tidal surges and sea-run fish from moving upstream; most migratory fish rely on these same tidal surges to transport themselves from estuaries and coastal regions into upstream spawning habitat. 15 Removing dams on coastal rivers can dramatically enhance reproductive rates for aquatic organisms that depend on the movement of tides to help them to return to coastal breeding areas. For example, the removal of the Edwards Dam on the Kennebec River in Maine provided coastal fish populations access to previously impounded upstream habitats, including head of tide habitat. Now that the dam has been removed, as expected, regional populations of striped bass, Atlantic and shortnosed sturgeon, smelt, American shad, and blueback herring have increased, in some cases significantly, due to the re-establishment of the natural interaction between the river and the sea. 16

#### Even small wetland destruction collapses the global hydrological cycle

May 2005 (Jonathan, JD – University of Maryland Law, “The Current Status Of Clean Water Act Jurisdiction And The Future Of Non-Tidal Wetlands Protection: A Call To Protect 'Isolated Wetlands'”, University of Baltimore Journal of Environmental Law, Spring, 12 U. Balt. J. Envtl. L. 127, Lexis)

In the Prairie Pothole region, for example, isolated wetlands are responsible for the production of approximately half of all waterfowl in the U.S. 33 Wetlands' hydrologic function of recharging dwindling aquifers and other water sources becomes particularly important in non-tidal areas of the American West, where access to navigable water is limited, and aquifers are slowly emptying. 34 Simply because isolated wetlands tend to be small and 'isolated' from other waters does not mean they lack significant value or use; in fact, small acreage wetlands have been noted to have proportionally equal benefits in terms of pollution reductions as larger wetlands. 35 Moreover, any separation of [\*133] these 'isolated' wetlands from other wetlands is artificial, since the term 'isolated wetland' is a legal construct created for jurisdictional purposes only under federal law; there is no scientific corollary to what it is thought of legally as an 'isolated' wetland. 36 Therefore, there is a lack of scientific data on exactly what role such 'isolated' wetlands can play in the environment and economy. 37 Nonetheless, given the vital role of all wetlands, even small ones that seem geographically isolated, they can have significant effects on the world around them and deserve protection.

#### The impact is extinction

Karner 98 (Dr. Frank D., Professor of Geology and Geological Engineering – University of North Dakota, “Hydrologic Cycle”, Earthscape, 1-26, http://www.und.nodak.edu/instruct/eng/fkarner/pages/cycle.htm)

Water's molecular arrangement is very simple, two hydrogens to each oxygen atoms, but this is misleading. Water has many unique properties that allow it to be such a universal material. One special characteristic of water is its ability to change state very easily under Earth conditions. It can be found readily on the planet in all of its three forms, solid, liquid, and gas. These forms also play a great part in the hydrologic cycle. Now, exactly what is the hydrologic cycle.? The hydrologic cycle takes place in the hydrosphere, this is the region containing all the water in the atmosphere and on the surface of the earth. The cycle is the movement of water through this hydrosphere. How the entire process is very simple, divided in to five parts Condensation Infiltration Runoff Evaporation Precipitation The process begins with condensation, when water vapor condenses in the atmosphere to form clouds. Condensation occurs when the temperature of the air or earth changes. Water changes states when temperatures fluctuate. So when the air cools enough, water vapor has to condense on particles in the air to form clouds. This process is very noticeable on plants as they dew in the morning. As clouds form, winds move them across the globe, spreading out the water vapor. When eventually the clouds can't hold the moisture, they release it in the form of precipitation, which can be snow, rain, hail, etc. The next three stages: infiltration, runoff, and evaporation occur simultaneously. Infiltration occurs when precipitation seeps into the ground. This depends a lot on the permeability of the ground. Permeability is the measure of how easily something flows through a substance.The more permeable, the more precipitation seeps into the ground. If precipitation occurs faster than it can infiltrate the ground, it becomes runoff. Runoff remains on the surface and flows into streams, rivers, and eventually large bodies such as lakes or the ocean. Infiltrated groundwater moves similarily as it recharges rivers and heads towards large bodies of water. As both of these processes are happening, the power of the sun is driving this cycle by causing evaporation. Evaporation is the change of liquid water to a vapor. Sunlight aids this process as it raises the temperature of liquid water in oceans and lakes. As the liquid heats, molecule are released and change into a gas. Warm air rises up into the atmosphere and becomes the vapor involved in condensation. Considering so little of the water on earth is drinkable to people, it is amazing the supply has survived as long as it has. The hydrologic cycle continues to move water and keep sources fresh. It is estimated that 100 million billion gallons a year are cycled through this process. Without this process life on Earth would be impossible. We need it to sustain us and for all of our life processes to function. Without water, life would not be possible on Earth.

### Ecosystems: Dams Bad

#### Dams destroy ecosystems – river connectivity is key

Higgs, JD, now an associate in the Perkins Cole Environment, Energy, and Resources Group, et al, 2002 (Stephen Higgs, then a conservation assistant at American Rivers, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

Ecological Consequences of Dams

A dam disrupts river connectivity and can block passage both up- and downstream for migrating¶ fish and other wildlife. This is the case for sea-run (anadromous and catadromous) fish that¶ migrate between salt and fresh water, as well as for residential fish that move up and down a¶ river to find suitable spawning, rearing and foraging habitat. In addition, dams fragment the¶ river corridor by isolating populations and habitats, altering the river environment both¶ physically and thermally, and **disturbing the interface between land, freshwater, and coastal**¶ **ecosystems**.55 This combined negative impact of dams on aquatic species can adversely impact¶ reproduction.

#### Dams artificially change water temperature which cuts off oxygen for fish

Higgs, JD, now an associate in the Perkins Cole Environment, Energy, and Resources Group, et al, 2002 (Stephen Higgs, then a conservation assistant at American Rivers, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

Ecological Consequences of Dams

Many dams convert fast-moving rivers into slower-moving lake-like habitats with relatively large surface areas. Because of the increase in water depth and decrease in flow velocity created by a dam, a reservoir may separate into several layers of water with varying temperatures, a process known as **temperature stratification**. A reservoir’s top layer of water (epilimnion) will warm and decrease in density, while cooler, denser water will sink to the bottom layer (hypolimnion) of the reservoir. Because many reservoirs are deep, the bottom and top layers often do not mix well, inhibiting gas transfer between the highly oxygenated surface layers and the poorly oxygenated bottom layer. 21 Bednarek’s paper points out that many dams draw water from the cool bottom layer of the reservoir, a process that artificially decreases the temperature of the water that flows out from underneath the dam (tail waters). 22 While many fish prefer cool water, tailwater releases are often devoid of sufficient oxygen to support traditional cold-water fish. In addition, changes in temperature within and downstream of the reservoir can affect species composition, diminishing population densities of some native migrating species. For example, certain fish species have evolved to swim in cool water. If water temperatures warm considerably due to the presence of a dam, these fish populations may be unable to reach upstream spawning habitats because of the inhospitably warm water temperatures created by the dam. In other words, a dam may alter water temperatures in such a way as to create a **thermal block** to fish migration. 23

### Ecosystems: Dam Removal Solves

#### Dam removal key to biodiversity and local environments

**Carney**, JD, **2000** [Peter J. Carney, University of Maine School of Law, Class of 2000. DAM REMOVAL: EVOLVING FEDERAL POLICY OPENS A NEW AVENUE OF FISHERIES AND ECOSYSTEM MANAGEMENT. Washington & Lee Law School, Ocean & Coastal Journal. Volume 5 Number 2. 2000. <http://mainelaw.maine.edu/academics/oclj/pdf/vol05_2/vol5_oclj_309.pdf>] AP

Dam removal proponents seek to reverse the adverse effects that dams have caused to rivers, and ultimately seek to restore riverine and surrounding terrestrial ecosystems to their natural conditions. A publication by American Rivers, a conservation organization, lists the top ten reasons why dams damage rivers: reduction of water levels, blockage of the flow of rivers, the slowing of rivers, alteration of water temperatures, alteration of timing of flows, fluctuating reservoir levels, decreased oxygen levels in reservoir waters, sedimentation, the danger turbines present to migrating fish, and increased predator risk for migrating fish. '' The combined effects of these impacts results in a complete alteration of native biotic communities and results in their replacement by communities composed of nonnative and exotic species.' 2 Impoundments or reservoirs created by dams have dramatic and far reaching effects on both riverine and terrestrial communities. As dams are constructed and the waters behind a dam deepen, less light reaches the riverbed, altering the composition of, first, aquatic plant communities, and subsequently the fish and other species relying on those plant communities for food and protection." Also, as the result of the changing depth of the water, water temperatures change. 4 In the upper water column temperatures rise and may be oxygen rich."2 In deeper waters temperatures are cool and the amount of dissolved oxygen in the water is less. 26 Releases of water from dams will affect the downstream ecosystem as waters of varying temperature and oxygen levels are released, all of which cause stress on downstream inhabitants. 7 This inevitably leads to the displacement of native species by non-native species as fish dependent on fast-moving, cold water, disappear.' Species adapted to the new conditions will arrive to replace them, including bass, carp, walleye, shad, pike, and pickerel. 9 These replacement species disrupt the native fish and subject them to new forms of predation and greater competition for food and shelter.'31 Dams also stop the natural flow of nutrients in the river, as leaves are no longer carried to awaiting insects, and the insects are no longer carried by the waters to foraging fish.'3' The presence of a dam results in the alteration of the river bottom downstream where finer elements are washed away leaving a coarse river bed affecting the ability of some invertebrates to survive in this new habitat. 32 These organisms-mayflies, stoneflies, and caddisflies-are essential food sources for species such as salmon and trout.133 The flow regime employed by a dam operation may also lead to gravel being swept away from the riverbed, denying their use to fish species using such beds as spawning habitat. 134 Water releases by the dam lead to regular fluctuations of water temperature and water level, aggravating all of the above circumstances. 35 The effects of dams are not limited to the riverbed itself; as water levels rise from new projects, large areas of riparian vegetation are submerged. 36 These submerged areas may include important wetland areas that are necessary to filter pollution and contaminants from runoff entering the river, and are also important elements in flood control. 137 Due to fluctuations in water level, plant communities located at the water's edge will often not reestablish themselves around the periphery of a dam project. 38 The water levels in impoundments may fluctuate up to forty feet, 139 resulting in periods of inundation and drying out that make it impossible for new plant communities to colonize. The same results may occur downstream as water releases raise and lower the water level, often leaving riverbanks bare or colonized by non-native species. In the case of coastal rivers, the effects may be as far reaching as ocean beaches and estuarine areas. The reduced amount of sediment being carried downstream results in less sediment being carried to ocean deltas. As a result, the composition of the beds of estuarine areas are affected, and the natural supply of sand replenishing ocean beaches is interrupted. 4 '

### AT: Non-Migratory Fish Key

#### **Dam Removal helps all fish, not just migratory ones**

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

Researchers believe that **dam removal benefits non-migrating fish** and other organisms as well.¶ One study on the removal of the Woolen Mills Dam determined that darter populations likely¶ increased due to improved habitat quality and access to new river regions created by dam¶ removal.60 In addition, smallmouth bass gained access to optimum spawning conditions¶ following the removal of the Woolen Mills Dam.61

### Seed Dispersal: Dams Bad

#### Dams destroy riparian zones which are key to seed dispersal and biodiversity

Jansson, Landscape of Ecology Group at Umed University, et al, 2000 (Roland Jansson, Christer Milsson, and Birgitta Reno, Landscape of Ecology Group at Umed University, Sweden, “Fragmentation of Riparian Floras in Rivers with Multiple Dams”, Ecological Society of America Journal, [http://www.esajournals.org/doi/pdf/10.1890/0012-9658(2000)081%5B0899:FORFIR%5D2.0.CO%3B2)](http://www.esajournals.org/doi/pdf/10.1890/0012-9658%282000%29081%5B0899%3AFORFIR%5D2.0.CO%3B2%29)

Riparian zones are among the most diverse, dynamic, and complex habitats on the world’s continents (Naiman and De´camps 1997). Rivers and their adjoining riparian zones are considered to be the most important corridors for movements of animals in natural landscapes (Forman and Godron 1986, Malanson 1993). Natural riparian zones are also effective pathways for plant dispersal: the rivers carry large numbers of plant diaspores over long distances (Schneider and Sharitz 1988, Nilsson et al. 1991b, Johansson and Nilsson 1993), and riparian zones are rich in water-dispersed plants (Johansson et al. 1996) and rapidly spreading exotics (Planty-Tabacchi et al. 1996). **Rivers are increasingly fragmented by dams** (Dynesius and Nilsson 1994), **potentially disrupting natural dispersal pathways and causing changes in riverine communities** (Hanson et al. 1990, Zwick 1992, Fahrig and Merriam 1994). Such alterations have however been documented only for migratory ﬁsh (Petts 1984). **Many rivers have been converted to stairs of lakelike water bodies interrupted by dams and underground passages. Dams are barriers to the movement of ﬁsh** (Petts 1984) **and waterborne vascular-plant diaspores** (Nilsson et al. 1993), **and regulated riparian zones harbor fewer vascular plant species than free-ﬂowing ones** (Nilsson et al. 1997). In free-ﬂowing rivers (Fig. 1A), ﬂoating diaspores are rapidly transported far downstream during ﬂoods (Nilsson et al. 1993). This effective dispersal is hypothesized to homogenize the ﬂoristic composition among riverbank sites, because any riverbank site may be colonized by species from a large portion of the river valley. In impounded rivers (Fig. 1B), current velocity is low and ﬂoating diaspores either sink or become swept ashore by winds. A few diaspores may pass dams through turbines or spillways. Long ﬂoaters are more likely to pass, because passages are hard to hit, and long ﬂoating-times increase the probability of success. Short ﬂoaters may be absent from impoundments because they fail to recolonize after local extinction (Fahrig and Merriam 1994). Riverbanks will thus be colonized by species from other sections of the same impoundment and from surrounding uplands rather than by species from upstream areas. We hypothesize that in rivers fragmented by dams, riparian ﬂoras will become more similar among sites within an impoundment than among sites between impoundments (Fig. 1B). In contrast, in free-ﬂowing rivers with effective dispersal, equivalent differences between adjacent slow-ﬂowing reaches are not expected. Instead, ﬂoristic transitions are hypothesized to be gradual along the river (Fig.

1A).

### Sediment: Dams Bad

#### Lack of sediment inhibit aquatic life: in the streams and coasts

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

SEDIMENT RELEASE AND TRANSPORT

Sediment transport in a river is vital to riparian and riverine habitats and species. Most free¶ flowing rivers are characterized by wide fluctuations in flow, which affects sediment transport¶ and creates unique and diverse habitats for species. Large flows serve to erode small, nutrientrich¶ sediments from a river and its shoreline, **depositing this material downstream and in rich**¶ **coastal breeding grounds** such as estuaries. These same flows transport and redistribute larger¶ sediments and boulders, creating new and more diverse habitat for aquatic species. Studies have¶ shown that variations in sediment sizes transported by a river **promote species diversity** and¶ aquatic health by increasing the variety of habitats for feeding, spawning, and breeding. Some¶ fish species, for example, require varying habitats that change seasonally and throughout their¶ lifetime. During the high river flows typical of summer, the adults of certain species feed in¶ riffles with small cobbles.27 In wintertime, however, these adults inhabit small pools with slower¶ moving current. Additional studies have also shown that salmonid fish rely on varying sediment¶ types for spawning.28

#### Dam removal is key to restoring down and upstream sediment, which restores ecology

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

Ecological Consequences of Dams As indicated in Bednarek’s paper, dams block the movement of sediment within a river,¶ depositing much of the material behind the dam and altering the river’s habitat.29 Sediment¶ accumulation behind a dam restricts the amount and types of sediment that reach areas¶ downstream, as well as the habitat available within the reservoir. Furthermore, because dams¶ restrict the flow of rivers, dammed rivers often can no longer distribute large material such as¶ boulders and cobble downstream. Once a dammed river has lost the ability to transport large¶ materials, **the streambed begins to rise,** exacerbating habitat loss within the reservoir. 30 In¶ addition to rising streambeds, smaller material (i.e., sand and silt) often settles close to the dam¶ and slowly fills the reservoir, a process that often severely limits hydropower operations, water¶ storage, and flood control.31Dams reduce the amount of sediments deposited downstream, creating an adverse effect on¶ downstream aquatic species and their habitats.32 Because dams force sediments to settle to the¶ bottom of the streambed, the waters that eventually pass through a dam are “sediment starved”¶ and are also known as “clear-water releases”. Downstream of a dam, sediment-starved rivers¶ often regain sediments lost behind a dam by eroding deeper into the river channel and away at¶ the stream banks.33 Consequently, the river channel may become coarse, encouraging stream¶ bank erosion and the disappearance of riffles.34 By limiting access to water, dams can also¶ exacerbate channel scouring, a process which may lower groundwater tables and negatively¶ impact riparian habitats.35 Together, stream-bank erosion and channel incision can render the¶ remaining river habitat inhospitable for many organisms, altering the community of species that¶ live in the stream.36 Finally, because rivers transport much of the sediments that create coastal¶ habitats, impounding rivers and their sediments **can exacerbate the loss of shoreline habitats** that¶ depend on continued sediment transport.

Ecological Benefits of Dam Removal Dam removal often redistributes sediments trapped behind a dam, **restoring the river and its¶ riverine habitats to pre-dam condition**s, according to Bednarek. Following the removal of the¶ Woolen Mills Dam on the Milwaukee River in Wisconsin, the percent of rocky substrate¶ compared to silt and mud found in the former impoundment significantly increased.37 In¶ addition, once the dam was removed, native fish such as smallmouth bass increased in number, a¶ positive trend that can be attributed to the reintroduction of larger and more course sediments to¶ the river habitat.38 As shown in the Woolen Mills case, dam removal allows for the freer¶ movement of sediments (i.e., sand, gravel, and cobbles), and can restore river sedimentation¶ patterns in the reservoir basin and downstream from the dam. Following dam removal, gravel and cobble upstream from the dam (i.e., the old reservoir basin),¶ may become re-exposed, as rocky materials that were previously covered under fine sediments¶ are washed downstream. Re-exposing gravel or cobble in the riverbed often **provides new**¶ **colonization habitat for aquatic insects and revitalized spawning habitat for fish.** For example,¶ the removal of the Stronach Dam on the Pine River in Michigan is expected to erode sand that¶ has covered nearly 4 km of upstream river habitat, thereby re-exposing the natural gravel/cobble¶ substrate that native trout strongly prefer.39 In the case of the Edwards Dam on the Kennebec,¶ approximately 18 miles of riverine habitat was recovered. Dam removal restored spawning¶ habitat above the dam for ten species of sea-run fish, exposed six separate runs of reestablished¶ riffle/pool sequences, varying speeds in river current, and a varied substrate.40

#### Sediment restores coastal beaches

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

Dam removal can play a key role in restoring sediments to coastal beaches as well. The Elwha¶ Dam and Glines Canyon Dam in Washington State have trapped many of the fine sediments that¶ historically accumulated along shoreline beaches, resulting in beach erosion.41 Non-native¶ species such as kelp and barnacles have also benefited from the obstruction of sediments behind¶ these dams. These two species have grown at alarming rates and have overcome native species¶ in the Strait of Juan de Fuca. Sediment obstruction caused by these dams has also exacerbated¶ the loss of critical estuaries, the nurseries for many fish and shrimp.42 Studies predict that¶ removal of the two Elwha River dams is likely to restore the natural sediment movement, thus¶ reversing the negative impacts of coastal sediment loss. Both of these dams on the Elwha River¶ are scheduled for removal, pending funds to be appropriated by Congress.

#### Sediment solves overpopulation of species like Kelp

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

Dam removal can play a key role in restoring sediments to coastal beaches as well. The Elwha Dam and Glines Canyon Dam in Washington State have trapped many of the fine sediments that historically accumulated along shoreline beaches, resulting in beach erosion.41 Non-native species such as kelp and barnacles have also benefited from the obstruction of sediments behind these dams. These two species have grown at alarming rates and have overcome native species in the Strait of Juan de Fuca. Sediment obstruction caused by these dams has also exacerbated the loss of critical estuaries, the nurseries for many fish and shrimp.42 Studies predict that removal of the two Elwha River dams is likely to restore the natural sediment movement, thus reversing the negative impacts of coastal sediment loss. Both of these dams on the Elwha River are scheduled for removal, pending funds to be appropriated by Congress.

### AT: Sediment Release Bad for Biodiversity

#### Sediment is good for river life both aquatic and land animals

Rice 7/14/2012 (July 14. 2012, Arwyn Rice Peninsula Daily News, “Researchers excited by early signs of Elwha changes”, http://www.peninsuladailynews.com/article/20120715/NEWS/307159999/researchers-excited-by-early-signs-of-elwha-changes)

¶ ¶ Glines Canyon Dam¶ ¶ As for Glines Canyon Dam, which has been reduced to about half of its initial 210-foot height, demolition was on hold throughout May and June to protect salmon runs.¶ ¶ During the time the fish are migrating up and down the river, work on the river is stopped to minimize the amount of sediment the fish have to deal with.¶ ¶ This month, crews began blasting sections from the top of the dam, increasing the flow and the sediment load carried downstream.¶ ¶ Another “fish window” begins in August.¶ ¶ Because of the large amount of sediment in the river, scientists have been concerned for the fish traveling up the river and for underwater life at the mouth of the river. ¶ ¶ However, those studying the river believe that **in the long run, the release of sediment** that had been trapped behind the Elwha and Glines Canyon dams **could bring even more life back to the area** — and **possibly even rebuild beaches** and much of Ediz Hook.¶ ¶ Shorelines now littered with cobblestones were once long, sandy beaches supporting clams and **other beach animals.**¶¶ It's more than beaches, Miller said.¶ ¶ Mud flats are starting to form inside the river mouth. They will, in the future, **support other animal life.**¶ ¶ “The plume is a part of putting the system back together,” Miller said.¶ ¶ The amount of sediment to be deposited from the dam removal is the equivalent of a 100-year or 500-year event, he said.¶

#### No impact: sediment will be contained

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

One concern of the dam removal process is the short-term increase in turbidity and water quality¶ problems that may occur if sediment accumulation is not addressed properly. Bednarek’s paper¶ suggests that many dams accumulate fine silt and sand sediments in their impoundments.43¶ Following dam removal, much of this sediment may become re-suspended into the free-flowing¶ river (whether or not the sediment becomes mobilized depends on the conditions of removal and¶ the nature of the substrate).44 This short-term influx of sediments into the stream flow can¶ damage spawning grounds,45 and negatively impact water, habitat,46 and food quality.47 If the¶ sediments contain toxics, impacts from dam removal can be more significant. Contaminants,¶ which can attach well to smaller sediments, can pose a threat to downstream habitats and fish¶ and wildlife.48 For example, when the Fort Edwards Dam on the Hudson River in New York¶ was removed in 1973, sediments containing PCB (polychlorinated biphenyl) were released¶ downstream.49 With careful studies and planning, scientists and decision-makers **will be able to¶ mitigate for the potential downstream effects** of contaminated sediments caused by dam removal.¶ Fortunately, most commonly re-suspended sediment from the dam removal process has hada temporary effect on rivers**.** Several studies show that following dam removal, sediments have¶ successfully been flushed out of river channels and natural sediment transport conditions have¶ resumed.50 **Within one week**, much of the silt and sediment that had been stored behind the¶ Grangeville and Lewiston Dams on Idaho’s Clearwater River was washed downstream, despite¶ the fact that the Lewiston Dam’s reservoir was completely filled with sediment prior to¶ removal.51 In other cases, flushing sediments downstream is a slower process. It is estimated¶ that it may take 50-80 years to flush stored sediments downstream following the removal of the¶ Newaygo Dam on the Muskegon River in Michigan.52 Timing dam removals carefully can be¶ one of the best tools to mitigate for the negative short-term impacts of dam removal. The¶ Grangeville Dam in Idaho was removed before the spring run-off in order to limit the negative¶ impact of stored sediments moving downstream.53 Gradually drawing down the reservoir,¶ trapping sediments in screens, and channel dredging of the reservoir sediments are other¶ techniques used to reduce the short-term impacts of sediments on downstream habitats following¶ dam removal.54

#### Other dams prove

Rice 7/14/2012 (July 14. 2012, Arwyn Rice Peninsula Daily News, “Researchers excited by early signs of Elwha changes”, http://www.peninsuladailynews.com/article/20120715/NEWS/307159999/researchers-excited-by-early-signs-of-elwha-changes)

PORT ANGELES — A huge plume of muddy water, fed by sediment released by dam-removal efforts, is spewing from the mouth of the Elwha River, turning some of the blue Strait of Juan de Fuca brown.¶ Already, scientists studying the effects of the $325 million Elwha River Restoration Project, which includes the removal of the Elwha and Glines Canyon dams, have **seen early signs of some of their most hoped-for changes** caused by tons of sediment being moved downstream — years before they expected anything.¶ Faster than expected ¶ **Everything is happening faster than expected** in the project to return the Elwha River to its wild state, said scientists studying fish and sediments and the dam-demolition contractor.¶ **“So far, that's the story of this dam removal,”** said Ian Miller, a coastal hazards specialist with Washington Sea Grant.¶ Miller is studying the effects of the increased river sediment on areas of the coast that have been eroding.¶ He said researchers hope the sediment being deposited will at least slow down the speed at which land is disappearing.¶ Once a sandy beach existed just east of the Elwha River mouth.¶ It hasn't been there for at least the past 50 years, according to photographic evidence.¶ “In the last 15 to 20 years, erosion has taken 12 feet per year,” Miller said.¶ “If the sand keeps coming, it might start to reverse that.”¶ During one of the most recent trips out to the areas under study, Miller found sand beginning to accumulate on the low-tide terrace — in small amounts.¶ “Just seeing it down there is a big deal,” he said.¶ In June, fish biologists spotted wild steelhead in tributaries above the site of the former Elwha Dam.¶ **It was much earlier than they had expected to see fish return to the river.**¶ Another aspect moving more quickly than expected is the dam demolition itself.¶ Barnard Construction personnel have noted that Elwha Dam came down more quickly and easily than expected.¶ Dam removal began in September, and Elwha Dam was completely removed in March.

## Flooding

### Dam Removal Solves Flooding

#### Dam Removal improves flood control, and prevents devastating flooding

MDEP 2007 (December 2007, Massachusetts Department of Environmental Protection, Bureau of Resource Protection, and Wetlands/Waterways Program, “Dam Removal and the Wetland Regulations”, http://www.mass.gov/dep/water/resources/dampol.pdf)

Dam removal can significantly improve the flood control and storm damage prevention¶ functions of wetland resource areas by restoring the natural ability of the riverine system to¶ moderate flow and absorb floodwaters. Except for dams specifically designed for flood control,¶ most dams do not provide flood control benefits and their removal may actually alleviate¶ upstream flooding while eliminating potential catastrophic dam failures. An unanticipated¶ failure of a dam will result in much more severe impacts than a prudently planned dam removal.¶ Preservation of human-made ponds formed as a result of a dam require dam maintenance¶ in perpetuity. Unless there is a reason to preserve the human-made impoundment, such as¶ an endangered species living in the impoundment, prevention of erosion of contaminated¶ sediments or to protect against downstream flooding, then replacement of the “impoundment”¶ wetland with a “riverine” wetland may be preferable in order to restore the natural ecosystem¶ functions. As part of dam removal planning, down stream hydrology should be assessed both¶ short-term (during the actual dam removal and a few days after) and long-term (permanent¶ hydraulic change). The hydrolgic assessment must include an analysis as to whether the dam¶ removed will increase the horizontal or vertical extent of flooding downstream.

#### Stops flooding

Juliet Eilperin, 2011 (The Washington Post, Sept. 19, 2011, “Dam removal in Washington another step in part of growing movement”, http://bangordailynews.com/2011/09/17/environment/dam-removal-in-wash-part-of-growing-movement/)

In some cases the removals have delivered human benefits as well as ecological ones. Purinton’s division and its partners spent $650,000 to remove the Briggsville Dam in Clarksburg, Mass., this year, $100,000 less than what it would have cost to bring it up to code. In past years, the dam had raised the river’s level, which caused it to jump its banks during storms. Last month the town avoided flooding from Hurricane Irene because the dam was gone, he said.

## Solvency

### Army Corps Should Remove the Dams

#### **The Army Corps should remove the lower Snake River dams- most economical and effective**

Bremerton Sun 2004 (“Report criticizes Columbia deepening, Snake River dams,” March 19, 2004, [http://resource.isvr.soton.ac.uk/FDAG/Cross-faculty%20UAUA%20centre/Media%20stories/whale%20bubble%20net%20media%20etc/Orca%20Network%20-%20News%20Network,%20March%202004.htm](http://resource.isvr.soton.ac.uk/FDAG/Cross-faculty%20UAUA%20centre/Media%20stories/whale%20bubble%20net%20media%20etc/Orca%20Network%20-%20News%20Network%2C%20March%202004.htm), LVS)

Projects to deepen the Columbia River and barge salmon around four Snake River dams were singled out for criticism Thursday in a national report by an environmental group and budget watchdog. ¶ The National Wildlife Federation and Taxpayers for Common Sense say the two Pacific Northwest projects are among 29 across the nation where the U.S. Army Corps of Engineers risks damaging the environment for little tangible economic benefit. ¶ The Lower Snake River Navigation project in Washington, Idaho and Oregon is listed as the third most-wasteful in the country, while the Columbia River deepening in Washington and Oregon is ranked 10th. Instead of spending tens of millions of dollars every year to move endangered salmon by truck or barge, the Army Corps should remove the Snake River dams as "the most economical and effective solution to stop the hemorrhage of taxpayer money and save the salmon," the report said. Similarly, the report said the corps should abandon plans to deepen the Columbia River channel by 3 feet to allow larger cargo ships to reach ports as far as inland as Portland, Ore. The $136 million dredging project "will pose a new threat to salmon and steelhead survival while overestimating its economic benefits to taxpayers," the report said.

#### Army Corps dams are failing

Melissa Samet, Senior Director of Water Recourses at American Rivers, 2009, “A Citizen’s Guide to the Corps of Engineers,” American Rivers, http://www.americanrivers.org/assets/pdfs/reports-and-publications/citizens-guide-to-the-corp.pdf

Two National Academy of Sciences panels and the Department of the Army Inspector ¶ General have concluded that **the Corps has an institutional bias for approving large and ¶ environmentally damaging structural projects, and that its planning process lacks adequate ¶ environmental safeguards.¶** **Less environmentally damaging, less costly, nonstructural ¶ measures that would result in the same or better outcomes are routinely ignored or given ¶ short shrift**. This results in projects that are unnecessarily destructive, costly, and, in many ¶ cases, simply not needed. ¶ **As communities and wildlife suffer the increased storms, floods, and droughts being wrought ¶ by global warming, it is more important than ever to transform the Corps’ civil works ¶ program. Healthy rivers, wetlands, and coastlines provide the first line of defense against ¶ flooding, improve water quality, recharge groundwater, provide outstanding recreational ¶ opportunities, and provide vital habitat for fish and wildlife. Protecting and restoring these ¶ vital resources must become the primary objective for the Corps’ civil works program**.

### AT: Army Corps Economic Consequences Study

#### No negative economic impact – the Army Corps study used flawed metrics

Poff and Hart 2002 (How Dams Vary and Why It Matters for the Emerging Science of Dam Removal, DAVID D. HART, PHD University of Maine, <http://www.fws.gov/habitatconservation/Dams.pdf>, and LeRoy Poff - College of Natural Sciences - Colorado State University, US Fish and Wildlife service bioscience journal August 2002 / Vol. 52 No. 8)phol

The Corps overestimated the negative employment consequences of bypassing the dams because it failed to account¶ for the economic forces and trends acting on the relevant¶ economies. The tool the Corps employed to estimate the¶ impact of breaching on jobs and incomes “presents a picture¶ of the economy at a single point in time,”the Corps states, and¶ that point is 1995 (USACE 1999b, p.I6-5). Furthermore,the¶ Corps assumes “the long-run effects are permanent and continue for the 100-year period analyzed in this study”(USACE¶ 1999b, p. I6-3). In other words, the Corps assumed that the¶ basic structure of the economy would remain fixed in its¶ 1995 form, unchanged for the next 100 years. For example,¶ the Corps estimated a maximum of 2256 jobs would be lost¶ in irrigated agriculture (figure 1).To arrive at 2256,the Corps¶ Figure 1. Employment impacts of the bypass. Adapted by ECONorthwest with data from ¶ USACE (1999b).ssumed that, when breaching the dams eliminates reservoir water for irrigation, the affected 13 corporate farms¶ would take out of production all 37,000 acres of their farmland. This assumption ignores other possible outcomes, including switching to groundwater, adopting different irrigation practices, and altering crops.In effect,the Corps assumed¶ that the owners of these corporate assets would quit and the¶ assets would remain idle for 100 years. Furthermore, the¶ Corps assumed, in effect, that for the next century, those¶ who lost their jobs as a result would never work again; local¶ and regional firms that otherwise would have sold goods¶ and services to those who lost their jobs instead would lose¶ those sales and wouldn’t find replacement sales; owners of the¶ farming enterprises wouldn’t switch to any other economic¶ activities; and those throughout the chain who lost their jobs¶ would act exactly the same way as the original job losers in¶ that they would never work again.¶ The Corps’rigid analytical structure produces an extreme¶ worst-case scenario, unsupported by economic theory or by¶ the historical performance of the local and regional economies.¶ The Corps’ analysis freezes all economic interactions in 1995.¶ Such a constraint ignores the dynamic adjustments that¶ economies—employees and employers, buyers and sellers,¶ savers and investors, and all other economic decisionmakers—¶ undertake all the time. For example,since the four dams began service,the agricultural sector experienced four major contractions, each of which affected more than 2256 workers,the¶ maximum that breaching the dams would affect, the Corps¶ predicts. And yet the local and regional economies have expanded steadily during this period (USDC 1998, ECONorthwest 1999).¶ These data and economic trends indicate that a snapshot¶ of lost jobs at a point in time tells very little about how a real¶ economy reacts to the breaching of four dams or any other¶ changes. Such rigid and unrealistic assumptions cannot produce a credible forecast of economic consequences under¶ the breaching scenario.

### Judge Redden Quals

#### Judge James A. Redden Was the Attorney General of Oregon and worked on the Dams case for more then 10 years.

FJC No Date (<http://www.fjc.gov/servlet/nGetInfo?jid=1977&cid=138&ctype=dc&instate=or>, Federal Judicial Center, History of the Federal Judiciary)phol

U.S. Army, 1946-1948

Private practice, Springfield, Massachusetts, 1954-1955

Title examiner, Title & Trust Insurance Company, Oregon, 1955

Claims adjuster, Allstate Insurance Corporation, 1956

Private practice, Medford, Oregon, 1956-1972

Oregon state representative, 1963-1969

House minority leader, 1967-1969

Chairman, Public Employee Relations Board, 1969-1972

State treasurer, Oregon, 1973-1976

State attorney general, Oregon, 1977-1980

## Counterplan Answers

### AT: Breaching CP

#### **Fish passages fail – delays and predation**

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

Ecological Benefits of Dam Removal¶ Reproductive success, which often depends on appropriate timing for reaching spawning or¶ breeding habits, can be improved by the removal of dams that prevent the migration of aquatic¶ organisms, according to Bednarek’s report. Furthermore, **dam removal decreases the risk of**¶ **mortality** for organisms that would otherwise have to pass through dams. For instance, many¶ dams across the United States have no fish passage structures; removal of these dams allow¶ migratory and resident fish populations to gain access to habitats blocked off by dams.¶ On dams where **fish passage structures** have been installed, **fish can be injured or killed** when¶ moving up fish ladders or being flushed through turbines.56 Further, **predation is often increased**¶ in the area below fish ladders where fish wait to move up the structure. Additionally, because¶ fish passage structures cause **delays** in **fish migration**, removal of a dam will improve the odds of¶ successful reproduction.57 For example, delays in reproduction cause the American shad to¶ reabsorb its gonads without releasing its eggs or sperm prior to returning to the ocean.58¶ Removing dams will likely boost the recovery of American shad by eliminating the reproductive¶ delays caused by dams. In addition, dam removal benefits many species of fish that cannot use¶ fish passage. **Small fish often encounter difficulty** working their way over a fish passage¶ designed for larger fish, while some fish, such as the Atlantic sturgeon, are so big they cannot¶ rely on fish passage for transportation.59

#### Breaching allows non-native salmon predators

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

The majority of dams transform part of a river into lake-like habitat by creating impoundments¶ of varying size. The slower water flow and larger surface area created by dams can alter the¶ species composition of organisms in the river, favoring slower-moving aquatic species that are¶ better adapted to lake-like bodies of water. For example, along the dammed Snake River in the¶ Pacific Northwest, slow-moving, reservoir habitat has led to an increase in fish species that prey¶ on salmon and steelhead populations, exacerbating the continual decline of these populations¶ along the Snake River.17

#### Water temperature:

#### (a) dams make waters warmer and with less oxygen, preventing the migration of cold-water fish

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

Many dams convert fast-moving rivers into slower-moving lake-like habitats with relatively¶ large surface areas. Because of the increase in water depth and decrease in flow velocity created¶ by a dam, a reservoir may separate into several layers of water with varying temperatures, a¶ process known as temperature stratification. A reservoir’s top layer of water (epilimnion) will¶ warm and decrease in density, while cooler, denser water will sink to the bottom layer¶ (hypolimnion) of the reservoir. Because many reservoirs are deep, the bottom and top layers¶ often do not mix well, inhibiting gas transfer between the highly oxygenated surface layers and¶ the poorly oxygenated bottom layer.21¶ Bednarek’s paper points out that many dams draw water from the cool bottom layer of the¶ reservoir, a process that artificially decreases the temperature of the water that flows out from¶ underneath the dam (tail waters).22 While many fish prefer cool water**, tailwater releases are**¶ **often devoid of sufficient oxygen to support traditional cold-water fish**. In addition, changes in¶ temperature within and downstream of the reservoir can affect species composition, **diminishing¶ population** densities **of some native** migrating species. For example, certain fish species have¶ evolved to swim in cool water. If water temperatures warm considerably due to the presence of a¶ dam, these fish populations may be unable to reach upstream spawning habitats because of the¶ inhospitably warm water temperatures created by the dam. In other words, **a dam may alter**¶ **water temperatures in such a way as to create a thermal block to fish migration**.23¶ Ecological Benefits of Dam Removal¶ While dams may alter a river’s temperature, dam removal can restore a river’s natural water¶ temperature range. One study of the Salling Dam on the AuSable River in Michigan estimated¶ that removal of the dam would reduce water temperatures in the former impoundment and¶ downstream by approximately 3° Celsius, thereby restoring natural water temperatures to the¶ river.24 Unfortunately, there have been few studies measuring the effects of dam removal on¶ water temperature. In making any dam removal decision, it is important that decision-makers¶ properly account for the changes in temperature that a release from the reservoir could impose on¶ the river.

#### (b) That means salmon

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

According to Bednarek’s paper, dam removal can enable the return of native species by restoring¶ the pre-dam, riverine habitats on which native species depend. Following the removal of the¶ Woolen Mills Dam in Wisconsin, high densities of non-native common carp declined, while¶ populations of native species such as smallmouth bass increased.18 In other parts of the country,¶ dam removal often displaces warm-water species that prefer a lake-like environment, while¶ promoting the **recovery of fish populations that prefer colder-water rivers, such as salmon, trout,**¶ **shad, river herring, stripped bass, sturgeon, and alewife.** Other studies on the west coast suggest¶ that dam removal may benefit native aquatic and terrestrial species as well. The removal of two¶ dams on Washington’s Elwha River are expected to restore over 715 acres of terrestrial¶ vegetation, which will improve elk migration corridors and their over-wintering habitats.19

### AT: Spilling CP

#### Spill will not be enough and costs more than dam removal

Barker 12 (Rocky Barker, reporter for the Idaho Statesman, acclaimed environmental writer, April 22, 2012, “Fisheries scientists redefine the salmon debate by trumpeting more ‘spill’”, http://www.idahostatesman.com/2012/04/22/2087353/saving-salmon-without-removing.html#storylink=cpy)

Nicole Cordan, the coalition’s policy and legal director, said the findings are promising for the salmon, but they don’t take dam removal off the table.¶ That’s partly because added spill isn’t enough to recover Idaho’s Snake River sockeye, which nearly went extinct. ¶ Increased spill will cost money, likely making it and other measures necessary for salmon recovery more expensive in the long run than simply removing the four dams, she said.¶ “We’ve always thought the economics and the science pointed to breaching to be the easier option,” she said.

#### Spill will not be enough

Barker 12 (Rocky Barker, reporter for the Idaho Statesman, acclaimed environmental writer, April 22, 2012, “Fisheries scientists redefine the salmon debate by trumpeting more ‘spill’”, http://www.idahostatesman.com/2012/04/22/2087353/saving-salmon-without-removing.html#storylink=cpy)

Charles Petrosky, an Idaho Fish and Game biologist who’s been involved in all of the studies, said **he’s not ready to simply say that increasing spill would be as successful, biologically, as dam removal.**“It may get us into the ballpark,” Petrosky said. “I don’t think it changes the past (conclusions), but it gives us something in between that has a lot of promise, and we ought to explore it.”

### AT: Privatization CP

#### Perm: Do both

#### The neg is in a doublebind: Either the dams aren’t necessary to privatization, in which case there is no net benefit and the CP doesn’t compete, or they are necessary, in which case the CP leaves them in place and solves nothing

**CP Links to Politics – universal resistance**

**Russell 2012** [Pam Radtke Russel, CQ Staff. “No Easy Task to Shift the Balance of Power. CQ Weekly – In Focus. May 26, 2012. <http://public.cq.com/docs/weeklyreport/weeklyreport-000004095161.html>] AP

And lawmakers representing the vast areas served by PMAs resist anything that could threaten that cheap power. Even some of the most conservative champions of free enterprise find themselves defending the big government agencies that one liberal House Democrat recently labeled “socialist.”

**CP Links to Politics – top-down policies always fail**

**Russell 2012** [Pam Radtke Russel, CQ Staff. “No Easy Task to Shift the Balance of Power. CQ Weekly – In Focus. May 26, 2012. <http://public.cq.com/docs/weeklyreport/weeklyreport-000004095161.html>] AP

In the end, virtually every attempt to modernize, streamline, privatize or experiment with the PMAs has failed, underscoring the clout of their congressional allies. The quasi-independent agencies within the Energy Department typically operate from the “bottom up,” with rate increases for power transmission lines and efficiency measures only after lengthy, on-the-record proceedings with public comment. This makes it tough for Washington to impose top-down policies.

### AT: USFG Agent CP

#### Perm: Do the CP – the plan only says that the federal government should do it, and the CP agrees

#### No solvency: broad federal government action is necessary

Maclin and Sicchio, writers for *American Rivers*, 1999

(Elizabeth and Matt, “Dam Removal Success Stories,” http://www.americanrivers.org/assets/pdfs/reports-and-publications/SuccessStoriesReport6f14.pdf)

There are numerous federal, state, and local government

agencies with overlapping layers of authority and responsibility for regulating and overseeing dams on our public waterways. Most federal dams are built and **operated by the Army Corps** or the Bureau of Reclamation. Management decisions for these projects are guided by numerous statutes and specific project authorizations **enacted by Congress**, including the Reclamation Act, Flood Control Act, Water Supply Act, Endangered Species Act, Clean Water Act, and Pacific Northwest Electric Power Planning and Conservation Act. The Army Corps and Bureau of Reclamation **work in consultation with other federal agencies**, such as the Department of Energy’s power marketing division, to control how the dams and associated water and power facilities are operated.

### AT: Fifty States CP

#### The federal government owns the four Snake River dams – the CP can’t do anything unless it mounts a attack like the one on Fort Sumter. That’s Yardley 2012 from the 1AC.

#### Congress must pay and approve the project

Betsy **Otto 2000**, Former Vice Prsident 1999-2011of American Rivers Program, October 2000, “Paying for Dam Removal: A Guide to Selected Funding Sources,” American Rivers, http://www.michigandnr.com/publications/pdfs/Fishing/dams/Paying-Dam-Removal.pdf

Specific Federal Congressional Appropriations **¶ A number of federal agencies can be authorized by Congress to remove specific dams, including ¶ the Army Corps of Engineers**, Bureau of Reclamation, and National Park Service. Usually**, this ¶ funding is for dams owned by the agency and/or located on agency lands.** However, funds have ¶ also been appropriated for removals that are not on agency property. **Each project must be ¶ specifically authorized and Congress** generally **must appropriate specific funds to the authorized ¶ project before the dam can be removed.** For example, in 1992 the National Park Service was ¶ authorized by Congress to purchase two dams from private dam owners on the Elwha River in ¶ Olympic National Park in Washington. The dams block migratory salmon and steelhead runs and ¶ cause other impacts to the river system. Appropriations to purchase and remove the dams are ¶ actively being pursued. In another example, **in 1999 Congress authorized $10 million for the ¶ Army Corps of Engineers to remove the Embrey Dam** on the Rappahannock River in Virginia.

#### States can’t do plan- Army Corps dams funded by Federal government

Nic **Lane 2008**, Anlayst in Natural Resources Policy Recourses, Science, and Industry Division, March 25, 2008, “CRS Report for Congress: Aging Infrastructure: Dam Safety,” Congressional Research Service, <http://www.fas.org/sgp/crs/homesec/RL33108.pdf>

**While the federal government owns less than 5% of NID** (National Inventory of Dams) **dams, more than 30%¶ of all dams in the NID inventory were funded, designed, or constructed with federal¶ resources,** most of them through the Department of Agriculture’s Natural Resources¶ Conservation Service (NRCS). NRCS’s involvement in dam construction stems¶ primarily from the Watershed Protection and Flood Prevention Act of 1954,¶ which¶ authorized it to cooperate with states and local agencies to undertake works of¶ improvement for flood prevention and other purposes. Under this act and an earlier¶ law to build projects in 11 designated watersheds, NRCS has helped build more than¶ 10,000 upstream flood control dams beginning in 1948. These are generally¶ relatively small dams owned by public or private entities other than the federal¶ government. These nonfederal entities are principally responsible for the dams’¶ operation, maintenance, and security.

#### Plan needs congress funding and approval

Melissa **Samet 2009**, Senior Director of Water Recourses at American Rivers, 2009, “A Citizen’s Guide to the Corps of Engineers,” American Rivers, http://www.americanrivers.org/assets/pdfs/reports-and-publications/citizens-guide-to-the-corp.pdf

Certain fundamental criteria apply to each Corps civil works project**. Each project and ¶ project study must be authorized by Congress. Each project and project study must also be ¶ funded by Congress**. Almost every project must have a non-federal sponsor who pays for a ¶ portion of the project’s costs**. Each project must go through a detailed planning process that is ¶ guided by laws, regulations, and guidance specifically applicable to Corps projects.** And each ¶ project must comply with other applicable federal and state environmental laws.

#### States can’t do plan-need Congress authorization

Melissa **Samet 2009**, Senior Director of Water Recourses at American Rivers, 2009, “A Citizen’s Guide to the Corps of Engineers,” American Rivers, http://www.americanrivers.org/assets/pdfs/reports-and-publications/citizens-guide-to-the-corp.pdf

Congressional Authorization: As discussed in Chapter 4, **the Corps must have explicit ¶ Congressional approval before it can begin planning or constructing projects under the ¶ civil works program.¶ Project studies and project construction (along with changes to ¶ Corps policy) are typically authorized through the Water Resources Development Act.¶ Occasionally, Corps projects are authorized by stand-alone legislation or as part of another ¶ bill**. For example, project authorizations are sometimes added to appropriations bills. See ¶ Chapter 4 for a discussion of the Congressional authorization process. ¶ **Most Corps projects costing more than $5 million must be individually authorized by ¶ Congress.** Some types of less costly projects can be carried out under one of the Corps’ nine ¶ programmatic authorities, also known as “continuing authorities” programs. The continuing ¶ authorities programs place restrictions on a project’s cost and purpose. ¶ Each individually authorized project actually requires two separate authorizations. Congress ¶ must first authorize the Corps to study the project (the Corps is directed to study a water ¶ resources problem and recommend a project to address the problem). Congress then must ¶ separately authorize construction of the project recommended by that Corps study.

Congress must fund dam deconstruction

Melissa **Samet 2009**, Senior Director of Water Recourses at American Rivers, 2009, “A Citizen’s Guide to the Corps of Engineers,” American Rivers, http://www.americanrivers.org/assets/pdfs/reports-and-publications/citizens-guide-to-the-corp.pdf

Project Funding: **Before the Corps can begin an authorized study, Congress must appropriate ¶ funds to carry out that study. Likewise, Congress must appropriate funds to construct a project ¶ before the Corps can begin construction.** It will often take more than one appropriation cycle ¶ to obtain all the funding necessary to complete a project study or construction. Each year’s ¶ work is limited to the work that can be paid for through funds appropriated during that fiscal ¶ year, or through monies still available from a previous year’s appropriation.26 A Citizen’s Guide to the Corps of Engineers 2009¶ It is important to recognize that many authorized studies and projects are unlikely to receive ¶ the necessary funding. For example, while the Corps currently has a $61 to $83 billion project ¶ backlog (depending on the suite of project authorizations considered),¶ it receives only about ¶ $2.1 billion in construction funding each year.¶ At that rate, it could take up to 39 years to ¶ construct all the authorized, but unconstructed, Corps projects currently on the books.¶ Funding for Corps activities is typically appropriated through the Energy and Water ¶ Development Appropriations Act (the E&W bill).¶ See Chapter 4 for a detailed discussion ¶ of the budget and appropriations process. The E&W bill includes the total dollar amounts ¶ for each function of the Corps: General Investigation, Construction, Mississippi River and ¶ Tributaries, and Operation and Maintenance. The E&W bill also typically includes a limited ¶ number of specific project earmarks (i.e., the bill directs a certain amount of appropriated ¶ money to specific Corps projects).

#### Congress must appropriate money to Army Corps of Engineers

Melissa **Samet 2009**, Senior Director of Water Recourses at American Rivers, 2009, “A Citizen’s Guide to the Corps of Engineers,” American Rivers, <http://www.americanrivers.org/assets/pdfs/reports-and-publications/citizens-guide-to-the-corp.pdf>

Obtaining Study Funding: **Congress must appropriate funds to carry out an authorized ¶ study before the Corps can begin work. Through the normal federal budget and ¶ appropriations process**, the President’s budget may request money to begin the study ¶ process. While Congress will use the President’s budget request as a guide, it also can ¶ appropriate money for a study (or for project construction) even if those monies are not ¶ included in the President’s budget. See Chapter 4 for a detailed discussion of the budget ¶ and appropriations process

## Disad Answers

### AT: Spending / Budget Tradeoff

#### Removal costs 37% as much as maintenance

**Otto et al 2000** [Betsy Otto, Director of the Aqueduct project in the Markets and Enterprise Program at the World Resources Institute. “Paying for Dam Removal: A Guide to Selected Funding Sources.” American Rivers. October 2000. <http://www.michigandnr.com/publications/pdfs/Fishing/dams/Paying-Dam-Removal.pdf>] AP

Removing dams for environmental benefits and to address unsafe and unwanted dams is still a relatively new phenomenon. Dam removals have been documented since the early 1900s— including a large number removed in just the last decade1—and many more are undocumented. In part this reflects America’s aging dam infrastructure; in part, it reflects significant changes in land uses and the structure of our economy, which has reduced our need for certain dam functions, as well as a growing concern about river ecology. Many local communities, natural resource agencies, and environmental advocates want to remove selected dams that have outlived their purpose, are unsafe, or have costs that outweigh their benefits. The decision to remove a dam is often driven by safety concerns, but there may be compelling environmental and economic concerns as well. In many cases, dam removal saves significant taxpayer dollars compared to repair or environmental mitigation costs. On average, removal costs were only 37 percent of the estimated dam repair costs for 10 dams profiled in the report, Dam Removal Success Stories: Restoring Rivers Through Selective Removal of Dams that Don’t Make Sense report.2 Finding funding for removal is a significant impediment to removing dams that don’t make sense. There are almost no funding programs dedicated specifically to dam removal (Wisconsin is an exception). However, many federal, state and local government programs intended to improve water quality, protect or enhance wildlife habitat, restore natural resources or alleviate dam safety concerns can be used to finance dam removals. In addition, there are many sources of private funding, such as corporate environmental damage mitigation funds (these funds may be government-administered) that can be used to remove dams. For example, dams in Maine, Wisconsin, Pennsylvania, and other states have been successfully removed using creative approaches that combine multiple types of public and private financing. The information provided in this report is cause for both concern and optimism. The lack of dedicated funds for dam removal foretells an increasing problem as dams across the country age and the need for investment in repair and removal becomes more critical. It also exposes the potential for a significant lost opportunity. As we better understand the negative impacts that dams have on rivers, fish and wildlife, and water quality, removal of dams that don’t make sense can be a simple, cost-effective way to alleviate many of the problems associated with dams. It would be very unfortunate and short-sighted to miss these restoration opportunities simply because of the lack of funds for dam removal.

#### Status quo is a larger waste of tax money

ENS 2002 – Environmental News Service “Corps Opposes Breaching Snake River Dams” February 12, 2002

WALLA WALLA, Washington, February 21, 2002 (ENS) - As expected, the U.S. Army Corps of Engineers final report on improving salmon passage through the lower Snake River dams recommends against dam breaching. Conservation groups warn that leaving the dams intact could lead to the extinction of the Snake River's salmon and steelhead runs. ¶ The Corps' final Lower Snake River Juvenile Salmon Migration Feasibility Report/Environmental Impact Statement calls for spending almost $400 million over the next 10 years on programs aimed at making the dams less lethal to migrating salmon and steelhead. ¶ The study, begun in 1995, examined ways of improving salmon passage through the four lower Snake River dams and reservoirs - Ice Harbor, Lower Monumental, Little Goose and Lower Granite. The dams and locks cost $36.5 million dollars to maintain each year, a sum which includes the maintenance of fish facilities and a transportation program to carry fish around the dams. ¶ Four alternatives were identified and explored in the study - maintaining existing conditions, maximizing transport of juvenile salmon around the dams, major systems improvements to the dams, and dam breaching. The Corps chose the third option, which will keep the dams intact but require major changes to help protect migrating fish. ¶ "Adapting the dams with various operational and structural configuration changes for improving fish passage better describes this alternative than simply calling it major system improvements," said Lonnie Mettler, Walla Walla District project manager for the feasibility study. "The survival of both juvenile and adult salmon passing through the lower Snake River hydrosystem is already high for a majority of flow years and salmon stocks." ¶ Operational changes proposed include improving the coordination and implementation of spill, increasing in stream flows, and juvenile fish transportation. Structural changes include spillway improvements, upgraded adult fish passage systems, upgraded facilities for juvenile fish and additional fish transportation barges. ¶ Proposed long term improvements include turbine upgrades, removable spillway weirs and surface bypass structures. The estimated cost of implementing the proposed structural improvements and changes in operations is $390 million dollars over a period of 10 years. ¶ Critics note that the federal government's own scientists have determined that the investment will do little to help salmon. ¶ "**There is apparently no end to the Corps' appetite for retrofitting the Snake River dams with expensive devices that provide little, if any, benefit to salmon**," said Rob Masonis, Northwest regional director of the conservation group American Rivers. "This is a self serving proposal designed more to keep ratepayer and taxpayer money flowing into the Army Corps than to recover Snake River salmon." ¶ Populations of Snake River salmon and steelhead plummeted following the construction of the four lower Snake River dams in the 1960s and '70s. During the 1990s, the National Marine Fisheries Service (NMFS) listed four separate stocks of Snake River salmon and steelhead under the Endangered Species Act. ¶ In 1999, a peer reviewed study released by Trout Unlimited predicted that, at current rates of decline, all Snake River chinook will go extinct between 2008 and 2017. Other fish populations in the River could face a similar fate if the dams remain intact, some biologists warn. ¶ One year ago, the Snake River dams were found by a federal court to be in violation of Clean Water Act standards for temperature and dissolved gas. ¶ "It was a clear error of judgment by the Corps not to address compliance with its legal obligations under the Clean Water Act," the court ruled. ¶ Environmental groups, joined by the Nez Perce tribe and the state of Oregon, proved that the dams raise water temperatures and dissolved nitrogen above mandatory water quality standards. The Court ordered the Army Corps to protect the water quality of the Snake River when planning its operation of the dams and their reservoirs. ¶ The current federal plan to restore Snake River salmon is based on a 2000 NMFS biological opinion, known as the salmon plan. The salmon plan will be evaluated at several points, the first of which is next year. If the salmon plan is not being implemented or if it is failing to recover salmon, NMFS may again need to consider removing the four lower Snake River dams. ¶ "Ultimately, the decision about whether to remove the dams won't be the Corps' to make," said Masonis. "The fate of the dams will hinge on what the best science says Snake River salmon need to recover." ¶

#### Latest studies

Blumm 2012 (Faculty Scholar and Professor of Law, “The Real Story Behind the Columbia Basin Salmon Debacle: Dam Preservation Under the Endangered Species Act,” February 17, <http://elawreview.org/2012/02/the-real-story-behind-the-columbia-basin-salmon-debacle-dam-preservation-under-the-endangered-species-act/>, LVS)

For Hawley and for several salmon war veterans he interviewed, like Reed Burkholder and Ed Chaney,[22] the obvious solution to significantly restoring the salmon runs is to remove the four federal dams on the Lower Snake River. Some studies suggest this solution not only is economically affordable, but also actually might end up saving money by eliminating the need to maintain the dams and for costly mitigation measures like barging salmon and hatcheries, which only serve to damage wild salmon.[23] However economically and scientifically supportable dam removal may be,[24] it would require an unlikely political transformation. The book suggests that the beginning of such a transformation may be evident in Lewiston, Idaho, the seaport the dams created, some 465 miles inland.[25]

**Dam removal costs less than status-quo repairs – empirics prove**

**Graber 2002** [Brian Graber, Watershed Restoration Specialist. “Potential Economic Benefits of Small Dam Removal.” *Dam Removal Research: Status and Prospects.* Proceedings of The Heinz Center’s Dam Removal Research Workshop October 23–24, 2002. <http://www.heinzctr.org/Major_Reports_files/Dam%20Removal%20Research%20Status%20and%20Prospects.pdf>] AP

Aging small dams are often removed after the direct costs of repair and the costs of removal are compared. Although dam removal is usually less expensive than dam repair, it also is accompanied by additional economic benefits. These benefits include relief from certain expenses associated with the dam such as operations and maintenance, liability costs, impoundment management, and fisheries management. The opportunities for economic growth include the economic activity associated with improved fishing and boating, community revitalization around a riverine waterfront, and quality of life improvements associated with improved aesthetics and recreational opportunities. Data from 31 small dams that were ultimately removed reveal that the lower-end repair cost estimates for an aging small dam are three to five times higher than the cost of removal (Born et al., 1996; Trout Unlimited, 2001). Indeed, for several dams repair cost estimates were more than 10 times removal costs. The repair cost estimates varied significantly, from $30,000 to $5 million, and included costs to bring the dams up to modern safety standards, repair operation facilities, or provide effective fish passage.

**Removal is cheapest – maintenance and liability**

**Graber 2002** [Brian Graber, Watershed Restoration Specialist. “Potential Economic Benefits of Small Dam Removal.” *Dam Removal Research: Status and Prospects.* Proceedings of The Heinz Center’s Dam Removal Research Workshop October 23–24, 2002. <http://www.heinzctr.org/Major_Reports_files/Dam%20Removal%20Research%20Status%20and%20Prospects.pdf>] AP

A direct cost comparison between dam removal and repair, while the most obvious economic issue, does not take into account a range of other potential economic activity involved and only includes short-term costs. Removing a dam is a onetime cost, whereas maintaining a dam involves recurring costs over time. Dam removal can provide relief from many of these financial burdens. Operations and maintenance , needed daily to operate a structure and to keep it safe and in working order, include tasks such as keeping dam removal research gates and other structures operational and maintaining proper signage, security, the property and any other facilities, and liability insurance. An example of the costs of operations and maintenance is provided by two small dams in Wisconsin from 15 to 20 feet high. Their operating costs are $10,000–$60,000 a year (Trout Unlimited, 2001). Dams are constructed with a finite design life, although a welldesigned and maintained structure can last many decades. Repairs are necessary at some point, and most likely repeatedly, to keep a dam operational for its intended uses. Common repairs are fixing inoperable control gates, repairing cracking concrete, and reconstructing effective fish passage. As an example of the magnitude and recurrence of repairs, the 30- foot-high Little Falls Dam on Wisconsin’s Willow River was built in the 1920s and had repair costs greater than $250,000 each year in 1980, 1990, 1991, and 1996 (Trout Unlimited, 2001). Another cost of dams is related to the liability associated with dam failure, personal injury on or near the structure, or drowning. Even small dams can pose significant risks. In 1999 the Federal Emergency Management Agency (FEMA) reported to Congress: “Failure of even a small dam releases sufficient water energy to cause great loss of life, personal injury, and property damage.” Although small dam failures generally do not cause the same degree of damage as large dam failures, they occur more frequently because small dams are commonly older structures, not as routinely maintained, and have less spillway space to relieve flood pressure. Overall, the National Performance of Dams Program estimates that the safety costs for aging dams in the United States will be about $1 billion a year for the next 20 years. These costs include those for upgrades of unsafe dams, dam failures, and state dam safety programs (McCann, 1998). The combined cost of insuring against dam failures and accidents can result in high liability costs. For the largest number of dams, those that are small and privately owned, dam insurance can be prohibitively expensive. Because of the uncertainty of risk, insurance companies charge rates according to worst-case scenarios (FEMA, 1999). Dam removal also eliminates the need to meet certain impoundment management costs. Dam impoundments collect sediment and nutrients that normally flow downstream. Over time, many small dam impoundments fill in with sediment, algae, and plant growth. As they fill in, they can lose their ability to support both operational and recreational uses. Many dam owners (often small communities) choose to dredge impoundments to maintain uses and aesthetics. Dredging is usually expensive, with onetime potential economic benefits costs ranging from $200,000 to $700,000 for a 30–100-acre impoundment (Marshall, 1988). But dredging is not a permanent solution because it does not remove the source of the material filling the impoundment.

**Reject their authors cost estimates – overruns during repairs always put status-quo dams way over the estimates**

**Graber 2002** [Brian Graber, Watershed Restoration Specialist. “Potential Economic Benefits of Small Dam Removal.” *Dam Removal Research: Status and Prospects.* Proceedings of The Heinz Center’s Dam Removal Research Workshop October 23–24, 2002. <http://www.heinzctr.org/Major_Reports_files/Dam%20Removal%20Research%20Status%20and%20Prospects.pdf>] AP

In addition, small dam repair costs are typically underestimated because project managers often do not realize the extent of repairs until the work has begun, and surprises are common because the interior of the dam can be in worse condition than expected. Assessments of such direct cost comparison data can be clouded by the range of options and differing environmental requirements guiding the removal process. For example, rebuilding the deteriorating Woolen Mills Dam on the Milwaukee River in Wisconsin was estimated at $3.3 million. The cost of removing the dam in 1988 was $82,000. However, an additional $2.3 million was spent on the project for engineering design, grading, seeding, channel work, fisheries improvements, construction of a new bridge, and development of a park over 61 acres of the former impoundment (Trout Unlimited, 2001—see figures 4.1 and 4.2 for before and after views of the dam site). In the end, then, the cost estimate to repair the dam was still greater than that for the entire removal project, but there was a smaller difference in the cost figures when the additional project costs were included

#### Removing the dams is cheaper then keeping them.

Save Our Wild Salmon 2009 (REVENUE STREAM: An Economic Analysis of the Costs and Benefits of ¶ Removing the Four Dams on the Lower Snake River, 11/01/2009 02:19:17,

<http://www.truckeeriverflyfishers.org/pdf/SOS_RevenueStream.pdf>, Save Our Wild Salmon)phol

Federal laws and treaties require the protection and restoration of wild¶ Columbia and Snake River salmon. Two options — retaining four dams on the¶ lower Snake River in Washington state and removing those same dams — are¶ now under discussion, each with its own costs and benefits. A side-by-side¶ comparison of the options shows that removing the four lower Snake River¶ dams is less costly for taxpayers, and generates greater economic benefits.¶ Restoring wild salmon with the lower Snake River dams in place would cost¶ taxpayers $7.8 billion to $9.1 billion over 10 years, and generate non-fishing¶ recreation and sport and commercial fishing benefits of $1.8 billion to $6.5¶ billion over the same time period. Conversely, restoring wild salmon by¶ removing these four dams should be the cheaper of the two options for¶ taxpayers, costing between $6.2 billion and $9.08 billion over 10 years. That¶ is $12 million to $1.7 billion less than the costs of keeping the dams in¶ place. Additionally, removing the dams results in economic activity from¶ non-fishing recreation and sport and commercial fishing equaling as much¶ as almost five times today’s benefits (with the dams in place), ranging from¶ $9.1 billion to $10.5 billion over 10 years.

### AT: Elections (Obama Good)

#### River restoration is popular with voters

Shelley **Vineyard 12**, Head of Environment America’s federal clean water program, May 292012, “ New Poll Shows Protecting America’s Waterways is Good Policy and Good Politics,” American Rivers, <http://www.americanrivers.org/newsroom/press-releases/2012/new-poll-shows-protecting.html>WASHINGTON, D.C.— A [new poll](http://www.environmentamerica.org/sites/environment/files/E_Clean%20Water%20memo%202_2.pdf) [PDF] commissioned by the nation’s leading environmentalists and sportsmen organizations in key Great Lakes and Rocky Mountain states shows that the public overwhelmingly supports an Obama administration proposal to restore protections for America’s rivers, lakes, streams, and wetlands.¶ The poll confirms that – across party lines and in all age groups – voters demand clean water for safe drinking water and oppose the pollution of places where their families fish and swim. This poll comes at a time when the Obama administration is set to finalize its Clean Water Act guidance, yet the House majority is preparing to ignore the will of the public and instead continue dirty water politics.¶ Three-quarters (75%) of the likely voters surveyed in Ohio and nearly seven in ten (67%) Colorado respondents support the President’s proposal to restore clean water safeguards, with support strong across political affiliations.¶ The poll was released as the U.S. House of Representatives is poised to vote on the House Energy and Water Development and Related Agencies Appropriations Act (H.R. 5325) next week. The bill includes a provision to block the President from restoring critical clean water protections. However, the poll’s findings indicate that blocking those protections could be a political dead end for many in Congress. Two-thirds of Ohioans and Coloradoans (66%) say they would feel more favorable toward their Representative if he or she supported the restoration of clean water protections, including more than 60% of independents in both states.

### AT: Agenda (Obama Good)

Plan popular – environmentalists will get the blame – they are the public image of the plan

Garrett No Date [Chris Garrett. “The Political Symbolism of Dams.” <http://www.whitman.edu/environmental_studies/WWRB/damsymbol.htm>]

With so much political power attached to the dams, it seems very unlikely that those who oppose their existence can in fact achieve the end goal of breaching the four lower Snake River dams. Are the proponents to the breaching of the dams up to the challenge? To answer this question we look at what political forces the environmentalists are using to combat the very strong political scaffold that supports the existence of the dams. In doing so, we see that many of the same political forces that perpetuate the political power of the dams are being used in the crusade to remove them. In fact, environmentalists are using liberalism to combat liberalism, and symbolism to combat symbolism. Against the image of the dam as symbolic of the engineering achievements of man, the environmentalists depict a mighty wild salmon leaping from a free flowing river. These groups are attempting to exploit the pride people feel towards the existence of salmon and the sympathy people feel towards a declining and depleted salmon population. If the salmon can be used as an effective condensational symbol, then environmentalists can appeal to those who wish to save the wild salmon and in the process destroy the dams. To combat the economic power of the dams, environmentalists are capitalizing on American liberal values by financing many studies which demonstrate that the dams are in fact fiscally inefficient because of the large federal subsidization these dams receive- they are turning around the liberal power associated with the dams to aid in the political cause of their destruction.

Plan popular – Idaho Republican Crapo will get the blame

IRU 11 [Idaho Rivers United. “Elwha dam removals offer lessons for the Snake.” 9/15/11. <http://www.idahorivers.org/news/?id=248>]

In 2009, U.S. Sen. Mike Crapo, an Idaho Republican, offered a potential roadmap toward resolution. Perhaps the best way to move forward, the senator suggested, is to bring salmon stakeholders together — conservationists, fishermen, tribes, power producers, barging and transportation interests, farmers, irrigators and the states — to hammer out a solution.¶ “The time for a stakeholder solutions table is here,” Stuart said. “The region can ill-afford the economic uncertainty caused by the continual courtroom merry-go-round. And our salmon can’t afford another decade of legal wrangling, either.

### AT: Electricity DA

#### Snake River dams supply only 5 percent of the region’s power and are unreliable – other sources will be needed inevitably

American Rivers and six other advocacy organizations 2009 (REVENUE STREAM: An Economic Analysis of the Costs and Benefits of ¶ Removing the Four Dams on the Lower Snake River, last modified 11/01/2009 02:19:17,

<http://www.truckeeriverflyfishers.org/pdf/SOS_RevenueStream.pdf>,)

Combined, the four lower Snake River dams generate about 1,200 average¶ megawatts (aMW) annually, representing less than 5 percent of the entire¶ Pacific Northwest’s average energy consumption.¶ 23¶ However, because these¶ are “run-of-the-river” dams with almost no ability to store water in order to¶ generate electricity when power is most in demand, the power they generate¶ is of low value to the Northwest. In the winter and late summer, when¶ energy demand is higher and surplus power most valuable, river flows are at¶ their lowest and the combined output of the four dams meets only about ¶ 2 percent of Northwest energy demand.¶ 24¶ The Northwest’s highly variable precipitation pattern limits the dependability¶ of these dams. Bonneville Power Administration (BPA), which markets the¶ hydropower from these dams, puts their annual total firm power — the¶ amount that can be counted on in a drought — at only 790 aMW. In¶ December, for example, when the region needs it most, the four dams¶ together produce only 423 aMW of firm power. Consequently, the dams are¶ relatively unreliable for serving electricity loads. That unreliability means¶ that the region must keep expensive, gas-fired combustion turbines on hand¶ — but underutilized — for times when power from the dams is unavailable.¶ This drives up the costs of these four dams.¶ 25¶ In 2002, the RAND Corporation studied the economic impact of removing¶ the lower Snake River dams and replacing their power with clean energy¶ (energy efficiency and wind power). The results showed that doing so would¶ not impede economic growth, and could create as many as 15,000 longterm jobs.¶ 26¶ A NW Energy Coalition analysis estimates that replacing the power from the¶ dams with a mix of energy efficiency and wind power would increase¶ electrical utility costs $79 million to $170 million per year for the next ¶ 20 years.¶ 27¶ Actual increases in monthly energy bills would be modest —¶ about 65 cents per month for residential customers if spread among the¶ millions of Pacific Northwest ratepayers, or about $2 per month if paid only¶ by BPA’s firm customers.¶ 28

No power loss – transition to new sources

NYT 2009 (“As Wind Power Grows, a Push to Tear Down Dams,” June 11, <http://www.nytimes.com/2009/06/12/business/energy-environment/12bonneville.html?pagewanted=all>, LVS)

When it comes to helping salmon, Bonneville has “been dragged kicking and screaming every inch of the way,” said Bill Arthur, a Sierra Club representative in the Northwest. Mr. Arthur praised the agency’s efforts to add wind power, but he argued that the four lower Snake River dams, which are far smaller than major dams like Grand Coulee, were not needed to back up wind power. Instead, he proposed putting wind turbines in more places, to help balance power generation by ensuring that some are always in an area where the wind is blowing, or relying more on the Northwest’s natural gas plants in combination with energy-saving measures. He also noted that if the dams came down, dismantling them could take six or more years, allowing plenty of time to plan the transition to new power sources.

#### Sediment collection makes hydropower dams ineffective and causes flooding

Higgs et al 2002 (Stephen Higgs of *American Rivers*, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

As indicated in Bednarek’s paper, dams block the movement of sediment within a river,depositing much of the material behind the dam and altering the river’s habitat.29 Sediment accumulation behind a dam restricts the amount and types of sediment that reach areas downstream, as well as the habitat available within the reservoir. Furthermore, because dams restrict the flow of rivers, dammed rivers often can no longer distribute large material such as boulders and cobble downstream. Once a dammed river has lost the ability to transport large materials, **the streambed begins to rise**, exacerbating habitat loss within the reservoir. 30 In addition to rising streambeds, smaller material (i.e., sand and silt) often settles close to the dam and slowly fills the reservoir, a process that often severely limits hydropower operations, water storage, and flood control.31

### AT: Local Economy

#### **Turn – construction and full time jobs**

Juliet Eilperin, 2011 (The Washington Post, Sept. 19, 2011, “Dam removal in Washington another step in part of growing movement”, http://bangordailynews.com/2011/09/17/environment/dam-removal-in-wash-part-of-growing-movement/)

 Faced with aging infrastructure and declining fish stocks, communities are tearing down dams across the country in key waterways that can generate more economic benefits when they’re unfettered than when they’re controlled.¶ ¶ “What once seemed radical is now mainstream,” said American Rivers President Bob Irvin, whose group has advocated dam removal for environmental reasons. “All of these are experiments in how nature can restore itself, and the Elwha is the biggest example of that.”¶ ¶ The pace of removal has quickened, with 241 dams demolished between 2006 and 2010, a more than 40 percent increase over the previous five years. Many of them are in the East and Midwest, having powered everything, including colonial textile mills and paper operations at the turn of the 20th century.¶ ¶ A drumbeat of litigation by tribes and environmental groups has pushed federal officials to dismantle some dams that otherwise would have remained in place. Although this has led to political fights in regions where dams matter the most, such as the Pacific Northwest, it has also forged historic compromises.¶ ¶ “The Elwha River restoration marks a new era of river restoration in which broad community support provides the bedrock for work to sustain our rivers and the communities that rely on them,” Interior Secretary Ken Salazar said in a statement.¶ ¶ Although estimates vary on the economic value of restoring a river’s natural flow, it creates construction jobs in the short term and eventually restores depleted commercial fisheries. It also draws tourists such as anglers, rafters and kayakers. Federal officials estimate the $325 million, 2-1/2 year Elwha river restoration project will generate at least 760 jobs during its duration and 446 annual jobs in recreation and tourism once it’s finished.¶

#### **No trade off with economic growth.**

Poff and Hart 02 (How Dams Vary and Why It Matters for the Emerging Science of Dam Removal, DAVID D. HART, PHD University of Maine, <http://www.fws.gov/habitatconservation/Dams.pdf>, and LeRoy Poff - College of Natural Sciences - Colorado State University, US Fish and Wildlife service bioscience journal August 2002 / Vol. 52 No. 8)phol

In a 27 July 1999 speech, Senator Slade Gorton (R–WA) claimed that removing the four Snake River dams would be an “unmitigated disaster and an economic nightmare” (Hughes 1999). In February 2000, George W. Bush said, “Breaching the [Snake River] dams would be a big mistake....The economy and jobs of much of the Northwest depend on the dams” (Seattle Times, 26 February 2000, p. A1). In its 1 May 2000 editorial, the Oregonian likened breaching the dams to “taking a sledgehammer to the Northwest economy.”The Clinton administration, perhaps sensitive to these claims,decided to leave the dams in place while other salmonrecovery methods were attempted. Just 10 years ago, many politicians offered similar predictions on the disastrous effects of protecting the northern spotted owl.Representative Bob Smith (R–OR) predicted the owl listing would “wreak havoc on the people and economy of the Pacific Northwest” (Ulrich and Ota 1990). During a campaign swing through the Pacific Northwest in 1992, President George Bush warned, “It is time we worried not only about endangered species, but endangered jobs” (Hong and Yang 1992). President Bush and many of the other politicians in those years—Senators Mark Hatfield and Bob Packwood and Representative Bob Smith—embraced the simplistic logic of owls versus jobs, just as some today frame the dambreaching debate as salmon versus jobs: We can protect endangered jobs, or we can protect endangered species, but not both. In fact, the Pacific Northwest economy has boomed, consistently outperforming the national economy,whether measured by jobs, income, or sheer exuberance, throughout the 1990s. Between 1988 and 1998,logging in Oregon and WashAugust 2002 / Vol. 52 No. 8  BioScience 729 ington fell 91% on federal lands and 52% overall, and timber-industry employment dropped 20%. But new jobs in other sectors offset these losses.Total employment actually increased 31%,while inflation-adjusted per capita income grew 26% (USDC 2000,Warren 1990–2000).Ten years ago this region had never experienced widespread economic changes to protect a species. The current deliberations on the fate of the Snake River dams would benefit from a consideration of these experiences and the implications for developing and conducting cost–benefit analyses.Ignoring the constraints inherent in the Corps’ analysis and the resulting biases that overestimate costs and underestimate benefits,the jobs losses predicted by the Corps do not describe a “disaster,” “nightmare,”or “sledgehammer” for either the local or the regional economy.

#### Dam Removal is key to jobs

Brian **Graber 12**,Director of The River Restoration Program, Northeast Region, May 10 2012, “River Restoration Creates Jobs,” American Rivers,http://www.americanrivers.org/newsroom/blog/bgraber-20120510-river-restoration-creates.html

**It takes a lot of professionals to remove a dam and restore a river.** Along with **the project** management and other technical assistance that we do at American Rivers, we and our project partners hire ecologists, engineers, geomorphologists, historians, archaeologists, accountants, lawyers, excavator operators, construction superintendents, and truck drivers to complete all of the scientific analysis, engineering design, permitting, contract management, and construction work necessary to complete dam removal projects.¶ We **also need to purchase materials and rent or purchase equipment**, such as erosion control fabric, silt fencing, dewatering pipes, pumps, large rock, large wood, plants, seed, mulch, excavators, trucks, port-a-potties, and more**. All of that activity means that we are creating and supporting jobs** with our river restoration work.¶ The Massachusetts Division of Ecological Restoration recently teamed up with Industrial Economics, Inc. to figure out just how many jobs, by analyzing four river and wetland restoration projects in a report titled The Economic Impacts of Ecological Restoration in Massachusetts [PDF]. American Rivers played a key role in the report’s two river restoration projects, the Briggsville Dam Removal and the Eel River Restoration Project.¶ While there are a lot of details in the report, the bottom line is that the equivalent of 12.5 jobs were supported per $1 million invested, averaged over the four projects. That includes direct job creation plus indirect jobs, those jobs supported by purchasing materials for projects.¶ How does this number compare to other studies of restoration projects? **In 2010, a** University of Oregon study [PDF] found that **fish passage projects in Oregon supported 15.2 jobs per $1 million invested.** Perhaps the most frequently cited report was produced by Restore America’s Estuaries [PDF] stating that **aquatic ecosystem restoration creates 30 jobs per $1 million invested**.¶ I had difficulty following their references to find the original source of that number, but the same number can be found in a 1997 Doppelt study found in the book, Watershed Restoration: Principles and Practices. Perhaps the difference in the number of jobs created between the 1997 number and the 2012 or 2010 numbers simply reflects inflation: $1 million does not go as far for job creation now than it did 15 years ago.¶ Taken together**, ecosystem restoration projects support between 12.5 and 30 jobs per $1 million investment**. The question that came to mind for me was: Is that a lot? **The Massachusetts study found that the total economic activity produced by ecosystem restoration is greater than or equal to other types of capital projects such as road and bridge construction**.¶ The Restore America’s Estuaries report shows that **ecosystem restoration projects create more jobs than road construction** (7 jobs per $1 million) **and the oil and gas industry** (5 jobs per $1 million).

#### Dam Deconstruction creates jobs

Sarah **Kluse** and Astrij **Scholz 06**, Ph.D. and writers for Ecotrust, January 31 2006, “ Preliminary Economic Assistance for Dam Removal,” Ecotrust, <http://www.ecotrust.org/indigenousaffairs/Siskiyou_Co_Economic_Assessment.pdf>

**Three types of jobs need to be considered with calculating the economic impact** of increased ¶ expenditures related **to dam deconstruction: those directly created, those indirectly created, and those ¶ "induced” through the multiplier effect.** For example, **dam deconstruction would directly create jobs ¶ related to demolition of the dams and processing/transportation of materials and sediment.** **Those ¶ indirectly created in support industries** might **include jobs such as heavy equipment maintenance and ¶ repair, and project monitoring jobs.** **The final category of jobs is created** not by the initial expenditures ¶ related to dam removal, but **on expenditures made by those directly and indirectly employed in the ¶ deconstruction process. These jobs would most likely be in industries such as entertainment, food ¶ services, hotels and real estate.** The multiplier effect accounts for each successive round of expenditures ¶ related to the initial expenditure. For example, a multiplier of 2 means that for each dollar spent ¶ initially, the successive rounds of spending lead to another dollar of spending, for an overall increase of ¶ two dollars to the local economy.

#### Economic multiplier for dam demolition is 2.3

Sarah **Kluse** and Astrij **Scholz 06**, Ph.D. and writers for Ecotrust, January 31 2006, “ Preliminary Economic Assistance for Dam Removal,” Ecotrust, <http://www.ecotrust.org/indigenousaffairs/Siskiyou_Co_Economic_Assessment.pdf>

Expenditures on **dam deconstruction are assigned as "Construction**” related spending. For this industry, ¶ it is estimated that **for every $1 million spent there are approximately 21.5 jobs are created and that for ¶ every direct job created in the construction sector, there are an estimated 2.1249 indirect and induced ¶ jobs created for the total economy**. ¶ The California final demand **multiplier for output is 2.3574**. This represents the dollar change in output ¶ by the total economy for each $1 increase in the construction sector output. Using the estimate of ¶ $35.6 million as the value of expenditures related to dam deconstruction, the total economic benefits ¶ of the project can be calculated using the RIMS II multipliers. It is estimated that an additional 765 ¶ jobs will be created and the increase in economic out will be just under $84 million (See Table 5). **Another study¶ estimates the cost to be $100 million for removal of all four dams** (See Table 4 for ¶ breakdown by dam). Using this estimate and the RIMS II multipliers, the economic benefits of dam ¶ removal can be estimated again. The number of jobs created is estimated to be 2,150, **while total ¶ benefits to the economy exceed $235 million** (See Table 5). ¶ If the estimated $17 million dollar cost for deconstruction of the JC Boyle dam is taken out of the ¶ calculations, the cost of removal for the three dams located in Siskiyou County is estimated at $83 ¶ million. While it is unlikely that the economic benefits of dam removal would be split directly down.

#### Increase in salmon population key to economy

Sarah **Kluse** and Astrij **Scholz 06**, Ph.D. and writers for Ecotrust, January 31 2006, “ Preliminary Economic Assistance for Dam Removal,” Ecotrust, <http://www.ecotrust.org/indigenousaffairs/Siskiyou_Co_Economic_Assessment.pdf>

A 2001 study of the Upper Klamath Basin found the **increasing salmon populations could also lead to ¶ an increase in jobs, with each additional 1,000 commercially caught salmon generating 1.5 jobs, while ¶ each 1,000 salmon caught recreationally support another 4 jobs**. Using the estimated harvests ¶ calculated previously, we can now estimate the associated increase in jobs. ¶ Using the 10-year average calculations, **the resulting increase in commercially harvested salmon would ¶ be almost 16,000 and in recreational fisheries would be over 12,000** (combining ocean and in-river ¶ sport fishing). The associated increase in jobs would be 48 from recreational fisheries and 24 from ¶ commercial fisheries, for an estimated total of 71 additional jobs created by increased salmon harvests. ¶ The same study provided estimates for the value of increased salmon harvest to the economy and ¶ calculated that **if salmon populations increased in the Klamath River, each additional fish caught by ¶ anglers would be worth approximately $200 and $5–70 if caught by commercial fishers**. The data in ¶ Table 6 show the estimate value to society of a 100% increase in salmon populations. ¶ Table 7: Estimated value of increased recreational and commercial Chinook salmon harvests¶ These calculations are intended to serve as an example. Because it is not known exactly what increase ¶ in salmon populations will occur, we cannot give precise estimates. Those above are based on the ¶ assumption of a 100% increase in fall Chinook salmon populations, and do not account for increase in ¶ other Klamath River fisheries such as steelhead or rainbow trout. **Increases in the populations of these ¶ species would undoubtedly lead to increased harvests and associated economic benefits as well**.

#### Non-Use value of dam removal benefits economy

Sarah **Kluse** and Astrij **Scholz 06**, Ph.D. and writers for Ecotrust, January 31 2006, “ Preliminary Economic Assistance for Dam Removal,” Ecotrust, <http://www.ecotrust.org/indigenousaffairs/Siskiyou_Co_Economic_Assessment.pdf>

**Individuals may value dam removal** even if they have never visited nor intend to visit the Klamath River. ¶ **This type of value is known as a non-use value because an individual(s) can receive benefits even if ¶ there is no use of the good or resource**. In other words, individuals may have a value for a free-flowing ¶ river even if they never fish, raft, swim or even visit the river. Included in the general definition of nonuse values are existence values and bequest values. Existence value is frequently mentioned with respect ¶ to endangered resources, or when the proposed action may affect a resource in an irreversible way. ¶ Similarly, bequest value relates to the notion of preserving the good for use by future generations. ¶ This analysis replicates the methods used for a study of non-use values related to dam removal on the ¶ Lower Snake River and uses benefit transfer methodology.¶ The goal of benefit transfer is to use ¶ existing values from a specific site(s) and transfer those values to another site with similar resource and ¶ policy conditions. Ideally, a non-use valuation study would be conducted in the Lower Klamath region ¶ and would gather data and values specific to that dam removal scenario. In this case, both time and ¶ financial constraints prevent such an analysis, so benefit-transfer will be used. While not exact, the ¶ approach provides a likely range of estimates associated with increased salmon populations resulting ¶ from dam removal. ¶ Independent of the use values associated with dam removal on the Lower Klamath is the non-use value ¶ associated with restoring the river to a natural free-flowing form. This type of value may also include ¶ related benefits, such as ecosystem restoration and improved water quality that are associated with the ¶ return of the river to a more natural condition. In this analysis, rough estimates will be calculated ¶ though an application of results from existing literature to measure the non-use value of dam removal ¶ on the Lower Klamath. ¶ A 1999 study in Colorado found that annual willingness-to-pay (WTP) for non-use values was $77 in ¶ 1983, or $147 in 2005, accounting for inflation.¶ In order to calculate the value per mile this value is ¶ divided by 555, the number of river miles being valued in the study. This yields a value of 26 cents per ¶ mile. Multiplying this by 35 river miles that would be opened by removal of the four lower dams yields ¶ a value of $9.10 per household per year. ¶ According to the 2000 U.S. Census, the number of households in California was 11,502,870. ¶ Subtracting the number of households in the counties surrounding the Lower Klamath River yields a ¶ total of 11,351,108 households. **Multiplying this by $9.10 yields an estimated non-use value for ¶ restoring the Lower Klamath River of $104,507,239.**

#### Dam Deconstruction puts money into economy

Sarah **Kluse** and Astrij **Scholz 06**, Ph.D. and writers for Ecotrust, January 31 2006, “ Preliminary Economic Assistance for Dam Removal,” Ecotrust, <http://www.ecotrust.org/indigenousaffairs/Siskiyou_Co_Economic_Assessment.pdf>

Another study estimated the value of preserving the Black Canyon of the Upper Snake River from ¶ development.¶ This survey found that non-users had an annual WTP of $58 for preservation. Updating ¶ to account for inflation, and dividing by the number of river miles being valued, yields a per mile value ¶ of $1.06. This value is higher that that of the previous study because only residents of counties ¶ adjacent to the river were sampled. Again, multiplying this by the 35 river miles of the Lower Klamath ¶ yields a per household value of $37.10. This value can then be multiplied by the number of non-user ¶ residents in Siskiyou County, as the Lower Klamath River flows directly through it, and the surrounding ¶ counties of Modoc, Del Norte, Humbolt, Trinity and Shasta. The purpose of including only non-user ¶ residents is to avoid double counting. ¶ No statistics were available for the number of users versus non-users in these counties, so estimates ¶ were calculated assuming that 50% of residents were users. Multiplying by $37.10 yields a non-user ¶ value by adjacent residents of just over $2,815,200. Even assuming 75% of the residents in these six ¶ counties were Klamath River users, the non-use value would be $1,407,600. ¶ The aggregate non-use value by the region is finally calculated by adding the two estimates, or ¶ $107,322,424, for the return of a free-flowing Lower Klamath River. **Even if 100% of residents in the ¶ surrounding six counties were users, the estimate non-use value for a free-flowing river would still be ¶ $104,507,200. ¶ This is a conservative estimate in the sense that it does not include individuals who use the river for ¶ recreation but still independent of their usage still value the existence of a free-flowing river.** However, ¶ the population of California is very diverse both in terms of socioeconomics and adjacency to the river ¶ and because of this, it is possible the estimate may overestimate the total value of a free-flowing river if ¶ WTP varies because of differences across different subcategories of the population. Finally, It should ¶ also be noted that this value is independent of any effect of dam removal on salmon populations and ¶ accounts only for the return of the river to its natural state.

## No War

### No War – Economics

#### Economic freedom prevents war

**Berg 2011** [Chris Berg, research fellow with the Institute of Public Affairs. “Free economies will choose the money over the gun.” May 29, 2011. Sunday Age. Lexis.] AP

The 21st century opened with a terror attack that sparked wars in Iraq and Afghanistan. The latter seems to be getting more violent. But the data is unambiguous. The world is fighting fewer wars. And the wars that are being fought are less deadly than at any time in living memory. A Canadian non-profit, the Human Security Report Project, has been tracking the number and intensity of conflicts in the past 50 years. Between 1950 and 1959, there was an average of 6 international conflicts per year - the vast bulk of them fought between states. In our decade, the average has been less than one, almost all civil wars. Sure, after the fall of communism, internal conflicts sharply spiked, as a decaying Russia and disengaging United States withdrew support for many petty tyrannies in the Third World. But the number of conflicts has since resumed its long-term decline. War is also becoming less deadly. In the 1950s, the average international conflict killed 20,000 people per year. The average conflict in the 2000s killed a 10th of that. You'd think this would be widely recognised and celebrated. But it's entirely at odds with the impression of escalating global violence we get from the nightly news. So, war is now rare. Take a moment to celebrate. Then think of the simple ideological narratives these observations upset. Anti-capitalist intellectuals from Lenin to Naomi Klein have associated competition in the marketplace with competition on the battlefield. Yet while the world is more commercial and more globalised than at any time in history, it's more peaceful too. Foreign policy realists long claimed the post-Cold War world - without two superpowers holding the globe together under a threat of mutual nuclear destruction - could be unstable. But if anything conflict has declined faster in the past two decades. So what accounts for all this world peace? If we want war to be even less common, we'd better figure out what's causing its demise. Many people would credit democracy - if citizens are given a chance to vote, they'll elect pacifists. But as American political scientist Patrick J. McDonald pointed out in his 2009 book The Invisible Hand of Peace, democracy is not immune to war mania. McDonald finds that during the 19th century democratic states were more likely to go to war than autocratic ones. This is not an academic question. If we want Middle East peace, focusing on democracy at the expense of everything else won't succeed. And we shouldn't pin our hopes for the peaceful rise of China solely on elections. The other big theory on the causes of peace focuses on commerce. Nations that trade with each other don't fight. War is bad for business. But this theory doesn't quite work either. What about World War I? European commerce was booming early in the 20th century, but 37 million people still died. McDonald argues it isn't the volume of commerce or the extent of globalisation that creates peace. It's the domestic institutions that promote commerce - that is, the "neoliberal" policies of low trade barriers, limited government ownership, and private property - which eliminate the incentives for war. By studying hundreds of interstate conflicts over the past two centuries, McDonald finds that only economic freedom is closely correlated with peace. That's because regulatory barriers to trade spark international political conflict, not co-operation. And businesses that enjoy trade protection like military conquests. It's how they expand their markets. These are general rules and it's a messy world. America's free markets and democracy did not stop it invading Iraq. Yet a 2005 study by the Cato Institute, an American think tank, found "economic freedom is about 50 times more effective than democracy in diminishing violent conflict". If we want the age of world peace to last, that's what we need to focus on.

#### Incentives have changed – going to war no longer makes sense

**Goldstein**, professor emeritus of international relations at American University, **and Pinker**, psychology professor at Harvard, **2011** [Joshua S. Goldstein and Steven Pinker. “War is really going out of style.” The New York Times. December 18, 2011. Lexis.] AP

Why is war in decline? For one thing, it no longer pays. For centuries, wars reallocated huge territories, as empires were agglomerated or dismantled and states wiped off the map. But since shortly after World War II, virtually no borders have changed by force, and no member of the United Nations has disappeared through conquest. The Korean War caused a million battle deaths, but the border ended up where it started. The Iran-Iraq War killed 650,000 with the same result. Iraq's annexation of Kuwait in 1990 backfired. Israel seized land in 1967, but since then most has been returned and the rest remains contested. The futility of conquest is part of the emergence of an international community regulated by norms and taboos and wielding more effective tools for managing conflicts. Among those tools, the United Nations' 100,000 deployed peacekeepers have measurably improved the success of peace agreements in civil wars. War also declines as prosperity and trade rise. Historically, wealth came from land and conquest was profitable. Today, wealth comes from trade, and war only hurts. When leaders' power depends on delivering economic growth, and when a country's government becomes richer and stronger than its warlords, war loses its appeal.

#### Potential impact on the market prevents war

**Gartzke and Li 2003** [Erik Gartzke, Columbia University, and Quan Li, Pennsylvania State University. “War, Peace, and the Invisible Hand: Positive Political Externalities of Economic Globalization.” International Studies Quarterly 47. 561-586. 2003. <http://dss.ucsd.edu/~egartzke/publications/gartzke_li_isq_03.pdf>] AP

Third, signaling through markets is costly but nonviolent. The size of global capital markets makes their operation relevant to states. Large outflows of capital, as has occurred in the recent crisis between India and Pakistan, can alter the prosperity of nations. This ability to significantly harm states, as well as the incentives investors have to pursue their own economic interests, means that frightening markets pose both costs and opportunities for political leaders. Costly market responses offer a mechanism for signaling while imposing a cost on an opponent. Few states will prefer costly methods of identifying resolve that also weaken their bargaining power. War is appealing because it serves the dual role of signaling while potentially increasing a state’s bargaining power. Integrated states face the prospect of mutual economic harm as the result of threats or demands. The leader making a threat reveals resolve because of the harm she imposes on her economy. The target of a threat in turn has an incentive to accommodate the demand in order to stem capital outflows. Finally, scaring markets involves no direct loss of life, does not alter state borders, and cannot immediately weaken a state’s military strength. In contrast, costly signaling through deterrence, alliance formation, and arms racing all involve changes in the military balance that can be seen as threats, and possibly touch off a conflict spiral (Kydd, 1997).

#### No war – political objectives trade off with economic ones

**Gartzke and Li 2003** [Erik Gartzke, Columbia University, and Quan Li, Pennsylvania State University. “War, Peace, and the Invisible Hand: Positive Political Externalities of Economic Globalization.” International Studies Quarterly 47. 561-586. 2003. <http://dss.ucsd.edu/~egartzke/publications/gartzke_li_isq_03.pdf>] AP

Globalization has three attributes that facilitate costly signaling short of war. First, global markets consist of assets that are easily quantified. These assets impose additional opportunity costs on states for conflictual political activity. While opportunity costs seldom deter contests directly, the ability of other actors to observe both these costs and a leader’s reactions is informative. While economic costs are readily quantifiable, the (subjective) valuation of political goals is not. Leaders’ private information about their valuation of the stakes in international political competition leads to uncertainty and the possibility of violent contests. Because globalization forces leaders to choose between economics and politics, and because economic benefits are readily observable, opponents can better infer the concealed (subjective) valuation for political objectives.

#### No war - interdependence

**Gartzke et al 2001** [Erik Gartzke, Guan Li, and Charles Boehmer. “Investing in Peace: Economic Interdependence and International Conflict.” International Organizaiton 55, 2. Spring 2001. Pp. 391-438. <http://dss.ucsd.edu/~egartzke/publications/gartzkeetal_io_01.pdf>]

Second, instead of deterring conflict, interdependence can convey credible signals, obviating the need for costly military contests. Actors’ behaviors potentially inform observers about the value of strategic variables, dissipating private information. Interdependent states that endure opportunity costs in pursuit of political objectives differentiate themselves from other, less resolved, competitors. To the degree that nonviolent conflict allows observers to identify opponents, costly signaling also allows efficient ex ante bargaining. States seek to obtain settlements while competing for preferable terms. War is less often necessary when states possess nonviolent methods that credibly inform.

#### No war – economic disincentives

**Gartzke and Li 2003** [Erik Gartzke, Columbia University, and Quan Li, Pennsylvania State University. “War, Peace, and the Invisible Hand: Positive Political Externalities of Economic Globalization.” International Studies Quarterly 47. 561-586. 2003. <http://dss.ucsd.edu/~egartzke/publications/gartzke_li_isq_03.pdf>] AP

Adam Smith identified in markets autonomous forces with serendipitous effects. Here, we discuss how globalization facilitates costly signaling among states. Global markets have the ability to punish leaders’ statements by reallocating capital abroad. If in turn leaders have incentives to sooth economic markets, then globalization presents politicians with a dilemma. Leaders are forced to choose between stable markets and the pursuit of political objectives. Under traditional international conditions, states possess only crude instruments such as cheap talk and force with which to compete. Leaders must sometimes go to war to prove their willingness to do so. Globalization provides an additional mechanism for competition beyond cheap talk, but short of military violence. Leaders of integrated states who threaten a neighbor encourage investors to flee. Unresolved leaders may prefer to abandon political objectives rather than antagonize investors. Resolved leaders pursue demands in spite of the economic consequences, differentiating themselves from less resolved types and allowing opponents to more effectively fashion mutually acceptable ex ante bargains.4

### No War – Democracy and Security

#### Democracies and security practices check

**Mandelbaum 99** [Michael Mandelbaum. “Is Major War Obsolete?” Great Debate Series. February 25, 1999. <http://www.ciaonet.org/conf/cfr10/>]

Moreover, I would argue that three post-Cold War developments have made major war even less likely than it was after 1945. One of these is the rise of democracy, for democracies, I believe, tend to be peaceful. Now carried to its most extreme conclusion, this eventuates in an argument made by some prominent political scientists that democracies never go to war with one another. I wouldn’t go that far. I don’t believe that this is a law of history, like a law of nature, because I believe there are no such laws of history. But I do believe there is something in it. I believe there is a peaceful tendency inherent in democracy. Now it’s true that one important cause of war has not changed with the end of the Cold War. That is the structure of the international system, which is anarchic. And realists, to whom Fareed has referred and of whom John Mearsheimer and our guest Ken Waltz are perhaps the two most leading exponents in this country and the world at the moment, argue that that structure determines international activity, for it leads sovereign states to have to prepare to defend themselves, and those preparations sooner or later issue in war. I argue, however, that a post-Cold War innovation counteracts the effects of anarchy. This is what I have called in my 1996 book, The Dawn of Peace in Europe, common security. By common security I mean a regime of negotiated arms limits that reduce the insecurity that anarchy inevitably produces by transparency-every state can know what weapons every other state has and what it is doing with them-and through the principle of defense dominance, the reconfiguration through negotiations of military forces to make them more suitable for defense and less for attack.

### No War - Globalization

#### Globalization promotes communication and mitigates escalation – prevents war

**Gartzke and Li 03** [Erik Gartzke, Columbia University, and Quan Li, Pennsylvania State University. “War, Peace, and the Invisible Hand: Positive Political Externalities of Economic Globalization.” International Studies Quarterly 47. 561-586. 2003. <http://dss.ucsd.edu/~egartzke/publications/gartzke_li_isq_03.pdf>] AP

Informational theories of war argue that at least some contests result from uncertainty and states’ incentives to compete. Costly signaling can reduce the need for conflict by allowing for credible communication. Globalization facilitates costly signaling by making leaders’ talk costly and thus reducing the incentives to bluff. For a state with a closed economy seeking to compete in the international system, alternatives are largely limited to cheap talk and war. Traditionally, leaders have been forced to fight to prove that they are not bluffing. However, for a state that is integrated into the global economy, there exists a ‘‘middle path’’ between fighting and just talk. The ability of capital to flow freely into and out of a national economy provides leaders vying for prosperity with incentives to appeal to the market. Conditions that frighten investors lead to capital flight, raise the costs of borrowing, and deter future investments. The leader of a globalized state thus faces a trade-off between economic and political incentives. Efforts to promote prosperity and economic stability imply a lack of political resolve while efforts to compete abroad frighten markets. The fervor with which leaders make political threats now imparts an economic cost. Leaders that value economic conditions more than a given political issue will prefer to accept less generous bargains while leaders that value the issues at stake highly and pursue more advantageous political bargains can demonstrate preference intensity through a willingness to incur economic hardship. When capital is free to move globally, the conflictual political talk of leaders is no longer cheap.

#### No war – transparency and incentives

**Gartzke and Li 03** [Erik Gartzke, Columbia University, and Quan Li, Pennsylvania State University. “War, Peace, and the Invisible Hand: Positive Political Externalities of Economic Globalization.” International Studies Quarterly 47. 561-586. 2003. <http://dss.ucsd.edu/~egartzke/publications/gartzke_li_isq_03.pdf>] AP

Second, globalization significantly increases the ability of market agents to respond decisively to political risk, making it difficult for integrated states to avoid the economic consequences of political competition. The fact that global integration allows investors to shift capital abroad with greater rapidity and ease means that economic consequences can be both massive and swift. Further, investors possess unambiguous incentives. As crises heat up and leaders continue to advance political objectives, the proximity of danger should lead markets to assess the extent and credibility of looming political shocks. Increasing globalization means that market actors can react relatively autonomously to changes in risk and return. Different priorities between states are then revealed by the interaction of states and integrated markets, an outcome not recognized in previous literatures. To the extent that globalization limits the ability of states to interfere with market processes, it also forces states to confront the trade-off between satisfying markets by promoting political stability and satisfying political interests by pursuing competitive international goals. Thus, we see the autonomy of capital as a critical component of our argument.17

### No War – Strategy Shift

#### No war – interstate conflicts are obsolete because of a shift in tactics

**Goldstein 11** [Joshua Goldstein, professor emeritus of international relations at American University. “Think again: war.” Foreign Policy. Sept/Oct 2011. <http://www.foreignpolicy.com/articles/2011/08/15/think_again_war?page=full>] AP

Armed conflict has declined in large part because armed conflict has fundamentally changed. Wars between big national armies all but disappeared along with the Cold War, taking with them the most horrific kinds of mass destruction. Today's asymmetrical guerrilla wars may be intractable and nasty, but they will never produce anything like the siege of Leningrad. The last conflict between two great powers, the Korean War, effectively ended nearly 60 years ago. The last sustained territorial war between two regular armies, Ethiopia and Eritrea, ended a decade ago. Even civil wars, though a persistent evil, are less common than in the past; there were about a quarter fewer in 2007 than in 1990.

### No War - Trends

#### War and violence are massively in decline – history and scientific studies

**Pinker 07** [Steven Pinker is the Johnstone Family Professor in the Department of Psychology at

Harvard University. “A History of Violence.” The New Republic, 3.19.07. <http://www.global-mindshift.com/discover/Memebase/A%20HISTORY%20OF%20VIOLENCE.pdf>] AP

Violence has been in decline over long stretches of history, and today we are probably living in the most peaceful moment of our species' time on earth. In the decade of Darfur and Iraq, and shortly after the century of Stalin, Hitler, and Mao, the claim that violence has been diminishing may seem somewhere between hallucinatory and obscene. Yet recent studies that seek to quantify the historical ebb and flow of violence point to exactly that conclusion. Some of the evidence has been under our nose all along. Conventional history has long shown that, in many ways, we have been getting kinder and gentler. Cruelty as entertainment, human sacrifice to indulge superstition, slavery as a labor-saving device, conquest as the mission statement of government, genocide as a means of acquiring real estate, torture and mutilation as routine punishment, the death penalty for misdemeanors and differences of opinion, assassination as the mechanism of political succession, rape as the spoils of war, pogroms as outlets for frustration, homicide as the major form of conflict resolution-all were unexceptionable features of life for most of human history. But, today, they are rare to nonexistent in the West, far less common elsewhere than they used to be, concealed when they do occur, and widely condemned when they are brought to light. At one time, these facts were widely appreciated. They were the source of notions like progress, civilization, and man's rise from savagery and barbarism. Recently, however, those ideas have come to sound corny, even dangerous. They seem to demonize people in other times and places, license colonial conquest and other foreign adventures, and conceal the crimes of our own societies. The doctrine of the noble savage-the idea that humans are peaceable by nature and corrupted by modern institutions-pops up frequently in the writing of public intellectuals like José Ortega y Gasset ("War is not an instinct but an invention"), Stephen Jay Gould ("Homo sapiens is not an evil or destructive species"), and Ashley Montagu ("Biological studies lend support to the ethic of universal brotherhood"). But, now that social scientists have started to count bodies in different historical periods, they have discovered that the romantic theory gets it backward: Far from causing us to become more violent, something in modernity and its cultural institutions has made us nobler. To be sure, any attempt to document changes in violence must be soaked in uncertainty. In much of the world, the distant past was a tree falling in the forest with no one to hear it, and, even for events in the historical record, statistics are spotty until recent periods. Long-term trends can be discerned only by smoothing out zigzags and spikes of horrific bloodletting. And the choice to focus on relative rather than absolute numbers brings up the moral imponderable of whether it is worse for 50 percent of a population of 100 to be killed or 1 percent in a population of one billion. Yet, despite these caveats, a picture is taking shape. The decline of violence is a fractal phenomenon, visible at the scale of millennia, centuries, decades, and years. It applies over several orders of magnitude of violence, from genocide to war to rioting to homicide to the treatment of children and animals. And it appears to be a worldwide trend, though not a homogeneous one. The leading edge has been in Western societies, especially England and Holland, and there seems to have been a tipping point at the onset of the Age of Reason in the early seventeenth century. At the widest-angle view, one can see a whopping difference across the millennia that separate us from our pre-state ancestors. Contra leftist anthropologists who celebrate the noble savage, quantitative body-counts-such as the proportion of prehistoric skeletons with axemarks and embedded arrowheads or the proportion of men in a contemporary foraging tribe who die at the hands of other men-suggest that pre-state societies were far more violent than our own. It is true that raids and battles killed a tiny percentage of the numbers that die in modern warfare. But, in tribal violence, the clashes are more frequent, the percentage of men in the population who fight is greater, and the rates of death per battle are higher. According to anthropologists like Lawrence Keeley, Stephen LeBlanc, Phillip Walker, and Bruce Knauft, these factors combine to yield population-wide rates of death in tribal warfare that dwarf those of modern times. If the wars of the twentieth century had killed the same proportion of the population that die in the wars of a typical tribal society, there would have been two billion deaths, not 100 million. Political correctness from the other end of the ideological spectrum has also distorted many people's conception of violence in early civilizations-namely, those featured in the Bible. This supposed source of moral values contains many celebrations of genocide, in which the Hebrews, egged on by God, slaughter every last resident of an invaded city. The Bible also prescribes death by stoning as the penalty for a long list of nonviolent infractions, including idolatry, blasphemy, homosexuality, adultery, disrespecting one's parents, and picking up sticks on the Sabbath. The Hebrews, of course, were no more murderous than other tribes; one also finds frequent boasts of torture and genocide in the early histories of the Hindus, Christians, Muslims, and Chinese. At the century scale, it is hard to find quantitative studies of deaths in warfare spanning medieval and modern times. Several historians have suggested that there has been an increase in the number of recorded wars across the centuries to the present, but, as political scientist James Payne has noted, this may show only that "the Associated Press is a more comprehensive source of information about battles around the world than were sixteenth-century monks." Social histories of the West provide evidence of numerous barbaric practices that became obsolete in the last five centuries, such as slavery, amputation, blinding, branding, flaying, disembowelment, burning at the stake, breaking on the wheel, and so on. Meanwhile, for another kind of violence-homicide-the data are abundant and striking. The criminologist Manuel Eisner has assembled hundreds of homicide estimates from Western European localities that kept records at some point between 1200 and the mid-1990s. In every country he analyzed, murder rates declined steeply-for example, from 24 homicides per 100,000 Englishmen in the fourteenth century to 0.6 per 100,000 by the early 1960s. On the scale of decades, comprehensive data again paint a shockingly happy picture: Global violence has fallen steadily since the middle of the twentieth century. According to the Human Security Brief 2006, the number of battle deaths in interstate wars has declined from more than 65,000 per year in the 1950s to less than 2,000 per year in this decade. In Western Europe and the Americas, the second half of the century saw a steep decline in the number of wars, military coups, and deadly ethnic riots. Zooming in by a further power of ten exposes yet another reduction. After the cold war, every part of the world saw a steep drop-off in state-based conflicts, and those that do occur are more likely to end in negotiated settlements rather than being fought to the bitter end. Meanwhile, according to political scientist Barbara Harff, between 1989 and 2005 the number of campaigns of mass killing of civilians decreased by 90 percent.

### No War – U.N.

#### U.N. peacekeeping checks war

**Goldstein 11** [Joshua Goldstein, professor emeritus of international relations at American University. “Think again: war.” Foreign Policy. Sept/Oct 2011. <http://www.foreignpolicy.com/articles/2011/08/15/think_again_war?page=full>] AP

In response, the United Nations commissioned a report in 2000, overseen by veteran diplomat Lakhdar Brahimi, examining how the organization's efforts had gone wrong. By then the U.N. had scaled back peacekeeping personnel by 80 percent worldwide, but as it expanded again the U.N. adapted to lessons learned. It strengthened planning and logistics capabilities and began deploying more heavily armed forces able to wade into battle if necessary. As a result, the 15 missions and 100,000 U.N. peacekeepers deployed worldwide today are meeting with far greater success than their predecessors. Overall, the presence of peacekeepers has been shown to significantly reduce the likelihood of a war's reigniting after a cease-fire agreement. In the 1990s, about half of all cease-fires broke down, but in the past decade the figure has dropped to 12 percent. And though the U.N.'s status as a perennial punching bag in American politics suggests otherwise, these efforts are quite popular: In a 2007 survey, 79 percent of Americans favored strengthening the U.N. That's not to say there isn't room for improvement -- there's plenty. But the U.N. has done a lot of good around the world in containing war.

### AT: Small Conflicts

#### Even civil wars and small conflicts are becoming obsolete

**Goldstein and Pinker 11** [Joshua S. Goldstein, professor emeritus of international relations at American University, and Steven Pinker, psychology professor at Harvard. “War is really going out of style.” The New York Times. December 18, 2011. Lexis.] AP

What about other kinds of armed conflict, like civil wars and conflicts that miss the 1,000-death cutoff? Remarkably, they too have been in decline. Civil wars are fewer, smaller and more localized. Terrible flare-ups occur, and for those caught in the middle the results are devastating -- but far fewer people are caught in the middle. The biggest continuing war, in Afghanistan, last year killed about 500 Americans, 100 other coalition troops and 5,000 Afghans including civilians. That toll, while deplorable, is a fraction of those in past wars like Vietnam, which killed 5,000 Americans and nearly 150,000 Vietnamese per year. Over all, the annual rate of battle deaths worldwide has fallen from almost 300 per 100,000 of world population during World War II, to almost 30 during Korea, to the low teens during Vietnam, to single digits in the late 1970s and 1980s, to fewer than 1 in the 21st century. As the political scientist John Mueller has pointed out, today's civil wars are closer to organized crime than traditional war. Armed militias -- really gangs of thugs -- monopolize resources like cocaine in Colombia or coltan in Congo, or terrorize the locals into paying tribute to religious fanatics, as in Somalia, Nigeria and the Philippines.

# DAM REMOVAL NEG

## Topicality

### Dams Create Navigable Waterways

#### Dams create navigable waterways

Bowmen et al 02 (Margaret Bowman, Steve Higgs, Elizabeth Maclin, Serena McClain, Matt Sicchio, Amy Souers,

Sara Johnson and Brian Graber, “Exploring Dam Removal, a Decision Making Guide”, American Rivers and Trout Unlimited, <http://www.americanrivers.org/assets/pdfs/dam-removal-docs/Exploring_Dam_Removal-A_Decision-Making_Guide6fdc.pdf>)

There are approximately 75,000 dams greater than six feet high in the waterways of the United States. Many thousands of smaller dams also block our nation’s rivers1. **Dams** provide important benefits to society. They generate hydropower, provide water for crops and human consumption, help manage floods, **create navigable waterways**, and provide recreational opportunities. But dams, both large and small, come with significant costs. Dams have fundamentally changed the ecology of hundreds of thousands of river miles in our country, damaged habitat, disrupted native populations of fish and wildlife, and adversely affected some local economies and communities.

#### Dams create navigable waterways

AMNH No Date (“Dams benefit billions of people,” American Museum of Natural History, <http://www.amnh.org/sciencebulletins/biobulletin/biobulletin/story1290.html>)

Dams benefit billions of people. **Globally, many dams have yielded enormous economic** benefits and relief from life-threatening problems such as flooding. They have made development possible in poverty-stricken areas. In drought-ridden countries, irrigation from dam impoundments has prevented famine. For example, irrigation has enabled India to be self-sufficient in food production since 1974. Reservoirs are important for community water storage, and they can prevent disease caused by the lack of potable water. **Dams can create navigable waterways, making navigation in some areas cheaper and more efficient**. Though expensive to build, hydropower plants are inexpensive to run and are quite efficient. In other words, many dams are essential to the well-being of large human populations. However, there are also enormous environmental and social costs that go along with damming a river. As new dam construction and dam removal projects are considered, it’s important to keep these costs in mind.

### Snake River Dams Bidirectional

#### **Destroying the Snake River Dams causes less Transportation**

Dr. G. Edward Dickey 99- September 1999, “Grain Transportation After Partial Removal¶ of the Four Lower Snake River Dams:¶ An affordable and efficient transition plan”, http://www.bluefish.org/dickey.htm)

The four federal dams on the lower Snake enable river barge transportation of commodities, principally grain, from as far inland as Lewiston, Idaho -- 465 miles from the Pacific Ocean – to deep-water ports. If the dams are removed, commercial barge navigation would be eliminated in the Snake River, making the Tri-Cities, Washington, the furthest inland port accessible by river barge. As such, commodities that are currently transported by barge on the Snake River would have to be moved by some other transportation mode or combination of modes.¶ Currently, the Snake River waterway transports roughly 3.8 million tons of grain and a lesser quantity of other commodities to deep-water ports on the lower Columbia River. The potential elimination of this inland waterway has proved a contentious and politically charged issue, with farmers, fearful of perceived higher shipping rates, and barging interests opposing Snake River drawdown.¶

### T “Substantially”

#### Army Corps owns over 600 dams

Melissa Samet 09, Senior Director of Water Recourses at American Rivers, 2009, “A Citizen’s Guide to the Corps of Engineers,” American Rivers, http://www.americanrivers.org/assets/pdfs/reports-and-publications/citizens-guide-to-the-corp.pdf

Through its civil works program, **the Corps plans, constructs, and operates water ¶ projects in every state** in the nation. The majority of the Corps’ work falls under one ¶ of its three main mission areas: flood damage reduction, navigation, and environmental ¶ protection and restoration. However, Congress also has given the Corps an increasing ¶ role in projects that fall outside these primary mission areas. ¶ **The Corps has constructed** 8,500 miles of levees; 11,000 miles of navigation channels; ¶ **more than 600 dams**; 276 navigation lock chambers; 75 federal hydropower facilities; ¶ and countless miles of seawalls, jetties, and artificial beaches. **The Corps manages the ¶ nation’s inland waterway system**, dredges and otherwise maintains more than 920 coastal ¶ and inland harbors, and manages more than 380 lakes and reservoirs.¶ Since 1990, when ¶ Congress added environmental protection to the Corps’ mission areas, the Corps’ civil ¶ works portfolio has grown to include some of the nation’s largest and most controversial ¶ restoration projects.

## Advantage Answers

### AT: Biodiversity Advantage

#### **The Salmon are coming back without the dams, Salmon returns have been highest ever in the last 5 years.**

PNWA 2007 (Pacific northwest waterways association, “Dam Breaching Is Not the Answer”, 12/12/2007 00:34:42, advocating for federal funding of our region's navigation projects and public policy to improve the economic efficiency, http://www.pnwa.net/new/Articles/Dam\_Breaching\_Is\_Not\_The\_Answer.pdf)phol

Fish returns are the highest on ¶ record ¶ Adult salmon returns past Bonneville ¶ dam for each of the years 2001-2004 ¶ were the highest on record since counts ¶ began in 1938. Adult returns were down ¶ in 2005, yet, at over one million fish, ¶ they were the second highest on record ¶ prior to the dramatic increase in 2001. ¶ Put another way, the salmon returns ¶ over the last five years were the first, ¶ second, third, fourth and sixth highest ¶ ever recorded past Bonneville Dam. ¶ ¶ Juvenile survival through the ¶ system is higher than ever ¶ Dam breach advocates have said that ¶ the decline in juvenile fish survival in the ¶ 1970s was due to the building of the ¶ Snake River dams. Improvements at the ¶ dams have increased survival three-fold ¶ since the seventies. Survival today is as ¶ high, or higher, than it was in the 1960s, ¶ before the last four dams were built.

#### Removal only solves 4 of 13 endangered salmon

Wheelihan, CEO of Montana Electric Cooperatives’ Association, 2012 (Dave, chief executive officer of the Great Falls-based Montana Electric Cooperatives' Association, “Big Skylights,” March 1, <http://www.montanaco-ops.com/uploads/Big%20Skylights_2012/March%201%202012%20Little%20Skylights.pdf>, LVS)

RiverPartners, a Portland, Ore.-based nonprofit represents utilities, businesses and tribes with a stake in the expense of the measures to protect salmon. Environmentalists have been litigating salmon plans, none of which is yet fully approved and the courts, for more than 20 years. One of the latest initiatives is to remove all the dams on the snake River. “Not only would that affect the use of generation of power but also the use of water for irrigation and agriculture and transportation, including barge traffic that keeps 700,000 trucks off the road every year,” Flores said. “The snake River dams provide 1,100 MW of power, enough to light up the city of Seattle 24-7.” Even if the dams were removed, she said, it would only affect four stocks of the 13 stocks of salmon considered endangered for the purpose of environmental plans.

#### Exxon pipeline near the Snake River is an alt cause to biodiversity loss

Wild Salmon 10 (7/12/10, “Exxon’s Threat to Salmon”,

<http://www.wildsalmon.org/facts-and-information/the-problems/highway-to-hell-exxons-threat-to-salmon.html>)

**The mighty Columbia-Snake watershed is facing another huge challenge. An oil company focused on profits and a government failing its duties to people has reared a new threat to wild salmon and local communities. It comes in two parts – development of the Canadian oil sands beneath the boreal forests of northern Alberta, and Exxon's surprise plan to use the Columbia and Snake Rivers, plus Idaho and Montana highways, to ship huge mining machinery to those oil sands.**

**Canadian oil sands development is one of the largest, most destructive industrial projects on earth.** Millions of acres of northern boreal forest is being strip-mined for bitumen that holds oil in a solid form. The oil is cooked out through a process that uses water equivalent to a city of roughly 2 million people. Toxic wastewater leaks directly into the environment at a rate of over 2.8 million gallons a day. The oil is then shipped in a continent-wide network of pipelines and tanker ports into the global oil market. Some of this vast web is in place; the rest is being built as fast as Canadian and American governments issue permits. Once at full scale, the development and its tentacles will operate for nearly half a century.

Along with its direct damage to lands, waters, fish and wildlife, traditional ways and nature-based economies, the oil sands (also called tar sands) is one of the single largest contributors on earth to climate disruption. As NASA climate scientist James Hansen says, "the tar sands constitute one of our planet's greatest threats. **They are a double-barreled threat. First, producing oil from tar sands emits two to three times the global warming pollution of conventional oil. But [it] also diminishes one of the best carbon reduction tools on the planet: Canada's Boreal Forest."**

**That double-barreled harm hits wild salmon. Damage to salmon and steelhead habitats, fresh and salt, caused by climate change is now occurring, more is already inevitable, and many of the salmon affected are already endangered.** Which means wild salmon need the carbon-storing boreal forest, and don't need oil whose burning will do three times worse harm to waters than past oil burning.

One of the pipelines nearing approval, the Northern Gateway pipeline to the British Columbia coast, will also harm salmon the old-fashioned way. It crosses and will degrade important salmon habitats, and oil tanker traffic to come in its wake threatens salmon ecosystems all along the coast. Defending salmon habitats and economies is one reason Canadian First Nations, fishermen, and conservationists are fighting this pipeline.

**Now another tentacle of the oil sands is poised for the Columbia Basin**. This fall, Exxon plans to start shipping huge pieces of Korean-made mining machinery – two-thirds the length of a football field, three stories high, weighing up to 344,000 pounds – to the tar sands. Rather than use an established route through the Panama Canal, then north on designated "high and wide corridor" roads from Texas, **Exxon is near gaining federal and state access to a new route: up the Columbia and Snake Rivers by barge to Lewiston, Idaho**, then up the Northwest Passage Scenic Byway through wild areas along the Lochsa River in Idaho, then across 350 miles of Montana to Canada. The sole purpose of this new route appears to be to increase Exxon's profits.

The Lochsa River's endangered salmon and steelhead will be further risked by this project. Highway 12 snakes up the Lochsa along the Lewis & Clark Trail in a National Wild and Scenic River corridor. Any accident will damage salmon habitats when the machinery falls into the river, and damage them more with the excavation and grading needed to get such huge stuff out of the river. The Nez Perce Tribal Executive Committee has voted to oppose the project for this and other reasons.

**It appears from the sparse public record that this will be a permanent industrial corridor to the tar sands for decades (**Exxon is providing little information, and the government less**.) Which means the harms to Columbia/Snake salmon will occur for decades.**

#### Piecemeal dam removal is not enough

Higgs, JD, now an associate in the Perkins Cole Environment, Energy, and Resources Group, et al, 2002 (Stephen Higgs, then a conservation assistant at American Rivers, and edited by Elizabeth Maclin and Margaret Bowman of *American Rivers* and Angela Bednarek of the *University of Pennsylvania*. February 2002.”THE ECOLOGY OF DAM REMOVAL: A Summary of Benefits and Impacts”, http://www.michigandnr.com/PUBLICATIONS/PDFS/fishing/dams/EcologyofDamRemoval.pdf)

It is important to consider that on rivers with several dams, efforts to breach one dam may not¶ significantly restore river continuity, due to the combined effect of other dams that continue to¶ prevent fish migration.62 For example, in 1963, the removal of the Washington Water Power¶ Dam on the Clearwater River in Idaho helped to improve Chinook salmon habitat.¶ Unfortunately, downstream dams on the Snake and Columbia Rivers continue to thwart the¶ species ability to return to the sea.63 In promoting fish migration, rivers often need to be restored¶ as entire units and not as fragmented pieces.

## Spilling CP

### Spilling CP – 1NC

#### The United States federal judiciary should order salmon preservation through increased spilling at the lower Snake River dams.

#### Spilling solves the case but avoids politics and maintains hydroelectric power, which is key to solve global warming

Barker 2012 (Rocky Barker, reporter for the Idaho Statesman, acclaimed environmental writer, April 22, 2012, “Fisheries scientists redefine the salmon debate by trumpeting more ‘spill’”, http://www.idahostatesman.com/2012/04/22/2087353/saving-salmon-without-removing.html#storylink=cpy)

The findings were released April 12 at the annual meeting of the Comparative Survival Study group in Portland. The group was set up in 1996 to estimate the effects of the Columbia and Snake dams on salmon through their life cycle.¶ “Spill” is the term given to river water that flows over the dam’s spillways rather than through its power-generating turbines. What makes an increased-spill plan more appealing than breaching dams is that **it helps more than the four stocks of endangered salmon that live upriver of the dams**. It also would help migrating salmon that spawn in the lower parts of the Columbia River system and its tributaries.¶ There are nonbiological benefits as well that could play just as big a role in any final management decision:¶ - Saving dams protects a source of cheap, nonpolluting electricity that will take on more and more importance in future years, as the world confronts the effects of global warming**.** ¶ **- Keeping dams preserves the Port of Lewiston, and the commerce** created by the inland port.¶ - The **dams’ slackwaters create boating** and other recreational opportunities that would remain. ¶ - If the scientists are right, existing river flows would provide enough spill without Idaho having to send more of the irrigation water it stores in reservoirs like Lucky Peak down the system to aid migrating salmon. Lastly, it is an option that could be accomplished by a federal judge’s court order without the arduous requirement of Congress authorizing the destruction of billions of dollars of dam infrastructure. The politically unpalatable breaching option has created huge social chasms that **often overshadow the larger discussion over what is the most effective and economical solution** to save salmon.

#### (OPTIONAL) Global warming causes extinction

Tickell 8 (Oliver Tickell, Environmental Researcher, 2008, “On a planet 4C hotter, all we can prepare for is extinction”, http://www.guardian.co.uk/commentisfree/2008/aug/11/climatechange)

We need to get prepared for four degrees of global warming, Bob Watson [PhD in Chemistry, Award for Scientific Freedom and Responsibility from the American Association for the Advacement of Science] told the Guardian last week. At first sight this looks like wise counsel from the climate science adviser to Defra. But the idea that we could adapt to a 4C rise is absurd and dangerous. Global **warming on this scale would be a catastrophe that would mean**, in the immortal words that Chief Seattle probably never spoke, "the end of living and the beginning of survival" for humankind. Or perhaps the beginning of our **extinction**. The collapse of the polar ice caps would become inevitable, bringing long-term sea level rises of 70-80 metres. All the world's coastal plains would be lost, complete with ports, cities, transport and industrial infrastructure, and much of the world's most productive farmland. The world's geography would be transformed much as it was at the end of the last ice age, when sea levels rose by about 120 metres to create the Channel, the North Sea and Cardigan Bay out of dry land. Weather would become extreme and unpredictable, with more frequent and severe droughts, floods and hurricanes. The Earth's carrying capacity would be hugely reduced. Billions would undoubtedly die. Watson's call was supported by the government's former chief scientific adviser, Sir David King [Director of the Smith School of Enterprise and the Environment at the University of Oxford], who warned that "if we get to a four-degree rise it is quite possible that we would begin to see a runaway increase". This is a remarkable understatement. The climate system is already experiencing significant feedbacks, notably the summer melting of the Arctic sea ice. The more the ice melts, the more sunshine is absorbed by the sea, and the more the Arctic warms. And as the Arctic warms, the release of billions of tonnes of methane – a greenhouse gas 70 times stronger than carbon dioxide over 20 years – captured under melting permafrost is already under way. To see how far this process could go, look 55.5m years to the Palaeocene-Eocene Thermal Maximum, when a global temperature increase of 6C coincided with the release of about 5,000 gigatonnes of carbon into the atmosphere, both as CO2 and as methane from bogs and seabed sediments. Lush subtropical forests grew in polar regions, and sea levels rose to 100m higher than today. It appears that an initial warming pulse triggered other warming processes. Many scientists warn that **this historical event may be analogous to the present**: **the warming caused by human emissions could propel us towards a similar hothouse Earth**.

### Spilling Solves – 2NC

#### New studies show spill is effective

Barker 2012 (Rocky Barker, reporter for the Idaho Statesman, acclaimed environmental writer, April 22, 2012, “Fisheries scientists redefine the salmon debate by trumpeting more ‘spill’”, http://www.idahostatesman.com/2012/04/22/2087353/saving-salmon-without-removing.html#storylink=cpy)

The current federal plan, often simply referred to as the bi-op, had the support of the states of Idaho, Montana and Washington, and most of the region’s Indian tribes. The Nez Perce Tribe and the state of Oregon opposed it. It was struck down in 2011 as insufficient for salmon recovery by U.S. District Judge James Redden. ¶ Salmon returns have improved since 2000, due in part to cooler ocean conditions near shore, which reduce predator numbers and create upwelling of currents that carry additional food. Those factors are outside of human control. But improved conditions in the rivers, due to court-ordered spill and fish-passage devices installed at many federal dams, also have contributed.¶ Biologists are predicting a good 2012 salmon season, which began this month. ¶ Bowles, the Oregon chief of fisheries, said the new data show that spill benefits fish in ways biologists previously didn’t understand.¶ Not only does it divert the juvenile salmon away from the powerhouses, it also improves their survival in the Pacific after they leave the Columbia. It speeds their trip through the rivers and estuaries, meaning more survive to get to the ocean. ¶ The larger salmon returns of the past decade and better tagging and monitoring of salmon have dramatically increased the amount of information scientists have to work with, Bowles said.¶ These most recent survival findings support Oregon’s official stance, which has called for an aggressive approach to salmon management that doesn’t include breaching.

#### Water spilling solves for salmon

Barker 2012 (Rocky Barker, reporter for the Idaho Statesman, acclaimed environmental writer, April 22, 2012, “Fisheries scientists redefine the salmon debate by trumpeting more ‘spill’”, http://www.idahostatesman.com/2012/04/22/2087353/saving-salmon-without-removing.html#storylink=cpy)

Increasing the amount of water spilled over eight Snake and Columbia river dams to keep juvenile fish away from hydroelectric turbines might be enough to recover most of Idaho’s endangered salmon populations without breaching dams, new studies suggest.¶ A state, tribal and federal science team that has been working since 1996 is urging federal fish and wildlife officials and dam managers to change their management to test the theory, which is based on a dramatic increase in data collected over the past decade.¶ “The fish are talking to us and we’re getting better at listening to what they’re telling us,” said Ed Bowles, chief of fisheries for the Oregon Department of Fish and Wildlife.¶ The research suggests that a 15 percent to 20 percent increase in the amount of water that now spills over the dams — for a total flow of just more than half the rivers’ water — would more than double the number of salmon that survive to return to spawn. That’s enough to support sustainable populations of wild stocks of chinook and steelhead within 48 years.¶ In previous survival studies going back to 1996 — including a review by Idaho’s Department of Fish and Game — the only management option that could reach those survival numbers was breaching the four federal dams on the Snake River in Washington state.

## Privatization CP

### Privatization CP – 1NC

**Text: The United States Federal Government should sell the lower Snake River dams to the highest bidder.**

#### The CP is mutually exclusive – the government cannot sell and destroy the dams simultaneously.

**The counterplan solves the case -- environmentalists will buy the dams and destroy them**

**Crane and Boaz 2003** [Edward H. Crane and David Boaz, the Cato institute. “Cato Handbook for Congress: Policy Recommendations for the 108th Congress (Google eBook).” The Cato Institute. Feb 1, 2003. Google Books.] AP

All of the PMAs should be privatized by asset divestiture and sold to the highest bidders by an asset privatization working group under the management of the Department of the Treasury.The divested assets should include the right to market power produced at federal facilities (without any price constraint) and the generation equipment associated with energy production at those facilities (own primarily by the Army Corps of Engineers and the Bureau of Reclamation). The privatization plan should grandfather in existing operating conditions at hydroelectric generating facilities, including minimum flows from the dams, and provide a “preference” to current customers that would relieve them from current contract requirements if they so desired**. Sale of the four PMAs proposed by the Clinton administration in 1995 (but, alas, proposed no longer) was estimated to bring in between $3.4 billion and $9 billion to the federal treasury. Bonneville was likely to bring in approximately $9 billion. Although there might not be a market for the largest federal dams, such as Hoover and Grand Coulee (although that remains to be seen), there are more than 100 smaller dams that would find ready buyers. More than 2,000 hydropower facilities are owned by the private sector (compared to 172 facilities owned by the public), and 56 percent of the nation’s hydropower is generated by private companies. Those facilities are not necessarily small generators. The Conowingo Dam, a 500-megawatt facility on Maryland’s Susquehanna River, and the Brownlee Dam, a 585-megawatt facility on the Snake River ,are both owned by nonfederal power companies.** Sale of federally owned dams would also allow environmentalists and the recreational industry the option of buying and retiring those dams in the interest of riparian protection and, indirectly, the health of various fisheries. **There is little merit to the idea that the federal government knows a priori the highest and best economic use for riparian resources**. It may well be that society values the environmental benefits of untamed waterways more than it values the low-cost electricity that those waterways provide. If that is the case, the public should be afforded the opportunity to make those preferences know through the marketplace. Most retail consumers of public power would experience no rate increases under privatization **(assuming, that is, that environmentalists do not win bids to own privatized hydroelectric facilities). The reason is that,** even though public power is sold to intermediary wholesale purchasers at from 1 to 3 cents per kilowatt-hour, those wholesalers **(rural electric cooperatives and municipal utilities)** typically resell that power to their customers at market rates – 6 to 8 cents power kilowatt-hour. In other words, the retail customers of public power do not receive the public subsidy; the rural electric cooperatives and municipal utilities do.

### Spending DA – 1NC

#### Removing the Snake River dams costs at least one billion dollars

Garrett No Date (Chris, cites an Army Corps economic prediction, “The Political Symbolism of Dams,” http://www.whitman.edu/environmental\_studies/WWRB/damsymbol.htm, LVS)

At a “save our dams” rally in Kennewick, Washington this last fall, the chief rhetoric justifying the existence of the dams was economics. At this rally, the participants were reminding those present that the Snake River dams are a huge producer of electricity, producing a combined 1,200 megawatts of electricity, enough to power a city the size of Seattle.[16] These activists also warned of the sheer costs of dam removal, citing an Army Corps’ prediction exceeding $1 billion to remove the earthen portion of the dams.[17]

**The CP sells federal assets – saving billions**

**Segal 2006** [Geoffrey Segal, director of government reform of Reason Foundation. “Privatization and Devolution Keys to Solving Federal Budget Mess.” July 19, 2006. <http://reason.org/news/printer/privatization-and-devolution-k>] AP

The current level of spending is not sustainable and a serious threat to our liberty.¶ A recent Government Accountability Office report highlights what the future will hold if our elected officials don't change their habits. At present rates, the federal government will consume more than 40 percent of the country's gross domestic product by 2040. By 2030, interest on debt, social security, and Medicare/Medicaid alone will drive the federal budget into deficit.¶ Its clear, as the GAO reported that "absent policy change, a growing imbalance between expected federal spending and tax revenues will mean escalating and ultimately unsustainable federal deficits and debt."¶ This should be setting off alarms in Washington and all over America for that matter. Sadly, rather than look for ways to trim federal programs we keep adding them. Despite this evidence, which according to the GAO "dramatically illustrate[s] AP the need for action," Congress and this administration continue to spend.¶ Taxing more is not the answer. Rather, a serious effort at privatization and devolution of federal assets and programs is needed.¶ First, privatize.¶ Believe it or not, the federal government does have some experience with privatization. Under Presidents Reagan and Clinton there were some successes in the 1980s and ï¿½90s. Both the Naval Petroleum Reserve and the uranium enrichment program were privatized to name just two. However, a new serious wave of privatization is needed. The federal asset inventory is a virtual treasure trove of locked up capital. Billions if not trillions of wealth are locked up in these assets that can be freed up with privatization. Thus generating, or creating, new wealth that can pay down debt or fund social security obligations until a more permanent fix can take hold.¶ In order to get the ball moving, we should turn to President Reagan's bold agenda. In the 1980s President Reagan's plan called for privatization of federal lands, Coast Guard rescue responsibilities, adjudication of federal tax disputes, the U.S. Postal Service, the U.S. Helium Reserves, and many others.¶ But why stop there? As the nation's largest electric power organization, the federal government acts as owner and manager of the Tennessee Valley Authority and four power marketing administrations (PMAs). In 1996, the Clinton administration did propose privatizing the facilities and estimated it would bring in between $3 billion and $9 billion. The Congressional Budget Office has estimated that sale of the three smallest PMAs and related hydropower assets would bring in from $8 billion to $11 billion. Sale of the Bonneville Power Administration would produce about $9 billion. The former head of the TVA estimates that that utility could sell for as much as $10.5 billion. Throw Amtrak and the US Postal Service on the list and we're making significant progress.

**Continued spending kills the economy and tanks competitiveness**

**Ortega 2011** [Israel Ortega, Editor of the Spanish Page of the Heritage Foundation. “Time to Face Economic Reality.” The Heritage Foundation, April 22nd 2011, <http://www.heritage.org/Research/Commentary/2011/04/Time-to-Face-Economic-Reality>] AP

Here are the official government numbers. According to the Department of the Treasury, our current total public debt is more than $14 trillion. Our public debt represents the sum of how much we currently owe to other financial institutions and foreign countries. To give you a sense of what $14 trillion looks like, imagine filling the entire Estadio Azteca in Mexico City (with a capacity of 104,000) with $100 bills from the bottom to the brim. This staggering debt is a burden to every single American. It’s also a sobering reminder that we are spending beyond our means. And yet, powerful voices are asking us to ignore the perilous reality and fight to increase federal spending at every turn. This hysteria was evident in Congress’ recent battle over last year’s budget spending bill when politicians calling for necessary spending cuts were labeled heartless and cruel. The irony of the recent debate is that it was dealing with only a fraction of our entire federal budget, and it pales in comparison to what’s necessary to get our financial house in order. The truth is that the federal government will need to exercise even more financial restraint if we are to ensure that our economy can get out of this recession and remain competitive in the global market.

### AT: Dam Removal Saves Money

#### Their studies are biased

Keppen 2002 Dan Keppen, Executive Director Family Farm Alliance, “Cast a Wary Eye on Dam Removal Economic Studies,” http://familyfarmalliance.clubwizard.com/IMUpload/Dam%20Removal%20Econ%20Studies.pdf

Just last month, another economic report addressing the Columbia River system was¶ trumpeted by anti-dam activist groups in Western urban papers. It suggested that¶ removing four dams on the Lower Snake River – a tributary to the Columbia - could¶ realize between $4.2 billion and $24.4 billion in savings and increased economic activity¶ over 20 years. The report consists of compiled numbers from an array of already published¶ (and some discredited) studies from interest groups, government agencies and¶ the Yakama Nation, while adding analysis from the interest groups that authored it.¶ According to an analysis prepared by Northwest RiverPartners, the Snake River report¶ makes “**numerous fictional claims** and advocates for a narrow, special interest of¶ removing a critical, reliable and renewable energy resource: the Lower Snake River¶ dams.”

### Solves the Case

Private entities would buy federally owned dams to destroy them for economic and environmental benefits

The Heintz Center for Economics, Science, and Environment 10 (nonproﬁt institution dedicated to improving the scientiﬁc and economic foundation for environmental policy through multisectoral collaboration focusing on issues that are likely to confront policymakers within two to ﬁve years, the Center creates and fosters collaboration among industry, environmental organizations, academia, and government in each of its program areas and projects. 4/23/10. DAM REMOVAL: Science and Decisionmaking. http://water.epa.gov/polwaste/nps/upload/Dam\_removal\_full\_report.pdf

Dams are a ubiquitous feature of the American landscape and waterscape, and they form an integral part of the nation’s economic infrastructure. The building of many of these structures has produced signiﬁcant economic beneﬁts, but the effort also has imposed environmental, economic, and social costs that are now becoming clear. The majority of structures are small, storing less than 100 ac ft of water, and most small dams in the nation are owned by private concerns or local entities. An unknown number of dams have been removed, but the total is probably at least 1,000. The removal of these structures, mostly small, run-of-river dams, typically has been the result of decisions by individual owners seeking a variety of largely economic beneﬁts, although the environmental reasons for dam removal are numerous and often supported by local or state governments. These benefits mean private companies would buy federally owned dams. Recommendation: The panel recommends that federal agencies and other organizations consider sponsoring a conference for researchers who are focusing on the scientiﬁc aspects of dam removal with the speciﬁc objectives of improving communication across disciplinary boundaries, identifying gaps in knowledge, and prioritizing research needs. The conference should not be a forum for debating whether dams should be removed, because other venues are available for bringing stakeholders together. It should focus on the private entities that want to buy the dams. The conference should focus on science and the state of knowledge available for decisionmakers, identify gaps, and assign priorities. Conclusion: Dam removal is a site-speciﬁc process, largely dependent on the owner and often in collaboration with local stakeholders and state and local government. If dam removal were to actually happen federally owned dams like those owned by the FEMA and the Army Corps of Engineers would have to be sold to private entities. These decision makers need more information and a framework for effective decision making. Data about dams that have been removed can be useful for decision makers considering the fate of existing structures, yet there is no centralized mechanism for collecting, archiving, and making available such information on a continually updated basis.

### Electricity Net Benefit

**The CP creates a competitive power market**

**Crews 95** [Clyde Wayne Crews, Jr. Fellow in regulatory studies, Competitive Enterprise Institute . “Privatization of the Power Marketing Administrations“ May 18, 1995. <http://cei.org/outreach-regulatory-comments-and-testimony/privatization-power-marketing-administrations>

There are two key ways in which continued existence of the subsidized PMAs threaten the future competitiveness of the energy market. One is the investor-owned utilities' lack of access to power generated at PMA facilities. The other impediment is that even though municipals and co-ops in any given PMA region legally may purchase power generated outside the PMA region, they have no incentive to do so, since even the economies generated by wheeling are not yet a match for the guarantee of at-cost purchase. A system that will be most efficient for energy consumers is one in which all producers are free to sell to any buyers, and any buyer is free to purchase from any seller. The PMAs preclude the existence of such a marketplace.

**Privatization of PMAs solves government inefficiencies**

**a) more energy**

**Block and Hon 97** [Michael Block is a Ph.D. and a professor of economics and law at the University of Arizona. He is also president of the Goldwater Institute and a Senior Fellow at the Progress 0 Freedom Foundation. John Shadegg is fhe U.S. representative from Arizona’s 4th Congressional District. The authors gratefully acknowledge the assistance of Libor Dusek. Lights Out on Federal Power: A Plan to Privatize the PMAs. Science Direct.] AP

PMA/Army Corps of Engineers plants are operated at Full Gate, which means that water control gates in the turbine are opened to provide maximum water flow and thus maximum output (in MW). However, this is less efficient than Best Gate, a regime normally used by investor-owned utilities, in which the turbine water flow is set at the point of peak turbine efficiency A cursory analysis made of the four SEPA/Corps of Engineers projects on the Alabama River Basin by Southern Company (an investor- owned utility) to estimate the inefficiencies caused by Full Gate operation found that, due to a loss of turbine efficiency of about 7 percent, the value of annual energy lost was about $700,000.

####  b) power outages

**Block and Hon 97** [Michael Block is a Ph.D. and a professor of economics and law at the University of Arizona. He is also president of the Goldwater Institute and a Senior Fellow at the Progress 0 Freedom Foundation. John Shadegg is fhe U.S. representative from Arizona’s 4th Congressional District. The authors gratefully acknowledge the assistance of Libor Dusek. Lights Out on Federal Power: A Plan to Privatize the PMAs. Science Direct.] AP

Another inefficiency found in PMA operations is their outage rates. The PMAs do not produce the maximum power possible due to very long outages. Causes for this include the added wear on units from continual Full Gate operations, generator overheating and prolonged repair outages. The timing of these outages is also inefficient. Unlike investor-owned utilities, the PMAs we examined do not provide a reserve fund for major unit repair costs, and funds for the repairs must come from Congress. At one point SEPA had about 800 MW of hydro capacity (or 26 percent of its installed capacity) either out of service or forced to operate at less than full capacity because of maintenance problems. This is in contrast to the industry-wide average outage rate of 8.7 percent for the past five years. As an extreme example, unit 1 at Jones Bluff project was out of service from March 1992 until August 1995, and unit 1 at Millers Ferry has been out of service since June 1992.12

### CP Solves Environment

**CP turns the environment advantage – energy consumption, pollution, and environmental policies**

**Houston 96** [Douglas Houston, the Reason Foundation. “Federal Power: The Case for Privatizing Electricity.” March 1, 1996. <http://reason.org/news/show/federal-power>] AP

Privatization and the end of electricity subsidies could be a win-win proposition. First, existing subsidies are grossly inefficient; about half of the subsidies that flow through various government-owned utilities and co-ops don't reach the final consumers. Thus, a well-crafted privatization which provides these consumers with modest transitional protection from rising prices might push aside remaining consumer resistance. Second, environmental interests are not well served by government involvement in the electric power industry. Below-market pricing increases energy consumption and pollution; privatization legislation also offers an opportunity to reconsider the licenses on environmentally sensitive federal hydro facilities. Third, opening up all transmission access to competitive power delivery will expand price competition, benefiting electricity consumers nationwide.

### CP Solves Economy

**Solves spending – revenues, sales, and efficiency**

**Houston 96** [Douglas Houston, the Reason Foundation. “Federal Power: The Case for Privatizing Electricity.” March 1, 1996. <http://reason.org/news/show/federal-power>] AP

Other countries have privatized electricity for two main reasons: 1) to improve the efficiency and performance of their electric power industry, particularly as competition in this sector emerges, and 2) to raise capital to reduce their national debts. Both objectives are equally applicable to the United States, but the U.S. federal government has yet to divest a single electric power asset. The Clinton administration's FY 1996 budget called for the privatization of the four smallest PMAs, but this initiative stalled in the 104th Congress, and congressional calls for privatization of the larger TVA and the Bonneville Power Administration (BPA) also have been rebuffed.¶ Privatizing federal electricity and ending current subsidies would have the following benefits:¶ Sale of federal power enterprises would raise $15-30 billion, which could be applied to reducing the national debt.¶ Total direct subsidies to government-owned utilities and cooperatives of about $7-10 billion per year would end. Of this total, $3 billion per year is lost government revenue due to the sale of preference power at below-market prices.¶ Privatization would lead to substantial gains in efficiency and performance by the privatized utilities. Government-owned utilities worldwide suffer substantial operational problems and face political interference in management and investment decisions, which can be solved by the shift to investor-ownership.¶ Putting the transmission grids of the TVA and the PMAs into the emerging competitive market would help promote efficiency and lower electricity prices for all Americans. There is no good reason for the Federal Energy Regulatory Commission to treat these transmission assets differently from those of investorowned utilities.

### AT: People Won’t Buy

**People will buy – the private sector comprises a huge part of the market**

**Crane and Boaz 03** [Edward H. Crane and David Boaz, the Cato institute. “Cato Handbook for Congress: Policy Recommendations for the 108th Congress (Google eBook).” The Cato Institute. Feb 1, 2003. Google Books.] AP

Sale of the four PMAs proposed by the Clinton administration in 1995 (but, alas, proposed no longer) was estimated to bring in between $3.4 billion and $9 billion to the federal treasury. Bonneville was likely to bring in approximately $9 billion. Although there might not be a market for the largest federal dams, such as Hoover and Grand Coulee (although that remains to be seen), there are more than 100 smaller dams that would find ready buyers. More than 2,000 hydropower facilities are owned by the private sector (compared to 172 facilities owned by the public), and 56 percent of the nation’s hydropower is generated by private companies. Those facilities are not necessarily small generators. The Conowingo Dam, a 500-megawatt facility on Maryland’s Susquehanna River, and the Brownlee Dam, a 585-megawatt facility on the Snake River ,are both owned by nonfederal power companies.

**PMAs will be sold at asking price - empirics**

**Houston 96** [Douglas A. Houston. “Federal Power: The Case for Privatizing Electricity.” Policy Study No. 201. March 1996. <http://reason.org/files/994350d9490adaff84a65c1547ddb647.pdf>] AP

 Four of the PMAs should be relatively easy to privatize. The current revenues from the four PMAs other than BPA appear more than sufficient to generate revenues in excess of a normal return on book value. As a result, even if privatization of the four took place with no anticipated increase in prices, it still could generate considerable value to the government. This suggests that these PMAs will sell for more than the $3.7 billion that the Department of Energy predicts or the $4.1 billion suggested by the House Budget Committee. The proposed bid of $550 million by Tucson Electric, an investor-owned utility, for just the Arizona assets of the WAPA, also supports the view that the assets may go for more.

### Alternate Mechanism – Stakeholders’ Association

**Text: the United States Federal Government should divest power management administration to public associations of stakeholders.**

**Block and Hon 97** [Michael Block is a Ph.D. and a professor of economics and law at the University of Arizona. He is also president of the Goldwater Institute and a Senior Fellow at the Progress 0 Freedom Foundation. John Shadegg is fhe U.S. representative from Arizona’s 4th Congressional District. The authors gratefully acknowledge the assistance of Libor Dusek. Lights Out on Federal Power: A Plan to Privatize the PMAs. Science Direct.] AP

It makes more sense if the dams are transferred to an association of stakeholders: farmers who need water to irrigate their fields; second home owners who want the reservoir to provide the amenities they were seeking when they purchased their property; resort owners along the beach who want the dam to be attractive for the general public; the power company who relies on the dam for generating purposes; and perhaps some other stakeholder whose “rights” to the dam are not tied to land ownership (environmentalists who want the wildlife to be preserved or fishing associations who want to have sufficient fish in the reservoir and downstream). In order for all stakeholders to be adequately represented, there should be one association on a river, and that association would then own all federal hydro projects on that river (thus we call it a “river association”). The association would own everything that the federal government now owns (except the power resources) and would make decisions about, and bear responsibility for, dam maintenance and water management. Thus a local organization would decide local, or regional, issues. Financing for dam maintenance and non-power activities would be provided by revenues from the privatized PMAs (i.e., the fees they pay for their use of the dam).

### Alternate Mechanism – 51%-49%

**Crews 1995** [Clyde Wayne Crews, Jr. Fellow in regulatory studies, Competitive Enterprise Institute . “Privatization of the Power Marketing Administrations“ May 18, 1995. <http://cei.org/outreach-regulatory-comments-and-testimony/privatization-power-marketing-administrations>] AP

While I'm happy to simply make the previous suggestions and leave the mechanics of privatization up to the investment bankers, the Heritage Foundation suggested a method in 1986, based on the British experiences with Britoil and British Telecom, that may be worth investigating since it helps to address the concerns of customers who potentially could face rate shock but also allows a certain less-than-majority percentage of the stock of the newly privatized firm to be sold at higher post-initial-offering rates, thereby heightening the amount of deficit reduction. The idea is to create a package whose benefits are distributed in such a way that all parties--PMA customers and taxpayers--can potentially be better off with privatization compared to the status quo. In rudimentary and simplistic terms it could work something like this: (a) a 51% controlling interest in the PMA would be offered to the public at the initial valuation, with current customers of each PMA given the option to purchase stock in proportion to their use of power (perhaps to be paid for in installments on future electric bills). A minimum of 10% of this 51% block of stock could be reserved for small investors like residential or small business customers of the PMA. These small buyers would also receive an option to buy additional shares in the future at the original price if they hold their shares for a prescribed minimal length of time. Heritage states that this allows small investors or former customers to benefit from any increase in value that privatization brings. (b) The remaining 49% share of stock would be temporarily retained by the government and then sold at the most attractive price. This way the taxpayer wins from any increase in stock value post-privatization, because all the additional funds could be earmarked for deficit reduction.

### Alternate Mechanisms – AT: Perm

**The counterplan is competitive – it sells the dams that they destroy**

**Crisson 12** [Mark Crisson, President & CEO, American Public Power Association. “Testimony on “Increased Electricity Costs for American Families and Small Businesses:

The Potential Impacts of the Chu Memorandum”” April 26, 2012. <http://www.publicpower.org/files/PDFs/MarkCrissonTestimonyNatResCommitteeChuMemo.pdf>] AP

Approximately 600 of APPA’s members in 33 states purchase hydropower from the four federal Power Marketing Administrations (PMAs). The PMAs market the hydropower produced at large federally-owned dams operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation. Each of these public power utilities has a unique contractual arrangement with the PMA from which they receive power. Some of these utilities get all of their power needs met through the PMA, while others only get a portion – augmenting the federal hydropower with their own generation sources which include natural gas, coal, nuclear, other hydropower facilities and non-hydro renewable sources such as wind, solar, geothermal and biomass. What they have in common is that the rates they pay for the PMA-marketed hydropower cover ALL of the costs of generating and transmitting the power, interest on the federal investment in the project, and ongoing operation and maintenance. In some cases, the power customers also subsidize other purposes of the dams, such as irrigation and recreation.

#### And – that includes the Snake River dams – they’re owned by the PMAs

Harvey 99 [Jacqueline Harvey, Idaho State University. “Idaho Fish Hatcheries.” http://imnh.isu.edu/digitalatlas/geog/fishery/hatchery.htm]

In 1976 Congress passed the Water Resources Development Act and the Lower Snake River Fish and Wildlife Compensation Plan was created. The plan required the construction of fish hatcheries whose operation was intended to help offset the loss of Idaho's native salmon and trout species. Fish populations were declining - apparently as a result of construction of four dams and locks on the lower Snake River by the Bonneville Power Administration (Ice Harbor, Little Goose, Lower Granite and Lower Monumental were all built between 1962 and 1976).

## Electricity DA

### Links

#### Snake River Dams key to industry

Paul **Schlienz 03**, Communications writer for The Association of Washington Businesses, September 17 2003, “Research Council Finds Gaping Holes in Snake River Dam Study,” Association of Washington Businesses, http://www.awb.org/articles/environment/research\_council\_finds\_gaping\_holes\_in\_snake\_river\_dam\_study.htm

Working families depend upon these jobs and they in turn depend upon irrigation waters from the Snake River dams,” Sawin added.Dams keep good paying jobs in place¶ Rep. Jim Honeyford (R-Sunnyside) is very fond of saying: “Next time you want to give up your $30 to $40 an hour job to get nine dollars an hour to change somebody else’s bed, give me a call. I’ve got lots of motels in my area.”His district includes the Columbia Gorge region, which depends on the dams.¶ Another contention of the RAND study is the Northwest’s energy needs can be met through conservation and alternative energy sources if the dams are removed. Sjoblom rejects this notion.¶ “**We have a shortage of generating capacity today to meet our rapidly expanding appetite for electricity and in drought years like 2001, we simply can’t find enough electricity without closing industrial facilities,” Brunell said. “Each of the Snake River dams can produce enough power for the needs of a city the size of Portland.”**

[NOTE: Don Brunell = President of the Association of Washington Business]

#### Snake river dams key to energy

Terry **Flores 11**, Executive Director for Northwest River Partners, August 3, 2011, “Arguments for removal of Snake River Dams are laughable, absurd,” Northwest River Partners, <http://www.thenewstribune.com/2011/08/23/1792061/arguments-for-removal-of-snake.html>

The article, “Ruling brings opportunity to rebuild fisheries, expand green economy” (Viewpoint, 8-18) is rife with mischaracterizations, to put it politely. The authors claim to speak for Northwest businesses on the topic of a recent court ruling on a federal salmon plan. This is simply absurd.¶ If you look behind the curtain, **those purporting to speak for “business” are merely anti-hydro and dam-removal extremists aligned with a small slice of specialty chefs, elite food retailers and commercial fishing representatives** (all of whom could better help save wild salmon by not killing, selling or serving them) along with eco-apparel retailers.¶ **This is hardly representative of Northwest businesses, which include farmers, ports, high-tech, manufacturing, food processing, wood products, energy generation and many, many more, including a myriad of small local enterprises.**¶ Furthermore, the letter the authors reference – which asks President Barack Obama, members of Congress and Gov. Chris Gregoire to convene a new process to craft yet another salmon plan – suggests that they have conveniently forgotten the last six years when state, federal and tribal sovereigns worked together in an unprecedented collaborative process to do just that.¶ **The plan for salmon that resulted from this process is being implemented and is working, as witnessed by record and near-record returns in many adult salmon runs this decade. The anti-hydro and dam-removal groups simply don’t like the plan because it doesn’t support their agenda for ripping out some of the Northwest’s cleanest, greenest and most reliable sources of power around – the hydro energy generated by the Snake River dams.¶**

## Agenda DA

### Plan Controversial

#### The plan is politically explosive

LA Times 2009 (“Saving the Columbia and Snake river salmon,” July 6, <http://articles.latimes.com/2009/jul/06/opinion/oe-vandevelder6>, LVS)

"The letter is strongly critical of the key strategy in the plan to focus on habitat improvements to offset the harm that federal power-generating dams inflict on fish," the Oregonian wrote, expressing surprise at such a reaction while conveniently ignoring the fact that billions of dollars spent on habitat improvement, fish ladders and barging young fish around dams have done very little to increase salmon populations.¶ If anything, these measures have lengthened the odds against the salmon's survival by shifting the focus away from more politically explosive solutions, such as dam removal. Redden first issued his warning about the dams in 2004, when he threw out the first Bush rescue plan.

#### Simpson hates the plan – he’s key

**Cousins 2011** [Sarel Cousins, Virginia Polytechnic Institute and State University. “Controversy surrounding Dam Removal on the Elwha and Lower Snake Rivers.” May 7, 2011.https://scholar.vt.edu/access/content/group/5b95dc6f-a3ef-4ce5-8e1a-875819148663/MNR%20Capstone%20Projects/Final%20Paper\_Sarel%20Cousins\_051011.pdf]

Finally, the political power of various U.S. Congressmen and Senators in the region and their position on dams in the¶ 13¶ Pacific Northwest can influence outcomes. For example, Representative Mike Simpson is the chairman of the Appropriations Subcommittee of the Interior and is also on the Subcommittee of Energy and Water Development. ―The two committees are in charge of funding the federal agencies that control 64 percent of Idaho’s land area‖ (Barker 2010). If Congressman Simpson is not interested in dam removal on the Snake River, then he might be able to influence the monies allocated to various federal agencies for salmon recovery. Water projects in the past and even today are known as "the pork par excellence for U.S. politicians" since they produce jobs, provide services and provide a great deal of money for local districts (McCully 2001 p. 242).

#### Power interests – powerful political bloc

**Cousins 2011** [Sarel Cousins, Virginia Polytechnic Institute and State University. “Controversy surrounding Dam Removal on the Elwha and Lower Snake Rivers.” May 7, 2011.https://scholar.vt.edu/access/content/group/5b95dc6f-a3ef-4ce5-8e1a-875819148663/MNR%20Capstone%20Projects/Final%20Paper\_Sarel%20Cousins\_051011.pdf]

A combination of factors including hydropower, navigation and irrigation interests represent a powerful political argument against dam removal. As mentioned earlier, relevant federal action agencies include BPA, BOR, NOAA Fisheries, and the U.S. Army Corps of Engineers. ―Cheap power produced by the turbines at the dams and water diverted from the river still fuel the economy of eastern Washington and much of Oregon and Idaho‖ (Montgomery 2003). Since hydropower is the main source of electricity for the entire region, and irrigation practices and navigation interests are entrenched in the social fabric of the area, dam removal is an unpopular option thus far. Maintaining the status quo however is not an option as the region has to address how it will manage threatened and endangered species (Independent Scientific Group 1999).

#### Decades of controversy prove – multiple actors in dispute

**VanDevelder 2009** [Paul VanDevelder, author of Savages and Scoundrels: the Story of America’s Road to Empire Through Indian Territory.” July 06, 2009. LA Times. <http://articles.latimes.com/2009/jul/06/opinion/oe-vandevelder6>]

If ever there were a story that foreshadowed the political and legal Waterloos that loom in seeking solutions to climate change, surely that cautionary tale is the one about the Columbia and Snake rivers' salmon and their imminent extinction. And like most stories about endangered species or environmental threats, this one is not only about fish and rivers -- it's about us.¶ The policy deadlock that has resulted from the debate among stakeholders along the Columbia and the Snake -- aluminum smelters, the Bonneville Power Administration, politicians, Indian tribes, states, conservation groups, fishermen, barge operators, agribusiness and wheat farmers -- has flushed billions of taxpayer dollars out to sea over the last 15 years while doing very little to prevent 13 endangered salmon stocks from going extinct.

#### Hydropower and electricity agencies

**Cousins 2011** [Sarel Cousins, Virginia Polytechnic Institute and State University. “Controversy surrounding Dam Removal on the Elwha and Lower Snake Rivers.” May 7, 2011.https://scholar.vt.edu/access/content/group/5b95dc6f-a3ef-4ce5-8e1a-875819148663/MNR%20Capstone%20Projects/Final%20Paper\_Sarel%20Cousins\_051011.pdf]

Some of the major stakeholders include the federal agencies in charge of the Federal Columbia River Power System including the Bonneville Power Administration (BPA), the USACE and the Bureau of Reclamation (BOR). These agencies are responsible for hydropower operation and marketing, navigation and flood control and water allocations for irrigation. Since BPA funding comes from selling hydropower to other utilities and industries, curtailing electricity production during salmon migration is not in the organization’s best interest financially. Moreover, many organizations rely on some BPA funds including the Oregon, Washington and Idaho Fish and Wildlife departments, graduate programs at universities in the Pacific Northwest, NOAA, USFWS, USACE, and others (Hawley 2011).

#### Steadfast opposition

**VanDevelder 2009** [Paul VanDevelder, author of Savages and Scoundrels: the Story of America’s Road to Empire Through Indian Territory.” July 06, 2009. LA Times. <http://articles.latimes.com/2009/jul/06/opinion/oe-vandevelder6>]

Politicians and stakeholders have steadfastly resisted the painful solution of dam removal while hoping for a miracle. That hope turned out to be a one-way road on a dead-end street, and in many respects they're now blaming the court for their current predicament. With few exceptions, the region's politicians, past and current, have been challenging the recommendations of scientists (including dam removal and increasing the spills over the dams) for more than a decade. Former Sen. Gordon Smith (R-Ore.) famously vowed to chain himself to a dam rather than surrender, a prospect relished by many conservation groups.

#### Emotional opposition

Garrett No Date [Chris Garrett. “The Political Symbolism of Dams.” <http://www.whitman.edu/environmental_studies/WWRB/damsymbol.htm>]

A second reason why the dams have become so powerful politically is because dams also have an emotional element to them as well. Dams for many imbue feelings of pride since they are feats of engineering, and are testimonies to what man is capable of building. These types of emotions are what Murry Edelman calls, “condensational symbols,” which, according to Edelman, are situations or objects that conjure up patriotic pride, or other proud remembrances which help to perpetuate the object’s or situation’s existence. Since dams are condensational symbols, the emotions they imbue help to perpetuate their own existence. Driving along the highways on either side of the Snake River near Lewiston, Idaho for example, one can see countless shields with the symbol of a dam, a testimony to man taming nature. The pride one feels when one sees a dam makes the political support for these dams no longer simply a result of the benefits that these dams give to the greater community, but rather results from citizens likening these dams to historical markers and symbols of progress of our society.

### Dam Removal Goes Through Congress

#### Dam removal would have to go through congress.

McCullen 10 (“Army Corps releases plan on dam removal on Snake river”, kevin McCullen | Tri-City Herald, April 1, 2010http://www.mcclatchydc.com/2010/04/01/91473\_army-corps-releases-plan-on- dam.html)phol

The Army Corps of Engineers on Wednesday released a plan outlining the steps to evaluate the potential breaching of one or more dams on the Lower Snake River if necessary to ensure survival of endangered wild salmon and steelhead.¶ A study -- which would include a technical phase and public policy phase and possibly the development of an environmental impact statement -- is not imminent.¶ A dramatic decline in the four-year average of wild salmon and steelhead listed under the Endangered Species Act or a natural catastrophe are among the "trigger" events that would have to happen to launch the study -- which would take several years to complete, Corps officials said.¶ "There's a lot of things that would have to fall into place before we could ever get to this step," said Greg Graham, chief of planning for the Corps' Walla Walla District.¶ And even if a plan of study -- which would incorporate information gathered for a 2002 study of breaching the four Snake River dams -- were initiated and dam removal recommended, the final decision would be up to Congress, the Corps said.

## Elections DA

### Voters Dislike Dam Removal

#### Voters dislike Snake River dam removal

Terry **Flores 11**, Executive Director for Northwest River Partners, August 3, 2011, “Arguments for removal of Snake River Dams are laughable, absurd,” Northwest River Partners, <http://www.thenewstribune.com/2011/08/23/1792061/arguments-for-removal-of-snake.html>

Fortunately, the public doesn’t buy this nonsense. **Polling done by DHM Research in Portland for several years now shows the public believes that removing the Snake dams is an extreme solution that would do more harm than good. In fact, the public’s opposition to removing the Snake dams has only increased over time, from 68 percent opposed in 2007 to 73 percent opposed in 2011. And citizens consistently identify hydro energy as the Northwest’s most practical, clean, reliable and renewable energy resource**.¶ And the **suggestion that the Snake River dams are “relatively small” is just laughable. They provide more than 1,000 megawatts of clean energy, enough to light a city the size of Seattle** – and then some. They generate power to back up wind resources when the wind isn’t blowing, which happens a lot. Along with the rest of the Northwest’s hydro system, **they generate billions of dollars for the Northwest’s economy, provide hundreds of thousands of local, family-wage jobs and keep our carbon footprint half that of the rest of the country.**¶ These jobs and environmental benefits certainly can’t be replaced by a few “fishing and other salmon-based jobs” as the authors purport. And, isn’t the aim of fishing to catch and kill the very salmon these folks say they want to protect? Sounds fishy to me.¶ Terry Flores is executive director of Northwest RiverPartners, an alliance of farmers, utilities, ports and business that promote the economic and environmental benefits of the Columbia and Snake rivers and salmon-recovery policies based on sound science.¶

# DAM REMOVAL MISCELLANEOUS

## Other Mechanisms (various flaws but maybe salvageable)

### Other Mechanism: Federal Matching Funds

#### Federal action key – matching key to fulfill funding needs

**Otto et al 2k** [Betsy Otto, Director of the Aqueduct project in the Markets and Enterprise Program at the World Resources Institute. “Paying for Dam Removal: A Guide to Selected Funding Sources.” American Rivers. October 2000.

There is no dedicated funding source at the federal level for removal of dams for ecological or¶ recreation reasons, nor is there a dedicated source for repair or removal of unsafe dams at the¶ federal level. Nevertheless, there is a remarkable array of federal programs and dollars that can¶ be tapped for both removal and associated costs. Although some dam removals have been funded¶ directly through one federal source, many dam removals have creatively combined monies from¶ many sources.¶ Many of the federal funding programs provide grants to individuals and nonprofit organizations¶ as well as state and local governments. Matching requirements are included with many federal¶ funding sources—that is, most federal funding programs require a certain percentage of project¶ costs to be borne by non-federal funding sources. These match requirements can sometimes be¶ difficult for local communities to meet, particularly since most federal programs do not allow¶ matching with other federal funds. In some programs, more flexible matching fund rules are¶ beginning to take hold. For example, the U.S. Department of Transportation’s TEA-21¶ Recreational Trails program (potential funding for riverfront restoration work related to a dam¶ removal), allows other federal funds to be used to match up to 95 percent of program grants. The¶ Army Corps of Engineers also has liberal rules that allow up to 80 percent of the match required¶ under its Aquatic Ecosystem Restoration and Modifications for Environmental Improvements¶ programs to come from in-kind contributions.¶ To date, natural resource agencies, such as the U.S. Fish and Wildlife Service (Interior¶ Department), the U.S. Environmental Protection Agency, National Marine Fisheries Service¶ (Commerce Department) and the Natural Resources Conservation Service (Agriculture¶ Department) have provided the most grant funding for the direct physical demolition costs of dam¶ removal. The most frequently tapped federal grant programs for dam removal include: Partners¶ for Fish and Wildlife (U.S. Fish and Wildlife Service), Challenge Grants (National Fish and¶ Wildlife Foundation), Community-Based Restoration (National Marine Fisheries Service),¶ Chesapeake Bay Program’s Fish Passage Workgroup (U.S. EPA), and Wildlife Habitat¶ Improvement Program (Natural Resources Conservation Service).¶ Many of these programs make grants on a competitive basis, and the demand for funds is much¶ greater than the supply. For example, the Natural Resources Conservation Service’s Wildlife¶ Habitat Incentives Program (WHIP) program provides funding for up to 75 percent of habitat¶ improvements on private lands and has been used to remove some dams. Demand for WHIP¶ funds has been so great that the program exhausted the available $50 million in funding¶ appropriated for 1997-2000 in two years.

### Other Mechanism: Federal Energy Regulatory Commission (FERC)

#### FERC solves – multiple funding mechanisms already in place

**Otto et al 2k** [Betsy Otto, Director of the Aqueduct project in the Markets and Enterprise Program at the World Resources Institute. “Paying for Dam Removal: A Guide to Selected Funding Sources.” American Rivers. October 2000.

5. Decommissioning Funds and Other Mitigation Under the Federal Energy Regulatory¶ Commission Licensing Process¶ The Federal Energy Regulatory Commission (FERC) has the authority to license the operation of¶ most non-federal hydropower dams. FERC is charged with balancing economic interests and the¶ environment when granting a license. Many licenses across the country, which can be issued for¶ 30 to 50 years, are coming up for renewal in the next few years. There are at least five potential¶ avenues for funding dam removal through the FERC relicensing process3:¶ (a) required modifications to existing facilities;¶ (b) required removal of a dam;¶ (c) removal or restoration of other dams as mitigation for continued operation;¶ (d) specific dam decommissioning funds; and¶ (e) general dam decommissioning funds.¶ (a) Required modifications to existing facilities. Through the FERC relicensing process,¶ applicants can be required to make necessary modifications to dam structures or operations to¶ improve environmental conditions impacted by the dam. This can take the form of¶ modifications to dam structures, such as fish passage, or operations requirements, such as¶ flow release levels and timing that more closely approximate natural river flows. Depending¶ on the cost of the required modifications and the value of the hydropower produced, the¶ applicant may choose to voluntarily remove the dam as the more economically rational¶ choice. This occurred recently with the Condit Dam on the White Salmon River in¶ Washington, which was required by FERC under a new license to provide passage for salmon¶ whose migration had been blocked by the dam. In September of 1999, a voluntary agreement¶ among the Yakama Nation, PacifiCorp, environmental groups, and state and federal fishery¶ agencies was reached to remove Condit Dam as a less expensive alternative to fish passage.¶ (b) Required removal of the dam. FERC can deny a dam owner’s application to relicense a dam¶ and require that the dam be removed. This occurred for the first time when FERC denied a¶ relicense application for the Edwards Dam in Maine and ordered the dam removed at the¶ owner’s expense because the environmental benefits of removal overwhelmingly outweighed¶ the economic benefits of the hydropower produced at the dam. 4¶ (c) Removal or restoration of other dams as mitigation for continued operation. Approving an¶ application to relicense a dam can be conditioned on the applicant paying to remove other¶ dams on the same or connected rivers as mitigation for being allowed to continue operating¶ the present hydropower dam. The dams to be removed may or may not be owned by the¶ licensee. For example, on the Menomonee River in Wisconsin and Michigan, a public utility¶ agreed to remove one dam it owned that was no longer economically viable, as well as a¶ smaller dam on a tributary to the river that it did not own, as part of the environmental¶ mitigation for relicensing eight other hydropower dams.¶ (d) Specific dam decommissioning funds. FERC has the authority to require a dam owner to¶ establish an individual decommissioning fund to finance future removal of a dam. However,¶ to date, FERC has never ordered a dam owner to establish such a fund.¶ (e) General dam decommissioning fund. FERC or Congress also could establish a general dam¶ decommissioning trust fund financed by all dam owners to be used to remove dams whose¶ owners are unable to maintain their license and cannot undertake dam removal without¶ financial assistance. Under the trust fund approach, all FERC licensees would be required to¶ provide funding either in a one-time payment, or over time to a general decommissioning¶ funding pool as a condition of license renewal.

#### FERC key – authority and coordination

**Carney 2k** [Peter J. Carney, University of Maine School of Law, Class of 2000. DAM REMOVAL: EVOLVING FEDERAL POLICY OPENS A NEW AVENUE OF FISHERIES AND ECOSYSTEM MANAGEMENT. Washington & Lee Law School, Ocean & Coastal Journal. Volume 5 Number 2. 2000. <http://mainelaw.maine.edu/academics/oclj/pdf/vol05_2/vol5_oclj_309.pdf>] AP

A key player to any notion involving dam removal is the Federal Energy Regulatory Commission (FERC), the federal agency responsible for licensing dams over which the federal government has jurisdiction. 2 The scope of FERC's licensing authority extends to: (1) dams constructed on navigable rivers; (2) affecting interstate commerce; (3) utilizing water or water power at a government dam; or (4) occupying lands of the United States, 3 giving FERC authority over 2000 dams nationwide. 4 FERC's primary licensing duties include issuing preliminary permits for proposed projects, issuing original and renewal project licenses, and making determinations on exemptions from licensing.15 In addition, FERC performs project compliance activities to ensure that conditions on which permits are issued are adhered to, administers dam safety programs, coordinates hydropower projects with other agencies, and, as statutorily required, undertakes a balancing of environmental and economic concerns in determining the nature of potential and existing hydropower projects.' 6 Dam licenses issued by FERC have an expiration time of thirty to fifty years. 17 Because FERC will undeniably have a role in the removal of many large dam projects, the analysis of many dam removal projects must be viewed through the lens of the general principles of administrative law.

### Other Mechanism: Dam Purchasing

#### Congress solves – can appropriate funds and projects across numerous agencies

**Otto et al 2k** [Betsy Otto, Director of the Aqueduct project in the Markets and Enterprise Program at the World Resources Institute. “Paying for Dam Removal: A Guide to Selected Funding Sources.” American Rivers. October 2000.

3. Specific Federal Congressional Appropriations¶ A number of federal agencies can be authorized by Congress to remove specific dams, including¶ the Army Corps of Engineers, Bureau of Reclamation, and National Park Service. Usually, this¶ funding is for dams owned by the agency and/or located on agency lands. However, funds have¶ also been appropriated for removals that are not on agency property. Each project must be¶ specifically authorized and Congress generally must appropriate specific funds to the authorized¶ project before the dam can be removed. For example, in 1992 the National Park Service was¶ authorized by Congress to purchase two dams from private dam owners on the Elwha River in¶ Olympic National Park in Washington. The dams block migratory salmon and steelhead runs and¶ cause other impacts to the river system. Appropriations to purchase and remove the dams are¶ actively being pursued. In another example, in 1999 Congress authorized $10 million for the¶ Army Corps of Engineers to remove the Embrey Dam on the Rappahannock River in Virginia.¶ The Army Corps is currently conducting a feasibility study for the dam removal and has¶ committed to removing the dam by 2002.

## Natives (linked to other dams / mechanisms)

### Klamath Dam Solvency Advocate

#### The Klamath River Dam kills culture, the FERC should kill it.

McCovey 12(Donald McCovey journalist, The Times-Standard, 07/11/2012 02:35:21 AM PDT, http://www.times-standard.com/guest\_opinion/ci\_21050463/time-different-direction-klamath-dam-removal)phol

The Resighini Rancheria is a small federally recognized tribe with a reservation at the top of the Klamath River estuary. We are of Yurok ancestry. Our people have fished the Klamath River since time immemorial and we remain dependent on the bounty of the river, both for our sustenance and our spiritual well being. The Resighini Rancheria favors removal of four Klamath Hydroelectric Project (KHP) dams but strongly opposes the implementation of the Klamath Basin Restoration Agreement (KBRA) that is part of the government dam removal process.¶ Our tribal government was denied participation in the Klamath settlement talks, but we have studied the issues while participating in review of government dam removal environmental documents. We have come to the conclusion that our treaty rights and the government's trust responsibility should not be changed to favor politically powerful farm interests as part of dam removal. Also, dam owner PacifiCorp should be made to remove its polluting dams sooner than 2020 and replace their power generating capacity at the expense of their rate-payers, not at the expense of the citizens of California.¶ The Indian people of the Klamath River Basin share a harmony-based culture where all living creatures are part of a living river system. The Upper Klamath ecosystem historically provided clean water for the lower Klamath River, until the Klamath Project reduced lakes and wetlands by 80 percent. By preventing recovery of the marshes and¶ shallow lakes of the Upper Klamath Basin, the Klamath settlement will block the recovery of water quality as well as the endangered sucker fish and dozens of bird species dependent on the Tule Lake and Lower Klamath National Wildlife Refuges.¶ During our government to government meetings, we asked that the effects of the KBRA be scientifically analyzed. Government representatives declined, saying that its effects were unknown and yet to be determined. In fact the KBRA and its effects are already being felt. In January 2012 the U.S. Bureau of Reclamation turned off the water to the refuges and in March 2012, dead ducks started falling from the sky. From October 2011 through February 2012, Lower Klamath River flows were drawn down to levels that violated the coho salmon biological opinion for Klamath Project operation and created potential risk of increasing algae blooms that are known to be a major factor in salmon disease epidemics. In April of 2010, the U.S. Fish and Wildlife Service allowed the bureau to draw down Tule Lake to levels that would not support Lost River and shortnose suckers, and to capture the fish and transport them to Upper Klamath Lake. We have asked Secretary of Interior Salazar to explain why these agencies are not upholding the Endangered Species Act, but he has not responded.¶ The federal legislation to authorize dam removal is stalled and likely dead. California has made no indication that it will come up with the $250 million required for dam removal under the Klamath Settlement. The Resighini Rancheria agrees with the Hoopa Tribe that dam removal through the Federal Energy Regulatory Commission (FERC) relicensing process will be the quickest path to decommissioning. Although FERC staff recommended dam retention for power generation, the requirement by the National Marine Fisheries Service for fish ladders that cost $240 million will render the project uneconomic.

#### K river dam stalled now, FERC is only way to get plan back on track.

Hostler 12(Allie Hostler, Two Rivers Tribune, July 9, 2012, Siskiyou County Calls for FERC Action on Klamath Dams, Stalling Brings About Call to Actionhttp://www.tworiverstribune.com/2012/07/siskiyou-county-calls-for-ferc-action-on-klamath-dams/)phol

Dam removal on the Klamath River is stalled and opponents of the Klamath Settlements are pushing to speed up water quality improvements on the ailing river.¶ Although Klamath Settlements are on the Congressional table in the form of the Klamath Basin Economic Restoration Act, stakeholders such as the Hoopa Tribe believe there is a less expensive route to dam removal.¶ The Tribe filed a petition with the Federal Energy Regulatory Commission (FERC) in late May to restart the process for evaluating the future of the dams. The final step in the FERC relicensing process is Clean Water Act certification from California and Oregon.¶ Siskiyou County does not support dam removal, but last week filed a response to Hoopa’s petition that says the states are failing to uphold their obligations under the Clean Water Act.¶ “…The states of California and Oregon have ignored their lawful options in processing the water quality certification for the Project (Klamath Hydroelectric Project) and have instead entered into a contract—with the signatures of their respective governor’s—that provides for the 401 process to be held in abeyance until at least the year 2020,” Siskiyou County wrote in their response to the Hoopa Tribe’s Petition to FERC.¶ Under the FERC process, PacifiCorp would have to decide whether to invest in expensive fish passage and water quality upgrades to the hydroelectric project, or remove the dams.¶ The Hoopa Tribe believes that dam removal is far more likely to occur under the aforementioned scenario than deadlocked legislation.

#### FERC key to removing K river dam.

Hostler 12(Allie Hostler, Two Rivers Tribune, July 9, 2012, Siskiyou County Calls for FERC Action on Klamath Dams, Stalling Brings About Call to Actionhttp://www.tworiverstribune.com/2012/07/siskiyou-county-calls-for-ferc-action-on-klamath-dams/)phol

 Others disagree, like the Northwest Regional Director of the Pacific Coast Federation of Fisehrmen’s Associations (PCFFA), Glen Spain. Spain defends the Klamath Settlements and remains optimistic that legislation is the cure for decades of perpetual disaster in the Klamath Basin.¶ “The KBRA is very much like the San Joaquin Settlement Agreement, seeking to restore salmon to the completely dewatered San Joaquin River for the first time in 60 years. That also took some years longer to get funded through Congress than originally anticipated,” Spain wrote in an email. “But once the San Joaquin Settlement Act began to move, it took only three weeks to become law.”¶ Siskiyou County opposed the Settlements early in their inception, but for different reasons than the Hoopa Tribe. Hoopa wants the dams to come down, but doesn’t believe the Settlements are realistic. The Tribe also believes the settlements fail to provide enough water for salmon and fail to protect senior water rights in the Basin.¶ “Despite the aspirations of the Klamath Hydroelectric Settlement Agreement, that planning process is not cleaning up our water. Instead, it blocks fish unless Congress passes dangerous and expensive legislation, which is going nowhere,” Hoopa Valley Tribal Chairman, Leonard Masten said in a prepared statement.¶ Spain holds that the FERC process will not bring down the dams.¶ “FERC has never ordered a dam down in its history except pursuant to a Settlement like the KHSA,” Spain said. “There is no special reason they would do so in this one case. This is an agency of which it is said that is has never seen a dam it did not like!”¶ Representing the Hoopa Tribe on the matter, Thomas Schlosser also wrote in an email that Settlement proponents have ignored the many dam removals that are occurring as a result of the FERC process. He cited the removal of PacifiCorp’s Condit Dam last October.¶ “Why did PacifiCorp remove Condit?,” he said. “It was because FERC’s license included the agencies’ prescriptions—requirements of volitional upstream and downstream fish passage…typically in these cases, the licensee concludes that future operation of a project on the new terms that are consistent with existing law will be uneconomic, so the licensee seeks and obtains FERC’s permission to decommission the project. PacifiCorp’s testimony to the PUCs in connection with the dam removal surcharge makes clear their opinion that the most cost effective route for them is removal of all four dams.”¶ On Monday, the Hoopa Tribe issued a call to action asking the public to participate in an upcoming California State Water Resources Control Board meeting where they are expected to continue stalling the Clean Water Act Certification process. The meeting will be held on July 17, 2012 in Sacramento.

### Grand Coulee Dam: V2l

#### The Grand Coulee dam has resulted in Systemic violence, alcoholism, and suicide in tribal populations.

Harden 02 (The Grand Coulee: Savior For Whites, Disaster For Indians, Blaine Harden, Alicia Peterson Foundation FELLOW since 1993, 2011-05-02, http://aliciapatterson.org/stories/grand-coulee-savior-whites-disaster-indians)phol

If the Colville Reservation extends half-way across the Columbia, shouldn't its members have a claim to power from Grand Coulee Dam? Aren't the Colville Tribes due a slice of the $412 million worth of electricity that the dam generated last year? Don't they have, a right to some of the tens of billions of dollars worth of power that the dam has produced in the past five decades?¶ If the answer to these ownership questions were yes, even a qualified yes, then the Colville Reservation would be home to 7,775 exceedingly well-heeled Indians. For the past half century, however, the federal government's answer has been a resounding no, and the Native Americans who live on the far side of the steel bridge are about as far from well-heeled as is possible in the prosperous Northwest.¶ "I attend death scenes on the reservation," says Allen Nielson, the white prosecutor and coroner for Ferry County, which includes part of the Colville Reservation. "Typically, what I see is a young Indian male with high blood alcohol and perhaps some drugs. He has been suffering from depression and unemployed for some period of time. It is usually a gun shot or a traffic accident. You can take a graduating class at Inchelium High [on the reservation] and in ten years they are all dead. It is absolutely staggering."¶ It is only now, in the summer of 1993, that the question raised by the little sign on the bridge is being taken seriously by the U.S. government. The U.S Court of Appeals for the Federal Circuit ruled last year that the government has failed to make "fair and honorable dealings" with the Colvilles as regards compensation for power generated on reservation land.

### Salmon=Culture (Grand Coulee)

#### Salmon were key to tribal culture. The Grand Coulee Dam has killed them off causing a cultural genocide.

Harden 02 (The Grand Coulee: Savior For Whites, Disaster For Indians, Blaine Harden, Alicia Peterson Foundation FELLOW since 1993, 2011-05-02, http://aliciapatterson.org/stories/grand-coulee-savior-whites-disaster-indians)phol

Before Grand Coulee Dam was completed in 1941, the Confederated Tribes of the Colville Reservation centered their lives around Columbia River salmon. The Colvilles were one of the last Indian groups in the United States whose lives, as of the 1930s, had not been fundamentally changed by whites.¶ An anthropologist estimated that before the dam was built each tribal member ate one and a quarter pounds of salmon a day. The most sacred ceremonies of Indian life, along with the most intensive season of work, feasting and recreation, revolved around the summer migration of salmon. The biggest and choicest of the salmon were the summer Chinooks.¶ Whites called them "June Hogs" because they often weighed 60 to 80 pounds. Most of these big salmon were caught in traps in the white-water at Kettle Falls on the Columbia.¶ Nearly a mile wide, 550-feet high and built with no fish ladders, Grand Coulee Dam blocked all upstream passage of salmon. About 1,400 miles of spawning grounds were lost. Kettle Falls disappeared under Franklin Roosevelt Lake. The dam that the U.S. government paid Woody Guthrie $3,200 to lionize in blue-collar ballads wiped out more salmon than any single structure in American history.¶ Without salmon, the Colville Tribes fell apart. Rates of suicide, fatal car accidents, alcoholism, drug-addiction, divorce and death by house fire on the reservation soared to levels that stunned a white anthropologist who had studied the Colvilles before the dam. Verne Ray, who lived among the Indians when the salmon were still running, said Grand Coulee Dam "involved a ruthless disregard for Indians as human beings. The result can only be called a disaster for the Colville people."¶ The dam pumps water to more than half a million acres in the Columbia Basin Irrigation Project, The entire project lies across the river from the reservation and Indians receive none of the water.The U.S Bureau of Reclamation has given 4,000 landowners in the project (almost all of whom are white) an infrastructure subsidy of $2.1 million per 960-acre farm. In addition, water for these farms is "virtually free," according to Jim Cole, who manages the project for the Bureau. Farmers pay just $25 per acre a year for water that, if it were puddled together on a concrete. floor, would stand four-feet deep.¶ As the non-Indian side of the Columbia blossomed, the reservation withered. Drinking water and phone service to some parts of the reservation were cut for 30 years. The dam flooded more than 21,000 acres of prime bottom land, where the bulk of the Indian population had lived for centuries. The best hunting, farming and root-gathering land disappeared. Although they live in the shadow of the big dam, reservation residents pay more than twice as much for electricity as do their neighbors across the Columbia in Grant County. While the Columbia Basin continues to attract new industries (drawn by cheap power and water), unemployment on the reservation has hovered around 50 percent for decades. A chart of income distribution on the reservation shows there is no middle class. The dismal contrast between Indian penury and white success is on display here in Coulee Dam. A highway winds down into the town from parched reservation land that is littered with wrecked cars and abandoned washing machines. At the city limits of Coulee Dam, which was built by the Bureau of Reclamation and is occupied mostly by white dam workers, rusted junk and blowing dust give way to freshly painted houses, tidy green lawns and the steady stitching of sprinklers.¶ As part of air after-the-fact environmental impact statement that the Bureau of Reclamation prepared on Grand Coulee Dam in 1975 (42 years after work began on the project), Colville leaders were asked what the dam [lad done for them. In a statement of sorrow and acid resentment, they said "tribal members paid with their homes, their lifestyle, their foodstuffs, so that others could have jobs, incomes, and wealth ... The Indians are treated as non-persons."¶ 0ut on the Colville Reservation and upstream from Grand Coulee Dam, there is another small and easily missed sign. It lies in the dirt on a hillside just above a ferry landing.¶ "DRUGS, ALCOHOL, SUICIDE," the sign says, and it has a drawing of an Indian brave slumped over a horse. The hand-painted sign is on a ranch owned by Martin Louie Sr., an 86-year-old Colville Indian.¶ Louie is a story-teller, an "informant" for latter-day anthropologists, a sobered up alcoholic and one of the last remaining Colvilles who speared Chinook salmon in the Columbia before the dam. He lives in a leaky camping trailer covered with a blue plastic tarp to keep out the rain.¶ 'The trailer has a view of what Grand Coulee Dam did to the upper Columbia Basin, mutating a wild river into a placid lake.¶ "You asking me what did we do after the flood? We, starved. We drank. My daughter-in-law's son committed suicide. He blowed his brains out about three or four years ago with a rifle. I know two or three who committed suicide," Louie said.¶ 'The old mail who has rheumy blue eyes (the legacy of a Welch grandfather who worked for the Hudson's Bay Company) said the salmon he eats now comes in cans that are part of a federal program for elderly Indians.¶ Fetching a can of food-aid "PINK SALMON" from a shelf, Louie thrust it in a white visitor's face.¶ "You guys took all my food," the old man said. 'This is flow you replaced our salmon."¶

#### Salmon are key to the Columbia Basin Tribes’ culture.

Barnes 01 (Erin Barnes, undergrad university of va, A History of the Grand Coulee Dam 1801-2001, http://xroads.virginia.edu/~ug02/barnes/grandcoulee/natcult.html)phol

While the Americans were purebred farmers to the degree that many easterners found hunting a despicable habit, the Native Americans had no such beliefs. It was to their benefit to profit from a source in which the planting and sowing had been done by nature. All they had to do was reap of the provisions of the river. Moreover, it was easier not to introduce agriculture into the arid lands of Washington. During the Walla Walla Councils of 1854 and 1855 a zealous leader named Smohalla expressed some feelings that support the Native American inclination to harvesting the river:¶ "Those who cut up the lands or sign papers for lands will be defrauded of their rights and will be punished by God¹s angerŠYou ask me to plow the ground! Shall I take a knife and tear my mother¹s bosom? Then when I die she will not take me to her bosom to rest. You ask me to dig for stone! Shall I dig under her skin for bones? Then when I die I cannot enter her body to be born again. You ask me to cut grass and make hay and sell it, and be rich like white men! But how dare I cut off my mother¹s hair?" (Josephy, 435).¶ The Native Americans surrounded the Columbia River at the massive drops where it was most easy to obtain salmon. The Cascades, the Dalles, Celilo Falls, Priest Rapids, and Kettle Falls were significant sites first because of the human dependence on food. These falls eventually became imprinted on the spiritual geography of the Columbia Basin for these groups. They were not tribes as Europeans and American appellate them. Instead, "the basic social unit was the village or town organized around a core population of related males. People ebbed and flowed in and out of these settles according to seasons. Movements demanded connections, and the strongest connections came through the outmarriage of women" (White, 21). There was sometimes a salmon chief who regulated rules and rites. At the mouth of the river were the Chinooks and Clatsops, Kathlamets and Wahkiakums. The Katskanies and Cowlitzes were further upriver. A little further were the Skillutes, Kalamas, Quthlapottles, Clannarminnamons, Multnomahs, Tillamooks,Shotos, Clanninnatas, Cathlahnaquiahs, Cathlacommahtups. Then at the Dalles were Wishrams, Wascos, Cathlakaheckits, Cathlathalas. This was the end of the Chinook-speaking groups. The language changes to Sahaptin at Celilo Falls. The Nez Perces fished near the Snake River, and the Kutenais fished the Kootney River.¶ Fishing at Kettle Falls¶ The Native American culture was inexorably linked the Columbia River in a spiritual as well as a physical dependence. The salmon supplied the Native Americans with the energy necessary to sustain life. The Native Americans in turn used that energy to better know and experience the river. The salmon are an anadromous species, which means that as smolts they travel into the Pacific to feed and grow. By impetus of seasonal water temperature change and other natural forces, the salmon's bodies become less conducive to ocean life and thus return to their streambeds of their birth to spawn and die. To the Native Americans, the salmon arrived by force of Providence, so their return was never expected but always received with spiritual gratitude. Without any work expended in planting and growing, the salmon were simply theirs for the harvest, "a virtually free gift to the energy ledger of the Columbia" (White, 15).¶ Legend taught that Coyote or 'Ekanunum' (White, 16) instructed the Indians to fish and cook the salmon properly. He made the Columbia River drop or move in order for the humans to better obtain the fish. He also made the large rocks at the falls for the people to use to catch them. Historian Richard White describes the technologies implemented by the indigenous humans as part of the organic machine of the Columbia. Nespelems and Sanpoils constructed weirs to guide fish into artificial channels in the rapids so they would be more visible and accessible. At Kettle Falls, a spiritual locus now submerged in Franklin D. Roosevelt Lake, the people constructed large timber frames which hung from them large willow baskets so that jumping fish would hit the frames and fall into the baskets. Often fisherman would wait nearby with clubs to knock the salmon unconscious. Each basket caught a yield of 5,000 pounds of salmon during the apex of the runs. At the Dalles, the Cathlakaheckits and Cathlathalas would build platforms over the rapids to stand on with dip nets. The yield here was about 500 salmon daily for an experienced hand (White, 16).¶ Fishermen¶ Salmon live off the fat obtained in the ocean and burn it swimming upstream to their birthplaces. In this way, the caloric value of the salmon steadily decreased till it was at the lowest point in Nelson or British Columbia, about 25% of is original fat. Because the runs fluctuated so much in season and geography it was necessary to preserve the fish. In an area where hunting was not largely available the main source of food year round was berries and roots. The salmon were preserved in styles mentioned in the journals of the early explorers. Mostly the women preserved the fish while the men hunted them. The "lower river fish had to be smoked to be dried, but at the Dalles and above Indians could rely on solar energy - the direct heat of the sun - to dry the fish the split and set out on racks" (White, 18).¶ Reciprocity was no faithfilled hopefulness to the Native Americans. For indigenous people whose lives depended on this food, the return of the salmon was a relief of a huge anxiety.

### Impact: Poverty (Grand Coulee)

#### We have categorically excluded Native Reservations from reaping any benefit from the Grand Coulee Dam, which has led to massive poverty.

Barnes 01 (Erin Barnes, undergrad university of va, A History of the Grand Coulee Dam 1801-2001, http://xroads.virginia.edu/~ug02/barnes/grandcoulee/nateffects.html)phol

The Yakima Treaty of 1855 entitled Native Americans of the Washington Territory to half of the salmon runs to be collected in common with the citizens of the area. On June 17, 1940 groups of tribes gathered at Kettle Falls, once a heralded fishing site, for the "ceremony of tears" instead of the traditional celebration of the salmon run. The Grand Coulee Dam would be open for business in one year. The formation of Lake Roosevelt, from Grand Coulee 150 miles to the Canadian border, submerged much Native American property. Homes, salmon, villages, burial sites and graves, and land were erased in a watery grave. Many filed claims for what they had lost in 1951. Not until 1994 did the federal government pay up - $54 million with annual payments of $15.25 million as long as Grand Coulee Dam is profiting on its hydroelectric facilities (McCully, 72). Despite the financial reparations, Roosevelt Lake has continued to serve as a symbolic erasure of minority rights and rites in the name of the power of the American government.¶ The Casino on the Colville Confederated Tribes Reservation, visible from Grand Coulee Dam.¶ The Native American reservations are generally wide open spaces of non-irrigated land. In Nespelem on the Colville Reservation there is a community center for nightly bingo and a trading post. Otherwise, the reservations are a depiction of extreme poverty. Billboards for reservation casinos pepper Washington State. The Colville Confederated Tribes Reservation borders Mason City, the north-east bank of Grand Coulee. There visitors can go to the Casino or check out the Colville Museum a block away. The museum, 1.2 miles from the dam, is a teepee shaped one room structure with a basement. Signs instruct the visitor to not take pictures, but there is not museum guide to enforce the rule. In low light, gigantic stuffed buffalo stare down intruders. Five foot salmon leap from remembered falls. Indian figurines demonstrate ancient fishing rites at Celilo Falls and Kettle Falls. Squaws imitate basket-making. Oversized picture albums show black and white photos of tribe chiefs, elders, and children. Stuffed figures in these traditional poses are surrounded by artifacts like baskets, knives, arrows, and clothing. Long narratives explain the importance of both artifacts and rituals. Although obviously constructed with limited funds, the museum offers a rationale of Indian rites and rights as well as a history that reads like a family tree.¶ On the motel facing the Grand Coulee Dam is this mural.¶ In the town of Coulee Dam or Grand Coulee a visitor can purchase any number of postcards or greeting cards with depicting Native Americans blessing the dam, bowing toward the dam in full dress, or conducting some sort of stereotypical ritual near the dam. However, next to the Casino is a Coulee Dam motel, with this mural painted on the street side (opposite). Rather than a romantic painting of the dam with water flowing over the spillways and electricity symbols over it, the artist chose a scene from the construction period. A very telling depiction of the bulldozers rendering a peaceful desert, in the background, a destructive force on nature, foreground. There stands a figure peering into the left bulldozer with curiosity. Above an eagle watches over the scene, or perhaps, flees. The eagle in Wishram myth often symbolizes a weak salmon run, as the bird or woman symbolically held the salmon captive until released by Coyote. So in this case the eagle could be another symbol of the loss of salmon species due to industrialization.¶ Behind the Colville Museum.¶ Perhaps there was no legal reason to irrigate the Native American reservations. However, for the sake of humanity, one would think that the original inhabitants of this region would be entitled to a drop of the Columbia River. When comparing the landscapes of the US and Native American the stark differences are painful. The citizens' crop circles of lush alfalfa mock the surrounding sagebrush. Brazen cherry trees rise out of sand. The Native American desert is a badlands, much like how it could have looked hundreds of years ago, except for the missing animals. The US lands exhibit signs of scientific management, agricultural technology, and greater comparative wealth. All the farms, orchards, and ranges are located on US land. Only huge boulders, moved by the last ice age, and the occasional trading post mark the majority of reservations.

### Impact: V2L (Grand Coulee)

#### Construction of the GCD led to Native Americans being treated as sub-humans.

NPS 6 (National Park Service, 12/13/2006, Lake Roosevelt Administrative History, CHAPTER 2: The River Becomes a Lake, <http://www.nps.gov/history/history/online_books/laro/adhi/adhi2a.htm>)phol

¶ ¶ ¶ The CCT and STI suffered far-reaching injuries beyond the loss of their homes and land. Hundreds of Indian burials were relocated; others were inundated by the rising water. The construction of Grand Coulee Dam and the flooding of the reservoir destroyed fundamental aspects of tribal culture and forced Indians into a new, undesired way of life. The arrival of thousands of non-Indian dam workers and the construction of towns to house them created cultural conflict.¶ ¶ Both tribes gathered roots and berries on lands south of the Columbia River; this ended because of the influx of non-Indians to these lands and because crossing the reservoir was so difficult. Hunting was affected by the flooding of much bottomland forage. School-age children living in the Keller area of the Colville Reservation had to take a forty-mile (one way) school bus and ferry ride to school in Wilbur. The reservoir flooded sites with mythological significance, places to gather pitch wood and driftwood, and rock art. All these related impacts created great personal hardship and economic dislocation. The benefits to the tribes, on the other hand, were few. Relatively few tribal members were employed in the construction of the dam. The irrigation aspect of the project benefited lands south of the reservations, not agricultural lands owned or farmed by Indians. [22]¶ ¶ Another tremendous loss for the American Indians of the region was the loss of the fishery at Kettle Falls, the mouth of the Sanpoil River, Little Falls, and other places along the upper Columbia River in the area flooded by Lake Roosevelt. At the time of white contact, several species of salmon taken from the Columbia and tributaries provided perhaps half the total diet of the Colville and Spokane tribes. The salmon was also important to the tribes' religion, economy (dried salmon was traded for other goods), and social life. The fish runs on the Columbia River and in the Kettle Falls area began declining in the late 1800s due to commercial fishing in the lower Columbia and the Pacific Ocean and the construction of downstream dams. The sudden and complete loss of the salmon fishery upstream of Grand Coulee Dam dramatically changed the way of life of Indians living along the upper Columbia. [23]¶ ¶ We had a beautiful way of life. We were rich. The dam made us poor. The way they treated us, they tried to make us less than human. . . . We Indians trust the day is past when the nation will approve of what the government did when they built the dams, which back in those days caused one of our people to say, "The promises made by the government were written in sand and then covered with water, like everything else."¶ ¶ -- Lucy Covington, member, Colville Confederated Tribes, 1977 [24]¶ In June 1940, American Indians from around the Pacific Northwest gathered at the site of St. Paul's mission above Kettle Falls for a final three-day "Ceremony of Tears" to mourn the loss of the ancestral fishing grounds. A crowd estimated at eight to ten thousand people attended the gathering. Chief Peter Joseph of the Kalispel commented that the government should reimburse the tribes for the loss of their fishing grounds, and Senator Clarence C. Dill pledged his support for a measure to accomplish this. [25]¶ ¶ One specific concern of both tribes in subsequent years has been the high cost of electricity to tribal members living on the reservation. The rates are much higher on the Colville Reservation than in the town of Coulee Dam, for example, even though the BPA had assured the tribes that electricity would be extremely cheap as a result of the dam. The BPA response is that they sell power at the same rate to electrical utilities; the difference in users' costs is due to the varying cost of distribution, so rural residents face higher bills than people living in towns.

### Impact: Cultural Genocide (Grand Coulee)

#### Dams cause the cultural genocide of Native Americans through force relocation.

Shields 08 (Talena Shields, Portland State University, May 5, 2008, Design & Society, Is Constructing Large Dams Ethical?, http://web.pdx.edu/~talena/Are%20Big%20Dams%20Ethical.htm)phol

To answer this question, one must view all sides of the issue at hand. Before the dam is built or even financed, a report is prepared examining the costs and benefits of construction. The World Commission on Dams exists for just this purpose. Started in 1997, this organization prepares thorough reports regarding new dam construction, focusing specifically on the construction of large dams in underdeveloped countries. However, the WCD has prepared a report regarding a dam here in the Pacific Northwest: The Grand Coulee Dam and Columbia River Basin Project. This 211 page document exhaustingly examines the real costs and benefits associated with large dam construction in a place where we can examine the issues at hand without having to cross cultural divides.¶ An official from the South Columbia Irrigation District states: If you look at the positive benefits [of the project] power, flood control, fish, agriculture, wildlife; every one of those is impacted in a positive way It added $650 million in crops per year to the Columbia Basin. What isn’t good about that? Mr. McDaniel goes on to describer higher employment rates, the benefits of hydro-electric power and the environmental benefits of planned fisheries and hunting grounds. With a list of benefits like that, what isn’t there to like about a large dam?¶ Our traditional ways, fishing, land, pretty much everything we did for survival was hurt by the dam. These are the words of a Native American tribal elder. He goes on to describe how the culture and livelihood of his people was damaged by construction of the dam on the Columbia River. This echoes the sentiments felt by the villagers around the Sarovar Dam in India. Though the government claims that the relocated villagers are being compensated and rehabilitated, accounts of the accuracy of that promise vary widely. Promises were made that everything would be taken care of for us . . . [but] we never received compensation for that dam. Though the preceding statement could have come from a Narmada Valley farmer, it was actually recorded from another Native American elder. If the dams are causing cultural genocide, why are they still being constructed?¶ While I agree with the South Columbia Irrigation District’s assessment of the benefits of the Grand Coulee Dam and associated projects, I find it totally unethical to force thousands of people to choose between moving from the land of their ancestors or drowning. Especially here in the United States, building a dam is not the catalyst for positive change that it can be in other, less developed, countries, especially in recent years. Back during early industrialization building a dam was a catalyst for productive change, but we as a country do not have the same needs as we did then.

### A2: Genocide isn’t happening now

#### Genocide is a process, not an event.

Rosenberg 12 (Sheri P. Rosenberg, Benjamin N. Cardozo School of Law, New York, “Genocide Is a Process, Not an Event”, Genocide Studies and Prevention, Volume 7, Number 1, Spring 2012http://muse.jhu.edu.turing.library.northwestern.edu/journals/genocide\_studies\_and\_prevention/v007/7.1.rosenberg.html)phol

Among the categories of inquiry, there has been a thread of scholarship explicitly dedicated to exploring the genocidal process and the implications that flow from deducing a particularized understanding of it.5 The “genocidal process” is a relatively indeterminate term, and it is the notion of the complex genocidal process that will [End Page 16] be the focus of this article, which urges renewed attention to exploring the social phenomenon of genocide as a process rather than as the outcome of a process. The rigid conception of genocide as a definition (as opposed to a social phenomenon) of “something” against which unfolding events are to be measured is in part due to the very success and standing of the concept in international law. The emphasis on legalism subjects each genocide to a rigid test in order to maintain the integrity of the term and determine criminal culpability. This, however, has caused some authors and policy makers to lose sight of the fact that genocide is a fluid and complex social phenomenon, not a static term. This process perspective is crucial to the detection and standardization of early warning indicators for the prevention of genocide, a goal which many genocide scholars seek to pursue.6 As Bloxham and Moses argue, “the focus on specific types of outcomes that qualify as genocide is analogous to studying the peaks of mountains from above a cloud-line that only particularly tall mountains penetrate, when a glimpse beneath the cloud-line would illustrate that other mountains fall just short.”7 Hence, if one focuses on how the process of genocide unfolds and the acts that are often perpetrated on the victim—both indirectly and directly—during the genocidal process, then one might begin to link these preliminary or early acts to the efforts of genocide prevention. Moreover, a process-oriented approach provides lawyers and jurists with a lens through which to interpret the 1948 UN Convention on the Prevention and Punishment of the Crime of Genocide (UNCG). This approach aids in the interpretation of the UNCG’s dual goals of prevention and punishment.

### A2: No Cultural Genocide

#### Native Americans are currently the victims of cultural genocide.

Rozzell 7 (Rozzell, Kristin Lynn, Ph.D., The University of Texas at Arlington, 2007, Reinventing the self: Native American women's autobiographies, http://proquest.umi.com/pqdweb?RQT=305&attempt=1&skip=1&SQ=STYPE(dissertation)+AND+ISBN(9780549319733)&cfc=1)phol

Native Americans do not have a champion as powerful as Spielberg, and their own Holocaust did not happen over a limited period of time. Furthermore, wide-scale physical threats to Native Americans by non-Natives are over a century removed; Wounded Knee in 189 is considered the last major military confrontation. Native Americans of the Twenty-first contrary have not had to face physical genocide in the same way, but they have faced and still do in many ways the effects of poverty and unemployment that threaten their physical existence. They also face an ongoing cultural genocide. Today, cultural genocide is not an obvious overt threat from the outside as it was when Native Americans were forbidden to speak their languages or practice their rituals during the “Kill the Indian save the man” era; however, misinformation about natives combined with a general apathy toward them is still a threat to native American cultures.

### Kills Culture (Grand Coulee)

#### The Grand Coulee Dam puts the continuation of the native culture of the Upper Columbia Basin in jeopardy.

Ortolano 2000 (Leonard Ortolano, Stanford University, Katherine Kao Cushing, University of California, Berkeley, November 2000, WCD Case Study Grand Coulee Dam and the Columbia Basin Project USA,http://www.centre-cired.fr/IMG/pdf/F9\_GranCouleeDam.pdf)phol

Trade-offs also exist between regional development and objectives related to equity and the ¶ environment. This is clearly shown by the way GCD affected indigenous peoples in the upper ¶ Columbia River Basin. In the view of many Native Americans and members of First Nations in ¶ Canada, GCD was nothing short of catastrophic. For them, the project had a disastrous affect on the ¶ continuance of their culture. In our interviews, Native Americans and members of First Nations ¶ highlighted the importance of Kettle Falls and other fishing areas as places where different tribes came ¶ together to enhance mutual understanding, share language and stories, and continue rituals and other ¶ traditions. These opportunities were lost after GCD blocked the runs of salmon to the upper Columbia ¶ River.

### Impact: Extinction

#### Survival of Native culture solves human extinction—it’s key to every other impact.

Weatherford 94 (Jack, Anthropologist, Savages and Civilization: Who Will Survive?, pp. 287-291)phol

Today we have no local and regional civilizations. The world now stands united in a single, global civilization. Collapse in one part could trigger a chain reaction that may well sweep away cities across the globe. Will the fate of Yaxchilán be the fate of all cities, of all civilization? Are they doomed to rise, flourish, and then fall back into the earth from which they came? Whether we take an optimistic view or a pessimistic one, it seems clear that we stand now at the conclusion of a great age of human history. This ten-thousand-year episode seems to be coming to an end, winding down. For now, it appears that civilization has won out over all other ways of life. Civilized people have defeated the tribal people of the world who have been killed or scattered. But just at the moment when victory seems in the air for civilization, just at the moment when it has defeated all external foes and made itself master of the world, without any competing system to rival it, civilization seems to be in worse danger than ever before. No longer in fear of enemies from outside, civilization seems more vulnerable than ever to enemies from within. It has become a victim of its own success. In its quest for dominance, civilization chewed up the forest, leeched the soil, stripped the plains, clogged the rivers, mined the mountains, polluted the oceans, and fouled the air. In the process of progress, civilization destroyed one species of plant and animal after another. Propelled by the gospel of agriculture, civilization moved forcefully across the globe, but it soon began to die of exhaustion, leaving millions of humans to starve. Some of the oldest places in the agricultural world became some of the first to collapse. Just as it seems to have completed its victory over tribal people, the nation-state has begun to dissolve. Breaking apart into ethnic chunks and cultural enclaves, the number of states has multiplied in the twentieth century to the point that the concept of a nation-state itself starts to deteriorate. The nation-state absorbed the remaining tribal people but has proven incapable of incorporating them fully into the national society as equal members. The state swallowed them up but could not digest them. The state could destroy the old languages and cultures, and it easily divided and even relocated whole nations. But the state proved far less effective at incorporating the detribalized people into the new national culture. Even though the state expanded across the frontier, it could not make the frontier disappear. The frontier moved into the urban areas with the detribalized masses of defeated nations, emancipated slaves, and exploited laborers. After ten thousand years of struggle, humans may have been left with a Pyrrhic victory whose cost may be much greater than its benefits. Now that the victory has been won, we stoop under the burdensome costs and damages to a world that we may not be able to heal or repair. Unable to cope with the rapidly changing natural, social, and cultural environment that civilization made, we see the collapse of the social institutions of the city and the state that brought us this far. The cities and institutions of civilization have now become social dinosaurs. Even though we may look back with pride over the last ten thousand years of evolution and cite the massive number of humans and the ability of human society and the city to feed and care for all of them, one major fluctuation in the world might easily end all of that. The civilization we have built stretches like a delicate and fragile membrane on this Earth. It will not require anything as dramatic as a collision with a giant asteroid to destroy civilization. Civilization seems perfectly capable of creating its own Armageddon. During the twentieth century, civilization experience a number of major scares, a series of warning shots. Civilization proved capable of waging world war on itself. Toward that end, we developed nuclear energy and came close to provoking a nuclear holocaust, and we may well do so yet. When we survived World War I, then World War II, and finally the nuclear threat of the Cold War, we felt safe. When catastrophe did not follow the warning, we felt relief, as though the danger had passed, but danger still approaches us. Civilization experienced several “super plagues” ranging from the devastating world influenza epidemic early in the century to AIDS at the close of the century. These may be only weak harbingers of the epidemics and plagues to come. Even as life expectancy in most countries has continued to climb throughout the twentieth century, diseases from cancer to syphilis have grown stronger and more deadly. If war or new plagues do not bring down civilization, it might easily collapse as a result of environmental degradation and the disruption of productive agricultural lands. If the great collapse comes, it might well come from something that we do not yet suspect. Perhaps war, disease, famine, and environmental degradation will be only parts of the process and not the causes. Today all of us are unquestionably part of a global society, but that common membership does not produce cultural uniformity around the globe. The challenge now facing us is to live in harmony without living in uniformity, to be united by some forces such as worldwide commerce, pop culture, and communications, but to remain peacefully different in other areas such as religion and ethnicity. We need to share some values such as a commitment to fundamental human rights and basic rules of interaction, but we can be wildly different in other areas such as life-styles, spirituality, musical tastes, and community life. We need to find a way for all of us to walk in two worlds at once, to be part of the world culture, without sacrificing the cultural heritage of our own families and traditions. At the same time we need to find ways to allow other people to walk in two worlds, or perhaps even to walk in four or five worlds at once. We cannot go backwards in history and change one hour or one moment, but we do have the power to change the present and thus alter the future. The first step in that process should come by respecting the mutual right of all people to survive with dignity and to control their own destinies without surrendering their cultures. The aborigines of Australia, the Tibetans of China, the Lacandon of Mexico, the Tuareg of Mali, the Aleuts of Alaska, the Ainu of Japan, the Maori of New Zealand, the Aymara of Bolivia, and the millions of other ethnic groups around the world deserve the same human rights and cultural dignity as suburbanites in Los Angeles, bureaucrats in London, bankers in Paris, reporters in Atlanta, marketing executives in Vancouver, artists in Berlin, surfers in Sydney, or industrialists in Tokyo. In recent centuries, Western civilization has played the leading role on the stage of human history. We should not mistake this one act for the whole drama of human history, nor should we assume that the present act is the final one just because it is before us at the moment. Much came before us, and much remains yet to be enacted. We must recognize the value of all people not merely out of nostalgic sentiment for the oppressed or merely to keep them like exhibits in a nature park. We must recognize their rights and value because we may need the combined knowledge of all cultures if we are to overcome the problems that now threaten to overwhelm us. At first glance, the Aleuts who hunt seals on isolated islands in the Bering Sea may seem like unimportant actors on the world stage of today, but their ancestors once played a vital role in human survival of the Ice Age. The Quechua woman sitting in the dusty market of Cochamba may seem backward and insignificant, but her ancestors led the way into an agricultural revolution from which we still benefit. Because we do not know the problems that lie ahead of us, we do not know which set of human skills or which cultural perspective we will need. The coming age of human history threatens to be one of cultural conflicts between and within countries, conflicts that rip cities apart. If we continue down the same path that we now tread, the problems visible today in Tibet or Mexico may seem trifling compared with the conflicts yet to come. If we cannot change our course, then our civilization too may become as dead as the stones of Yaxchilán, and one day the descendants of some alien civilization will stare at our ruined cities and wonder why we disappeared.