

Twenty-First Century Dams Act: A Proposal from an Environmental NGO, Hydropower, and Dam Safety Coalition¹

The United States needs to accelerate the rehabilitation, retrofit, and removal (the “3Rs”) of the nation’s more than 90,000 dams **to improve public safety, enhance clean energy output, and restore the health of our nation’s rivers.** A coalition of environmental NGOs, dam safety officials, hydropower industry, and hydropower reform advocates¹ have proposed a suite of infrastructure investments, not focused on any particular river or dam, to advance these goals – and support more than 500,000 jobs.

Improve Public Safety | Dams are a critical part of the nation’s infrastructure. Dams provide water supply for agriculture and industry, flood control, recreation, and, where appropriately mitigated, clean energy through hydropower. There are over 90,000 dams in the U.S., nearly 6,000 of which are at high risk to fail with tragic consequences. **The total cost of rehabilitating non-federal high hazard potential dams – the dams that are likely to cost human lives if they fail – exceeds \$20 billion.**

Proposal - Reduce dam safety risk by building existing state regulatory oversight capacity, expanding grant funding for the rehabilitation of existing dams, mapping the potential consequences of dam failure, and reimagining the National Dam Safety Program. *\$2.575 billion over five years, plus \$15 billion in lending capacity to rehabilitate dangerous non-Federal dams.*

Enhance Clean Energy Production and Grid Resilience | Hydropower provides the United States with more than seven percent of its electricity and over 90% of its current electricity storage capacity. Both the private and federal hydropower fleet generate electricity, and hydropower facilities can “firm up” variable solar and wind power sources, critical to decarbonizing the grid. DOE estimates that **by maintaining and retrofitting existing powered dams, U.S. hydropower electricity output could reduce CO2 emissions by 5.1 billion metric tons by 2050 while supporting nearly 200,000 clean energy jobs.** Investing in existing federal dams, which make up roughly 50% of all U.S. hydropower generation, is essential to maintain this energy resource.

Proposal - Establish a 30% Tax Credit for investment at qualifying facilities in dam safety, environmental improvements, grid flexibility, and dam removals, with a direct pay alternative. *\$4.7 billion.*

Proposal - Improve the safety and renewable energy generating capacity, and reduce environmental impacts of federally-owned dams across the U.S. *\$11 billion over five years.*

Restore River Ecosystems | **There are ample opportunities to remove unnecessary dams that no longer provide benefits to society, have safety issues that cannot be cost-effectively mitigated, and/or have significant environmental impacts** that cannot be addressed. Dam removals can improve public safety, restore the natural functions of rivers, help extirpated and endangered fish species, create jobs, protect important environmental and cultural resources, and increase the climate resilience of U.S. rivers.

Proposal – Create an inter-agency and stakeholder advisory committee to help administer a public source of climate resilience and conservation funding to reconnect 20,000 miles of river through the removal of 2,000 dams, with dam owner consent, supporting 180,000 to 225,000 jobs. *\$7.5 billion over five years.*

¹Coalition members: The Nature Conservancy, American Society of Civil Engineers, Low Impact Hydropower Institute, American Rivers, Association of State Dam Safety Officials, Hydropower Reform Coalition, National Hydropower Association, World Wildlife Fund, Hydropower Foundation, Rye Development, and Union of Concerned Scientists. Stanford University and the Energy Futures Initiative convened the process leading to these recommendations.