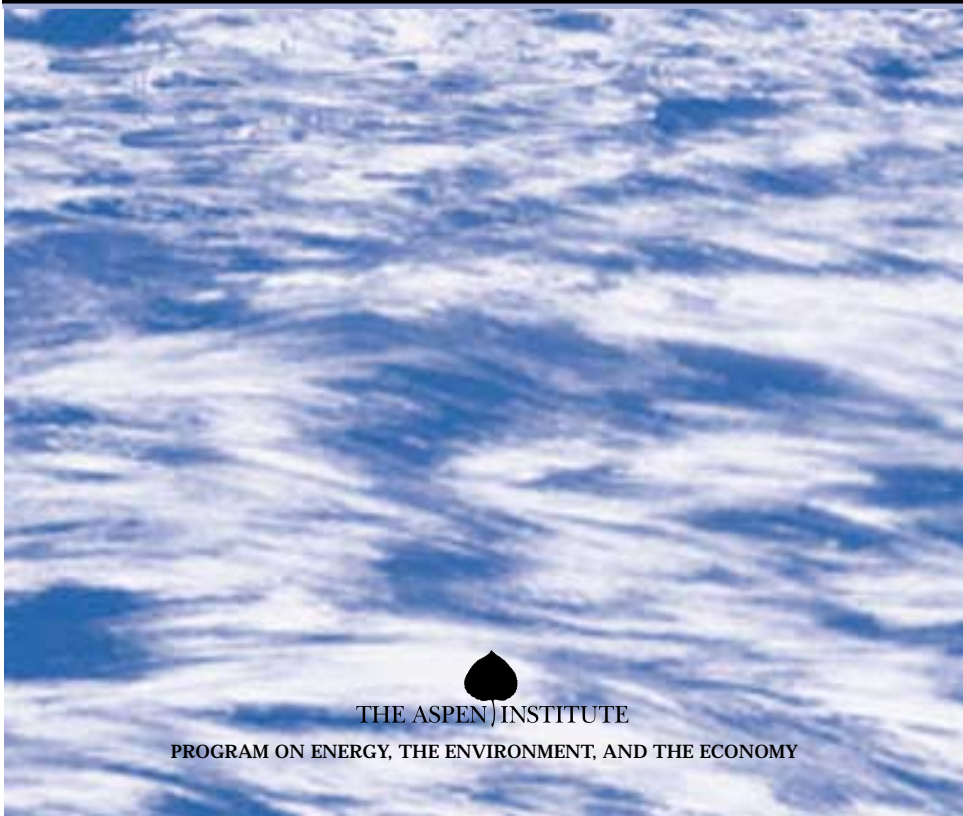




Dam Removal ■ *A New Option For a New Century*



THE ASPEN INSTITUTE

PROGRAM ON ENERGY, THE ENVIRONMENT, AND THE ECONOMY

Dialogue Participants

Margaret Bowman
American Rivers

Mark H. Capelli
National Marine Fisheries Service

R. Scott Carney
PA Fish & Boat Commission

David Clark
*MA Dept. of Environmental
Management*

Kathryn Conant
*NOAA, National Marine Fisheries
Service*

Shannon Cunniff
U.S. Bureau of Reclamation

Thomas F. Donnelly
National Water Resources Association

Wayne D. Edwards
HDR Engineering, Inc.

Forester Einarsen
U.S. Army Corps of Engineers

Meg M. Galloway
WI Dept. of Natural Resources

Jane Hannuksela
NOAA General Counsel

Joan Harn
National Park Service

Alex Hoar
U.S. Fish & Wildlife Service

Robert G. Hunter
Water Watch

Cleveland Kapala
PG&E National Energy Group

Julie A. Keil
Portland General Electric Company

Stephanie Lindloff
NH Dept. of Environmental Services

Steven Malloch
Trout Unlimited

Dave Munro
Skippers Cove Marina, CA

Joseph Pavel
*Northwest Indian Fishery
Commission*

Karen I. Pelto
MA Dept. of Fish & Wildlife

Kyle Schilling
*ASCE, Environment &
Water Resources Institute*

Robert Wengrzynek
USDA NRCS

Marcin Whitman
CA Dept. of Fish & Game

Laura A.S. Wildman
American Rivers

Eugene P. Zeisel
*Federal Emergency
Management Agency*

Dam Removal – A New Option For a New Century is issued on the authority of The Aspen Institute and its Program on Energy, the Environment, and the Economy. It reflects the collective views of the diverse participants in the dialogue and the agreements they reached over two years and, as such, reflects numerous reconciliations. No individual should be presumed to endorse every word; nor should the participation of individuals imply the endorsement of their organizations. The organizations listed are those with which the participants were affiliated at the time of the last meeting.

The Aspen Institute's new report, *Dam Removal – A New Option For A*

New Century, is now available. The following summarizes the report and

its recommendations. Please access the full report using the contact

information on the back cover of this pamphlet.



The United States relies on dams and reservoirs. From the earliest settlements to today, communities have diverted and stored water for many uses. Now, however, along rivers and lakes from New England to California, some of the tens of thousands of dams in the United States are aging beyond their expected lifespan, and some are causing a variety of safety, environmental, and other problems. Dealing with these situations can be a costly and controversial task, complicated by society's changing views of dams. Once perceived as almost entirely beneficial, dams are seen more realistically today as having both positive and negative effects, some obvious and quantifiable, and others less so.

One possible solution to these dilemmas—and in some cases the best solution—is dam removal. The removal of some dams can be straightforward and inexpensive. But for many dams, evaluating and implementing this option can be difficult.

In September 2000, The Aspen Institute's Program on Energy, the Environment, and the Economy invited a group of twenty-six experts to address these issues in a series of intentional, values-based dialogues. This report offers the group's recommendations and practical advice aimed at integrating the dam removal option into river management decisions, evaluating the options fairly and, if appropriate, implementing the dam removal option effectively. The imprimatur of this diverse group, with interests that are often at odds, lends a unique weight to the recommendations.

Example barriers to dam removal and its appropriate consideration as a river management option:

- tendency to use inappropriate or one-size-fits-all analyses for what is in fact the unique context of every dam including its physical, ecological, social, economic, regulatory, and legal constraints
- difficulty in quantifying methods for assessing the full range of the costs and benefits of river management options, particularly social, ecological, and historic values
- inadequate inventories of existing and removed dams as a basis for decisionmaking
- absence of periodic, comprehensive evaluations of all dams
- inappropriateness of current regulatory regimes and levels of analyses required for permitting
- lack of clear guidance on the rights and responsibilities of dam owners and other beneficiaries
- shortage of funding, especially for soft costs such as inclusive decisionmaking processes involving all stakeholders
- lack of technical studies on dam removal impacts, benefits, and techniques
- lack of centralized information about the dam removal option
- lack of public understanding of dams and dam removal

Premises

During the initial dialogues that produced this report, the Aspen group agreed on a set of shared premises which provided grounds for further exploration and eventually for the recommendations and action items (detailed in Part I of the report). This agreement was reached only after consideration of the full range of dams, from abandoned mill dams to large, multipurpose dams, and after agreement that removal of a dam can be a reasonable approach to meeting a variety of economic, ecological, water resource, public safety and owner objectives.

The group also developed a list of opportunities that can set the consideration of dam removal in motion, priority issues to consider in dam removal, and lessons learned in the collective experience of the group in implementing dam removal (described in Part II of the report).

Recommendations

The Aspen group recommends the following to policymakers and practitioners at the national, state, and local levels:

- Reflect the scale of the project and scope of the project's impacts in the depth and type of analysis associated with a decision about any dam.
- Integrate dam removal at appropriate levels as an option in decisionmaking regarding dams, including the regulatory process, watershed planning, and community decision making.
- Review all dam structures and operations periodically and within a reasonable time frame; reviews should address environmental, economic, and social benefits and impacts in addition to dam safety.
- Provide public notice and opportunity for comment regarding dam removal decisions when public resources are affected.
- Consider social, ecological, and historical values in decisionmaking about dam removal.
- Address the rights of dam owners and beneficiaries of dam services.
- Revise permitting processes to ensure that shortterm impacts of dam removal do not preclude projects for which restoration benefits outweigh those impacts.
- Coordinate policies and regulatory programs affecting dam removal.
- Expand, integrate, and where necessary establish dam inventories so that a comprehensive inventory of all dams (regardless of size) is available.
- Develop technical guidance and site-appropriate practices for implementing dam removal.
- Increase scientific research and educational curricula on dam removal.
- Provide public education on dams and dam removal.
- Establish and maintain a user-friendly, centralized, Web-based clearing-house for dam removal information.
- Establish financial responsibility for dam removal.
- Improve funding opportunities for dam removal.



THE ASPEN INSTITUTE

Program on Energy, the Environment, and the Economy
One Dupont Circle, NW, Suite 700
Washington, DC 20036
www.aspeninst.org/damremovaloption

A full copy of the report can be found on-line or by contacting
The Aspen Institute
Publication Orders
109 Houghton Lab Lane
PO Box 222
Queenstown, MD 21658
410 820 5338