

Undoing DAMage

Resources for researching dam removal projects

How-to guides and dam removal success stories:

Guide for the Removal of Small Dams in Oregon
(Oregon Watershed Enhancement Board)
<http://www.oweb.state.or.us/OWEB/publications.shtml>

Exploring Dam Removal: A Decision-Making Guide
(American Rivers)
www.americanrivers.org

Dam Removal: A New Option For a New Century
(The Aspen Institute)
http://www.aspeninstitute.org/site/c.huLWJeMRKpH/b.612701/k.65FC/Dialogue_on_Dams_and_Rivers.htm

Dam Removal: Science and Decision Making
(The Heinz Center)
http://www.heinzctr.org/Programs/SOCW/dam_removal.shtml

Potential funding and in-kind sources for dam removal projects*:

- Oregon Watershed Enhancement Board:
www.oregon.gov/OWEB/GRANTS/index.shtml
- Open Rivers Initiative:
www.nmfs.noaa.gov/habitat/restoration/projects_programs/crp/partners_funding/callforprojects3.html
- American Rivers:
www.americanrivers.org/NOAAGrants
- County or city government where the project is located
- Potential project partners/sponsors
- The project's local watershed council or soil and water conservation district can assist landowners with dam removal or retrofitting projects. Grant writing, access to technical expertise, and building community understanding of the watershed and options for the dam are all potential services:
www.oregonwatersheds.org
www.oacd.org/districts.html

*Funding cycles for these grant sources vary — check Web sites for additional information.

Office of Regulatory Streamlining

350 Winter St. NE, Room 200
P.O. Box 14480
Salem, Oregon 97309-0405
Phone: 503-947-7873
www.streamline.oregon.gov



**A quick reference
for small dam removal
projects in Oregon**



Office of Regulatory Streamlining



Aging dam structure on your river?

You are not alone! Oregon has more than 1,570 dams that are 10 feet or greater in height or store more than 9.2 acre feet of water.

Many of these dams were built during the Industrial Revolution in the 19th and early 20th centuries, and played central roles in Oregon's economic growth. But as technological and societal needs have changed, so has the need for some dams.

Very few dams in Oregon and in the United States are currently under consideration for removal. According to the Aspen Institute, fewer than 600 dams nationwide have been removed out of an inventory of more than 75,000. However, dam removal is an option that should be considered.

When the costs associated with a dam outweigh its benefits, dam removal may be the best decision — one that can result in significant environmental, economic, and social benefits.

Dam management options

- Repair and restore the structure to prevent dam failure; install a fish passage structure
- Manage the existing dam and fish passage structure to provide the greatest opportunity for passage (i.e., install or remove flashboards as needed to control flows to benefit aquatic species)
- Remove the dam and restore the river

The benefits of dam removal

- Eliminates a barrier to fish and other aquatic species
- Restores river habitats
- Eliminates a public safety hazard
- Provides a cost savings to taxpayers and dam owners
- Creates new, river-based recreational opportunities
- Improves opportunities for riverfront revitalization

Steps to follow

State and federal agency regulators must authorize removing a dam in Oregon. Follow these four steps:

1 Obtain necessary information

- Determine if the project will affect any species listed under the Endangered Species Act (ESA): <http://www.nwr.noaa.gov/Species-Lists.cfm>
- Identify regulatory processes
- Determine dam ownership
- Obtain necessary permit materials
- Identify potential funding sources

2 Research, plan, and design the project

- Identify and consult with stakeholders
- Build consensus on dam removal
- Identify key issues to address early (e.g., sediment transport issues, cultural/historical resource issues)
- Recruit and contract with a reputable project engineer/firm
- Develop a conceptual design plan
- Build agency/stakeholder consensus on the preferred design
- Complete the design

3 Permit application package preparation

- Prepare a Section 404 Joint Fill and Removal Permit Application (JFRPA) for the U.S. Army Corps of Engineers (USACE) and Oregon Department of State Lands. It is the same form, but a copy must be submitted to each agency: <http://www.oregon.gov/DSL/forms.shtml>
- Sediment Evaluation Framework (SEF) determination — no form exists, check with your USACE representative for guidance
- Sediment modeling — no form exists, check with your USACE representative for guidance
- State Historical Preservation Office (SHPO) review of project under Section 106 of the National Historic Preservation Act — USACE will submit the project to SHPO for review. It is possible to submit project materials to SHPO directly to obtain feedback prior to having a complete JFRPA: <http://www.oregon.gov/OPRD/HCD/SHPO/index.shtml>

- Biological Assessment (BA) determination — ESA Consultation with National Marine Fisheries Service (NMFS): <http://www.nwr.noaa.gov/ESA-Salmon-Regulations-Permits/index.cfm>
- Standard Local Operating Procedures for Endangered Species (SLOPES IV) may cover ESA consultation for your project. Check with your NMFS representative: http://seahorse.nmfs.noaa.gov/pls/pcts-pub/sxn7.pcts_upload.download?p_file=F15462/200401043_slopes_3_11-30-2004.pdf
- Section 401 Water Quality Certification — USACE will submit your project to the Oregon Department of Environmental Quality (ODEQ) for review
- Prepare a 1200-C NPDES storm water permit application and submit it to ODEQ: <http://www.deq.state.or.us/wq/stormwater/stormwater.htm>
- Prepare any local or county permits (e.g., floodway permits)

4 Permit Review and Issuance

- Provide updated information, as requested by permit agencies

