

# Maps

[Glacial Lake Allison in Oregon's Willamette Valley at the Height of the Lake Missoula Flood](#)

## Reference Map

The Ice Age Floods caused massive dams that forced water to temporarily pool into lakes throughout the Northwest. This map shows the most recent theories on the boundaries and depths of Lake Allison, the glacial lake that was located in the Willamette Valley.

[Ice Age Floods in the Pacific Northwest](#)

## Reference Map

Produced by the Ice Age Floods Institute, this map shows clear evidence of the nearly unimaginable floods that scoured channels throughout the Northwest contributing to the unique geological formations seen throughout the states of Montana, Idaho, Washington, and Oregon.

[Lake Missoula Flood Path from Missoula, Montana to Portland, Oregon](#)

## Reference Map

Paired with smaller versions of the panorama photos mentioned below, this publication includes a map of the sites photographed and an explanation of the geological features therein. A brief history of each area and the floods themselves are included.

[Lake Missoula Flood Path in Panorama Photos](#)

## Reference Map

Play witness to the dramatic forces of the Ice Age Floods by examining these beautifully rendered photos of the various landmarks created by the waters' passing. Pictures note landmarks in Montana, Washington, and Oregon, including Palouse Falls, Washington (pictured below).



Picture by Rick Thompson

# Websites

## NOVA—Mystery of the Megaflood

<http://www.pbs.org/wgbh/nova/megafood/>

Explore the Channeled Scablands through an interactive map, read an interview with geologist, take a quiz, visit the teacher's guide, and more.

## Ice Age Floods Institute

<http://www.iceagefloodsinstitute.org/>

The Ice Age Flood Institute is a non-profit organization of citizens throughout Montana, Idaho, Washington, and Oregon committed to tell the story of the Channeled Scablands.

## University of Wisconsin, Green Bay— Channeled Scablands: Overview

<http://www4.uwsp.edu/geo/projects/geoweb/participants/dutch/vtrips/scablands0.htm>

Field trip pages follow the floodwaters of Glacial Lake Missoula. Lots of pictures & some nice maps.

## CVO Website - Glacial Lake Missoula

[http://vulcan.wr.usgs.gov/Glossary/Glaciers/IceSheets/description\\_lake\\_missoula.html](http://vulcan.wr.usgs.gov/Glossary/Glaciers/IceSheets/description_lake_missoula.html)

US Geological Survey web site, with information and links about Glacial Lake Missoula.

## Ice Age Floods Alternatives Study

<http://www.nps.gov/iceagefloods/>

Chapter D, Background, recounts the geologic history of the region and the story of the debate over the great floods.

## Willamette Valley Pleistocene Project

<http://www.willamettevalleypleistocene.com>

Local experts share their paleontological finds in the Willamette Valley, including the story of Tualatin's mastodon and glacial erratics.



City of Tualatin

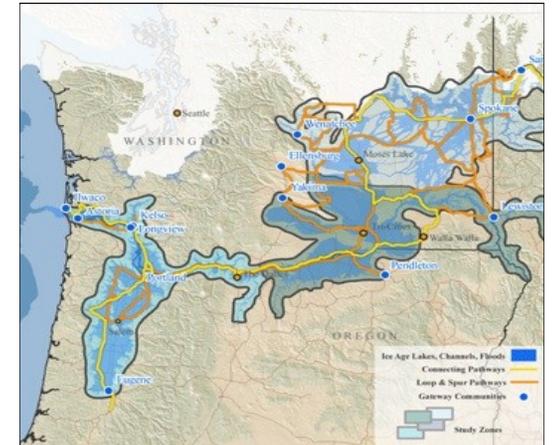
## Tualatin Public Library

Community Services Dept.  
18878 SW Martinazzi Ave.  
Tualatin, OR 97062  
503-691-3074  
[www.tualatinoregon.gov/library](http://www.tualatinoregon.gov/library)



Washington County  
Cooperative Library Services

# Ice Age Floods



# How the Northwest Was Shaped

Images courtesy of the Ice Age Floods Institute

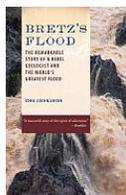
# Books

## Bretz's Flood: The Remarkable Story of a Rebel Geologist and the World's Greatest Flood

By John Robert Soennichsen

**Adult Nonfiction 550.92 Soennichsen**

Bretz's Flood tells the story of a scientific maverick—how he came to study the region, his theory that a flood created it, and how the geologic community fought against an idea that satellite photos would confirm decades later.

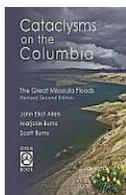


## Cataclysms on the Columbia: The Great Missoula Floods

By John Eliot Allen, Marjorie & Scott Burns

**Adult Nonfiction 551.35 Allen**

This book tells two stories. One follows research that challenged the scientific paradigm of the times, and the other chronicles the result of the research done by J Harlen Bretz: the discovery of the floods that shaped the Pacific Northwest.



## On the Trail of the Ice Age Floods: A Geological Field Guide to the Mid-Columbia Basin

By Bruce Bjornstad

**Adult Nonfiction 551.31 Bjornstad**

This book explores the origins, timing and frequency of the Ice Age floods and describes each of 19 geologic features they left behind. It is also an exciting field guide to features, trails and tours in the Mid-Columbia Basin.

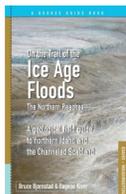


## On the Trail of the Ice Age Floods: The Northern Reaches

By Bruce Bjornstad

**Adult Nonfiction 917.973 Bjornstad**

The authors explore numerous flood features and present dozens of trails and tours directing readers to experience, firsthand, the striking aftermath of the Ice Age floods. The book includes: explanations of 19 types of landforms, guides to 65 flood-formed features and more.



## Washington's Channeled Scablands Guide: Explore and Recreate Along the Ice Age Floods National Geologic Trail

By John Soennichsen

**Adult Nonfiction 917.973 Soennichsen**

Explore the more than 2,000 square miles of terrain in eastern Washington that are home to sharp-edged coulees created by the Ice Age flood.

## The Channeled Scablands of Eastern Washington: The Geologic Story of the Spokane Flood

By Paul L. Weis

**Reference 551.792 Weis**

Weis's concise but informative guide summarizes the sequence of ice-age events that culminated in the flood and the spectacular landscape found in eastern Washington state.

## Ice Age Floods Driving Guides for the Willamette Valley, Clackamas County and the Tualatin, Sherwood Area

**Adult Nonfiction 551.792 Ice**

**Reference 551.792 Ice**

These guides explore the Missoula flood channels, obstacles and overlooks, ripple marks, flood channels, and other landforms throughout Clark, Multnomah, Clackamas, and Washington counties.

## In Search of Ancient Oregon: A Geological and Natural History

By Ellen Bishop Morris

**557.95 Bishop**

Morris, an accomplished geologist, relates the evolution of Oregon's diverse landscapes, with stunning photographs of geologic features shaped by Oregon's volcanic past and Ice Age floods.

## Glacial Lake Missoula: and its Humungous Floods

By David D. Alt

**Adult Nonfiction 551.792 Alt**

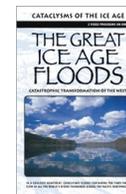
This book tells the gripping tale of a huge Ice Age lake that, when it suddenly drained, unleashed more than ten times the combined flow of all the modern rivers of the world. This is also the story of geologists grappling with scientific controversy.

# Videos

## The Great Ice Age Floods

**DVD 551.792 Great**

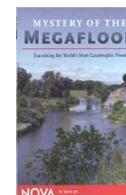
In 1923, geologist J. Harlen Bretz proposed that a catastrophic flood was the geologic genesis of the area, igniting a debate that raged for half a century. The program tracks the clues leading to the final verdict that changed geologic thinking and examines the floods that sculpted the landscape of Oregon.



## Mystery of the Megaflood

**DVD 551.489 Mystery**

Maverick scientist, J. Harlen Bretz, found traces of an enormous ice dam half a mile high, which had blocked a valley in present-day Montana and created an enormous lake behind it. With the help of realistic animation, Nova takes viewers back to the Ice Age to reveal what happened when the ice dam broke.



## Sculpted by Floods

**DVD 551.792 Sculpted**

Much of the landscape of America's Northwest was sculpted by geologic catastrophe. During the last ice age, floods flowing with ten times the volume of all the world's current rivers combined, inundated the Northwest. In their wake was left a unique and often puzzling landscape ... a landscape sculpted by the floods.



# Graphic Novel

## Terra Tempo. Ice Age Cataclysm!

By David Shapiro

**Juvenile Graphic Novel Terra**

Join in the adventure as three friends unlock the secret of time travel and journey back to witness the great Missoula Floods, the largest floods on earth. Experience the world of the past when mammoths and saber-toothed cats roamed the Pacific Northwest. Great for the little explorers in your life.

