

# WATERLINE

March 1, 2003

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Please save *Waterline* issues for future reference.

## Chelan is the place for 2003 conference

By Lee Mellish, conference organizer, WALPA president-elect

Lake Chelan is one of the largest and most pristine natural freshwater lakes in the nation. In the town of Chelan, Campbell's Resort is the site of WALPA's 16th annual conference from April 2 through 5.

The lakeside resort is near downtown Chelan, close to shops and restaurants. A variety of activities are available in the area including, casino gaming, fishing, skiing, snowmobiling, hiking, walking and shopping. The weather may still be cool, so bring warm clothes for outdoor activities.

Presentations at the conference are designed for everyone from the non-technical to university researchers. Session topics include: water quality studies and dam relicensing; forest service issues and fish; erosion control on Lake Chelan; international lake and stream studies; fisheries and lake quality; Eurasian watermilfoil control techniques; stream habitat restoration; shoreline protection and aquatic habitat; blue-green algae; fluctuating water levels and aquatic macrophytes; Priest Lake management plan; fish contamination in Washington; hydrocarbons and jet skis; developing TMDLs for lakes; landscaping and lake communities; the lake protection manager; West Nile virus in Washington; climatic changes and effects on lakes; conservation easements and lake protection; legal issues of watershed development; lake-friendly

construction designs; lake modeling; and lake food web research.

The keynote speaker is Jack Stanford, University of Montana, Flathead Lake Research Center. He'll speak at Thursday's lunch on ecosystem science at Flathead Lake. During Friday's lunch, local photographer, Mike Barnhart, will present a photographic history of Lake Chelan.

On Saturday, April 5, from 9 am to noon, 24 people will take a boat cruise to see lake protection activities on Lake Chelan.

**Due to limited space at the hotel, it is recommended to make reservations in early March at Campbell's Resort. To reserve a room, call 1-800-553-8225.**

For conference information, call Lee Mellish at 509-922-9016, ext. 24.

## EPA holds annual conference

The EPA presents its 16th annual national conference on Enhancing the States' Lake Management Programs from April 22 through 25 at the Congress Plaza Hotel in Chicago. The topic is Developing and Implementing TMDLs for lakes and reservoirs.

For a program and registration information, visit [www.nalms.org/symposia/chicago/index.htm](http://www.nalms.org/symposia/chicago/index.htm).

# Lake Focus on Lake Chelan

Compiled by Kurt Marx

Be sure to join us for WALPA's 16th annual conference at Campbell's Resort on Lake Chelan from April 2 through 5 (see page 1).

Lake Chelan is located in the northern Cascades in Chelan County, 32 miles north of Wenatchee.

## Physical characteristics of Lake Chelan

Lake Chelan discharges to the Chelan River at a dam located in the city of Chelan. The Chelan River drops 400 feet over a few miles to join the Columbia River.

Lake Chelan is more than 50 miles long, with an average width of one mile. The lake has two distinct basins. The upper basin is more remote, sparsely populated and deep – the maximum recorded depth is 1,486 feet. The lower basin is more populated (with the city of Chelan and the town of Manson) and shallow in comparison, with an average depth of 141 feet.

- Location: Township 27 N, Range 22 E.
- Altitude: From 1,092 to 1,100 feet above sea level (the dam, constructed in 1927-28, raised the lake level approximately 24 feet)
- Drainage area for the lake is 924 square miles, consisting primarily of forest, agricultural, and urban areas.
- Lake area: 52 square miles

## Lake Chelan's water quality

Lake Chelan is classified as an ultra-oligotrophic lake, having very low nutrients and high clarity. The water of Lake Chelan is used for drinking water, irrigation, hydro-power, fishing, and recreation. In 1990, the Lake Chelan Water Quality Committee prepared a water quality plan that included a TMDL for phosphorus with the goal of preserving the ultra-oligotrophic status of the lake. The average secchi disk depth (in 1989) was 40 feet.



Summertime in Lake Chelan. Photo by Cara K. Davis. Courtesy of Lake Chelan Chamber of Commerce.

Annual stocking programs provide hatchery-raised fish.

**Public access (boat launches):** City Park and Lakeside Park in Chelan, Lake Chelan State Park, Old Mill Park.

## Fish Species:

- Chinook (*Oncorhynchus tshawytscha*), landlocked
- Kokanee (*Oncorhynchus nerka*), a.k.a., silver trout (land-locked sockeye salmon)
- Lake trout (*Salvelinus namaycush*), a.k.a., mackinaw
- Westslope cutthroat trout
- Rainbow trout (*Oncorhynchus mykiss*), planted and wild
- Burbot (freshwater ling)
- Smallmouth bass (*Micropterus dolomieu*)

## Further information:

- Washington Department of Ecology. 1992. *Lake Chelan TMDL summary*. TMDL Number 47-001.
- Washington Department of Ecology, Olympia, Wash.
- [www.washingtonlakes.com/](http://www.washingtonlakes.com/)

## Sources for this article:

- Lakes of Washington, Volume II – Eastern Wash., Ernest E. Wolcott. Third Edition, Olympia, Wash. 1973.
- [www.washingtonlakes.com/FeaturedLakes/](http://www.washingtonlakes.com/FeaturedLakes/) (Lake Chelan, by John Kruse)
- U.S. Environmental Protection Agency. TMDL Case Study: Lake Chelan, Wash. EPA841-F-94-001. Jan. 1994. Office of Water, Wash., D.C.
- [www.lakechelan.com/guide/recreation.htm#fishing](http://www.lakechelan.com/guide/recreation.htm#fishing)
- WALPA board members

**NOTE: WALPA makes no guarantee to the accuracy of this information.**

To suggest a lake to highlight in the next issue, contact  
Kurt Marx, [marx@taylorassoc.net](mailto:marx@taylorassoc.net).

## Waterline accepts ads

The *Waterline* accepts advertising for lake-related products or services.

For advertising information and rates, call Paula Lowe, 360-491-0109, or e-mail her at [pmrlowe@attbi.com](mailto:pmrlowe@attbi.com).

Advertising lake-related products or services in the *Waterline* does not imply endorsement by WALPA or any of its officers.

# Ecology awards grants to control aquatic weeds

The Washington State Department of Ecology awarded grants of more than \$465,000 to help local governments and researchers control the spread of non-native aquatic weeds.

"These invasive weeds are highly aggressive and can grow in a wide variety of conditions, choking out native species, destroying fish and wildlife habitat, and making the water unusable for swimming and boating," explains Kathy Hamel, administrator of the state's Aquatic Weed Management Fund.

Mostly residents and property owners pay the high costs of controlling these weeds, but help came in 1991 with the Freshwater Aquatic Weeds Account which provides financial and technical support to tackle the problem statewide. This account, funded by a \$3 yearly license fee for boat trailers, pays for technical assistance, public education and grants to help control aquatic weeds.

The 2003 grants were awarded to:  
**King County (\$165,037)** – Con-

tinue efforts to eradicate hydrilla, a very fast-growing and aggressive plant, in Pipe and Lucerne Lakes (the only infestation of hydrilla in the Pacific Northwest and Ecology's highest aquatic weed priority), and treat Spring Lake for Eurasian watermilfoil through herbicide and hand-pulling by divers.

**Mason Conservation District (\$30,000)** – Develop a plan to manage aquatic vegetation in Mason Lake, particularly a new infestation of Eurasian watermilfoil.

**Ocean Shores (\$75,000)** – Stock additional grass carp in Duck Lake to control Brazilian elodea, an invasive aquarium plant no longer sold in Washington, and to do follow-up monitoring of plants and waterfowl.

**Pend Oreille County (\$35,000)** – Eradicate Eurasian watermilfoil in Diamond Lake using a diver-operated dredge.

**Skagit County (\$7,969)** – Continue treatment of Big Lake for Brazilian elodea, and educate the community

about controlling aquatic weeds.

**Thurston County (\$60,000)** – Update plans for controlling fragrant water lily in Long Lake and Lake Lawrence, and control Eurasian watermilfoil in Long Lake by hand-pulling.

**Washington Department of Agriculture (\$34,750)** – Analyze the DNA of common reed (phragmites) to separate highly aggressive European and Asian strains from the native Washington variety and identify where phragmites is growing in Washington, and continue studying the use of weevils in Yakima's Mattoon Lake to control Eurasian watermilfoil.

**University of Washington (\$57,627)** – To see whether exposure to herbicides used to combat aquatic weeds interferes with the ability of juvenile coho salmon to successfully make the transition from freshwater to saltwater when migrating to the sea.

[www.ecy.wa.gov/programs/wq/plants/grants/focusgrant.html](http://www.ecy.wa.gov/programs/wq/plants/grants/focusgrant.html)

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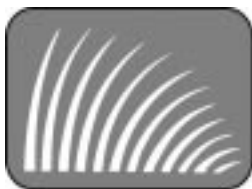


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# Ecology proposes changes to state's water quality standards

The Washington State Department of Ecology is overhauling the state's water quality standards last revised in 1997. The proposed standards reflect the latest scientific information and incorporate new state and federal requirements with a focus on making the state's waters clean and safe for people, fish and wildlife.

To prepare the new standards, Ecology worked with hundreds of citizens, scientists, large and small businesses, agricultural and timber interests, tribes, municipalities, environmental groups, and others, to understand complex issues and balance conflicting viewpoints.

The proposed standards cover criteria that are used to measure water quality: temperature, dissolved oxygen, bacteria and ammonia. Other proposed revisions change several key aspects of the water quality standards.

They are:

- New criteria to protect bull trout;
- New criteria to protect agricultural water supplies;
- New language on how to prevent degradation of water quality;
- Moving from a "class-based" system to a "use-based" system for designating beneficial uses of fresh waters;
- More clarity and detail on implementing the regulations; and
- Better organization to make the regulations easier to use.

The public commented on the proposal from January through March 7.

For current information on proposed changes, go to [www.ecy.wa.gov/programs/wq/swqs](http://www.ecy.wa.gov/programs/wq/swqs).

## Waterline newsletter published quarterly

*Waterline* deadlines and publication dates for the next two issues:

<u>Deadline</u>	<u>Issue date</u>
May 1	June 1
August 1	September 1

Story ideas are always welcome. Send your ideas to *Waterline* Editor Paula Lowe, [pmrlowe@attbi.com](mailto:pmrlowe@attbi.com) or call 360-491-0109.

Be sure to include the topic, suggested writer, contact person with phone number and e-mail address.

*WATERLINE* is the newsletter of the Washington State Lake Protection Association (WALPA). Send submissions to: Paula Lowe, [pmrlowe@attbi.com](mailto:pmrlowe@attbi.com). Articles may be reproduced; credit the *Waterline*. For information about WALPA, call 1-800-607-5498. WALPA is a chapter of the North American Lake Management Society (NALMS).

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