

WATERLINE

Remember to renew annual membership

Annual dues rates:

\$15 - students

\$20 - individuals

\$30 - professionals

\$40 - organizations & lake associations

\$10 - individuals who belong to lake associations that are WALPA members

The membership year is April 1 through March 31. Dues are renewable April 1 or at the annual conference.

Send your membership dues to: WALPA, P.O. Box 4245, Seattle, WA 98104

WALPA holds regional conference in Portland

By BiJay Adams, president-elect and conference coordinator, WALPA

This year WALPA is co-hosting its annual conference with the North American Lake Management Society (NALMS) and another NALMS Chapter, Oregon Lakes Association (OLA). The 2006 regional conference will be held at Portland State University in Portland, Oregon, on Sept. 13 and 14, with Sept. 15 tentatively reserved for a field trip.

A regional conference has many benefits including learning the concerns and challenges experienced by other chapters while providing an avenue to work closely with neighboring states. In addition, co-hosting a regional conference will provide each of the associations the opportunity to expand while working closely with NALMS.

For more information, contact BiJay Adams at 509-922-5443 or bijay@libertylake.org.

March 2006

WALPA supports EHB 2322 to limit phosphorus content in dishwashing detergent

By Stephanie Woolett, water resources technician, Skagit County Public Works

Due to the negative impacts of phosphorus on water quality and lake resources, WALPA supports EHB 2322 and the intent of the Washington Legislature to impose a statewide limit on the phosphorus content of household detergents. Excessive levels of phosphorus are known to stimulate excessive plant growth and impair water quality. In 1993, legislation was enacted to ban the sale of laundry detergent containing more than 0.5 percent or more of phosphorus by weight; however, sale of dishwashing detergent containing 8.7 percent of phosphorus by weight is allowed in Washington state.

Phosphorus occurs naturally in rocks and minerals, and is a key element for plant and animal growth. In Washington's lakes phosphorus tends to be the least available nutrient under natural conditions, which limits the growth of macrophytes and algae. Outside inputs of phosphorus from human sources can upset the nutrient balance in lakes and accelerate algae and plant growth. Nighttime plant respiration and increased microbial activity associated with excessive growing and decomposing plant matter causes declines in dissolved oxygen. According to the North Carolina Water Quality group, declines in dissolved oxygen can impact the life cycles of aquatic organisms and may result in losses of desirable fish species.

Household detergents contribute

to phosphorus loading in lakes and surface waters. Other sources include septic effluent, agricultural waste and lawn fertilizers. By enacting legislation to limit phosphorus content in dishwashing detergent, we can significantly reduce phosphorus loading in surface waters and reduce impacts to water quality, as well as the high costs of phosphorus removal for current and future treatment and restoration projects.

EHB 2322 was approved by the House and was scheduled for a public hearing in a Senate committee on Feb. 21. Additional information about EHB 2322 can be found at the website for the Washington State Legislature: <http://apps.leg.wa.gov/billinfo/summary.aspx?bill=2322&year=2006>

Sources of water quality information

Davis, J., Storer, B., Zisette, R.

Washington Lakes Book, June 1995.

www.ecy.wa.gov/programs/wq/plants/lakes/book_contents.html

Bartenhagen, K.A., Turner, M.H., Osmond, D.L. North Carolina State University Water Quality Group, *Watershedss: Phosphorus*. www.water.ncsu.edu/watershedss/info/

WALPA website:
www.nalms.org/walpa/

Please save *Waterline* issues for future reference.

Lake Focus on Lake Pend Oreille

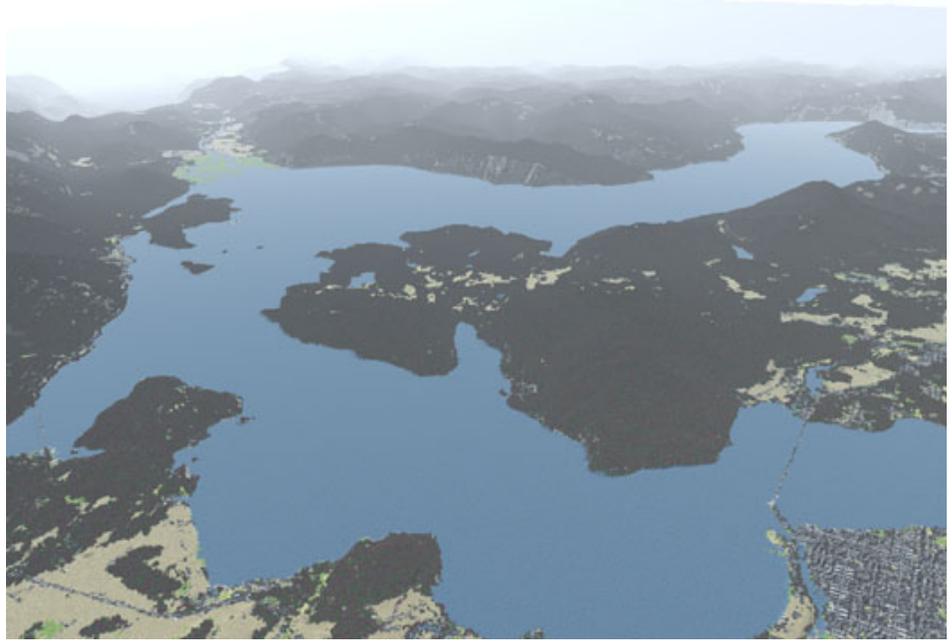
By Carla B. Milesi

Lake Pend Oreille (pronounced pon-duh-ray), located in northern Idaho, is surrounded by the Cabinet Mountains to the east, the Selkirk Mountains to the north, and the Coeur d'Alene Mountains to the south. The name, which means "ear drop" in French, was given to the lake by French-Canadian trappers in the region. It is thought that this referred to either the ear-like shape of the lake, or the custom of local Kalispell Indian tribe who wore prominent ear ornaments.

With 95,000 acres, 175 miles of shoreline and a maximum depth of 1,150 feet, Lake Pend Oreille is the largest natural lake in Idaho and the fifth largest natural freshwater lake in the United States. The lake is fed principally by the Clark Fork River, which provides 92 percent of the annual flow. Other tributaries flowing into the lake include Pack River, Lightning Creek, and Sand Creek with numerous smaller creeks entering the lake at various locations. Lake Pend Oreille is drained by the Pend Oreille River which flows west toward the Albeni Falls Dam and across the Idaho panhandle and northeastern Washington before draining into the Columbia River just south of the Canadian border.

Lake Pend Oreille is a remnant of the Glacial Lake Missoula, a massive inland sea that once extended from the Canadian border down through the Purcell Trench (the route of Highway 95) to the Spokane area and far into western Montana. Lake Missoula was formed about 15,000 years ago when water began to build up behind a 3,000 foot high ice dam located where the Clark Fork River meets Lake Pend Oreille. When the ice dam failed, it drained Lake Missoula in less than 48 hours.

At the southern tip of Lake Pend Oreille is the 4,000 acre Farragut State Park. This is home to the Farragut Naval Training Station, which was built in 1942 during World War II and was once the world's second largest naval recruit training facility. The naval station was decommissioned in



Aerial image the town of Sandpoint, Idaho, and Lake Pend Oreille looking south. Digital image created by geographer Rick Lovel. A north Idaho native, Rick is the GIS Coordinator for HDR Engineering in Boise, Idaho.

1946, however the U.S. Navy still has a presence in nearby Bayview. Bayview is home to the U.S. Naval Surface Warfare Center's Acoustic Research Detachment which is involved in research and development of methods to make ships and subs operate more quietly. The depth of Lake Pend Oreille makes it a prime location for this deep water acoustic testing.

Recreation is very important for the economy of the communities surrounding Lake Pend Oreille. Boating, camping, hiking, road biking and wildlife viewing are all popular pastimes; however, Lake Pend Oreille is especially well known for its fishing. Many species of fish can be found in the lake, including the lake trout, largemouth bass, sunfish, perch westslope cutthroat, and northern pike. The lake is said to harbor the strongest population of bull trout in the Pacific Northwest and is also well known for its Kamloops rainbow trout, which are prized by all fishing enthusiasts. The kokanee, which is a land-locked subspecies of the sockeye salmon, historically thrived in Lake Pend Oreille. Populations are now at an all-time low because of prey from rainbow and lake trout, and significant lake drawdowns for hydroelectric power and flood control at the Albeni Falls Dam. The drawdown, which

can lower the lake by as much as 11 feet, dries up the shallow kokanee spawning grounds.

Lake Pend Oreille is primarily oligotrophic and its deep, open waters have remained relatively clean during the past 50 years. Eutrophication is occurring in the nearshore areas because of increased phosphorus concentrations which lead to nuisance levels of algae and aquatic weed growth. This nutrient loading may be the result of residential development, leaking septic tanks, and stormwater runoff. In 1994 the lake was designated as "threatened" by the State of Idaho due to the increasing nutrients, and in 2002 a Total Maximum Daily Load (TMDL) was approved by the U.S. Environmental Protection Agency (EPA) to set a threshold for phosphorus. The Tri-State Water Quality Council, a non-profit partnership of citizens, business, industry, tribes, government and environmental groups from Washington, Oregon and Idaho, was enlisted to work with US EPA Region 10, Department of Environmental Quality, and local government groups, industries and citizens to develop an overall nutrient management plan for the lake.

Future management plans
Continued on page 3.

Lake Pend Oreille

continued from page 2

to address the nutrient problems include education and on-the-ground implementation projects. On-the-ground projects focus on specific pollution controls and lake management actions to reduce the amount of nutrients going into the lake from shoreline property, development, stormwater runoff, agriculture, boating and recreation. Plans also include a water quality monitoring program to evaluate if the TMDL targets are being met and to assess overall project effectiveness.

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

Want to recommend a lake for the next Lake Focus? Send suggestions and questions to Carla Milesi at Carla@taylorassoc.net.

Sources for this article:

Pend Oreille Lake Nearshore Nutrient TMDL Implementation Plan, Dec. 2004, www.deq.state.id.us/water/data_reports/surface_water/tmdls/pend_oreille_lake_ns/pend_oreille_lake_ns_implementation_plan.pdf

Glen Rothrock, Idaho Department of Environmental Quality

Tri-State Water Quality Council website, www.tristatecouncil.org

Idaho Department of Fish and Game, Kokanee Impacts Assessment and Monitoring on Lake Pend Oreille

Idaho Annual Progress Report for October 1995 – September 1996, www.efw.bpa.gov/Publications/R98065-1.pdf and www.sandpointonline.com



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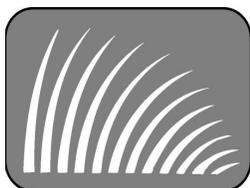
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Announcements from the WALPA Board

By Sally Abella, president, WALPA

Our most recent WALPA Board meeting was held in mid-February at the Washington Department of Ecology Northwest Regional Office in Bellevue.

We are planning a joint conference in September 2006 with the Oregon Lakes Association (OLA), and the North American Lake Management Society (NALMS). The Western Regional Panel for Nuisance Aquatic Species will be meeting in Portland at the same time, and both conference programs will be coordinated to allow attendees to take advantage of networking and information sharing opportunities. See page 1.

A WALPA membership vote in accordance with WALPA bylaws will be held on offering pro-rated membership dues for new members joining mid-year. A stamped postcard is enclosed with mailed copies of *Waterline*, and those who receive the newsletter electronically will

receive a postcard in the mail. You can either mark the postcard and mail it back or respond by emailing WALPA President Sally Abella at sally.abella@metrokc.gov. Two-thirds of the membership must respond before the vote can be ratified, although a majority of "yes" votes will be sufficient to pass the bylaws change. (See page 6.)

Work continues on a plan to offer dues discounts to private citizens who belong to a lake association that belongs to WALPA and who join as a group. A reduction in future conference fees will also be offered to people who belong to a member lake association and register together for annual conferences; however, this offer will probably not take effect for the 2006 regional conference.

WALPA is offering three scholarships: two awards of \$500 each and the Nancy Weller Memorial Scholarship of \$750. Please notify any

college students you know who are engaged in lake-related studies. In addition, several regional companies have expressed interest in partnering with WALPA to offer further scholarships for students, and this will be explored in the next few months by the Scholarship Committee. (See story on this page.)

Board members discussed WALPA support of House Bill 2322 which would limit phosphorus content in dishwashing detergents to 0.5%. See page 1.

Since the annual conference will not be held until September, WALPA board members and officers will serve until then. However, a search has begun for new officers and board members. WALPA members who are interested in serving on the board, please contact Pete De Arteaga, who chairs the Elections Committee, at pedro.dearteaga@metrokc.gov. We are also interested in nominations for president-elect.

WALPA offers scholarships to students

By Beth Cullen, WALPA board member

For the third year WALPA is presenting scholarships to undergraduate and graduate students studying limnology and lake management of lakes. Traditionally, WALPA has awarded \$250 and \$500 scholarships. This year, the scholarship amounts have been increased. WALPA will present one \$750 scholarship in memory of Nancy Weller who worked with the Washington State Department of Ecology for 13 years focusing on the many issues facing lakes in Eastern Washington, and two \$500 scholarships.

Scholarship funds may be used by recipients to help pay for education and/or research. Eligible applicants must be enrolled as a full-time undergraduate or graduate students in an accredited community college, four-year college or university, and be

completing course work or research related to the study, management or restoration of lakes in Washington or Idaho state.

All three scholarship recipients will also receive a one-year membership in WALPA and a waiver of registration fees for the 2007 conference. Scholarship recipients will be invited to give a presentation on their research at the 2007 conference.

If you know of worthy students, please pass this information along to them, which can also be found at www.nalms.org/walpa/scholarship.htm.

Procedure to apply

Applicants must provide a one-page résumé and recent transcripts of all college/university coursework. Applicants must also provide a one-page statement of interests, including

career goals, research interests, and intended use of scholarship funds. The statement of interest should explain why their research is of importance to the field of limnology and/or watershed management.

Send application materials to the WALPA Scholarship Program Committee by June 30, 2006 (postmark date). Scholarship recipients will be announced at the 2006 WALPA/OLA/NALMS regional conference and will be contacted by the Scholarship Program Committee (if not present at the conference).

Questions regarding these scholarships may be directed to Beth Cullen, 206-263-6242, or Beth.Cullen@METROKC.GOV.

Please send all application materials to: Beth Cullen, WALPA Scholarship Program, 201 South Jackson Street, Suite 600, Seattle, WA 98104

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WALPA Board proposes bylaws change

The WALPA Board is proposing a change in the bylaws to offer pro-rated membership dues for new members joining mid-year. (See below.) Two-thirds of the membership must respond before the vote can be ratified, although a majority of "yes" votes will be sufficient to pass the bylaws change.

A stamped postcard is enclosed with mailed copies of the *Waterline*, and those who receive the newsletter electronically will receive a postcard in the mail. You can either mark the self-addressed, stamped postcard and mail it to WALPA, or respond by emailing WALPA President Sally Abella at sally.abella@metrokc.gov.

Current bylaws:

ARTICLE IV. MEMBERSHIP.

SECTION D. The membership year of the Association shall end on March 31st of each year or at the time of the annual conference, whichever occurs later in the year. Annual membership dues are not pro-ratable. Dues are payable to the Washington State Lake Protection Association, for deposit by the Treasurer.

Proposed change to bylaws:

ARTICLE IV. MEMBERSHIP.

SECTION D. The membership year of the Association shall end on March 31st of each year or at the time of the annual conference, whichever occurs later in the year. Annual membership dues are pro-ratable; new members joining the second half of the year will pay half the annual dues. Dues are payable to the Washington State Lake Protection Association, for deposit by the Treasurer.

Waterline is the newsletter of the Washington State Lake Protection Association (WALPA). Articles may be reproduced; credit the *Waterline*. WALPA is a chapter of the North American Lake Management Society (NALMS). The next deadline is May 1 for the June issue. Send articles to Editor Paula R. Lowe, pmlowe@comcast.net.

For information about the newsletter or to inquire about advertising, call 360-491-0109. **Newsletter Committee:** Beth Cullen, Glen Rothrock, Stephanie Woolett.