Welcome to the 2004 WALPA conference Lakes Solutions for the 21st Century

March 31-April 2, Bellingham

Wednesday, March 31, 2004 8:00-11:30 a.m.

New technology revolutionizing water quality monitoring methods, Randy Glover and Linda Dean, Electronic Data Solutions and In-Situ, Inc.

9:00 a.m.-4:00 p.m.

Hydrolab maintenance and calibration workshop, T.J. Sisson, Hach

5:00-7:00 p.m. Informal social event

Thursday, April 1 8:00 a.m Registration opens

8:30 – 10:00 a.m. Welcome, overview, Plenary Session

- 1. Mayor Asmundsen, City of Bellingham
- 2. Lake Whatcom water quality, Robin Matthews, Huxley College, WWU
- 3. Resolving lake property rights issues, Rene-Marc Mangin, Ecology

10 – 10:30 a.m. Break - Visit exhibitors, posters.

10:30 a.m. – Noon Session 1-A Lake Whatcom Restoration and Management

Chair: Robin Matthews

- 1. Microbial patterns affecting metalimnetic water quality, Elise Deluna, WWU
- 2. Lake Whatcom: Cooperative management, Bruce Roll, Erika Stroebel, Clare Fogelsong, Whatcom County and City of Bellingham
- 3. Lake Whatcom TMDL study, Steve Hood, Bob Cusimano, Ecology

10:30 a.m. – Noon Session 1-B Lake phosphorus retention and management

Chair: Rob Zisette, Herrera Environmental Consultants

- 1. A global analysis of phosphorus retention in lakes, Michael T. Brett, UW
- 2. Lake Stevens A decade of aeration, Gene Williams, Snohomish County and Harry Gibbons, Tetra Tech
- Green Lake alum treatment dose for a decade, Rob Zisette, Herrera Environmental Consultants, Kevin Stoops, Seattle Parks and Recreation and Harry Gibbons, Gene Welch and Shannon Nobel, Tetra Tech

Noon – 1:30 p.m. Lunch - Sustainability for in-lake management options, Alex Horne, University of California, Berkeley

1:30 - 3:00 p.m. Session 2-A Volunteer Monitoring Programs

Chair: Marianne Barrentine, Spokane County engineers

- 1. Volunteer wetland restoration at Loon Lake, Bill Shawl, Loon Lake Land Conservancy
- 2. King County volunteer monitoring program Katie Sauter Messick, METRO King County
- 3. Volunteer monitoring at Newman Lake, Linda Pool/ M. Barrentine, Newman Lake Watershed volunteers
- 4. Pierce Co. volunteer stream team, Isabel Ragland/ Jayme Gordon, Pierce County Stream Team

1:30 - 3:00 p.m. Session 2-B Fish and Water Quality

Chair: Dave Christianson, WSU

- 1. Fish and water quality management in Colville Tribal Lakes, Dave Christianson, WSU
- 2. Hatchery monitoring and evaluation program, Dan Fairbanks, Colville Federated Tribes

3:00 – 3:30 p.m. Break - Visit exhibitors and posters.

3:30 - 5:00 p.m. Session 3-A Control of milfoil and invasive weeds in lakes

Chair: Kathy Hamel, Ecology

- Effects of Renovate, Reward and Sonar on Smoltification of juvenile Pacific Coho salmon, Kerensa King (other authors: Christian Grue, Martin Grassley, Catherine Curran, Jim Winton, and Walt Dickhoff
- 2. Just when you think it is under control it's back, Jim Bachmeier, Ryan Langan, Thurston Co. Lakes
- 3. Spring Lake integrated aquatic vegetation management plan, Michael Murphy, King County

3:30 - 5:00 p.m. Session 3-B Fish, Lakes and Stream Restoration

Chair: Barry Southerland, Natural Resource Conservation Service

- Native and introduced fish species in Lake Whatcom, Mark Downan, Fish & Wildlife on duty with Natural Resource Conservation Service
- 2. Natural channel restoration for fish habitat and lake protection, Barry Southerland

5:00 – 7:00 p.m. Hospitality Social. Visit exhibitors.

Friday, April 2

8 a.m. Registration opens. Visit exhibitors and posters.

8:30 - 10:00 a.m. 4-A

Innovative technologies for lake restoration

Chair: Barry Moore, WSU

- 1. Low dose annual alum treatment at Sahale Ponds, Harry Gibbons, Tetra Tech, Inc.
- 2. Microfloc alum injection at Newman Lake, Ann Richter, WSU
- 3. Hypolimnetic oxygenation at Newman Lake, Barry Moore, WSU

8:30 - 10:00 a.m. 4-B

Lake organizations and regulations

Chair: Lee Mellish, Liberty Lake Sewer and Water District

- 1. Shoreline inventory for lakemaster program updates, Anthony Gabriel, CWU
- 2. Sammamish Washington Analysis and Modeling Program, Jonathan Frodge, METRO King County
- 3. Public opinions in a lakeside community,
 Danna Moore, Marianne Barrentine, and Barry
 Moore, WSU and Spokane County engineers

10:00 - 10:30 a.m. Break. Visit exhibitors and posters.

10:30 a.m. - Noon 5-A

Nuisance waterfowl control and management

Chair: Bijay Adams, Liberty Lake Sewer and Water District

- 1. Management of Urban Canada Geese by USDA, Mike Linnell, USDA Wildlife Services
- 2. Perspectives in managing Canada geese in an urban setting, Barbara DeCaro, City of Seattle
- 3. Waterfowl management perspectives from Fish & Wildlife, Don Kraege, Fish & Wildlife

10:30 a.m. - Noon Session 5-B

Graduate research on lake ecology and management

Chair: Sally Abella, METRO, King County

- 1. Nutritional impacts of phytoplankton on *Daphnia* growth and reproduction, Joe Ravet, UW student
- 2. Bioavailability of particulate phosphorus in forested, urban, agricultural and mixed land cover streams, Micaela Ellison, UW student
- 3. Current and historical limnological conditions of Soap Lake, Jahn Kallis, WWU student (or session 2-B)
- 4. Fish, algae, and zooplankton in Liberty Lake, Lisa Audin, Ecovista Co. and WSU

Noon - 1:30 p.m. Luncheon and Business Meeting

Thanks to the Washington State Department of Ecology for its donation to WALPA for this year's conference.

1:30 - 4:30 p.m. Session 6 Aquatic Plant Workshop

Chair: Kathy Hamel, Ecology

- 1. Aquatic plant control methods, Kathy Hamel
- 2. Aquatic plant identification, Jenifer Parsons, Ecology

Conference Posters featured this year

"Trophic State Census of Washington State Lakes by Satellite Imagery," by Steve Butkus, Washington State Department of Ecology

"Influence of Logging and Precipitation Variability on a Declining Sockeye Salmon (Oncorhynchus nerka) Population in Lake Ozette, Washington," by Andrew Bach, Western Washington University Department of Environmental Studies and Kasey Ignac, City of Lynden Public Works Department

"Stream Restoration," by Tom Smayda, Smayda Environmental Associates, Inc.

"Innovative Rehabilitation of an Incised Urban Creek in Dallas, Oregon," by Tim Abbe and Matt Brennan, Herrera Environmental Consultants, Inc.

"Thornton Creek Restoration and the Saga of the 300-Foot-Long Fish Screen," by Ardith Lanstra-Nothdurft, Herrera Environmental Consultants, Inc.

"Environmental Impact and Management Options for Overcrowded Stands in Eastern Washington," by Megan Rogers and Barry C. Moore.

"Pre-exposure to Alum: Life History Adaptations in *Daphnia pulex*," by Louise A. Wold and Barry C. Moore.

"Hybrid Poplars in Riparian Buffers for Water Quality Protection in Eastern Washington Agricultural Settings," by Laurie J. Flaherty and Barry C. Moore.

Exhibitors welcome visitors

- EDS
- Hydrolab
- Aquatechnex
- Washington State Department of Ecology -Lakes Program
- Aquatic Plants display Arline Fullerton
- WALPA