

**CHERYL L. GREENGROVE**

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Interdisciplinary Arts & Sciences – Environmental Science  
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**EDUCATION**

Columbia University	Ph.D., Physical Oceanography 1986
Columbia University	M.Phil., Physical Oceanography 1986
Columbia University	M.A., Physical Oceanography 1982
Moravian College	B.S., Physics (cum laude) 1979

**CONTINUING EDUCATION**

Acoustic Doppler Current Profiler Course – RDI (2004)  
MATLAB Programming Course - Mathworks (2003)  
ARCINFO GIS Course - ESRI (2000)  
GIS ESRI meeting workshops (2000)  
GIS and Environmental Science - TORCH Institute: Woodrow Wilson National Fellowship Foundation (1999)  
HTML/Webpage workshop - UWT (1998)  
Multi-Media/Internet Educational Tools Workshops - North Seattle Community College (Fall 1994)  
Groundwater Pollution and Hydrology - The Princeton Course (1993)  
Native Water Resources and GIS - Department of Ecology (1993)  
NPDES Stormwater Workshops - Environmental Protection Agency (1993)  
Wetlands Law and Regulation in Oregon - The Cambridge Institute (1992)  
Environmental Regulation Course - Executive Enterprises, Inc. (1992)  
Line Manager Training Program - EG&G WASC, Inc. (1991)

**CERTIFICATIONS**

OSHA-HAZWOPER - General Site Worker (40 hr.); Supervisor (8 hr.) (1992)  
Standard First Aid and CPR Certified (1992)  
Scuba Diver - PADI (1975)

**PROFESSIONAL HISTORY**

University of Washington, Tacoma (1996- )

**Assistant Director for Environmental Science/Studies & PPE** (2012-2013)

**Interim Director of Interdisciplinary Arts and Sciences** (2006-2009)

**Environmental Science Coordinator** (1996-2006)

**Associate Professor of Environmental Science** (2002- )

**Assistant Professor of Environmental Science** (1996-2002)

Teaching geoscience courses in earth, air and water resources, pollution and management. Responsible for the development of the environmental science curriculum and facilities at the new Tacoma campus. Developing research focused on local and regional estuarine issues.

Oceanographic Consultant (1993-1996)

**Private consultant** specializing in oceanographic and marine geophysical research. Mainly working part-time with Scripps Institution of Oceanography on a variety of physical oceanographic projects such as ship-of-opportunity XBT data collection program and Coastal Ocean Processes Program off Duck, North Carolina.

Part-Time Instructor (1994-1996)

**Part-time instructor** at University of Puget Sound, Pacific Lutheran University, Seattle University, Bellevue Community College, North Seattle Community College and Seattle Central Community College. Courses taught include oceanography, meteorology, global climate change and environmental science. A detailed breakdown of teaching activities is included under teaching experience.

Arctic Slope Consulting Group, Inc. (1992-1993)

**Manager of Environmental Services** - In charge of business development, administrative functions and scientific oversight for the entire ASCG environmental group specializing in providing professional services related to natural resource assessment with concentration on water and land issues.

Science Applications International Corporation (1991-1992)

**Senior Research Oceanographer** - Principal responsibilities include business development, project management and scientific support services for physical oceanographic and marine geophysical programs.

EG&G Washington Analytical Services Center, Inc. (1987-1991)

**Associate Scientist/Technical Operations Manager/Data Processing Manager** - Primary scientific responsibilities included the collection, processing, analysis, interpretation, and presentation of hydrographic data, as well as the development of new hydrographic processing procedures and software. In addition, was manager and principal scientist for a number of physical oceanographic and marine geophysical projects based out of the Massachusetts and Alaska offices. Also served as technical operations manager and data processing manager. Performed the following administrative functions: project organization and management, client liaison, cost tracking, manpower surveys, logistics support, technical equipment/personnel scheduling and maintenance, computer needs analyses/implementation/scheduling, business development, technical proposal preparation, scientific presentations and report writing.

Hobart and William Smith Colleges (1986-1987)

**Assistant Professor of Geoscience** - Taught physical oceanography/ limnology, meteorology, climatology and earth science. The school facilities included the 65-foot R/V EXPLORER, four Aanderaa current meters, mechanical bathythermograph, Niskin bottles, Lamotte chemistry kits, plankton tow nets, corer, dredge, weather fax, a weather station, and other assorted scientific gear, and computers. Was responsible for the design and supervision of such class research projects as a circulation study of Seneca Lake, weather prediction in upstate New York, and a statistical climatological study of Geneva, New York. Also participated in limnological training program for high school science teachers.

Columbia University (1979-1986)

**Graduate Research Assistant** - Thesis work involved a regional hydrographic survey of the southwestern Atlantic which focused on vertical mixing processes (particularly atmospherically induced convection and salt fingering) in the upper water column of the Argentine Basin near the Brazil-Falkland confluence.

Moravian College (1978-1979)

**Teaching Assistant/Computer Operator** - Employed by the Physics Department to teach introductory physics laboratory. Employed by the Math/Computer Science Department to assist students and operate Digital mainframe computer with UNIX operating system.

Progen, Inc. (1975-1979)

**Vice President** - In charge of research and development of new software packages for small businesses and vertical markets. Responsibilities included managing, marketing, sales, systems analysis, programming, technical writing, presentations, and customer service. Also served as Senior Systems Analyst/programmer responsible for developing, installing and troubleshooting small business software accounting systems.

## **REPRESENTATIVE PROJECT EXPERIENCE**

Endicott Monitoring Program, Prudhoe Bay, AK (British Petroleum) - Ongoing program designed to assess the local, regional and cumulative effects of the Endicott Causeway on the oceanographic environment, evaluate causeway breach effectiveness and compare results with the Environmental Impact Statement (EIS) predictions. Primary responsibility involves the analysis and synthesis of all historical physical oceanographic data available near the Endicott Causeway in Prudhoe Bay, Ak.

Northern California Coastal Circulation Study (U.S. Dept. of Interior, Minerals Management Service) - A physical oceanography program to describe the circulation on the coastal shelf and slope in the region from San Francisco to Oregon. Served as Principal Scientist responsible for hydrographic measurements, data processing/analysis/interpretation and report/presentation preparation. Primary field work responsibilities included weather reporting, XBTs, thermosalinograph/underway surface mapping systems, CTD assistance, and participation as one of the four principals of the shipboard scientific and logistics decision-making team.

Physical Oceanography of Port Moller Estuary, AK (NOAA/OCSEAP) - A study to provide information on the physical processes that may affect inter-annual year-class strength and recruitment in Port Moller crab and fish populations. The field program consisted of five current meter moorings (8 current meters and 2 tide gauges), two meteorological stations, and two CTD profiling surveys. Served as Principal Scientist responsible for project planning, data collection, analysis, presentation and reporting.

Long Island Sound Oceanography Program (NOAA) - Project to collect current, temperature and salinity data at the key locations necessary to provide boundary conditions and ground truth for the NOAA LIS physical oceanography model. The model is used to predict flushing rates and anoxic conditions in the Sound. The field program consisted of four bottom-mounted, upward looking ADCPS, seven conductivity/temperature moorings (16 Seacats) and CTD profiling surveys. Primary responsibility as principal scientist included the deployment, recovery and collection of data from the seven C/T moorings and CTD surveys.

Tidal and Current Analysis, Bligh Reef, AK (Bogle&Gates) - Hindcasted tidal height and currents on Bligh Reef at the time of the grounding of the EXXON VALDEZ based on data obtained from tide gauges and current meters deployed at that site one year later.

Currents and Tides, Benecia, CA (Exxon) - Analysis of currents and tides in the vicinity of the Exxon Benecia Dock based on data from four current meters and a series of profiling surveys. Results were related to the Golden Gate Bridge tidal station data for future current prediction purposes.

R/V Palmer Scientific Instrumentation Specifications (NSF) - Developed specifications for all scientific instrumentation to be installed aboard the new NSF ice breaker the R/V Palmer. Principal responsibility involved specifying full CTD/Rossette, XBT and thermosalinograph systems.

Management Structure for the Science, Engineering, and Technology Center at McMurdo, Antarctica (NSF) - Convened a meeting of experts to recommend a management structure for the new SETC in McMurdo, Antarctica and summarize the results in a report to the National Science Foundation, Division of Polar Programs.

## **FIELD EXPERIENCE**

2000-present	Various cruises – Puget Sound, Commencement Bay, Quartermaster Harbor, WA
2001-present	R/V Barnes – annual cruises - Vancouver Island Fjord Study - Chief Scientist w/ Rick Keil
2012-2013	R/V Barnes - Monthly coring surveys of Quartermaster Harbor – Seagrant – Chief Scientist
2011- 2013	R/V Barnes – annual cruises - PS-AHAB – NOAA grant - Chief Scientist
2012	CCGS Vector – CTD, hydrographic and sediment survey of all west coast Vancouver Island Inlets
2006-2012	Monthly small boat hydrographic surveys of Quartermaster Harbor – Nitrogen Management Study - EPA grant
2006	R/V Barnes - Puget Sound Harmful Algal Bloom Study – NOAA grant - Chief Scientist
2005	R/V Barnes - Puget Sound Harmful Algal Bloom Study – NOAA grant - Chief Scientist
2002	SSV Robert C. Seamans - SEA Education vessel - Co-instructor for UWT oceanographic research class - Tacoma, WA to San Francisco, CA - summer
2002	R/V Thompson - UWT oceanographic field class – Pacific Ocean to Nisqually, Puget Sound
2001	R/V Barnes - Co-instructor for UWT oceanographic research class – Puget Sound - summer
2000-2001	R/V Thompson PRISM cruises - Puget Sound
1998	Clayoquot Sound BC Canada small boat physical oceanographic survey of Sydney Inlet with students
1991-1996	Various ship-of-opportunity XBT runs in the Pacific for Scripps Institution of Oceanography.
8/94	R/V Cape Hatteras, Scientist in charge of CTD data collection for COOP project off Duck, NC.
5-7/90	NOAA Ferrel (3-1 week cruises), Physical oceanographic study of Long Island Sound
9/89	Physical oceanographic study of Port Moller, Alaska using current meter moorings, meteorological stations and CTD surveys deployed from small boats.
5/89	R/V Glorita, Chief Scientist for hydrographic survey cruise 6 of the NCCCS program.
2/89	R/V Glorita, Scientist for hydrographic survey and mooring cruise 5 of the NCCCS program.
8/88	R/V Glorita, Scientist for hydrographic survey and mooring cruise 4 of the NCCCS program.
3/88	R/V Glorita, Scientist for hydrographic survey and mooring cruise 3 of the NCCCS program.
8/87	R/V Glorita, Scientist for hydrographic survey and mooring cruise 2 of the NCCCS program.
9-11/86	R/V HWS Explorer (various day cruises), Physical Limnological study of Seneca Lake using moored current meters and temperature profiling instruments.
9-10/84	R/V Thomas Washington (Marathon Leg 7), Oceanographic survey of the Brazil-Falkland Confluence.
11-12/83	R/V Knorr (leg 104-5), Oceanographic survey of the Agulhas Retroflexion Region.

## TEACHING

### Courses Taught at UWT

COURSE	TYPE	QUARTERS TAUGHT
<i>Maps and GIS</i>	lecture/lab	Spring 2000, Winter 2001, Winter 2002, Fall 2002
<i>The Atmosphere and Air Pollution</i>	lecture/lab	Spring 1997, Fall 1997, Winter 1999, Fall 2001, Fall 2005
<i>Global Climate Change</i>	lecture	Fall 1996
<i>Environmental Geology</i>	lecture/lab	Winter 1998, Fall 1998, Spring 2001
<i>Energy and the Environment</i>	lecture	Winter 1997, Winter 1998, Winter 2000, Spring 2002
<i>The Dynamic Earth</i>	lecture	Fall 1996
<i>Estuaries/Water Resources &amp; Pollution</i>	field	Spring 1997, 1998, 2002, 2003, 2005, 2006, 2012
<i>Oceanography</i>	lecture	Spring 1998, Summer 2003, Fall 2004
<i>Oceanography</i>	lecture/lab	Winter 2010, Fall 2011, 2012
<i>Oceanography of Puget Sound</i> (team taught w/ Rick Keil UWS)	lecture/lab	Spring 2000
<i>Maritime History and Science in the PNW</i> (team taught w/ Jim Gawel)	lecture	Spring 2001
Environmental Seminar	seminar	Spring 2012
<i>Environmental Science Research Seminar</i>	lecture	Fall 2001, 2005, 2006, 2007, 2008, 2009, 2012 (2), Winter 2012 (2)
<i>Introduction to Environmental Science</i> (team taught w/ David Secord)	lecture/lab	Winter 1997, Fall 1997, Fall 1999, Winter 2003
<i>Tools and Methods for Environmental Science</i> (team taught w/ David Secord)	lecture/lab	Fall 1998
<i>Field Methods in Marine Research</i> (team taught w/ David Secord)	field	Summer 1998
<i>PNW Field Geology</i> (team taught w/ Cathy Summa Winona State, MN)	field	Summer 1999
<i>UWT @ SEA Marine Research</i> (team taught w/ Jim Gawel)	field	Summer 2001, Summer 2002
<i>Field Geology: Southcoast of England</i> (team taught w/ Sian Davies-Vollum)	field	Summer 2006, Summer 2008
TCORE: Writing in the Rain (team taught w/ Riki Thompson)	core	Fall 2009
TCORE: Global Climate Change	core	Fall 2011
Independent Study and Internship students	100+? Total	1996-2013

### Professional Teaching Experience Prior to UWT

<u>Pacific Lutheran University (semesters)</u>		
<i>Environmental Science</i>	lecture/lab	Spring 1996
<i>Oceanography</i>	lecture/lab	Fall 1995
<u>University of Puget Sound (semesters)</u>		
<i>Oceanography</i>	lecture/lab	Spring 1996, Spring 1995, Fall 1995, Summer 1994
<u>Seattle University</u>		
<i>Global Climate Change</i>	lecture/lab	Spring 1994
<u>Bellevue Community College</u>		
<i>Oceanography</i>	lecture/lab	Spring 1995
<i>Environmental Science</i>	lecture/telecrse	Fall 1995, Fall 1994, Spring 1994
<u>North Seattle Community College</u>		
<i>Oceanography</i>	lecture	Fall 1994
<u>Seattle Central Community College</u>		
<i>Oceanography</i>	lecture	Spring 1994
<i>Oceanography</i> - developed distance learning course		1994-1995
<i>Meteorology</i> - developed distance learning course		1994-1995
<u>Hobart &amp; William Smith Colleges</u>		
<i>Climatology</i>	lecture/lab	Spring 1987
<i>Meteorology</i>	lecture/lab	Winter 1987
<i>Physical Oceanography</i>	lecture/lab	Fall 1986
<i>Introduction to Earth Sciences</i>	lecture	Fall 1986, Spring 1987
<u>Columbia University</u>		
<i>Oceanography</i>	teaching assistant	1980-1981
<u>Moravian College</u>		
<i>Introductory Physics Lab</i>	teaching assistant	1978-1979

## **AWARDS**

2010 UW Green Award - Environmental Science Group

2006 UWT Distinguished Teaching Award

2004 Brotman award for excellence in teaching - Environmental Science Group

## **GRANTS & CONTRACTS RECEIVED**

### ***External Grants***

2012-2015 SEAGRANT: *Understanding dormancy requirements and germination of Alexandrium cysts and evaluating cyst mapping as a tool for early warning of harmful algal blooms* with NOAA/NMFS [\$99,366]

2010-2014 NOAA/ECOHAB *Modeling favorable habitat areas for Alexandrium catenella in Puget Sound and evaluating the effects of climate change* with NOAA/NWFS, APL and UWS Climate Group [\$741,779]

2009-2012 EPA: *Quartermaster Harbor Nitrogen Management Study* with King County and Department of Ecology [\$625,000]

2008-2009 Russell Family Foundation Grant – *Monitoring Water Properties in Quartermaster Harbor* [\$15,000]

2006-2007 Russell Family Foundation Grant – *Monitoring Water Properties in Quartermaster Harbor* [\$15,000]

2004-2008 NOAA/ECOHAB: *The Relationship between Paralytic Shellfish Toxins and Alexandrium catenella Cysts in Puget Sound, WA.* with partners in UWS Oceanography [\$449,977]

### ***Internal UWT Grants***

2013 (Winter) Upgrading UWT Meteorological Station to for real-time live feed to web IAS Funds [\$5,527]

2013 (Winter) -80 Freezer Replacement for Science Building IAS Funds [\$5,524]

2012 (Fall) Undergraduate Research Assistants for Data Processing, Analysis and Archiving of multiple estuarine research projects IAS Funds [\$4,893]

2012 (Spring) *Physics II Laboratory Equipment Needs* IAS Funds [\$5,438]

2012 (Spring) *Enhancing undergraduate Environmental Science education and research in the lab and field through the development of digital microscopy tools and facilities*  
IAS Funds [\$5,375]

2012 *UWT Instructional Technology Fellows Initiative Grant for redesigning Environmental Geology course* with Sian Davies-Vollum, Peter Selkin and Julie Masura [\$5,000]

2010-2011 *UWT Chancellors Research Grant: Establishing historical baseline environmental conditions in South Puget Sound using sediment cores* [\$4,969]

2008-2009 *UWT Founders Endowment Grant for Quartermaster Harbor Water Property Survey* [\$6,500]

2005-2006 *UWT Founders Endowment Grant to Develop Alternative Teaching Assessment Tools at UWT.* [\$7,500] with team of Julie Buffington & Beth Kalikoff

2004-2005 *UWT Founders Endowment Grant to Enhance Undergraduate Education in Oceanography at UWT.* [\$3,755]

2002-2003 *UWT Founders Endowment Grant to do an Oceanographic Study of Commencement Bay* involving undergraduates. [\$7,600]

1999-2002 *The University of Washington Restoration Ecology Network.* Collaboration with Warren Gold, Director, and 7 others at UWB, UWS, and UWT. Tools for Transformation, University of Washington. [\$364,536]

2000-2001 *UWT Founders Endowment Grant to build a GIS database and reference library of environmentally relevant information for Pierce County, Big Beef Creek Watershed and Commencement Bay.* [\$4,454]

1998-1999 *UWT Founders Endowment Grant to start a GIS computer lab at UWT.* [\$7,150]

**Prior to UWT**

1988- 1990 *Physical Oceanography of Port Moller, Alaska.* NOAA contract No. 50ABNC800117 to EG&G Oceanographic Services. [\$72,865]

1987- 1991 Numerous other grants, contracts and proposals written while at EG&G Oceanographic Services

**PUBLICATIONS**

**ARTICLES IN PEER-REVIEWED SCIENTIFIC JOURNALS**

**Greengrove, C.**, J. Masura, S. Moore, B. Bill, L. Hay\*, N. Banas, E. Salathe Jr., N. Mantua, D. Anderson, V. Trainer, J. Stein. In Press 2014. *Alexandrium catenella* cyst distribution and germination in Puget Sound, WA USA. In: Proceedings of the 15th International Conference on Harmful Algae. International Society for the Study of Harmful Algae and Intergovernmental Oceanographic Commission of UNESCO, Korea  
<http://www.issaha.org/Welcome-to-ISSHA/Conferences/ICHA-conference-proceedings/ICHA15-Proceedings>

Horner, R.A., **C.L. Greengrove**, K.S. Davies-Vollum, J.E. Gawel, J.R. Postel, and A. Cox . 2011. Spatial distribution of benthic cysts of *Alexandrium catenella* in surface sediments of Puget Sound, Washington, USA. *Harmful Algae*. 11:96-105.

Davies-Vollum, K.S., and **Greengrove, C.L.** 2010. Developing a “Gateway” Course to Prepare Nontraditional Students for Success in Upper-Division Science Courses. *Journal of College Science Teaching*. 40(1):28-33

Horner, R.A., **Greengrove, C.L.**, Postel, J.R., Gawel, J.E., Davies-Vollum, K.S., Cox, A., Hoffer, S., Sorensen, K., Hubert, J., Neville, J. and Frost, B.W. 2008. *Alexandrium* cysts in Puget Sound, Washington, USA. In: Moestrup, O. et al. (eds.) Proceedings of the 12th International Conference on Harmful Algae. International Society for the Study of Harmful Algae and Intergovernmental Oceanographic Commission of UNESCO, Copenhagen. pp. 196-199.

**Greengrove C.L.** 2005. Autobiography in special issue on Women in Oceanography. *Oceanography*. 18(1) 126.

Gawel, J. and **C. Greengrove**. 2005. Designing Undergraduate Research Experiences for Nontraditional Student Learning at Sea. *Journal of Geoscience Education* 53(1) 31-36.

**Greengrove, C.** and D. Secord. 2003. Clayoquot Sound Summer Marine Research Field Program for nontraditional placebound students. *Journal of College Science Teaching*. 32(5) 316-321.

Secord, D. and **C. Greengrove**. 2002. Environmental Science as a Vehicle for Building Natural Sciences and Environmental Education Into a New Interdisciplinary Urban Public University, With Comparisons to Other Programs. *Journal of Environmental Education*. 34(1) 32-37.

Bray, N.A. and **C.L. Greengrove**. 1993. Circulation Over the Shelf and Slope off Northern California. *J. Geophys. Res.*, 98(C10), pp. 18119-18145.

**Greengrove, C.L.** and S.E. Rennie. 1991. South Atlantic Density Ratio Distribution. *Deep Sea Res.*, 38, Supp.1, pp. S345-S354.

Magnell, B.A., N.A. Bray, C.D. Winant, **C.L. Greengrove**, J. Largier, J.F. Borchardt, R.L. Bernstein, and C.E. Dorman. 1990. Convergent Shelf Flow at Cape Mendocino. *Oceanography*, 3:1, pp. 4-11.

Magnell, B.A., **C.L. Greengrove**, J.H. Ryther, Jr., and C.D. Winant. 1989. Real-time Data Telemetry Northern California Coastal Circulation Study. *Argos*, 37, pp. 7-11.

Ryther, J.H., Jr., B.A. Magnell, **C.L. Greengrove**, and C.D. Winant. 1988. Real-time Data Telemetry. *Sea Tech.*, 29:8, pp. 10-16.

Gordon, A.L. and **C.L. Greengrove**. 1986. Geostrophic circulation of the Brazil-Falkland confluence. *Deep Sea Res.*, 33, pp. 573-585.

Gordon, A.L. and **C.L. Greengrove**. 1986. Abyssal eddy in the southwest Atlantic.

Deep Sea Res., 33, pp. 839-849.

**Greengrove, C.L.** 1986. Thermohaline alteration of the South Atlantic pycnocline. Columbia University Ph.D. Thesis.

#### **TECHNICAL REPORTS**

King County. 2014. Quartermaster Harbor Marine Water Quality Data Report 2007-2011. Prepared by Kimberle Stark (King County Water and Land Resources Division), **C. Greengrove**, N. Schlafer, N. Huber, and J. Masura (University of Washington-Tacoma). Submitted by King County Dept. of Nat. Resources & Parks, Seattle, Washington.

**Greengrove, C.L.**, G.D. Pollard, R.K. Dewey. 1992. Endicott Reanalysis Report. Prepared by Science Applications International Corporation for British Petroleum, Alaska.

**Greengrove, C.L.**, 1991. The Physical Oceanography of Port Moller, Alaska - Final Report. Prepared by EG&G WASC Oceanographic Services for NOAA contract 50ABNC800117.

Magnell, B.A., C.D. Winant, N.A. Bray, **C.L. Greengrove**, J.F. Borchardt, J.M. Federiuk, C.E. Dorman, R.L. Bernstein, J.L. Largier. 1991. Circulation on the Northern California Shelf and Slope: Final Report of the Northern California Coastal Circulation Study. OCS Study, Report No. MMS 91-0023.

Magnell, B.A., C.D. Winant, N.A. Bray, **C.L. Greengrove**, J.F. Borchardt, J.M. Federiuk, C.E. Dorman, R.L. Bernstein, J.L. Largier. 1991. Circulation on the Northern California Shelf and Slope: Final Report of the Northern California Coastal Circulation Study - Executive Summary. OCS Study, Report No. MMS 91-0022.

Magnell, B.A., J.F. Borchardt, **C.L. Greengrove**, C.D. Winant, N.A. Bray, C.E. Dorman, and R.L. Bernstein. 1989. The Northern California Coastal Circulation Study: Results of the Pilot Program. OCS Study, Report No. MMS 89-0008.

Magnell, B.A., J.F. Borchardt, **C.L. Greengrove**, C.D. Winant, N.A. Bray, C.E. Dorman, and R.L. Bernstein. 1989. The Northern California Coastal Circulation Study: Results of the Pilot Program - Executive Summary. OCS Study, Report No. MMS 89-0011.

Magnell, B.A., J.H. Borchardt, **C.L. Greengrove**, C.D. Winant, N.A. Bray. 1987. Second Quality Review Board Report - Response and Recommendations for Program Changes, NCCCS. EG&G WASC Report No. NCCCS-88-2. Prepared for U.S. Department of Interior, Minerals Management Service.

Magnell, B.A., J.H. Borchardt, **C.L. Greengrove**, C.D. Winant, N.A. Bray. 1987. NCCCS Pilot Program Results and Design of the Main Program. EG&G WASC Report No. NCCCS-87-17. Prepared for U.S. Department of Interior, Minerals Management Service.

#### **DATA REPORTS**

Keil, R., C. Greengrove, and M. Logsdon. 2013. Water Column Characteristics of Barkley and Clayoquot Sound, September 2012 Data Report

Keil, R., **C. Greengrove**, and M. Logsdon. 2012. Water Column Characteristics of Barkley and Clayoquot Sound, September 2011 Data Report

Keil, R., **C. Greengrove**, and M. Logsdon. 2011. Water Column Characteristics of Barkley and Clayoquot Sound, September 2010 Data Report

Keil, R., **C. Greengrove**, and M. Logsdon. 2010. Water Column Characteristics of Barkley and Clayoquot Sound, September 2009 Data Report

Keil, R., **C. Greengrove**, and M. Logsdon. 2009. Water Column Characteristics of Barkley and Clayoquot Sound, September 2008 Data Report

Keil, R., **C. Greengrove**, and M. Logsdon. 2008. Water Column Characteristics of Barkley and Clayoquot Sound, September 2007 Data Report

Keil, R., **C. Greengrove**, and M. Logsdon. 2007. Water Column Characteristics of Barkley and Clayoquot Sound, September 2006 Data Report

**Greengrove, C.**, R. Keil, G. Chin-Leo and M. Logsdon. 2006. Water Column Characteristics of Barkley and Clayoquot Sound, September 2005 Data Report

**Greengrove, C.**, R. Keil, G. Chin-Leo and M. Logsdon. 2005. Water Column Characteristics of Barkley and Clayoquot Sound, September 2004 Data Report

**Greengrove, C.**, R. Keil, G. Chin-Leo and M. Logsdon. 2004. Water Column Characteristics of Barkley and Clayoquot Sound, September 2003 Data Report

**Greengrove, C.**, G. Chin-Leo, and R. Keil. 2003. Water Column Characteristics of Barkley and Clayoquot Sound, August 2002 Data Report

Keil, R., **C. Greengrove**, and G. Chin-Leo. 2002. Water Column Characteristics of Effingham Inlet and Clayoquot Sound, September 2001 Data Report

Waldorf, B.W., J.L. Largier, S. Rennie, J. Austin, **C. Greengrove**. 1995. Coastal Ocean Processes (CoOP) Pilot Project Data Report: R/V Cape Hatteras Shipboard Measurements; Underway, CTD, and ADCP Data August 1994. SIO Reference Series No. 95-29

Magnell, B.A., J.F. Borchardt, **C.L. Greengrove**, J.M. Federiuk, and N.A. Bray. 1990. NCCCS Data Report No. 4: Main Measurement Program March 1989 - October 1989, Vol. 1: Lagrangian and Hydrographic Observations. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-90-5. September.

Magnell, B.A., J.F. Borchardt, **C.L. Greengrove**, J.M. Federiuk, and N.A. Bray. 1990. NCCCS Data Report No. 3: Main Measurement Program August 1988 - March 1989, Vol. 1: Lagrangian and Hydrographic Observations. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-90-4. March.

Magnell, B.A., J.F. Borchardt, **C.L. Greengrove**, J.M. Federiuk, and N.A. Bray. 1990. NCCCS Data Report No. 2: Main Measurement Program March August 1988, Vol. 1: Lagrangian and Hydrographic Observations. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-89-17. September.

Magnell, B.A., J.F. Borchardt, **C.L. Greengrove**, J.B. Andrews, C.D. Winant, N.A. Bray, C.E. Dorman, R.L. Bernstein. 1988. NCCCS Data Report No. 1: Pilot Measurement Program, March-August 1987. EG&G report prepared U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-88-9. September.

Guerrero, R.A., **C.L. Greengrove**, S.E. Rennie, B.A. Huber, and A.L. Gordon. 1982. Atlantic II Cruise 107-3: CTD and Hydrographic Data. Lamont-Doherty Geological Observatory Technical Report LDGO 82-2.

### **CRUISE/PROJECT REPORTS**

**Greengrove, C.L.**, B.W. Frost, R. A. Horner, J.R. Postel, J.E. Gawel, K.S. Davies-Vollum 2009. The relationship between Paralytic Shellfish toxins and *Alexandrium* cysts in Puget Sound, WA. Final Report NOAA.

**Greengrove, C.L.**, B.W. Frost, R. A. Horner, J.R. Postel, J.E. Gawel, K.S. Davies-Vollum 2008. The relationship between Paralytic Shellfish toxins and *Alexandrium* cysts in Puget Sound, WA. Annual Progress Report – Year 4. NOAA.

**Greengrove, C.L.**, B.W. Frost, R. A. Horner, J.R. Postel, J.E. Gawel, K.S. Davies-Vollum 2007. The relationship between Paralytic Shellfish toxins and *Alexandrium* cysts in Puget Sound, WA. Annual Progress Report – Year 3. NOAA.

**Greengrove, C.L.**, B.W. Frost, R. A. Horner, J.R. Postel, J.E. Gawel, K.S. Davies-Vollum, A. Cox\*, K. Sorensen\*, J. Hubert\*, S. Hoffer\*, J. Neville\* 2006. The relationship between Paralytic Shellfish toxins and *Alexandrium* cysts in Puget Sound, WA. Annual Progress Report – Year 2. NOAA.

**Greengrove, C.L.**, B.W. Frost, R. A. Horner, J.R. Postel, J.E. Gawel, K.S. Davies-Vollum, A. Cox\*, K. Sorensen\*, J. Hubert\*, S. Hoffer\*, S. Wagner\* 2005. The relationship between Paralytic Shellfish toxins and *Alexandrium* cysts in Puget Sound, WA. Annual Progress Report – Year 1. NOAA.

Magnell, B.A., J.H. Ryther, Jr., **C.L. Greengrove**, J.M. Federiuk, C.D. Winant, and N.A. Bray. 1989. NCCCS Cruise Report, Fifth Main Cruise - October 1989. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-89-20.

Magnell, B.A., J.H. Ryther, Jr., **C.L. Greengrove**, J.M. Federiuk, C.D. Winant, and N.A. Bray. 1989. NCCCS Cruise Plan, Fifth Main Cruise - October 1989. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-89-16.

Magnell, B.A., J.F. Borchardt, **C.L. Greengrove**, J.M. Federiuk, and N.A. Bray. 1989. NCCCS Cruise Report, Fourth Main Cruise - May 1989. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-89-11.

Magnell, B.A., **C.L. Greengrove**, J.M. Federiuk, and N.A. Bray. 1989. NCCCS Cruise Plan, Fourth Main Cruise - May 1989. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-89-9.

Magnell, B.A., J.H. Ryther, Jr., J.F. Borchardt, **C.L. Greengrove**, C.D. Winant, and N.A. Bray. 1989. NCCCS Cruise Report, Third Main Cruise - February 1989. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-89-7.

Magnell, B.A., J.H. Ryther, Jr., J.F. Borchardt, **C.L. Greengrove**, C.D. Winant, and N.A. Bray. 1989. NCCCS Cruise Plan, Third Main Cruise - February 1989. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-89-3.

Magnell, B.A., J.H. Ryther, Jr., J.F. Borchardt, **C.L. Greengrove**, C.D. Winant, and N.A. Bray. 1989. NCCCS Cruise Report, Second Main Cruise - August 1988. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-88-15.

Magnell, B.A., J.H. Ryther, Jr., J.F. Borchardt, **C.L. Greengrove**, C.D. Winant, and N.A. Bray. 1989. NCCCS Cruise Plan, Second Main Cruise - August 1988. EG&G report prepared for U.S. Dept. of Interior, Minerals Management Service, Report No. NCCCS-88-12.

Magnell, B.A., J.F. Borchardt, J.H. Ryther, Jr., **C.L. Greengrove**, C.D. Winant, N.A. Bray. 1988. NCCCS Cruise Report, First Main Cruise: March 1988. EG&G Report NCCCS-88-7. Prepared for U.S. Department of Interior, Minerals Management Service. April.

Magnell, B.A., J.H. Ryther, Jr., J.F. Borchardt, **C.L. Greengrove**, C.D. Winant, N.A. Bray. 1988. NCCCS Cruise Plan, First Main Cruise: March 1988. EG&G Report NCCCS-88-3. Prepared for U.S. Department of Interior, Minerals Management Service. February.

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#### **PRESENTATIONS** (\* students)

Schlafer, N.\*, **C. Greengrove**, J. Masura. 2013. Water Properties in Quartermaster Harbor Puget Sound. Pacific Estuarine Research Society, 36th Annual Meeting, Vancouver, BC Canada

Gagliardi, K.\*, **C. Greengrove**, J. Masura. 2013. Phytoplankton in Quartermaster Harbor, Puget Sound USA. Pacific Estuarine Research Society, 36th Annual Meeting, Vancouver, BC Canada

**Greengrove, C.**, J. Masura, S. Moore, B. Bill, L. Hay\*, N. Banas, E. Salathe Jr., N. Mantua, D. Anderson, V. Trainer, J. Stein. 2013. Alexandrium cyst distribution and cyst viability in Puget Sound, WA USA. Pacific Estuarine Research Society, 36th Annual Meeting, Vancouver, BC Canada

**Greengrove, C.**, J. Masura, S. Moore, B. Bill, L. Hay\*, N. Banas, E. Salathe Jr., N. Mantua, D. Anderson, V. Trainer, J. Stein. 2012. *Alexandrium catenella* cyst distribution and germination in Puget Sound, WA USA. 15th International Conference on Harmful Algae (ICHA). Changwon CECO, Gyeongnam-do, Korea

Moore, S., N.S. Banas, **C.L. Greengrove**, B.D. Bill, J.E. Masura, E.P. Salathé, D.M. Anderson, N.J. Mantua, V.L. Trainer, J.E. Stein. 2012. Modeling favorable habitat for *Alexandrium* blooms in Puget Sound, WA, USA: present-day and future climate pathways and transport patterns. 15th International Conference on Harmful Algae (ICHA). Changwon CECO, Gyeongnam-do, Korea

**Greengrove, C.**, S. Moore, J. Masura, B. Bill, L. Hay\*, E. Salathe Jr., N. Banas, N. Mantua, D. Anderson, V. Trainer, J. Stein. 2012. *Alexandrium catenella* in Puget Sound, WA USA: Cyst Distribution and Germination and Cell Growth Rates and Toxicity. GEOHAB Core Research Project: HABS in Fjords and Coastal Embayments: Open Science Meeting #2: Progress in interpreting life history and growth dynamics of HABS in fjords and coastal environments. Victoria, BC Canada

**Greengrove, C.**, J. Masura, S. Moore, B. Bill, J. Emenegger\*, P. Leigh\*, E. Salathe Jr., N. Banas, N. Mantua, D. Anderson, J. Stein. 2011. The distribution of *Alexandrium catenella* cysts in the surface sediments of Puget Sound, WA in 2011. Salish Sea Conference, Vancouver BC Canada

Masura, J., M. Schatz\*, **C. Greengrove** and J. Postel. 2011. Spatial and Temporal Distribution of *Alexandrium catenella* cysts in Quartermaster Harbor, Puget Sound WA. Salish Sea Conference, Vancouver BC Canada

**Greengrove, C.**, J. Ruffner\*, J. Pelerine\*, N. Huber\*, and J. Masura. 2011. Water Quality in Quartermaster Harbor, Puget Sound, WA. Salish Sea Conference, Vancouver BC Canada

Huber N.\*, J. Ruffner\*, J. Pelerine\*, J. Masura and **C. Greengrove**. 2011. Spatial and Temporal Trends in Quartermaster Harbor Phytoplankton. Salish Sea Conference, Vancouver BC Canada

Desmul G.\*, A. Wallace\*, J. Masura, and **C. Greengrove**. 2011 Spatial and Temporal Distribution of Pollen in Sequim Bay, Washington. Salish Sea Conference, Vancouver BC Canada

Schatz, M., A. Nepela, B. Shetterly, J. Masura, C. Greengrove. 2009. Mapping the concentration of *Alexandrium catenella* cysts in Quartermaster Harbor, Puget Sound WA. Salish Sea Conference, Seattle WA

Hackett\*, Scholting\*, Nokes, Masura, **Greengrove**. 2008. *Alexandrium catenella* in Quartermaster Harbor, Puget Sound: Past and Present. PERS, Newport, OR.

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Masura, J., L. Nokes, **C. Greengrove**, A. Hackett\*, and K. Scholting\*. Environmental factors influencing the abundance and distribution of *Alexandrium catenella* in Quartermaster Harbor. 2008. South Sound Symposium, Tacoma, WA.

Horner, R.A., **C.L. Greengrove**, S. Davies-Vollum, J.E. Gawel, J.R. Postel, A.M. Cox\*, J. Hubert\*, A. Abrahamson\*, J. Masura, and B.W. Frost. 2007. *Alexandrium catenella* cysts and environmental conditions in Puget Sound, WA: Results of a cyst survey. Fourth Symposium on Harmful Algae in the U.S., Woods Hole, MA

Hubert, J.\*, K.S. Davies-Vollum, A. Abrahamson\*, K. Sorensen\*, **C. Greengrove**, R. Horner, J. Postel, A. Cox\*, J. Gawel, and B. Frost. 2007. Do sediment conditions affect the incidence of *Alexandrium catenella* and paralytic shellfish poisoning? A study of sites from Puget Sound. Fourth Symposium on Harmful Algae in the U.S., Woods Hole, MA

Hubert, J.\*, K.S. Davies-Vollum, A. Abrahamson\*, K. Sorensen\*, **C. Greengrove**, R. Horner, J. Postel, A. Cox\*, J. Gawel, and B. Frost. 2007. Do sediment conditions affect the incidence of *Alexandrium catenella* and paralytic shellfish poisoning? A study of sites from Puget Sound. Geological Society of America Cordilleran Section, Bellingham, WA.

**Greengrove, C.L.**, R.A. Horner, J.R. Postel, K.S. Davies-Vollum, J.E. Gawel, A. Cox\*, S. Hoffer\*, K.

Sorensen\*, J. Hubert\*, J. Neville\*, and B.W. Frost. 2007. *Alexandrium* cysts in Puget Sound, Washington, USA. Puget Sound/Georgia Basin Conference, Vancouver, BC

**Greengrove, C.L.**, B.W. Frost, R. A. Horner, J.R. Postel, J.E. Gawel, K.S. Davies-Vollum, A. Cox\*, K. Sorensen\*, J. Hubert\*, S. Hoffer\*, J. Neville\*. 2006. *Alexandrium* cysts in Puget Sound, Washington, USA. 12<sup>th</sup> International Conference on Harmful Algae, Copenhagen Denmark

**Greengrove, C.L.**, B.W. Frost, R. A. Horner, J.R. Postel, J.E. Gawel, K.S. Davies-Vollum, A. Cox\*, K. Sorensen\*, J. Hubert\*, S. Hoffer\*, J. Neville\*. 2006. Survey of *Alexandrium* cysts in the surface sediments of Puget Sound, Washington, USA. American Society of Limnology and Oceanography International Meeting, Victoria, BC Canada

**Greengrove, C.L.**, R. Keil, G. Chin-Leo, M. Logsdon, A. Ingalls, J. Nuwer\*, E Walsh\*, L. Delwiche\*, C. Evans\*. 2006. Repeat Hydrographic and Sediment Surveys in Barkley, Clayoquot and Nootka Sounds, (British Columbia, Canada) between 2000-2005. EOS Trans. AGU 87(36)

Davies-Vollum, K.S., **C.L. Greengrove** and J.E. Gawel. 2005. A Skills Driven Gateway Course To Prepare Transfer Students for Success in Upper Division Science Courses. GSA National Meeting, Salt Lake City, Utah

**Greengrove, C.L.**, B.W. Frost, R. A. Horner, J.R. Postel, J.E. Gawel, K.S. Davies-Vollum, A. Cox\*, K. Sorensen\*, J. Hubert\*, S. Hoffer\*, S. Wagner\*. 2005. *Alexandrium* cysts in Puget Sound, Washington: Preliminary results of a survey. Third Symposium on Harmful Algae in the U.S. Pacific Grove, CA.

Hoffer, S.\*, R.A. Horner, and **C.L. Greengrove**. 2005. Germination experiments with *Alexandrium catenella* cysts collected from surface sediments in Puget Sound. Third Symposium on Harmful Algae in the U.S. Pacific Grove, CA.

**Greengrove, C.L.** and R.G. Keil. 2005. Physical Oceanographic Conditions in Barkley and Clayoquot Sounds British Columbia Canada - Late Summer 2000-2004. American Society of Limnology and Oceanography International Meeting, Santiago de Compostela, Spain.

**Greengrove, C.L.** 2005. Giving Data Back to the Community: Student Created Course Website that Incorporates Presentation of Estuarine Data Collected in the Field. On the Cutting Edge - National Ocean Data Visualization NAGT Workshop. Seattle, WA

Davies-Vollum, K.S., **C.L. Greengrove** and J.E. Gawel. 2005. Preparing Students for Success in Upper Division Science Courses. The Scholarship of Teaching and Learning Forum at UW

**Greengrove, C.L.** 2004. Oceanographic Overview of Barkley and Clayoquot Sounds, British Columbia, Canada –CSIRO Marine Division, Hobart, Tasmania

**Greengrove, C.L.**, R. Keil, and G. Chin-Leo. 2004. Physical Oceanographic Conditions in Barkley and Clayoquot Sounds B.C Canada – Late Summer 2000-2003. EOS Trans. AGU 85(17)

Evans\*, C. T., B. Van Mooy, R. Keil, **C. Greengrove** and G. Chin-Leo. 2004. Active bacterial community dynamics in a coastal fjord measured using t-RFLP analyses of BrdU incorporated DNA. American Society of Limnology and Oceanography National Meeting, Honolulu, Hawaii.

Chin-Leo, G., R. Keil, **C. Greengrove**, C. Evans\*. 2004. Bacterioplankton Dynamics in Intermittently Anoxic Fjords of Vancouver Island, British Columbia. American Society of Limnology and Oceanography National Meeting, Honolulu, Hawaii.

Gawel, J.E. and **C.L. Greengrove**. 2003. Designing Undergraduate Research Experiences for Nontraditional Student Learning at Sea. EOS Trans. AGU, 84(46)

**Greengrove, C.L.** and J.E. Gawel. 2003. Designing Undergraduate Research Experiences for Nontraditional Student Learning at Sea. Geological Society of America National Meeting, Seattle, WA.

**Greengrove, C.L.**, R. Keil, G. Chin-Leo, and J. Grocock\*. 2003. Physical Oceanographic Conditions in Barkley and Clayoquot Sounds B.C Canada – Late Summer 2000-2002. Estuarine Research Federation National Meeting, Seattle, WA.

Faubion\*,L. and **C.L. Greengrove**. 2003. Distribution and Abundance of Phytoplankton in Barkley and Clayoquot Sounds, B.C. August 2002. Estuarine Research Federation National Meeting, Seattle, WA.

Gawel, J.E. and **C.L. Greengrove**. 2003. Designing Undergraduate Research Experiences for Nontraditional Student Learning at Sea. Georgia Basin/Puget Sound Research Conference, Vancouver, B.C..

Osenga\*, W.M., C.B. Tomkins\* and **C.L. Greengrove**. 2003. Undergraduate Oceanographic Research: A Longitudinal Transect of Puget Sound, May 2002 & Historical Comparison. Georgia Basin/Puget Sound Research Conference, Vancouver, B.C..

Halvorsen\*, Noah L., J.E. Gawel and **C.L. Greengrove**. 2003. Oceanographic Data for the Pacific Northwest Coast from Washington to Northern California: Results from an Undergraduate Research Cruise. Georgia Basin/Puget Sound Research Conference, Vancouver, B.C..

Keil, R., G. Chin-Leo, **C. Greengrove**, J. Grocock\*, K. Newell. 2002. On the microbiology of intermittently anoxic fjords on Vancouver Island, British Columbia. American Society of Limnology and Oceanography - Ocean Sciences National Meeting, Honolulu, Hawaii.

**Greengrove, C.** 2001. Building a Field Component into Oceanography Courses. Geological Society of America National Meeting, Boston MA.

Huisjen\*, D., H. Kim\*, **C. Greengrove**. 2001. Oceanographic Survey of Commencement Bay, WA – Spring 2000. Pacific Estuarine Research Society Conference, Tacoma, WA.

Huisjen\*, D., A. Brannon\*, H. Kim\*, **C. Greengrove**. 2001. Oceanographic Survey of Commencement Bay, WA – Spring 2000. Puget Sound Research Symposium, Bellevue, WA.

Logsdon\*, G. M. Logsdon, K. Schmitt, **C. Greengrove**. 2001. A GIS Spatial Database for Big Beef Creek, WA. Puget Sound Research Symposium, Bellevue, WA.

**Greengrove, C.** 2000. Teaching Geoscience with Technology. National Association of Geoscience Teachers - Western Meeting, Portland, OR.

**Greengrove, C. L.**, M. Papin\*, J. Rouleau\*, N. Wilson\*. 2000. Hydrographic Survey of Sydney Inlet, Clayoquot Sound, British Columbia, Canada. Pacific Estuarine Research Society Conference, Sidney, B.C..

**Greengrove, C. L.**, M. Papin\*, J. Rouleau\*, N. Wilson\*. 1999. Hydrographic Survey of Sydney Inlet, Clayoquot Sound, British Columbia, Canada. Northwest Science Association Conference, Tacoma, WA.

MacDonald\*, S., **C. L. Greengrove**, K. Kluge, M., Murnane. 1999. Mapping the Wetlands of Tacoma, Washington Using A Geographic Information System. Northwest Science Association Conference, Tacoma, WA.

Gold, W.G., K.E. Ewing, M. Groom, **C. Greengrove**, D. Secord. 1999. The University of Washington Restoration Ecology Network. Society for Ecological Restoration IX International Conference, San Francisco, CA.

Secord, D. and **C. Greengrove**. 1999. Building a New Environmental Science Program at University of Washington, Tacoma. Ecological Society of America National Meeting, Spokane, WA.

**Greengrove, C. L.** and D. Secord. 1998. Joint Undergraduate Summer Research Program in Clayoquot Sound, B. C. Canada. EOS Trans. AGU, 79(45), p.f63.

**Greengrove, C. L.** and J. L. Largier. 1997. Regional Hydrographic Conditions Off Duck North Carolina During August and October 1994. 5th Oceanography Society National Meeting - Ocean Interfaces, Seattle WA.

Largier, J.L. and **C.L. Greengrove**. 1995. Regional Hydrographic Conditions Off Duck, North Carolina During August and October 1994. EOS Trans. AGU, 76(46),p.f281

**Greengrove, C.L.** and N.A. Bray. 1991. Characteristics of the California Undercurrent During the Northern California Coastal Circulation Study (NCCCS). Eastern Pacific Ocean Conference, Lake Arrowhead, CA.

**Greengrove, C.L.** and N.A. Bray. 1991. A Comparison of NCCCS and CALCOFI Hydrographic Data. EOS Trans. AGU, 72(44),p.225.

**Greengrove, C.L.** and N.A. Bray. 1990. Structure and Variability of the Undercurrent off Northern California. EOS Trans. AGU, 71(43),p.1361

Johnson, W.R. and **C.L. Greengrove**. 1990. Circulation in the Port Moller/Herendeen Bay Estuary, Alaska. EOS Trans. AGU, 71(2),p.83.

**Greengrove, C.L.** and N.A. Bray. 1990. Comparison between Moored Current and Baroclinic Velocity Fields off the Northern California Coast. EOS Trans. AGU, 71(2),p.122.

Bray, N.A. and **C.L. Greengrove**. 1990. Heat and Freshwater Fluxes during Active Upwelling off Cape Mendocino. EOS Trans. AGU, 71(2),p.147.

Bray, N.A. and **C.L. Greengrove**. 1987. Hydrographic and Underway Observations from the NCCCS Pilot Program. EOS Trans. AGU, 68(44),p.1314.

**Greengrove, C.L.** and N.A. Bray. 1987. Upper Ocean Variability Near Cape Mendocino. EOS Trans. AGU, 68(44),p.1304.

**Greengrove, C.L.** and S.E. Rennie. 1984. Distribution of the density ratio in the South Atlantic. EOS Trans. AGU, 64(52),p.1058.

**Greengrove, C.L.** and A.L. Gordon. 1982. Thermohaline structure of the Brazil Current Extension. EOS Trans. AGU, 63(18),p.344.

## **SERVICE**

### **Professional Service**

- Invited keynote address Washington State Urban & Rural Information Association - 2001
- Invited keynote address White River Watershed Symposium - 2000
- Invited keynote INTEL summer program for in-service teachers - 2000
- Planning committee and volunteer coordinator for Estuarine Research Federation national meeting – 2003
- Chaired and hosted Pacific Estuarine Research Society meeting - 2001
- American Society for Environmental History conference session chair - 2000
- Challenges in the Puyallup Watershed: Workshop for Elected Officials - mediated panel on TMDLS - 1998
- Organized and Co-chaired Eastern Pacific Ocean Conference, Mt. Hood, OR - 1992
- AGU/ASLO meeting session chair - 1990
- Panel judge for ranking Centennial Water Grants for Pierce County - 2000
- Northwest Straits Commission - Missing Science Workshop - 1999
- Served on advisory panel for watershed volunteers state PIE grant program - 1998
- Sigma Xi - cosponsored lecture series, field trips and meetings - 1998-1999
- Reviewed Jill Whitman, Geoscience Associate Professor at PLU, for promotion – 2002
- Participated in development of CDROM for educators “An Overview of the Puyallup River Watershed” - 2003
- Review Prentice Hall Environmental Science text – 1998
- Review Thomson Brooks/Cole Publishers Oceanography/GIS text - 2004
- Journal article peer reviews for Journal of Geophysical Research – Oceans; Oceanography; Landscape Ecology; Journal of College Science Teaching; Journal of Geoscience Education - ongoing
- Multiple federal, state and local agency proposal/grant reviews (National Science Foundation; U.S. Fish and Wildlife; WA State Fish & Wildlife; National Fish & Wildlife Foundation; Pierce County; Royalty Research Fund)- ongoing
- Multiple review and recommendation letters - ongoing

### **Presentations, Seminars & Workshops given at University of Washington**

- New faculty orientation - 1997
- UW Board of Regents - Science at UWT - 1997
- UWT Advisory Committee - Science at UWT - 1998
- Panel on alternative careers for UWS graduate students - 1998
- Dougan building (housing temporary labs) groundbreaking and dedication - 1999
- UWS joint session with Sichuan University - Environmental Science at UWT - 2000

- Environmental Science Open House for Community College faculty and staff - 2000
- IAS Research Seminar on the Physical Oceanography of Port Moller, Alaska - 2000
- Ran GIS workshop for faculty and staff for UWT and all area colleges - 2000
- Lead IAS seminar with Rob Crawford on jr/sr faculty issues - 2001
- Presentations to City Council & County Council at the request of the Chancellor - 2003
- Participated in tri-campus initiative workshop on Digital Scholarship - 2003
- Participated in Math, Science & Technology Summit sponsored by UWT education program - 2003
- Coordinated lecture and National Water Monitoring Day Expo with USGS at UWT – 2003
- Science Day - 2005
- Multiple presentations to the UWT Directors on technology & curriculum related issues - ongoing
- Multiple presentations and meetings with Community College faculty, staff and students - ongoing
- Participated as panelist in multiple Teaching and Learning Roundtable workshops - ongoing
- Participate in multiple IAS orientations for students - ongoing
- Guest lectures at UWT and UWS - ongoing

#### **University of Washington (UWT and UW System) Service**

- Founder & Coordinator of Environmental Science and Studies - 1996-present
- Chancellor Review Committee - Vicky Carwein - 2001 (appointed)
- Associate Dean Review Committee - Sharon Fought (UWT) - 1997 (appointed)
- Director Review Committee - Bill Richardson – 2002
- Director Review Committee-Orlando Baiocchi - 2009
- Tenure Committee - Erica Cline - 2011
- Tenure Committee Chair - Bonnie Becker - 2012
- Tenure Committee - Kelly Forrest - 2012
- Tenure Review Committee Chair - Sian Davies-Vollum – 2006
- Tenure Review Committee - Michael Kucher - 2006
- Tenure Review Committee - Nita McKinley – 2005
- Tenure Review Committee - Guido Preparata - 2005
- Tenure Review Committee - John Banks – 2004
- Tenure Review Committee - Jim Gawel – 2004
- 3rd year Review Committee - Michael Kucher - 2003 (appointed)
- Institute of Technology Director Search – 2005 (appointed)
- Search Committee - Comparative Religion -2011
- Search Committee - Political Economy -2011
- Interview Committee - Biochemistry - 2011
- Faculty Search Committee Chair – Microbiologist – 2006
- Faculty Search Committee Chair – Marine Ecologist– 2006
- Faculty Search Committee – Port of Tacoma Chair – 2006
- Faculty Search Committee – Computer Engineering – 2006
- Faculty Search Committee Chair - geologist - 2003
- Faculty Search Committee - GIS – 2003
- Faculty Search Committee - urban sociologist - 2002
- Faculty Interview Committee - mathematician - 2002
- Faculty Search Committee - urban planner - 2001
- Faculty Search Committee - aquatic chemist – 1999
- Faculty Search Committee - terrestrial ecologist - 1999
- Participated in 13 additional IAS and Social Work humanities and social science faculty searches from 1997-2006
- Staff Search Committee - science laboratory coordinator - 2000
- Staff Search Committee - IAS program coordinator - 1999
- Staff Search Committee - IAS program advisor - 1999
- Lower Division Curriculum Development Committee – 2005 (appointed)
- TCC Dual Enrollment Task Force – 2005-present
- Building Committee - Phase 1b, 2a & 2b - 1997-2002 (appointed)
- Campus Technology Committee Chair - 1996-1999 (appointed)
- GIS advisory board for UW Extension - 1999-present (appointed)
- Urban Studies Planning Committee - 1999-present (appointed)
- Teaching & Learning Center (TLC) Advisory Board - 2002-present (appointed)
- UWS doctoral committee - 2002 (appointed)
- Program on the Environment Tri-campus Governing Board – 2003-2005 (appointed)

- UW Seattle Geological Sciences Curriculum Review participant - 1998
- Curriculum Committee - 1996-1997
- Faculty Assembly By-Laws Committee - 1996-1997
- IAS Faculty Council - 2002-2003, 2005-2006
- IAS Graduate Review – section writer/reviewer – 2005-2006
- Lead IAS alternative administrative structure design task force – 2002
- Developed Faculty Assembly UWT History Project - 2006
- Lead Faculty Assembly Task Force (and produced resource packet on) Teaching Assessment Tools – 2003
- Team leader with J. Buffington & B. Kalikoff on Endowment sponsored series of Teaching Assessment Tools Workshops – 2005-2006
- Teaching and Learning Roundtable Steering Committee- 1999-present
- Restoration Ecology Network Steering Committee - 1999 - present
- Big Beef Creek Field Site Steering Committee - 2000-present
- United States Geological Survey Co-location Group member - 1997-present
- GIS Certificate Program Development Team - 1998-present
- UWT Environmental Science Community College Outreach Team - 1996-present
- Colleges Fair – 2005, 2006
- Project Earth - student organization advisor - 1996-2002

### **Community Service**

- Urban Waters Development Committee - City of Tacoma 1999-present
- Nominated for Salmon Resource Advisory Committee - 2001
- Tacoma Environmental Commission - City of Tacoma Commissioner - 1997-2000
- Critical Areas Ordinance Review Committee - City of Tacoma - 1998-1999
- Puyallup River Watershed Council - member - 1997-2001; ed. com. chair - 2002-2003; board – 2003-present
- Citizens for a Healthy Bay - education com. - 1997-2003; board – 2005-present
- Association for the Advancement of Sustainability in Higher Education member – 2004-present
- Pierce County Environmental Educators - 1997-present
- Various talks to K-12 school classes

### **PROFESSIONAL AFFILIATIONS**

The Oceanography Society	Estuarine Research Federation
American Meteorological Society	American Society of Limnology & Oceanography
American Geophysical Union	Association for Women Geoscientists
National Association of Geoscience Teachers	Association of Women in Science
National Science Teachers Association	Sigma Xi

### **LOCAL COMMUNITY AFFILIATIONS**

Puyallup River Watershed Council - non-profit board member  
 Citizens for a Healthy Bay – non-profit board member