

TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Weston H. Nowlin

Title: Assistant Professor

B. Educational Background

Degree	Year	University	Major	Thesis/Dissertation
PhD	2003	University of Victoria, BC Canada	Biology	Phosphorus dynamics in coastal and inland lakes and reservoirs of British Columbia with special reference to water level fluctuation and climate variability
MS	1998	Texas Christian University	Biology	Context-dependent effects of bluegill in experimental mesocosm communities
BA	1996	Austin College	Biology	N/A

C. University Experience

Position	University	Dates
Postdoctoral Research Scholar	Miami University	2003-2005
Course Lecturer	Miami University	2004
Graduate Research Assistant	University of Victoria	1999-2003
Departmental Teaching Assistant	University of Victoria	1999-2002
Graduate Research Assistant	Texas Christian University	1997-1998
Departmental Teaching Assistant	Texas Christian University	1997-1998

D. Relevant Professional Experience

Position	Entity	Dates
Science Teacher	Mansfield High School (Mansfield, Texas)	Jan-May 1999

II. TEACHING

A. Teaching Honors and Awards:

N/A

B. Courses Taught:

Wetlands Ecology (BIO 7422), Community and Ecosystem Ecology (BIO 7360R), General Ecology (BIO 4416), Graduate Research (BIO 5214), Undergraduate Research (BIO 4299), Seminar in Aquatic Resources (BIO 7102)

C. Graduate Theses/Dissertations or Exit Committees (if supervisor, please indicate):

Alisa Abuzeineh (PhD, Nowlin), Jesse Becker (PhD, Nowlin), Crystal LeBoeuf (MS, Nowlin), Pete Diaz (MS, Nowlin), Corey Pray (MS, Nowlin), Brad Caston (MS, Nowlin; *graduated*), Alexandra Smith (MS, Nowlin; *graduated*)

Jamie Meyer (MS, Longley), Zach Shattuck (MS, Bonner), Preston Bean (PhD, Bonner), Jessica Strickland (MS, Groeger), Dennis Runyan (MS, Bonner; *graduated*), Rebecca Marfurt (MS, Bonner; *graduated*), Katrina Cohen (MS, Bonner; *graduated*), Tom Heard (MS, Bonner; *graduated*), Jesse Becker (MS, Groeger; *graduated*)

D. Courses Prepared and Curriculum Development:

Wetlands Ecology (BIO 7422), General Ecology (BIO 4416), Community and Ecosystem Ecology (BIO 7360R), Seminar in Aquatic Resources (BIO 7102)

E. Funded External Teaching Grants and Contracts:

N/A

F. Submitted, but not Funded, External Teaching Grants and Contracts:

N/A

G. Funded Internal Teaching Grants and Contracts:

N/A

H. Submitted, but not Funded, Internal Teaching Grants and Contracts:

N/A

I. Other:

Guest Lecturer, Department of Biology, Texas State University, Aquatic Biology course, October 2006

Guest Lecturer, Department of Biology, Texas State University, Biometry course, February 2006

Guest Lecturer, Department of Biology, Texas State University, Graduate Seminar “How I Became a Scientist”, November 2005

Attended Program for Excellence in Teaching and Learning, Texas State University, Sept 2005 - May 2006

III. SCHOLARLY/CREATIVE

A. Works in Print

1. Books (if not refereed, please indicate)

a. Scholarly Monographs:

N/A

b. Textbooks:

N/A

c. Edited Books:

N/A

d. Chapters in Books:

N/A

e. Creative Books:

N/A

2. Articles

a. Refereed Journal Articles:

Caston CB, WH Nowlin, A Gaulke, and MJ Vanni. *Accepted pending minor revision*. The relative importance of heterotrophic bacteria to pelagic ecosystem dynamics varies with reservoir trophic state. *Limnology and Oceanography*.

Pray, CL, WH Nowlin, and MJ Vanni. 2009. Deposition and decomposition of periodical cicadas (Homoptera: Cicadidae) in woodland aquatic systems. *Journal of the North American Benthological Society*. 28:181-195.

Nowlin, WH, MJ Vanni and LH Yang. 2008. Comparing resource pulses in aquatic and terrestrial systems. *Ecology*. 89:647-659.

Nowlin, WH, MJ González, MHH Stevens, MJ Vanni, MW Fields and JJ Valente. 2007. Periodical cicadas affect dynamics, productivity and stability of woodland pond ecosystems. *Ecology* 88:2174-2186.

Nowlin, WH, J-M Davies and A Mazumder. 2007. Planktonic phosphorus pool sizes and cycling efficiency in coastal and interior British Columbia lakes. *Freshwater Biology* 52:860-877.

Nowlin, WH, RW Drenner, KR Guckenberger, M Lauden, T Alonso, JE Fennell and JL Smith. 2006. Gape limitation, prey size refuges and the top-down impacts of piscivorous largemouth bass in shallow pond ecosystems. *Hydrobiologia* 563: 357-369.

Chumchal, M, WH Nowlin, RW Drenner and S Mann. 2005. Biomass-dependent effects of common carp on water quality in shallow ponds. *Hydrobiologia* 545: 271-277.

Nowlin, WH, JL Evarts and MJ Vanni. 2005. Release rates and potential fates of nitrogen and phosphorus from sediments in a eutrophic reservoir. *Freshwater Biology* 50 (2): 301-322.

Davies, J-M, WH Nowlin and A Mazumder. 2004. Temporal changes in nitrogen and phosphorus co-deficiency in plankton in lakes of coastal and interior British Columbia. *Canadian Journal of Fisheries and Aquatic Sciences* 61 (8): 1538-1551.

Nowlin, WH, J-M Davies, RN Nordin and A Mazumder. 2004. Effects of water level fluctuation and short-term climate variation on thermal and stratification regimes of a British Columbia reservoir and lake. *Lake and Reservoir Management* 20 (2): 91-109.

Davies, J-M, WH Nowlin and A Mazumder. 2004. Variation in temporal [¹⁴C] plankton photosynthesis among warm monomictic lakes of coastal British Columbia. *Journal of Plankton Research* 26 (7): 763-778.

Nowlin, WH, and RW Drenner. 2000. Context-dependent effects of bluegill on experimental mesocosm communities. *Oecologia* 122: 421-426.

b. Non-refereed Articles:

N/A

3. Abstracts:

N/A

4. Reports:

Spafard, MA, WH Nowlin, J-M Davies and A Mazumder. 2002. A morphometric atlas of selected lakes in southern British Columbia: Vancouver Island, Saltspring Island and the Kooteney region. National Sciences and Engineering research Council (NSERC),

Industrial Research Chair Program, Environmental Management of Drinking Water, University of Victoria.

5. Book Reviews:

N/A

6. Other:

N/A

B. Works not in Print

1. Papers Presented at Professional Meetings:

Nowlin, WH, CB Caston, A Gaulke, and MJ Vanni. 2009. Stoichiometry and limitation of bacteria and phytoplankton along a productivity gradient. *ASLO (Advancing the Sciences of Limnology and Oceanography)*, Nice, France.

Westerlund, J.F., TH Bonner, WH Nowlin, and RA Earl. 2008. NSF GK-12: Project Flowing Waters. *North Central Association for Science Teacher Education, (NC-ASTE)*, Winona, Minnesota.

Smith, AS, WH Nowlin, M. Chumchal, and A. Abuzeineh. 2008. Mercury contamination of the Rio Grande fish community: influence of spatial variation and food web structure. Society for Environmental Toxicology and Chemistry (SETAC) – North America, 29th Annual Meeting, Tampa, Florida.

Smith, AS, WH Nowlin, M. Chumchal, and A. Abuzeineh. 2008. Mercury contamination of the Rio Grande fish community: influence of spatial variation and food web structure. Oklahoma-Texas Aquatic Research Group/Great Plains Limnology Conference, Kingston, Oklahoma.

Diaz, PH, and WH Nowlin. 2008. Influence of productivity, size, and hydroperiod on aquatic macroinvertebrates in isolated wetlands. Oklahoma-Texas Aquatic Research Group/Great Plains Limnology Conference, Kingston, Oklahoma.

Caston, CB, WH Nowlin, A Gaulk, and MJ Vanni. 2008. Nutrient cycling in pelagic ecosystems: The relative importance of heterotrophic bacteria and phytoplankton changes along a trophic gradient. Oklahoma-Texas Aquatic Research Group/Great Plains Limnology Conference, Kingston, Oklahoma.

Becker, JC, AW Groeger, MM Chumchal, and WH Nowlin. 2008. Distribution and bioaccumulation of mercury in a subtropical reservoir system. Oklahoma-Texas Aquatic Research Group/Great Plains Limnology Conference, Kingston, Oklahoma.

Nowlin, WH, CB Caston, A Gaulke, and MJ Vanni. 2008. Stoichiometry and nutrient limitation of bacterio- and phytoplankton across a reservoir productivity gradient: implications for competition intensity. Oklahoma-Texas Aquatic Research Group/Great Plains Limnology Conference, Kingston, Oklahoma.

Smith, AS, WH Nowlin, M. Chumchal, and A. Abuzeineh. 2008. Mercury contamination of the Rio Grande fish community: influence of spatial variation and food web structure. South Central Chapter of the Society of Environmental Toxicology and Chemistry (SETAC Annual Meeting), Clear Lake, Texas.

Becker, JC, AW Groeger, MM Chumchal, and WH Nowlin. 2008. Distribution and bioaccumulation of mercury in a subtropical reservoir system. South Central Chapter of the Society of Environmental Toxicology and Chemistry (SETAC Annual Meeting), Clear Lake, Texas.

Caston, CB and WH Nowlin. Does the relative importance of bacteria in reservoir nutrient cycling vary with productivity? Texas River and Reservoir Management Society (TRRMS) and South Central Society of Environmental Toxicology and Chemistry (SETAC), 2007, Nacogdoches, Texas, USA.

Cohen, KL, TH Bonner, and WH Nowlin. Food habits of the non-indigenous suckermouth catfish in the San Marcos River, Texas: A concern for spring endemics? American Fisheries Society, 2007, San Francisco California, USA.

Cohen, KL, TH Bonner, and WH Nowlin. Food habits of the non-indigenous suckermouth catfish in the San Marcos River, Texas: a concern for spring endemics? Texas Chapter of the American Fisheries Society, 2007, Lake Jackson, Texas, USA.

Nowlin, WH, A Gaulke and MJ Vanni. The relative importance of bacteria and algae in pelagic nutrient cycling of reservoir ecosystems. *ASLO (Advancing the Sciences of Limnology and Oceanography)*, 2007, Santa Fe, New Mexico, USA.

Davies, JM, WH Nowlin, B Matthews and A Mazumder. A temporal discontinuity of nutrient deficiency and limitation, the role of deficiency in cyanobacterial bloom formation. *ASLO (Advancing the Sciences of Limnology and Oceanography)*, 2006, Victoria, British Columbia, USA.

Nowlin, WH, MHH Stevens, M.J. Vanni, M.J. Gonzalez and M.W. Fields. Effects of a pulsed allochthonous subsidy from a 17-year periodical cicada emergence on woodland pond communities. *Oklahoma – Texas Aquatic Research Group and Texas River and Reservoir Management Society Meeting*, 2005, Oklahoma Biological Station, Kingston, Oklahoma, USA.

Valente, JJ, MJ Gonzalez, WH Nowlin, MJ Vanni, MW Fields, MHH Stevens. Effects of the 17-year periodical cicada emergence on zooplankton communities in woodland ponds. *Ecological Society of America*, 2005, Montréal, Quebec, Canada.

Pauly, L, MW Fields, C Koenig, C. Hwang WH Nowlin. Allochthonous input effects on the bacterial community of an aquatic mesocosm. *Ecological Society of America*, 2005, Montréal, Quebec, Canada.

Nowlin, WH, MHH Stevens, M.J. Vanni, M.J. Gonzalez, J.J. Valente and M.W. Fields. Effects of a pulsed allochthonous subsidy from a 17-year periodical cicada emergence on woodland pond communities. *Ecological Society of America*, 2005, Montréal, Quebec.

Symposium: Resource pulses in space and time: Linking species, communities, and ecosystems, *Ecological Society of America*, 2005 Montréal, Quebec, Canada.

Pray, CL, WH Nowlin, MJ Vanni, MHH Stevens, MJ González, MW Fields.
Deposition and decomposition of litter associated with the emergence of 17-year periodical cicadas in woodland ponds and streams. *Ecological Society of America*, 2005 Montréal, Quebec, Canada.

Nowlin, WH, J-M Davies and A Mazumder. The relative importance of “new” and “recycled” phosphorus sources in lakes of varying trophic in British Columbia, Canada. *Ecological Society of America*, 2004, Portland, Oregon, USA.

Mazumder, A, R Nordin, B Matthews, J-M Davies, WH Nowlin, PC Furey, C Meays and K Broersma Integrated water and watershed management for sustainable clean and healthy water. *The International Congress of Limnology (SIL)*, 2004, Helsinki, Finland.

Nowlin, WH, J-M Davies and A Mazumder. Effects of seasonal drawdown on a drinking water reservoir: response of pelagic phosphorus pathways. *American Society of Limnology and Oceanography*, 2002, Victoria, British Columbia, Canada.

Mazumder, A, Y Liang, J-M Davies, WH Nowlin, P Furey and B Matthews. Loss of ecosystem and watershed quality: a serious threat to sustainable clean and healthy drinking water. *American Society of Limnology and Oceanography*, 2002, Victoria, British Columbia, Canada.

Davies, J-M, WH Nowlin and A Mazumder. Phytoplankton nutrient status: implications of plankton size. *American Society of Limnology and Oceanography*, 2002, Victoria, British Columbia, Canada.

Nowlin, WH, J-M Davies and A Mazumder. Effects of seasonal drawdown on a drinking water reservoir: responses of pelagic phosphorus pathways. *Society of Canadian Limnologists*, 2002, Vancouver, British Columbia, Canada.

Nowlin, WH, RW Drenner, M Chumchal, and S Mann. Biomass-dependent effects of common carp on water quality: Implications for biomanipulation of Texas reservoirs. *American Society of Limnology and Oceanography*, 2000, Copenhagen, Denmark.

Basu, BK, Y Liang, P Caron, J-M Davies, WH Nowlin and A Mazumder. Environmental management of drinking water: An ecosystem and watershed approach. *American Society of Limnology and Oceanography*, 2000, Copenhagen, Denmark.

Drenner, RW, JL Smith, S Mann, M Chumchal, JM Fennell, WH Nowlin and CE Edwards. Estimating the densities of common carp and their biomass-dependent effects on ponds. *Texas Chapter of the American Fisheries Society*, 2000, Bossier City, Louisiana, USA.

Mazumder, A, BK Basu, Y Liang, P Caron, J-M Davies and WH Nowlin. The environmental management of drinking water: an overview of the NSERC-IRC program at the University of Victoria. *Society of Canadian Limnologists*, 2000, Fredericton, New Brunswick, Canada.

Drenner, RW, WH Nowlin, KR Guckenberger, M Lauden, JE Fennell and JL Smith. Effects of piscivorous largemouth bass on water quality. *Texas River and Reservoir Management Society*, 1999, College Station, Texas, USA.

Nowlin, WH and RW Drenner. Effects of bluegill on experimental mesocosm communities in the presence and absence of a fish assemblage. *Texas River and Reservoir Management Society/North Texas Limnology Group*, 1998, Denton, Texas, USA.

Nowlin, WH and RW Drenner. Effects of bluegill on experimental mesocosm communities in the presence and absence of a fish assemblage. *American Society of Limnology and Oceanography/Ecological Society of America*, 1998, St. Louis, Missouri, USA.

2. Invited Talks, Lectures, Presentations:

Austin College Department of Biology, October 2006, Sherman, Texas – October 2006. Picoplankton, piscivores and periodical cicadas: research in aquatic ecology.

Texas State University, Aquatic Biology Society, San Marcos, Texas – October 2005. Effects of a pulsed allochthonous subsidy from a 17-year periodical cicada emergence on woodland pond communities.

Miami University, Department of Zoology, Oxford, Ohio –Miami Department of Zoology REU Program Speaker, July 2005. The effects of 17-year periodical cicadas on woodland aquatic ecosystems: An overview of summer research in the Miami ECO-REU program.

Bowling Green State University, Department of Biological Sciences, Bowling Green, Ohio – January 2005. The relative importance of “new” and “recycled” phosphorus sources in lakes of varying trophy in British Columbia, Canada.

3. Consultancies:

N/A

4. Workshops:

N/A

5. Other:

Symposium Co-Organizer, Ecological Society of America, 2005 Meeting in Montreal, Quebec, Canada – Resource pulses in space and time: Linking species, communities and ecosystems.

Meeting Organizer and Host, South Central Chapter of the Society for Environmental Toxicology and Chemistry, 2009 Annual Meeting, San Marcos, Texas

C. Grants and Contracts

1. Funded External Grants and Contracts:

Spring Lake Nutrient Sources Identification and Nutrient Management Plan. WH Nowlin, B. Schwartz, and A Sansom. Texas Commission on Environmental Quality/United States Environmental Protection Agency 319(h) Grant. Received March 2009. \$293,689

Project Flowing Waters. J Westerlund, TH Bonner, WH Nowlin, R Earl, and P Guettner. National Science Foundation: Graduate Teaching Fellows in K-12 Education (GK-12). Received January 2008. \$2,320,660.

Building adaptive capacity and the ecological values of watersheds of the Lower Brazos River Basin. TH Bonner, WH Nowlin, Y Zhang and V Lopes in cooperation with the Nature Conservancy. The Houston Foundation. Received January 2008. \$600,000.

Bigclaw River Shrimp in San Marcos River: Invasive Species' Impact. Y Zhang and WH Nowlin. Texas Parks and Wildlife – State Wildlife Grant (SWG) Program. Received October 2007. \$68,640.

Trophic ecology and habitat associations of the threatened San Marcos salamander (*Eurycea nana*) – WH Nowlin, JN Fries and ML Alexander. United States Geological Survey. Received May 2007. \$25,844

Sources and pathways of energy and nutrients supporting the Rio Grande biotic community - WH Nowlin and TH Bonner. United States Department of Agriculture, Sustainable Agricultural Water Conservation in the Rio Grande Project. Received March 2006. \$90,404

Reproductive Ecology and Culture Techniques of the Devil's River Minnow - WH Nowlin (Single PI). United States Fish and Wildlife Service Cooperative Agreement. Received June 2006. \$8,000.

Invasion of Suckermouth Catfish in the San Marcos River Ecosystem – WH Nowlin and TH Bonner. United States Fish and Wildlife Service, Collaborative Conservation Project Award Initiative (CCPAI). Received February 2006. \$5,000

2. Submitted, but not Funded, External Grants and Contracts:

Biological Services Contract (57-9RFPB001), TH Bonner (PI), M Forstner (Co-PI), J Baccus (Co-PI), WH Nowlin (Co-PI), C Green (Co-PI), Y Zhang (Co-PI), and J Veech (Co-PI). Texas Department of Transportation – Environmental Affairs Division. Submitted March 2009 – *In Review*. \$500,000.

Ecological Values and Ecosystem Services of Watersheds in the Lower Rio Grande River TH Bonner (PI), WH Nowlin (Co-PI), Y Zhang (Co-PI), and T Hardy (Co-PI). United States Department of Agriculture, Sustainable Agricultural Water Conservation in the Rio Grande Project. Submitted February 2009 – *In Review*. \$135,500.

Effects of Invasive Species on the Biogeochemistry of Hyporheic Water from Sandbars: A Comparison Restored and Unrestored Areas in, Big Bend National Park. K Urbanczyk (PI), WH Nowlin (Co-PI), and J Bennett (Co-PI). Submitted February 2009 – *In Review*. \$62,281.

Integrated contaminant bio-monitoring for the sustainability of the Rio Grande Basin – TH Bonner (PI), WH Nowlin (Co-PI), D Hahn (Co-PI), M Chumchal (Co-PI), and M Forstner (Co-PI). United States Department of Agriculture, Sustainable Agricultural Water Conservation in the Rio Grande Project. Submitted February 2008 – *Not Funded*. \$139,142.

Monitoring of Riparian and Stream Habitat and Biotic Communities, Wichita River Basin, North-Central Texas – TH Bonner and WH Nowlin. US Army Corps of Engineers (USACE) Tulsa District. Submitted August 2006 – *Not Funded*. \$186,565.

Resilience and adaptation of watersheds in the Rio Conchos – V Lopes (PI), D Lazcano (PI), PA Lavin-Murcio (Co-PI), MRJ Forstner (Co-PI), D Hahn (Co-PI), TH Bonner (Co-PI), WH Nowlin (Co-PI), A Groeger (Co-PI), M Gutiérrez (Co-PI). USAID New IDEAS Partnership Program. Submitted July 2006 – *Not Funded*. \$152,781.

Impact of Suckermouth Catfish on the San Marcos River Ecosystem – WH Nowlin and TH Bonner. Texas Parks and Wildlife/United States Fish and Wildlife Service Section 6 Program, Submitted November 2005 – *Not Funded*. \$195,424.

3. Funded Internal Grants and Contracts:

Transfer of Mercury and Methylmercury Across Ecosystem Boundaries in Arid River Landscapes - WH Nowlin (Single PI). Texas State University Research Enhancement Program. Received December 2007. \$7,984.

Ecosystem engineering and nutrient cycling effects of native and exotic species in the San Marcos River ecosystem - Y Zhang and WH Nowlin. Texas State University Research Enhancement Program Grant. Received December 2006. \$16,000.

The Relative Importance of Bacteria and Algae in Reservoir Carbon Cycling - WH Nowlin (Single PI). Texas State University Research Enhancement Program. Received December 2005. \$6,940.

4. Submitted, but not Funded, Internal Grants and Contracts:

Patterns of resistance of aquatic communities to mercury contamination: a gene to ecosystem approach – WH Nowlin (Single PI). Texas State University Research Enhancement Program. Submitted October 2007 – *Not Funded*. \$7,980.

The Relative Importance of Bacteria and Phytoplankton in Reservoir C Dynamics – WH Nowlin (Single PI). Pre-Proposal for State of Texas Advanced Research Program – *Not Funded*.

D. Fellowships, Awards, Honors:

Texas State University Presidential Award for Scholarly/Creative Activities – Assistant Professor. 2008.

Graduate Student Tuition Fellowship – University of Victoria, Department of Graduate Studies. Received award every semester from 1999-2003

Student Travel Award – American Society of Limnology and Oceanography (ASLO)
Conference 2000 in Copenhagen, Denmark

Outstanding Graduate Student of 1998 – Texas Christian University, Department of Biology

Adkins Research Fellowship to Graduate Students – Texas Christian University, 1997

IV. SERVICE

A. University:

College Recruiting Committee (2006 – Present)

B. Departmental:

Committee Service: Departmental Seminar Committee (2005 – Present), Student Retention Plan Committee (2005 – Present), Space Committee (2006 – Present), Undergraduate Program Committee (2006 – Present), Seminar Committee (2005 – Present), Awards Day Committee (2005 – Present; Co-chair 2007, 2008), Budget Committee (2006 – Present), Freeman Building Operations Committee (2005 – Present), Target of Opportunity Committee (2007 – Present)

C. Community:

Selection Committee for San Antonio Conservation Society's Graduate Scholarship for Louise Reischling Natural Resources Scholarship

D. Professional:

Manuscript Reviewer – Hydrobiologia, Oecologia, Lakes and Reservoirs: Research and Management, Aquatic Conservation: Marine and Freshwater Ecosystems, Limnology and Oceanography, Freshwater Biology, Southwestern Naturalist, American Midland Naturalist, Transactions of the American Fisheries Society, Journal of Applied Biology, Water Resources and Management, Journal of the North American Benthological Society, Lake and Reservoir Management

Grant Reviewer – Israel Science Foundation (ISF)

American Society of Limnology and Oceanography, Service on Education Sub-committee of Education and Human Resources Committee, 2003-2005

American Society of Limnology and Oceanography, Organized and coordinated activities for the ASLO Minorities in the Aquatic Sciences (MAS) Program, Summer 2002 meeting in Victoria, BC, Canada

E. Organizations

1. Honorary:

N/A

2. Professional:

Ecological Society of America, Advancing the Science of Limnology and Oceanography, North American Lake Management Society, Oklahoma-Texas Aquatic Research Group, Society of Canadian Limnologists, Society for Environmental Toxicology and Chemistry (National and South Central Chapter member).