

# WATER E-NEWS

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Delaware Water Resources Center (*DWRC*) <http://ag.udel.edu/dwrc/>  
UD Water Resources Agency (WRA) <http://www.ipa.udel.edu/wra/>

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## I. *DWRC NEWS*

### Spotlight on 2009-10 *DWRC* Undergraduate Internships



UD's Department of Food and Resource Economics *DWRC* intern Michael Ruppel paused from writing his final report to summarize: "My research with Dr. Joshua Duke investigated interstate water law, particularly as it pertains to the most novel method of water allocation, the interstate compact. By examining a conflict over competing interests on the Delaware River Basin, which included protection of an endangered mussel, drinking water for New York City, mitigation of flooding threat, and protection of a

world-class fishery, I was hoping to gauge the effectiveness of the interstate water compact in efficiently resolving complex and dynamic interstate water disputes. Specifically, our research sought to examine the impacts that preemptive federal environmental laws, like the Endangered Species Act in this case, would have on agreements made between states under a federal government much less capable of protecting national environmental interests, like the protection of endangered species. As these laws continue to grow in scope and number, our research will allow policymakers in states to make more effective decisions in the formation of interstate compacts.

By extensively reviewing the literature on the three primary methods of interstate water allocation, which include the compact, judicial apportionment, and Congressional apportionment, we concluded that scholars generally felt interstate compacts have a more effective enforcement mechanism, that states have final control over the criteria used to determine allocation, and that compacts are often negotiated with an eye to the future, such that resources can be shifted between interests at future dates."

"After carefully detailing the history of the conflict between the four interests, and the response of the Delaware River Basin Commission (the governing arm of the Delaware River Basin Compact), our conclusions showed less confidence in the capacity of interstate water compacts to effectively and efficiently allocate watershed resources. We found that the interstate compact, due to the power granted to New York City by a pair of Supreme Court decrees, and the potential power granted to environmentalists based on the growing applicability of the "critical habitat" listing under the Endangered Species Act, is not capable of shifting watershed resources to other uses, even if they have higher relative values. Because of the strictness of expansive federal laws, and a judicial history that favored a certain entity, the Delaware River Basin Commission is poorly equipped to protect a trout fishery, or to mitigate downstream flooding. While our research suggests that compacts as they are currently created are not particularly effective, we also conclude that they remain the most effective resolution process, and that states negotiating interstate water compacts should recognize both the legal history of the river in negotiating a compact, and should negotiate with recognition of future ecological, economic, legal, and demographic trends in a watershed."

**Friday, Apr. 23, 2010:** Free *DWRC* 2009-10 Undergraduate Internships research project Poster Session, part of a larger session sponsored by the UD Undergraduate Research Scholars Program. 2:00 p.m. - 4:30 p.m., UD Trabant University Center Multipurpose Rooms A, B & C, Newark, DE.

## II. JOBS IN WATER RESOURCES

### Mentors / Projects Needed: 2010-11 *DWRC* Undergraduate Internship Program

- *Current project proposals:*  
<http://ag.udel.edu/dwrc/jobs/2010-2011/DWRCProjectProposals.htm>
- *Brochure and information about the 85 current & past internship projects funded since 2000:* <http://ag.udel.edu/dwrc/publications/DWRCInternshipspotlight2009.pdf>
- *Current faculty advisors, application materials, report and poster requirements:*  
<http://ag.udel.edu/dwrc/internships.html>

Students having a 3.0 GPA or better enrolled at any Delaware institute of higher learning (except those graduating in Spring '10) may **apply through Mar. 26** for *DWRC's* undergraduate internships and earn up to \$3500 at the rate of \$10 per hour worked. *DWRC's* research and education opportunities are especially attractive to undergraduates seeking mentored experiences leading to publication and possibly a degree with distinction or senior thesis. All interns must have the active support of a mentor who matches intern earnings 2:1, usually through a commitment of time to the project. Advisors may mentor up to two students concurrently. (Continued next paragraph.)

If you would like to mentor a deserving *DWRC* intern and/or propose a project of up to 350 hours to be completed by Feb. 28, 2011, contact Maria Pautler at 302-831-0847 or [mpautler@udel.edu](mailto:mpautler@udel.edu).



**Water Resources Research - National Competitive Grants Program**  
***Request for Proposals – FY 2010 / Announcement No. 10HOPA0002***

The U.S. Geological Survey, in cooperation with the National Institutes for Water Resources, requests proposals for matching grants to support research on the topics of water supply and water availability, including investigations of possible new sources of supply, improvement of impaired waters to usable quality, conservation of existing sources, and limiting growth in demand. Proposals are sought in not only the physical dimensions of supply and demand, but also quality trends in raw water supplies; the role of economics and institutions in water supply and demand; institutional arrangements for tracking and reporting water supply and availability; and institutional arrangements for coping with extreme hydrologic conditions. Any investigator at an accredited institution of higher learning in the U.S. is eligible to apply for a grant through a Water Research Institute or Center... as amended (<http://water.usgs.gov/wrri/institutes.html>). Proposals may be for projects of one to three years in duration and may request up to \$250,000 in federal funds. Successful applicants must match each dollar of the federal grant with one dollar from non-federal sources. Proposals must be filed... at <https://niwr.net/> by 4:00 PM, EST, **Wednesday, April 7, 2010** and must be approved for submission to the National Competitive Grants Program not later than 4:00 PM, EST, Wednesday, April 21, 2010 by the Institute or Center through which they were submitted. The SF-424 (Application for Federal Assistance) portion of the application package must be submitted... at <http://www.grants.gov> not later than 4:00 PM EST, April 21, 2010 by the university at which the Institute or Center is located... The Government's obligation under this program is contingent upon the availability of funds.

***Delaware State University*** offers water-related undergraduate and graduate assistantships, and undergraduate scholarships. Contact Dr. Dennis McIntosh, phone 302-857-6456, fax 302-857-6402, e-mail [dmcintosh@desu.edu](mailto:dmcintosh@desu.edu), or visit <http://cars.desu.edu/aqua-sci/opportunities.htm>.

For news about fellowships through the ***University of Delaware College of Earth, Ocean, and Environment*** (formerly the College of Marine and Earth Studies), visit <http://www.ceoe.udel.edu/prospective/scholarships/index.shtml>.

### III. UPCOMING WATER CONFERENCES / EVENTS

#### *Delaware's Wetlands*

More than 30% of Delaware is covered in wetlands. About 1/3 of that is tidal, while freshwater wetlands make up the remainder. Currently, state law only protects tidal wetlands, leaving over 30,000 acres of wetlands unprotected. The Delaware Nature Society is hosting a series of workshops about freshwater wetlands: what they are, why they are important to protect, and what you can do to support this effort.

#### **Saving Wetlands, One Tadpole at a Time**

*Thursday, February 4, 2010 – 6:00-7:00 PM*

DuPont Environmental Education Center on the Wilmington Riverfront in the Russell W. Peterson Urban Wildlife Refuge, featuring presentations by Ducks Unlimited's Bernie Marczyk and DNS's Brenna Goggin. **Free admission. Refreshments served.** RSVP to 302-239-2334, ext. 132 or to [brenna@delawarenaturesociety.org](mailto:brenna@delawarenaturesociety.org)

*OR*

*Thursday, February 18, 2010 – 6:00-7:00 PM*

UD's Elbert N. and Ann V. Carvel Research and Education Center, Georgetown, DE, featuring presentations by Ducks Unlimited's Bernie Marczyk and DNS's Brenna Goggin. **Free admission. Refreshments served.** RSVP to 302-239-2334, ext. 132 or [brenna@delawarenaturesociety.org](mailto:brenna@delawarenaturesociety.org).

#### **Wednesday, Feb. 10, 2010: Delaware GIS 2010**

The Delaware Geographic Data Committee is holding this day-long event at the Sheraton Hotel in Dover, DE. Pre-conference workshops are scheduled for Feb. 9. Poster and paper presentations, and a K-12 student contest are on the program. Visit <http://www.degis.org>.

#### **Wednesday, Feb. 17, 2010: Mid-Atlantic Coastal Wetland Assessment (MACWA) Workshop**

The Barnegat Bay National Estuary Program and the Partnership for the Delaware Estuary have organized this day-long event at Cumberland Community College. Three sessions include "National and Regional Wetlands Assessment: Past & Present;" "States, Academia and National Estuary Programs;" and panels on rapid assessment and fixed monitoring stations. There is no fee but registration **no later than Feb. 8** is required. Visit [http://delawareestuary.org/science\\_projects\\_wetland\\_workshop.asp](http://delawareestuary.org/science_projects_wetland_workshop.asp) for flyer and registration form.

***Tuesday, Mar. 9, 2010: 1<sup>st</sup> Annual Soil Health Conference***

Gain an understanding of soil health connections to stormwater runoff impacts; climate change and soil ecosystem services; stream erosion and impacts on aquatic environments; groundwater recharge-quantity and quality; and sustainable agriculture at this day-long event. Visit <http://www.sjrkd.org/soilhealth/> to learn sponsors and speakers, and to register **no later than Feb. 26.**

***Apr. 9, 2010: DENIN Research Symposium–UD’s Clayton Hall–Save the Date***

Check back - Delaware Environmental Institute website - <http://denin.udel.edu/>

***Apr. 11-15, 2010: Ground Water Summit***

The 2010 conference, **“Groundwater for a Thirsty World,”** will be held in Denver, CO. Visit <http://www.ngwa.org/summit2010/index.aspx>.

***Jun. 7-11, 2010: 3<sup>rd</sup> USGS Modeling Conference***

The 2010 conference, **“Understanding and Predicting for a Changing World,”** will also be held in Denver, CO, and will focus on the development of analytical and theoretical models and data availability that support managing the Nation’s resources. Conference themes include climate changes and impact, and a water census of the United States. Visit <http://geology.usgs.gov/modeling2010/>.

***Oct. 18-21, 2010: 26<sup>th</sup> International Conference on Soils, Sediments, Water and Energy***

Held at the University of Massachusetts, Amherst, MA, this conference will highlight energy environment interface topics. Visit <http://www.UMassSoils.com>. **Abstract deadline is Feb. 5.**

The Spring 2010 Seminar Series listing for University of Maryland-Baltimore County’s Center for Urban Environmental Research and Education (CUERE) is found at <http://www.umbc.edu/cuere/seminarSeries.html>. This particular series lists several seminars of interest to the water community.

The **Delaware Section of the American Water Resources Association** meeting information is found at <http://www.deawra.org/meetings>.

The **Delaware Nutrient Management Commission** (as well as other State of Delaware departments) public meeting and workshop information is found at <http://www.delaware.gov/egov/calendar.nsf/>.

## IV. WATER RESOURCES INFORMATION / TRAINING

### ***National Ecological Observatory Network, Inc. (NEON) Project***

NEON plans to build 62 sites across the U.S. by 2016 that will provide information about the impacts of climate change, land use change, and invasive species on natural resources and biodiversity. NEON will be the first observatory of its kind to collect data that will help scientists forecast ecological change at continental scales over multiple decades. Keep current at <http://www.neoninc.org/>.

### ***Continuing Education for the Delaware Nutrient Management Program***

Visit <http://ag.udel.edu/extension/NutriManage/continuinged.htm>.

On **Feb. 9**, 7:00 PM, at the Delaware Department of Agriculture conference room, there will be a meeting of the full DNM commission, where the water quality report for Delaware will be given by J. Schneider.

### ***Thursday, Feb. 11 (Part 1) and Wednesday, Feb. 17 (Part 2) – Hydrogeology of Aquitards and Low-Permeability Materials Webinar Series***

Visit <http://www.midwestgeo.com/webinars.php> for more information and to register.

***Sierra Club Student Coalition*** offers Summer Programs (SPROG) for Environmental Leadership Training. Visit <http://www.ssc.org/>.



Welcome new subscribers! Contributions, comments and questions are always appreciated. Water E-News serves citizens interested in topics on Delaware water resources and is published by the Delaware Water Resources Center, University of Delaware. Our address: 113 Townsend Hall, Newark, DE 19716-2103. Phone: 302-831-0847; fax: 302-831-0605; Web: <http://ag.udel.edu/dwrc/>. Dr. Tom Sims, Director, email [jtsims@udel.edu](mailto:jtsims@udel.edu); Maria Pautler, Program Coordinator, email [mpautler@udel.edu](mailto:mpautler@udel.edu). To unsubscribe, email [mpautler@udel.edu](mailto:mpautler@udel.edu) with "Unsubscribe Water E-News" in the subject line.