# STRATEGIC PLAN

for the

WATER RESOURCES AGENCY
Institute for Public Administration
School of Public Policy and Administration
College of Arts and Sciences
2012

# **Mission Statement**

The mission of the Water Resources Agency, a program within the University of Delaware's Institute for Public Administration, is to provide water-science and -policy assistance to governments in Delaware and the Delaware Valley through the University's land-grant public service, education, and research role.

### Goal

Be one of the finest university water resources institutes in America through contributions in public engagement, academia, and research.

**Goal #1 - Sharpen the Focus of Public Engagement** to provide water-science and -policy assistance to governments and the public.

### **Significance**

WRA is funded by governments/foundations to provide water-resources outreach to the public. This public service and engagement role is significant to the University's land-grant mission.

### Challenges

Expand and diversify revenue sources to continue providing water-resources assistance to governments in the Delaware Valley and along the Atlantic seaboard.

### **Future Steps**

Seek opportunities to pursue more funded work with governments in the Delaware River and Chesapeake Bay basins in Pennsylvania, New Jersey, New York, Maryland, and Virginia. Expand the capacity of WRA's GIS laboratory (the first water resources—based GIS laboratory in the U.S., est. 1970s) to conduct more work with federal, nonprofit, and business partners.

Goal #2 – Enhance the Quality of Academic Programs by offering courses, seminars, and forums with a water-resources focus and mentoring undergraduate and graduate students with funded fellowships.

### **Significance**

The goal to provide water resources—education opportunities at the University is significant to the interdisciplinary science—and policy—education mission. Education is a basic role of the

University of Delaware. WRA strives to educate students who will thrive as future leaders in water resources with its public-, private-, and nonprofit-sector partners.

# Challenges

The challenge is to participate in water resources—education opportunities on campus while expanding WRA's funding base from funding federal, state, and local government and foundation partners.

### **Future Steps**

Strengthen funding and curriculum for water-resources specializations in the undergraduate and MPA and MA in Urban and Regional Planning graduate programs. Build an interdisciplinary water-science and -policy graduate program.

**Goal #3 - Strengthen Programs of Research** by seeking opportunities to collaborate with University faculty, staff, and students to conduct and publish publicly and privately funded water-resources research.

# **Significance**

Research, the search and quest for new knowledge, is central to the mission of the University of Delaware

# Challenges

The challenge is to obtain federal, state, private, and foundation funding to carry out water-science and -policy research while maintaining a focus on the public service and education role of WRA.

### **Future Steps**

Pursue funded research and partnerships in the following emerging water-resources areas:

- GIS-based watershed modeling
- Energy-water nexus
- Impact of climate change on water resources
- Sustainable-watershed funding and financing
- Watershed-ecosystem services and socioeconomic value of water.

# **UD Strategic Milestones**

WRA will contribute to the strategic milestones outlined in the Strategic Plan for the University of Delaware as part of the University's *PATH TO PROMINENCE*<sup>TM</sup>:

# I. A Diverse and Stimulating Undergraduate Academic Environment

- Teach undergraduate courses in Water Resources Engineering (CIEG 440) and Environmental Resources and Public Policy (UAPP 467).
- Fund a cohort of students in an undergraduate water resources—research fellowship program.
- Advise undergraduate students through the Delaware Water Resources Center internship program.

• Provide service-based and problem-based learning opportunities for undergraduate students within the White Clay Creek National Wild and Scenic River watershed.

# II. A Premier Research and Graduate University

- Teach graduate courses in Regional Watershed Management (UAPP 611), GIS in Public Policy (UAPP 652), GIS in Public Policy (UAPP 655), and Watershed Planning and Design (CIEG 652).
- Advise students in an interdisciplinary water-science and -policy graduate program.
- Fund graduate research fellowships through the Institute for Public Administration and the MPA/MA programs in the School of Public Policy & Administration.

#### III. Excellence in Professional Education

- Sponsor an annual Delaware water-science and -policy forum on campus.
- Partner with Delaware and UD student sections of the American Water Resources Association
- Coordinate the Wilmington Green Jobs program for high school students.

# IV. The Initiative for the Planet (The Green University)

- Collaborate with the UD Environmental Institute (DENIN).
- Co-chair with the College of Agriculture & Natural Resources on the UD-WATER project.
- Develop a UD-business alliance with water-resources firms to conduct on-campus research at the STAR campus.

### V. The Global Initiative

- Develop a study-abroad program in water science and policy.
- Advise international students interested in water resources (e.g., Uzbekistan, Kyrgyzstan, Brazil, Portugal, Germany, New Zealand, Russia, Georgia, Ukraine, China, and South Korea).
- Work with the International Joint Commission between the United States and Canada.

### VI. The Engaged University

- Partner with the State of Delaware, New Castle County, City of Newark, and City of Wilmington in funded support to conduct regional water-resources planning and management.
- Serve as Delaware's Water Coordinator and technical advisor to the Delaware Water Supply Coordinating Council as required by state law.
- Served as watershed coordinator of the Christina Basin Clean Water Partnership among Delaware and Pennsylvania, Delaware River Basin Commission, and USEPA.
- Serve as watershed coordinator of the White Clay Creek Wild and Scenic River Committee with the National Park Service.
- Continue partnerships in Sussex County with the College of Earth, Oceans, and Environment at the UD Lewes campus.