#### **Environmental Science Faculty**

- Dr. Michael Vorwerk (Chair)
   Environmental Science, Water
   Resource Management
   (413) 572-5305, Wilson 207A
   myorwerk@westfield.ma.edu
- Dr. Emily Cole
   Environmental Education, Soil
   Ecosystems
   (413) 572-8495, Wilson 204C
   ecole@westfield.ma.edu
- Dr. John McDonald
   Wildlife Ecology, Natural
   Resource Management, Policy
   (413) 572-8393, Wilson 204D
   jemcdonald@westfield.ma.edu
- Dr. Tim Parshall
   Forest Ecology, Ecological
   History, Environmental
   Education
   (413) 572-5303, Wilson 204F
   tparshall@westfield.ma.edu
- Dr. Carsten Braun
   Physical Geography, Climate Change, Sustainable Energy, GIS
   (413) 572-5595, Wilson 201B cbraun@westfield.ma.edu

### **Affiliated Faculty**

- *Dr. Marijoan Bull* (Geography and Regional Planning)
- Dr. David Christensen (Biology)
- Dr. Brian Conz (Geography and Regional Planning)
- Robert Thompson (Westfield River Environmental Center)
- Karen Leigh (City of Westfield Conservation Coordinator)
- Dr. Steven O'Brien (Instructor Chemistry)



- We're one of the few colleges and universities to have an actual Department of Environmental Science
- There are many options to minor or concentrate in areas leading to careers in Environmental Planning, Environmental Policing, Environmental Policy, Environmental Law and Environmental Communication, to name a few.
- We have small class sizes with a low student: faculty ratio.
- Our focus is on hands-on learning with a project based curriculum.
- Our program is highly interdisciplinary.
- We're one of the largest Environmental Science programs in the country.
- We have a new Science Lab, renovated Departmental space, and extensive field research Areas close to campus.

Biology and Regional Planning majors may not minor in Environmental Science

# Minors in Environmental Science

At Westfield State University



### Environmental Science Minor

- Environmental Science
- Wildlife Conservation
- Wetlands Planning and Management

Located on the edge of the Berkshire Mountains, Westfield State offers uncommon opportunities to learn environmental science through hands-on field work. The University owns property with wetlands, a beaver pond, fields, a wilderness area and, islands on the Westfield River.

All students engage in independent research and most participate in internships to gain work experience. Our location offers great access to the outdoors for hiking, whitewater canoeing and kayaking, rock climbing, skiing, mountain and road biking, fishing, and other activities.



#### **Environmental Science Minor**

The minor in Environmental Science is designed to allow students who are interested in environmental science to tailor the minor to meet their interests, career goals, and future plans.

### The minor requires a total of 18 hours of coursework.

This includes ENVS 0101 - Principles of Environmental Science, GARP 0106 - Introduction to Environmental Analysis, or BIOL 0102 - Environmental Biology

- One course out of each of the three dimensions:
  - Natural,
  - Human, and
  - Methods/Technology as defined in the Environmental Science, B.S. major
- Additional courses selected by the advisement from the required and elective Environmental Science coursework to meet the 18 credit hour requirement.



#### Wildlife Conservation Minor

The minor in Wildlife Conservation is designed to allow students who are interested in Wildlife to gain the skills and knowledge necessary to work professionally as wildlife scientists or technicians, to prepare them for graduate study in wildlife or organismal ecology and to guide their course selection as part of the ENVS major.

## The minor requires a total of 20-21 hours of coursework.

This includes ENVS 0105 Natural History and Field Techniques and ENVS 0209 Wildlife Biology, ENVS 0225 - Natural Resource Conservation and Management, ENVS 0309 - Wildlife Ecology and Management and courses selected from the following:

- ENVS 0230 Estimating Wildlife Populations or BIOL 0128 - Introduction to Organismal, Ecological, and Evolutionary Biology
- MATH 0123 -Mathematical Methods in the Natural Sciences or BIOL 0278 - Biostatistics



### Wetlands Planning and Management Minor

There is a strong demand among consulting firms, state and federal agencies, and not-for-profit organizations for persons with knowledge and experience relevant to wetland resource management.

### The minor requires a total of 21 hours of coursework.

Including ENVS 0105 - Natural History and Field Techniques, ENVS 300 - Wetlands Analysis, GARP 0244 - Introduction to Geographic Information Systems or BIOL 0204 GIS in the Natural Sciences and courses selected from the following:

- ENVS 0251 Water Resources Planning and Management
- ENVS 0220 Surface and Groundwater Hydrology Credit
- ENVS 0255 Environmental Soil Science
- BIOL 0204 GIS Applications for Natural Sciences

