Watersheds: Connecting Weather to the Environment

Sara Espinoza – NEETF and Joseph P. Lamos – UCAR/COMET

Most Americans believe they know more about the environment than they actually do: just 12 percent can pass a basic quiz on energy awareness; about 80 percent are influenced by incorrect or outdated information; and only 41 percent can correctly define the term “watershed” in a multiple-choice format. To bridge this environmental information gap, the National Environmental Education & Training Foundation (NEETF), in partnership with the American Meteorological Society (AMS), is turning to broadcast meteorologists—a trusted public source of daily scientific information—for assistance.

The premier professional society for broadcast meteorologists in the United States, AMS believes that weathercasters are an underutilized public resource, and would like to see them become more central in improving science and environmental reporting at their stations. AMS foresees an evolution of the broadcast meteorologist into a “station scientist” who can expertly cover the weather, watersheds, and other environmental issues for the station.

Although broadcast meteorologists are experts in the atmospheric sciences and the art of broadcasting, they often have a more limited background in hydrology, water quality, and watersheds. To provide the background necessary to cover these topics on the air, NEETF partnered with the Cooperative Program for Operational Meteorology, Education & Training (COMET®) to develop a series of online environmental education courses aimed at providing basic watershed and environmental information to incorporate into local weathercasts. Online education materials complement NEETF’s Earth Gauge™ program to provide free environmental science information to the broadcast meteorology community for use on-air.

The initial course, “Watersheds: Connecting Weather to the Environment,” was released in September 2006. This online course is organized into six short units of instruction, each approximately 20 minutes long, and divided into six to eight small lesson elements. Overall, the course uses a narrative style to convey watershed science, and models how weathercasters can communicate watershed and hydrological concepts to the public. Central to the course content is the theme that one’s backyard is in a watershed; key information and data are provided by the EPA, USGS, NOAA, and other government agencies through their websites. The lessons focus on how these Web resources can be used to better educate the public about watershed science.

By incorporating this course into the AMS continuing education program, it is hoped that broadcast meteorologists will earn points toward their certification and inform and educate their audiences. While intended for broadcast meteorologists, the course is also an excellent primer for land use managers, teachers, community leaders, and others interested in learning more about watersheds.

Over the next year, NEETF and COMET will add a module that addresses smart growth issues and interactions between weather and the built environment. In addition, a course on weather and public health is planned.

The watershed course, funded by the U.S. EPA’s Office of Wetlands, Oceans, and Watersheds, is free and accessible on the COMET Program’s MetEd website, meted.ucar.edu/broadcastmet/watershed/.

Contact Sara Espinoza at sara@neetf.org. Learn about the AMS initiative at www.ametsoc.org/stationscientist.