

**UW-EXTENSION DEPARTMENT OF ENVIRONMENTAL SCIENCES AND
THE WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY:
GENERAL STATEMENT REGARDING ENGAGEMENT AND CONTROVERSY**

Background and general statement

The Wisconsin Geological and Natural History Survey (WGNHS) is a special missions unit in the Division of Cooperative Extension whose work responsibilities are broadly defined by state statute. The Department of Environmental Sciences (DES) is the academic (tenure) home of ten UW-Extension faculty members who program within WGNHS. DES faculty and the WGNHS engage in research, teaching, educational outreach, and service in the disciplinary areas of geology, mineral resources, hydrogeology, and soils.

DES faculty and the WGNHS share a common mission, which is to (1) conduct earth-science surveys, field studies, and research, (2) communicate objective scientific information about the geology, mineral resources, water resources, and soils of Wisconsin; and (3) collect, interpret, disseminate, and archive natural resource information.

Both DES faculty and the WGNHS place high value on the accuracy, objectivity, credibility, and timeliness of their research, teaching, educational outreach, and service. In addition, both emphasize the importance of communicating the results of these scientific activities through a variety of publications including maps, professional talks, informal presentations, field trips and responses to inquiries from technical and non-technical groups and individuals. They also share a common expectation that faculty bring a scholarly approach to their work.

Controversy involving the use and conservation of Wisconsin's natural resources is at the center of many local, county, and state public policy discussions. Much of the work of DES faculty and the WGNHS is directly relevant to these public policy issues. The role of DES faculty and the WGNHS is to inform the debate on these issues by supplying

geoscience information to all interested parties. This role can be complicated by the emotional and highly polarized circumstances in which these issues are often addressed. In the context of a contentious issue the geoscience information is all too commonly viewed as either supporting the view of one side or another. The continuing challenge for DES faculty and other WGNHS staff is to provide objective, geoscience-based information that allows interested parties to make informed choices, and supports an informed and scientifically credible debate.

An important part of maintaining the quality and objectivity of the geoscience information disseminated by DES faculty and other WGNHS staff is a peer review process. All scientific maps and reports are reviewed by the Director of WGNHS before release to the public. Review by scientific peers is a key part of the process of publishing WGNHS documents and articles for professional journals or books.

Collection, curation, and communication of natural resource records and information are another set of DES and WGNHS activities that support informed decisions on a variety of natural resource and environmental issues.

Some examples of topics where engagement may lead to controversy

Groundwater Resources: The use of the groundwater resource has the potential to create conflict among users in terms of the quantity and quality of the resource. Competition for water supplies and the protection of those supplies from contamination stimulates a growing need of governmental and non-governmental organizations and individual citizens to make decisions about the use of the resource and the use of the land from which this resource is replenished. It is the role of DES faculty and other WGNHS staff to communicate the understanding of the nature and distribution of groundwater resources and the range of alternatives and consequences of various management strategies.

Mineral Resources: Society needs metallic mineral and non-metallic aggregate resources and this need creates incentives for resource delineation and extraction – activities that potentially create conflict. DES faculty and WGNHS staff value the communication to all engaged in these discussions regarding their respective roles, rights, and opportunities to participate knowledgeably in the regulatory discussions. DES faculty and other WGNHS staff also educate about the geology of the resource.

Land-Use Planning: Knowledge of the geology is key to understanding the capability of land for specific uses and also for wise use of mineral and groundwater resources. It is also key to planning for recreational and educational uses of land and for maintaining key aesthetic characteristics of an area. Although geology is only one of many layers of information considered in land-use planning, it can help to define areas of potential conflict. For example, areas that have great aesthetic appeal for residential development may also have high potential for sand and gravel aggregate resources. These very different and conflicting land uses will have proponents and opponents. The role of DES faculty and WGNHS staff is to support well-informed decision making by advising all involved in the decision-making process of the geologic aspects of the issue.