

CONSENSUS INVESTIGATION AND CONFERENCE ON RESEARCH NEEDS

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Descriptors: Research, future planning, consensus survey, research needs

Research Objectives:

This project consisted of two phases. The first phase entailed conducting interviews of various governmental and non-governmental agencies which are in some way related to research in water resources. The interviews were directed toward identifying the research priorities for the next five years in the view of the respective agency for New Hampshire and the seacoast region. The objective of this phase was to gain a consensus of the future directions that research in water resources should take, and which issues should have priority.

The second phase of the project entailed a half-day conference for representatives from the interviewed agencies and research oriented organizations to come together and discuss the future research priorities of the region, and refine or resolve the conclusions obtained from the Phase I activities. The objective of this phase of the project is to provide a forum for the exchange of ideas and communication between the various agencies involved in water resources research, and to come to an understanding as to the priorities for research in the near- and long-term future.

Principle Findings and Significance:

The preliminary findings identified several areas which were commonly referenced. Several agencies suggested that research be directed toward looking at water quality in both surface and groundwater from a total biological systems approach, looking at the entire watershed. By dealing with a broader based approach, many agencies are concerned about non-point source (NPS) pollution (non-point source pollution topics such as roadway contaminants, pesticides and herbicides used in the residential zones, and agricultural nutrients). Biosolids is another topic which should have priority for research. The effect of land farming of biosolids on both ground water and surface water were of concern. Buffer zones are designed to protect surface waters from NPS pollutants, such as might occur with biosolids or roadway contaminants. Research should be directed toward identifying suitable buffer zones based on the site conditions, and evaluating their effectiveness. The effectiveness of common BMPs should also be included.

Research is also needed into the effects of land use on water quality. Included in this topic are the effects of proposed change, such as land development, timber harvest, and gravel extraction. In addition, many agencies cited the need for more detailed delineation of the ground water aquifers in the state, especially bedrock aquifers. There is also a need for baseline water quality monitoring of the surface waters in the state on a regular, long-term basis, to both evaluate the existing conditions, and also to identify real time changing conditions. Finally, many agencies cited technology transfer and public education as research needs. In this instance, the research is needed into how to best educate the public and make research results available to public and planning officials who do not have access to many of the academic journals.