

THE GOVERNMENT, NUTRIENTS AND WATER

Session Summary

Iowa Senator David Johnson, Moderator

Chuck Gipp, Director, Iowa Department of Natural Resources

Dr. Jason Cathcart, Manager of Land Use Policy, Policy Coordination and Research Branch, Alberta
Ministry of Agriculture

Dr. Jeffrey Reutter, Director, Center for Lake Erie Area Research and Stone Laboratory, Ohio State
University

Mr. Gipp focused his remarks on regulatory oversight of water issues in Iowa. The primary mission of the Iowa Department of Natural Resources (DNR)—which has jurisdiction over such issues as air, water, landfills, wastewater permitting, parks, fishing, wildlife, air quality—is to enhance the natural resources for people of Iowa. Mr. Gipp outlined two principles of regulatory enforcement. First, regulators should educate the public about the rules and requirements. The Iowa DNR works with a variety of stakeholders to help them understand the laws to avoid future issues. This also enhances relationships with industry and others in the state. Second, it is important to bring a variety of stakeholders to the table when crafting policy in order to find solutions that protect the environment while supporting agriculture. For example, a hypoxia task force was convened to Iowa that brought together point and non-point source contributors of phosphorus to craft a nutrient reduction strategy. The resulting strategy, which is voluntary for non-point sources and mandatory for point sources, is being implemented in Iowa. Mr. Gipp also noted the importance of including scientists and other experts to identify best practices in nutrient reduction strategies.

Dr. Cathcart talked about the land use planning framework that Alberta has adopted as part of its integrated regional planning and resource management initiative. The framework, which was released in December of 2008 and ratified by legislation in 2010, is designed to manage growth in the region to achieve environmental, economic and social outcomes. The framework provides a blueprint for growth, addressing opportunities for tourism and recreation, economic issues, first nation communities. It encompasses regional planning around the province's 3 major river systems, reflecting the connection between land and water use, and sets place-based achievement goals 40 years into the future. Enforcement is accomplished through existing legislation (e.g., energy regulation, public lands act, etc.). A land use secretariat was established to oversee regional planning and implementation. Dr. Cathcart highlighted some principles that are important when formulating regional management plans, including: the need for transparency and integration of policies; the need for public trust and having standards based on science. He also outlined challenges specific to the agriculture community, such as: the identification of non-point source pollution issues; cross-ministry administration and management; fragmentation and conversion of agricultural lands; and achieving public goods on private lands.

Dr. Reutter addressed phosphorus reduction strategies in the Great Lakes region. Algal blooms in Lake Erie in the 1960s and 1970s led the region to adopt a goal of reducing phosphorus levels in the lakes by 2/3. This was achieved in the 1980s by focusing on sewage treatment sources. Algal blooms in the last two decades have primarily been caused by phosphorus in agriculture runoff. Recent algal blooms in 2011 and 2013 have led to toxins in drinking water in the surrounding area, causing water system shut downs. Last year in Ohio, a Phosphorus Loading Task Force was convened that called for a 40% reduction in phosphorus levels in the lake. Dr. Reutter outlined strategies that the agriculture industry

may adopt to help achieve this goal, including: not applying manure or fertilizer on frozen ground; taking steps to ensure nutrients don't leave agriculture lands; more soil testing; targeting nutrient applications using new technologies; and developing best management practices. He also noted the importance of farmers taking steps voluntarily now before a major public health event occurs as a result of a toxic algal bloom.

Questions addressed managing buffer areas around farms and roads, the extent to which voluntary changes by major fertilizer companies can affect the market; and how state nutrient management plans are calling for changes to agricultural practices that may be damaging to the industry.