

## **WQAC Input on Potential Research Projects**

1. Identify water quality impacts at sites with heavy infrastructure associated with natural gas development (pipelines, roads, drilling pads, storage and handling areas, etc).
2. Use data from water quality and aquatic habitat monitoring to further identify impacts associated with water withdrawals.
3. Evaluate impacts associated with the later phases of natural gas development including sustained infrastructure development, erosion, and fragmentation of forest habitat.
4. Evaluate stormwater impacts associated with natural gas development, including seasonal differences in impacts.
5. Identify key water quality parameters that should be monitored in areas of natural gas development, and consider potential expansion of SRBC's remote water quality monitoring network. (Bromide and strontium were mentioned as parameters of concern.)
6. As the demand for water in the basin increases, perform research to identify new tools that could be used to manage the demand for water.
7. Perform repeat research studies or expand upon studies that are available in the "grey literature."
8. Perform research to further identify the benefits that wetlands provide in managing water quality and quantity.
9. Perform studies of freshwater mussels.
10. Perform studies of groundwater/surface water interactions, especially as they may relate to nutrient trading.
11. For planning and regulatory purposes, identify different classes of water (based on quality and reliability of sources), and relate these to different classes of water users to consider the next generation of water use needs.