

Developing recommendations for sustainable flows in the Great Lakes Basin of New York and Pennsylvania



Sandy Creek and the shore of Lake Ontario, Lakeview Wildlife Management Area @Baird Associates

Sustainable Flows:

The flow of water in a natural river or lake that sustains healthy ecosystems and the goods and services that humans derive from them

Primary Threats:

Water withdrawal & return
Dam management
Land use changes
Climate change

The Great Lakes Compact protects the waters
of the basin from diversion
And obligates the states to take steps toward
water management:

Within one year – establish a baseline of current withdrawals and consumptive uses

Within two years – promote environmentally sound and economically feasible water conservation measures

Within five years – conduct assessment on the cumulative impacts of withdrawals and consumptive uses

Within five years – create a management program for new/increased withdrawals and consumptive uses

(This RCN grant will provide the scientific basis for such a program)

The Objectives of This Project:

- Classify streams (by hydrology & geomorphology), and characterize the current hydrologic conditions in each class
- Establish clear links between degrees of hydrologic alteration and ecological impacts to sensitive biota through literature & data analysis
- Recommend flow goals and/or limits on flow alteration, spatially and temporally specific, with documentation on the needs of target species, natural processes, and habitats

Broader benefits of the project:

- Guide implementation of the Compact in other states
- Test and document these methods for other NEAFWA states



Project Partners:

- New York State Department of Environmental Conservation
- The Nature Conservancy
- Cornell University, New York Cooperative Fish and Wildlife Research Unit
- U.S. Geological Survey

Completion: January 2013

Figure 16:

