ASSESSING WETLAND AND RIPARIAN COVERAGE AND HEALTH IN THE ROCHESTER EMBAYMENT AREA OF CONCERN. ***J. Cole, A. Hall, K. Smith, G. Sprehe,*** *J. Waud, and K. Korfmacher***,** *Department of Biological Sciences – Environmental Science Program,* *jdc7601@vmsmail.rit.edu* , *amh9522@mail.isc.rit.edu* , *kds1829@vmsmail.rit.edu* , *ObsidianFlare@hotmail.com* , *jmwscl@rit.edu* , *kfkscl@rit.edu*

The 1997 **Rochester Embayment Remedial Action Plan** (RAP) defined several **use impairments** for the Rochester Embayment and the lower Genesee River. The ***"loss of fish and wildlife habitat"*** use impairment was documented in both the Embayment and the lower Genesee River. This impairment was attributed to the loss of wetlands, deforestation, agriculture, and urban/suburban development. To remove this use impairment designation, wetlands and riparian zones must be shown to have increased in area and improved in health. Using geographic information systems (GIS); satellite imagery, high resolution aerial photography, and other digital databases; global positioning systems (GPS); and pocket PCs running field versions of the GIS software, the research team delineated wetland boundaries, conducted field surveys, and calculated spatial extents for the study area's current wetland and riparian resources. In addition, six baseline wetlands were identified for in-depth field surveys. Results are being compared to earlier wetland and riparian surveys to help determine if the *"loss of fish and wildlife habitat"* use impairment should be lifted for the Rochester Embayment Area of Concern. This project was a collaboration between RIT, The Monroe County Soil and Water Conservation District, the Monroe County Environmental Management Council, and the Monroe County Department of Environmental Services (GIS), the League of Women Voters, and the Sierra Club.