

Passaic River, New Jersey. Project team consists of municipal wastewater treatment plants, the NJDEP, and experts from Rutgers and Cornell Universities. It is expected that the trading initiative will initially consist of bilateral and multilateral trades between two or more wastewater treatment plants. Point -nonpoint trading opportunities in the Passaic may include transactions between wastewater treatment plants and stormwater sources, where phosphorous credits may be generated from the implementation of an array of stormwater best management practices. The project will evaluate feasibility of various trading scenarios using the completed TMDL model for the watershed (TMDL is underway in the watershed) and by developing a bio-economic model. Monitoring will be conducted to verify environmental results.

Cape Fear, North Carolina. This project will launch a water quality credit trading pilot in the Jordan Lake watershed of the Upper Cape Fear River Basin (a nutrient TMDL is “upcoming”). The project will involve developing a water quality protection platform that combines traditional BMPs with nonstructural BMPs such as land banking, riparian buffers, and wetland restoration. Economic incentives will be created for developers to implement more environmentally sustainable land use patterns and conservation development techniques such as low impact development and other approaches that preserve open space and promote more permeable surfaces. Trading options may include municipal point-MS4, point-point, and point-nonpoint trades. The current MS4 permits and stormwater management plans will be reviewed to accommodate the inclusion of MS4s in the program. The project will provide an example of integrating urban stormwater management into a credit trading and watershed permitting program. The Cape Fear River Assembly (CFRA) will lead and conduct the project.

Bear River, Utah, Idaho, and Wyoming. This project will develop and demonstrate a water quality trading program to allow point and nonpoint pollutant sources to trade water quality credits (TP) and dynamic water quality modeling to support water quality trading and analysis of potential water quality management scenarios. Monitoring will procedures will also be developed. Trading design and implementation will be in two subbasins with existing TP TMDLs. Project team members are from the Bear River Commission and Utah State University.

Lake Tahoe, California and Nevada. This project will develop a water quality trading strategy for Lake Tahoe. Proposed work includes the use of customized watershed and lake response models (currently being developed) to link land use, atmospheric deposition, and BMPs to lake clarity; trading between agencies and local jurisdictions responsible for mitigation; and development of cross-media (i.e. air and water) trading opportunities. This strategy also requires an evaluation of interstate trading policy and options. The project will create units of trade, or pollution control ‘currency’, defined as the expected nutrient and fine sediment load reduction, project-by-project and basin-wide, that BMPs and other measures can achieve. This project is led by California Regional Water Quality Control Board, Nevada Division of Environmental Protection, and Dr. John Reuter from UC-Davis. (Note: a TMDL for nutrient and sediment inputs is scheduled to be completed in 2005).

Kalamazoo River, Michigan. With the Gun Lake Tribe as the administrative lead and Kieser & Associates as the primary technical consultant, this project will build on Kalamazoo River and Michigan-based trading experiences. The project will develop, test and implement “model” tools and infrastructure necessary to enable functioning water quality trading markets. Funding will

support agricultural BMPs to achieve load allocation goals in an EPA-approved Kalamazoo River phosphorus TMDL. Reductions will be used to test marketplace instruments and apply agricultural participation and credit banking schemes. Trading approaches will be instituted that allow for voluntary participation, insulate producers from NPDES permit liability and can be delivered consistently through traditional programs. Transferable marketplace and regulatory instruments developed here will: facilitate access to trading programs; minimize transaction and administrative costs; connect buyers and sellers; facilitate decision-making, and; quantify and track reductions. Tools will be integrated with existing regulatory programs to foster active markets. The Gun Lake Tribe will lead this effort. Outreach will be to Michigan, other states, tribes and EPA. There will be two major project tasks: 1) develop a “model” trading infrastructure, and; 2) develop a “model” trading framework for successful agricultural participation. Both will be tested and verified with real reductions through agricultural participation and other partners.