



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: NJ941

Title: A Continuation Proposal: Factors controlling methylmercury degradation in Pine Barrens lakes and the Meadowlands

Focus Categories: Toxic Substances, Non Point Pollution

Keywords: lakes, Pine Barrens, atmospheric deposition, degradation, ecosystem, mercury, methylmercury

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Federal Funds: \$30,000

Non-Federal Matching Funds: \$29,775

Congressional District: 6

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Abstract

The priority issue addressed concerns the integrity of aquatic and water associated ecosystems. Linkage between indicators and causal factors of ecosystem degradation is explored.

Mercury concentrations in fish of the Pine Barren lakes are elevated as a consequence of atmospheric deposition of mercury (Hg) and in-lake methylation processes. Tissue concentrations of mercury in fish collected from different lakes suggests that production of methylmercury (MM) is affected by factors that are unique to each lake, such as physico-chemical and biological parameters.