The Chautauqua Lake Tributary to the Allegheny/Mississippi River System

1. **Provide the name of all non-Federal interests planning to act as the sponsor, including and non-Federal interest that has included or is expected to contribute toward the non-Federal share of the proposed feasibility study or modification.** – *Chautauqua County is the sole non-Federal interest that is anticipated to act as a sponsor or contribute toward the non-Federal share of the proposed feasibility study.*

2. **State if this proposal is for a feasibility study or a modification to an authorized USACE project or feasibility study and, if a modification, specify the authorized project or study.** – *This proposal is for a feasibility study.*

3. **State the purpose of the proposed study or modification.** – *Chautauqua Lake is approximately 13,000 acres in size and is situated within an approximately 100,000 acre watershed (Figure 4) and is an impaired waterbody in accordance with section 303(d) of the Clean Water Act with phosphorous concentrations three times that of the Total Maximum Daily Load guidance value. High levels of nutrients, especially phosphorus, have resulted in excessive growth of submerged aquatic vegetation and frequent public health advisories related to blue-green algae. The excess phosphorus concentrations observed in Chautauqua Lake are attributable to accelerated erosion of streambanks and non-point sources of phosphorous throughout the Lake's 100,000 acre watershed. The deposition of sediments at the mouths of the Chautauqua Lake tributaries reduces the hydraulic capacity of the streams and promotes flooding that result in property loss, potential health and safety issues for residents and recreational boaters, and results in negative economic impacts locally and regionally. Of the fourteen subwatersheds that comprise the Chautauqua Lake watershed, only two have been assessed in detail. These assessments have provided a better understanding of subwatershed characteristics and have provided technical support for grants and informed decision making. These activities have resulted in the successful delivery of watershed restoration projects, which in turn, is reducing the amount of phosphorous in Chautauqua Lake. It is hoped that by assessing the remaining subwatersheds, we will be able to identify measures that will effectively reduce the sediment and nutrients that are negatively impacting Chautauqua Lake. Perform a study to evaluate the feasibility of improving the riparian function of the upland watershed areas and reducing non-point sources of phosphorous in an effort to mitigate excessive weed and algae growth and the management of sediments that have been deposited at the mouths of the tributaries in an effort to minimize the flood risks that are negatively impacting the environmental health and economic viability of Chautauqua Lake.*

4. **Provide an estimate, to the extent practicable, of the total cost of the proposed study or modification.** - *The study of the 12 remaining subwatersheds is estimated at approximately $480,000 or $40,000 individually.*

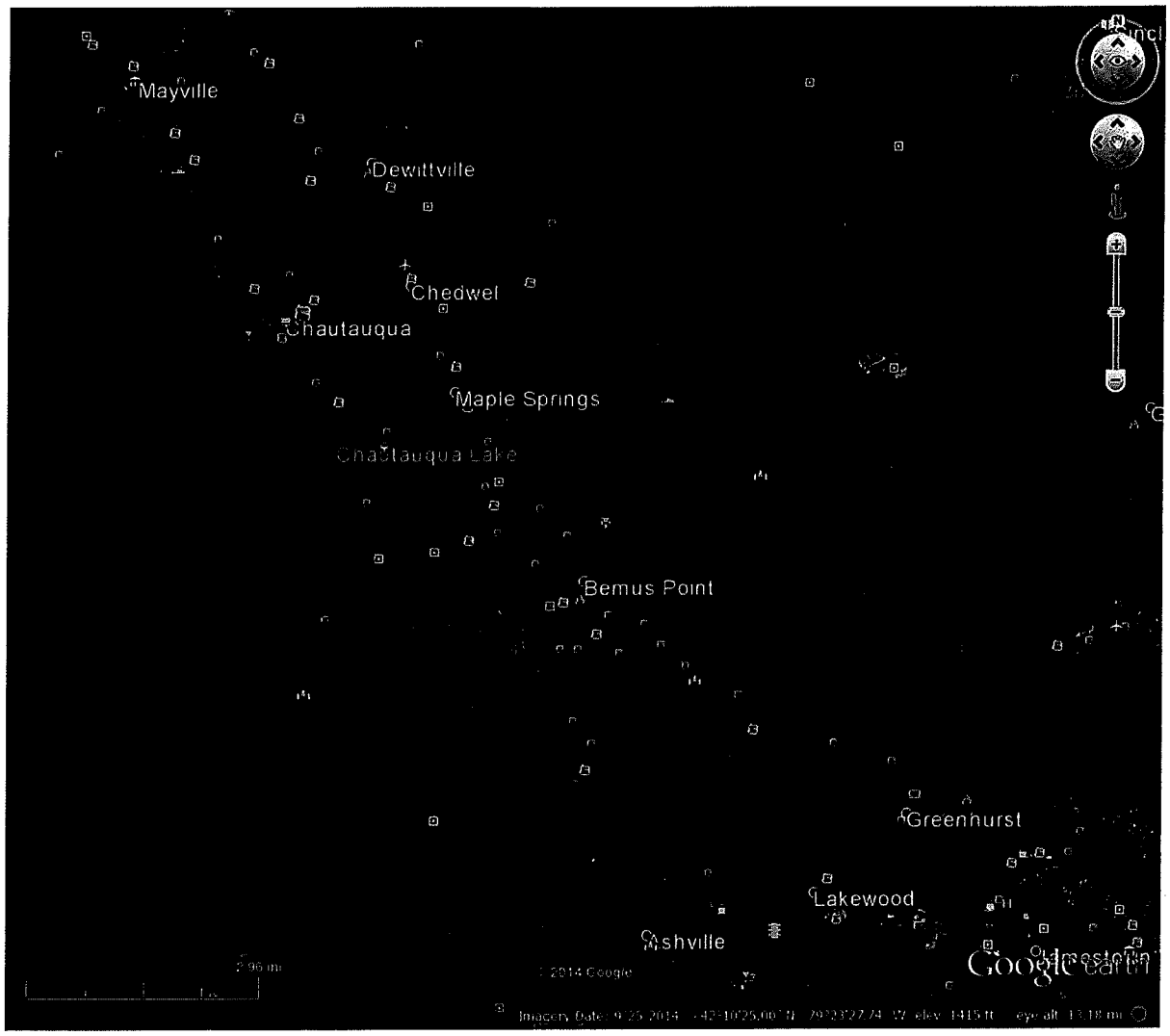
5. **Describe, to the extent practicable, the anticipated monetary and non-monetary benefits of the proposal including benefits to the protection of human life and property; improvement to transportation; the national economy; the environment; or the national security interests of the United States.** – *This proposal, if funded, will increase the probability that additional meaningful and effective environmental restoration projects with be funded and constructed. The two stream assessment projects that have been undertaken in the Chautauqua Lake Watershed thus far have leveraged approximately $500,000 in State and Federal Assistance and assistance from NGOs for the construction of streambank and lakeshore restoration projects. Chautauqua County's investments in the Chautauqua Lake watershed total well over $1 million. There are a number of anticipated benefits to the protection of human life and property through improved drinking water quality and the reduced risk of flooding, harmful algal blooms and hazards to recreational boaters. Anticipated benefits to the environment include reestablishing the riparian function of the tributaries and reduced growth of submerged aquatic vegetation and algae.*

6. **Describe if local support exists for the proposal.** – *Chautauqua County government and Chautauqua County Association of Mayors and Town Supervisors support this proposal. This proposal is also consistent with the recommendations contained within the Chautauqua County Comprehensive Plan, Chautauqua Lake Watershed Management Plan and the draft Chautauqua Lake Macrophyte Management Strategy. In addition the proposal is closely aligned with the mission of several non-governmental organizations.*

7. **State if the non-Federal interest has the financial ability to provide for the required cost share.** - *ER 1105-2-100, Appendix F, Amendment #1, 31 January 2006 provides a formula for program cost sharing for the feasibility phase of Continuing Authorities Program, where initially up to $100,000 is provided by Federal funds with the remaining costs being shared equally (50/50) with the non-Federal sponsor. Since the proposed feasibility study of the remaining Chautauqua Lake sub-watersheds is estimated at approximately $480,000, the non-Federal sponsor (Chautauqua County) would be required to invest $190,000. The County's history of delivering successful environmental restoration projects throughout the Chautauqua Lake watershed demonstrates its capacity to provide the required cost share.*

8. **Submit a letter or statement of support from each associated non-Federal interest.** – *Letters of support are attached.*

One of several public swimming areas on Chautauqua Lake closed due to the occurrence of a harmful algal bloom.



Chautauqua Lake, NY

Figure 4 – Project Location Map