

FINAL REPORT
FOREST SERVICE GRANT NO. 94-G-133

Issued to: **ACRT, Inc.**

Address: **6050 Hicks Road, Naples, NY 14512**

Project Name: **Feasibility Study of Urban Forest's Economic Value for USEPA Air Pollution and Carbon Sequestering Emission Reduction Credits and/or Mitigating Trading**

Contact Person: **Christopher J. Luley**

Phone Number: (716) 394-6060

Fax Number: (716) 394-1767

E-Mail Address:

Date of Award: June 2, 1994

Grant Modifications: N/A

Date of Expiration: May 31, 1996

Funding: Federal Share: \$45,000 plus Grantee Share: \$50,000 = Total Project: \$95,000

FS Grant Manager: **Suzy del Villar**

Address: **USDA Forest Service, 1042 Park West Court, Glenwood Springs, CO 81601**

Phone Number: (970) 928-9264

Fax Number: (970) 945-6058

Project abstract (as defined by initial proposal and contract):

Project Abstract (as defined by initial proposal)

The United States Environmental Protection Agency (EPA) policies provide that air pollution and carbon sequestering can be sold to manufacturers or utilities mandated to reduce their emissions. Urban forestry emission reduction credits (ERCs) could be established for carbon sequestering and certain air pollutants mitigated by trees. The National Ambient Air Quality Standard (NAAQS) were established in 1989. New trees planted since 1989 and increases in canopy cover and general tree health since then could provide one basis for urban forestry ERCs that could be sold by municipalities.

Project Objectives

The main objective of this study was to gather information and assess the feasibility of establishing and selling ERCs for air pollution and carbon dioxide mitigation by municipally managed urban trees. This included a review of literature, laws, regulations, business data, and research results at the federal, state and regional level.

Objectives Met Successfully

1. The project identified the current legislative, regulatory, economic, technical and scientific issues affecting the creation and sale of urban forestry ERCs.
2. The project determined that urban forestry ERCs are NOT feasible for both air pollution mitigation and carbon reduction by municipally managed trees.
3. The project defined alternatives to the creation of ERCs that could provide support and funding for urban forestry based on air pollution mitigation and carbon reduction.
4. This project determined that state and federal air quality regulators are most interested in the potential use of urban trees to mitigate the air pollutant ozone.

Objectives Not Met

None.

How Did the Project Increase the Knowledge We Have About Urban Forestry? How Did (Will) the Public Benefit?

This project determined that urban forestry will require more research and specific methods to quantify the removal of air pollutants and carbon dioxide before serious consideration can be given to the creation of ERCs. Based on the critique and discussion of this project with scientists from the EPA, USDA Forest Service, the Department of Energy (DOE), industry and

urban forestry practitioners, a number of potential roles for urban forestry in national efforts to reduce air pollution and greenhouse gases have been identified.

The public will benefit directly from this study. We have identified a number of potential uses of the urban forest to improve air quality and reduce greenhouse gases. As we investigate further how to practically implement these uses, public health and the urban environment could be enhanced, particularly in areas with poor air quality.

What Specific Quantifiable Results Were Produced? (Please Be Specific--Copies of Reports and/or Publications Can Be Attached to This Report)

1. See attached final report.
2. Written and oral presentation: Luley, C. J. 1995. Funding urban forestry: Air Pollution and carbon credits. Proc. 7th Nat. Urban For. Conf. Kollin, C. and Barratt, M. eds. American Forests. pp. 194-197.
3. Related publication developed as a result of this grant: Nowak, D. J., J. C. Stevens, S. M. Sisinni, and C. J. Luley. 1996. Effects of urban tree maintenance on atmospheric carbon dioxide. In preparation.
4. An additional proposal was developed and funded through the National Urban and Community Forestry Advisory Council as a result of this work. The proposal "Evaluating Air Quality Effects of Urban Trees: Developing Directionally Sound Programs for Use in State Ozone Attainment Goals" will investigate the effect of the urban forest on ground-level ozone using EPA accepted air quality models.

How Were the Results Disseminated to the Public?

See the oral and written presentations of results and the final report described above.

If a No-Cost Time Extension Was Granted for this Project, Why Was it Needed?

None was requested.

List the Active Partners (Key Individuals or Organizations) Involved in the Projects:

Group or Organization	Contact
USDA Forest Service	Drs. Dave Nowak and Greg McPherson
USEPA	Ms. Nancy Mayer, Innovative Strategies and Economics Group
Trexler and Associates, Inc.	Dr. Mark C. Trexler (Formerly of World Resources Institute)
USDOE	Mr. Larry Mansuetti
Urban Forestry Review Team	(See Part II, Final Report)

How Would You Evaluate the Grant Process? What Changes, If Any, Would You Recommend?

The grant process was very unorganized to begin with but has improved dramatically recently. The Requests for Proposals need to be more succinct regarding the type of requests being made, e.g. research, information gathering and dissemination, support for volunteer groups. This would help focus the type of proposals being written and should help the evaluation process.

NUCFAC is funding great projects, but it appears that very little consideration was given to how the results were going to be disseminated to the urban forestry community and the public in general. The present project is included in that comment.

Comments Considered of Importance Not Covered Above

None.



July 24, 1996

Ms. Suzanne M. del Villar
USDA Forest Service
1042 Park West Court
Glenwood Springs, CO 81601

Dear Suzanne:

Please find enclosed the final reports for grant 94-G-133 entitled *Feasibility Study of Urban Forest's Economic Value for USEPA Air Pollution and Carbon Sequestering Emission Reduction Credits and/or Mitigation Trading*. Two reports are enclosed, the brief summation of the project that you requested and a detailed report on the feasibility of obtaining carbon and air pollution credits from urban forestry developed from the information gathered during the study. Please feel free to distribute this report as you see fit.

I believe the project was a success, despite the fact that urban forestry ERCs do not appear feasible at the present time. We have defined a number of other potential uses of urban trees in air pollution mitigation and greenhouse gas reduction. As you know, The National Urban and Community Forestry Advisory Council has funded an air quality study which was conceived as a result of this project.

The final financial statements have been submitted for grant 94-G-133. If you have any questions or comments, please feel free to call me.

Sincerely,

A handwritten signature in blue ink that reads "Christopher J. Luley". The signature is written in a cursive style and is positioned above the printed name.

Christopher J. Luley, Ph.D.

Vice President, Urban Forestry Research

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