ATTACHMENT C: Professional Resumes of George T. Logan and Sigrun N. Gadwa

PROFESSIONAL RESUME

George T. Logan, MS

Principal Environmental Scientist

EDUCATION:

M.S. Natural Resources, Wildlife Management & Conservation Biology, University of Rhode Island, Kingston, R.I. 1989.

B.S. Natural Resources, Wildlife Management & Wetland Ecology, University of Rhode Island, Kingston, R.I. 1986.

Continuing Education

The Transportation Project Development Process: Training in the PennDOT Environmental Impact Statement Handbook, Harrisburg, PA, January 1994

Rapid Bioassessment Protocols of Aquatic Systems (EPA Protocols), Wetland Training Institute, Williamsport, PA, August 3-6, 1993

QUALIFICATIONS:

Certified Ecologist (2004) - The Ecological Society of America Registered Professional Soil Scientist (1989) - Society of Soil Scientists of Southern New England

Certified Professional Wetland Scientist (No. 581) (1994) - Society of Wetland Scientists

EXPERIENCE:

Mr. Logan is the Co-Owner and Principal Environmental Scientist of Rema Ecological Services, LLC. Mr. Logan specializes in tidal and inland wetland delineation and evaluation, permitting, mitigation design, and the preparation of environmental compliance documents in accordance with national (NEPA), state, and local criteria and guidelines. He also provides design and construction supervision of habitat and wetland restoration, enhancement and replacement projects. Mr. Logan performs watershed and surface water quality evaluations and provides guidance in the design of stormwater Best Management Practices (BMPs), including stormwater wetlands and biofiltration basins.

Mr. Logan has over sixteen years experience as a wildlife biologist conducting wildlife habitat evaluations and focused avian, mammalian, invertebrate and herpetofaunal surveys using both active and passive methods. He has also conducted focused surveys for several sensitive and "listed" species, and numerous aquatic biosurveys to assess the biodiversity and biotic health of ponds, lakes and watercourses. Mr. Logan has extensive experience in performing herpetological surveys including vernal pool investigations and evaluations.

Mr. Logan has participated in nearly 1,400 individual projects in New England and the Mid-Atlantic States and in 146 of 169 municipalities in Connecticut.



George T. Logan, MS

PROFESSIONAL AFFILIATIONS:

Society of Soil Scientists of Southern New England

Society of Wetland Scientists

Massachusetts Association of Conservation Commissions

Association of Massachusetts Wetland Scientists

Ecological Society of America

Society for the Study of Amphibians and Reptiles

The Wildlife Society

Soil & Water Conservation Society

Connecticut Association of Wetland Scientists (Past-President, Charter

member, Programs Committee Chairman)

PUBLICATIONS:

Logan, G.T. & S.N. Gadwa. 1999. Quinnipiac River Watershed Association Stream Study. Water Quality in the Quinnipiac River. Proceedings of a Symposium on the Impact of Nonpoint Source Pollution in the Quinnipiac River Watershed, pp. 66-70.

Logan, G.T. & S.N. Gadwa. 1998. Stream Biosurveys: *A Primer*. Quinnipiac River Watershed Association Educational Series for the Adopt-the-River Programs.

Pawlak, E.M. & G.T. Logan. 1996. Town of Cromwell Wetland Evaluation Project. Connecticut Association of Conservation and Inland Wetlands Commissions. The Habitat, Vol. 10:1

Logan, G.T., F.B. Titlow & D.G. Schall. 1995. The Scientific Basis for Protecting Buffer Zones. Proceedings of the 16th Annual Meeting of the Society of Wetland Scientists.

Pawlak, E.M. & G.T. Logan. 1995. Town of Cromwell Wetland Buffer Zone Designation Methodology. Proceedings of the 16th Annual Meeting of the Society of Wetland Scientists.

Logan, G.T., J.H. Brown, Jr., T.P. Husband & M.C. Nicholson. 1994. Conservation Biology of the Cretan Agrimi (*Capra aegagrus cretensis*). Biologia Gallo-Hellenica, Vol. 21, pp. 51-57.

Nicholson, M.C., T.P. Husband, J.H. Brown, Jr. and G.T. Logan. 1994. Implications of behavior on the management of the Cretan Agrimi (*Capra aegagrus cretensis*). Biologia Gallo-Hellenica, Vol. 21, pp. 45-50.

WORKSHOPS & CONFERENCES: (selected)

Riparian Buffer Function, Performance & Limitations. Urban Riparian Buffers Conference & Technical Training Session. April 1999. (Guest Lecturer)

George T. Logan, MS

WORKSHOPS & CONFERENCES: (selected)

The Importance of Habitat Edges. Riverside Landscaping Conference. The Rivers Alliance of Connecticut. June 1998. (*Guest Lecturer*)

Sedimentation and Erosion Control Review Session. USDA. Natural Resource Conservation Service and CPESC (Certified Professionals in Erosion Control), Concord, NH. September 2001.

Buffer Strips as Storm Water Quality Controls. EnviroExpo, Boston. May 1999. (Guest Speaker)

Identifying Wetland Soils, Fauna and Flora. Municipal Inland Wetland Staff Technical Workshops. June 1999. (Guest Speaker)

Water Quality in the Quinnipiac River: A Symposium on the Impact of Non Point Source Pollution in the Quinnipiac River Watershed. November 1998. (*Presenter*)

Our Hidden Wetlands: Vernal Pools in Connecticut. Co-sponsored by CT DEP and the Center for Coastal and Watershed Systems. November 1997 and January 1998 (Workshop Leader)

Aquatic Invertebrate & Stream Ecology Workshop. Quinnipiac River Watershed Association Workshop Series. September 1997, May 1998, June 1999, January 2000 (Workshop Leader)

The Massachusetts Association of Conservation Commissions Third Annual Conference: Wetland Buffer Zones, March 1996, (*Guest Lecturer*)

16th Annual Conference of the Society of Wetland Scientists: Wetland Understanding, Wetland Education, May 1995 (*Presenter*)

Quinnipiac River Watershed Association Forum on Non-Point Pollution: Significance of Wetlands and Wetland Buffers, October 1992 (*Guest Lecturer*)

The Massachusetts Association of Conservation Commissions Second Annual Conference, April 1995 (Guest Lecturer)

The Society of Soil Scientists of Southern New England Riparian Buffer Zone Conference, November 1994 (*Presenter*)

George T. Logan, MS

SUPPLEMENTARY INFORMATION:

1996 to present

Rema Ecological Services, LLC Principal Environmental Scientist, Owner

- Founded the company to provide natural resources management, environmental planning, compliance services, and client advocacy throughout the Northeast.
- Has participated in over 930 individual projects since the company's inception including four gas-fired, combined-cycle power plant projects, four wetland replacement projects, and several large residential, industrial and commercial endeavors.
- Acted as the Town of Waterford, Connecticut, Interim
 Environmental Planner during a ten-month tenure. Responsibilities included providing procedural and technical support to the town's Conservation Commission (a.k.a. Inland Wetlands and Watercourses Agency).

1994 to 1996

Fugro East, Inc. (Currently ENSR)

Senior Project Manager/Environmental Scientist

- Office Manager for the firm's Connecticut office, responsible for day-to-day operations, marketing, and business development.
- Wetland delineations in accordance with state and federal criteria.
- Natural resource inventories of upland, wetland and aquatic ecosystems, specializing in wildlife habitat assessments.
- Preparation of environmental compliance documentation for a variety of projects including large-scale commercial development.

1993 to 1994

A.D. Marble & Company, Inc.

Senior Environmental Planner/Wildlife Biologist

- Participated in the management of major transportation improvement projects and in the preparation of environmental documents in accordance with the National Environmental Policy Act (NEPA) while continuing involvement in the collection of baseline field data.
- Application of the Pennsylvania Department of Environmental Resources (PADER) hierarchical methodology for the selection of suitable wetland replacement sites.
- Field verification of Threatened, Endangered or Special Concern species listed by the Pennsylvania Game Commission.
- Wetland boundary identification in accordance with the unified PADER and U.S. Army Corps of Engineers (USACOE) methodology.

George T. Logan, MS

SUPPLEMENTARY INFORMATION (continued):

1989 to 1993

Soil Science & Environmental Services, Inc. Wildlife Biologist & Soil Scientist

- Acted as Project Manager responsible for field operations and report preparation for nearly 300 individual projects in over 75 towns in New England, including one town-wide wetland mapping, inventory and evaluation project.
- Wetland boundary delineation according to state and federal criteria (e.g., Connecticut and Massachusetts Statutes, USACOE methodologies).
- Ecosystem analyses and biological inventories of upland areas, tidal and inland wetlands, estuaries, streams, rivers, ponds and lakes.
- Environmental impact evaluations, including site plan review, analyses of proposed impacts and design of mitigation strategies.
- Local, state and federal permitting for impacts to natural resources, including wetlands.
- Implementation of water quality monitoring programs for streams and rivers.
- Design, construction supervision, and monitoring of wetland enhancement, restoration and creation.
- Aquatic biosurveys of streams and rivers utilizing standardized methods (e.g. EPA Rapid Bioassessment Protocols).
- Detailed faunal surveys and censuses using both active and passive methods (e.g. direct and indirect observation, live-trapping, point count avian censuses, pellet counts, etc.).
- Expert witness testimony for court and administrative proceedings.

PROFESSIONAL RESUME

Sigrun N. Gadwa, MS

Senior Ecologist

EDUCATION:

M.S., Plant Ecology, Natural Resources, University of Connecticut,

Storrs, CT, 1997.

B.A., Biology, Brown University, Providence, R.I., 1975.

Continuing Education

16 credit hours in Soil Science and Geology, 1993 - 2001

Graduate course in Phycology, Pan American University, Brownsville,

Texas, 1982

Arboriculture course, Quinnipiac College, Hamden, CT, 1984

Five Plant Pathology courses, Cook College, Rutgers University, New

Brunswick, N. J. 1978 - 1979

CERTIFICATIONS:

Registered Soil Scientist,

Society of Soil Scientists of Southern New England

EXPERIENCE:

An ecologist specializing in the assessment, monitoring, and delineation of wetlands and water resources, and in botanical and habitat inventories of ecological communities, with a Masters degree in Plant Ecology and a sub-specialty in Soil Science. Over twelve years of experience in open space acquisition planning, site plan reviews, highway alternatives analyses, delineation of jurisdictional wetland boundaries (U.S. Army Corps of Engineers), minimization of impacts on wetland functions, permitting assistance, wetland mitigation design, and preparation of habitat restoration and management plans, including control of invasive species. Specialties in listed plant surveys, stream bio-assessments and

riparian and wetland mitigation design.

PROFESSIONAL AFFILIATIONS:

Society of Soil Scientists of Southern New England

Society for Conservation Biology Society of Wetland Scientists Ecological Society of America

Connecticut Association of Wetland Scientists

Connecticut Botanical Society Connecticut Ornithological Society Cheshire Land Trust (Board Member)

PUBLICATIONS:

April 1990. Annotated Bibliography for Wetland Mitigation. M.W. Lefor, J.S. Barklay, J.S. Cooke, R.S. Craig, S.N. Gadwa, T.S. Murray,



Sigrun N. Gadwa, M.S.

PUBLICATIONS:

P.H. Rich & R.S. Siegel. Dept. Civil Engineering. Joint Highway Research Council. Report NO. FHWA-CYT-RD-JH87-6-FAB-90-2. 112 pp.

August 1990. Patterns of Herb Layer Species Association. In Lefor, M.W. et al Wetland Mitigation: Interim Report No. CT-RD-JHR-90-8, The Transportation Institute, Storrs, Conn. 97 pp.

1994. Forests. In Chesanow et al. Trails. The Cheshire Land Trust and the Cheshire Environment Commission, Cheshire, CT 96 pp.

May 1995. Wetland Mitigation: Botany. Volume 1 of 6. Lefor, M.W. and S.N. Gadwa. Report No. JR95-241. Dept. Civil Engineering, Joint Highway Research Council, Transportation Institute, Storrs, Conn. 259 pp.

River Resources Education Series, Quinnipiac River Watershed Association, Meriden, CT.

May 1995 New Haven Oysters.

June 1996 What Good are Streamside Woods

August 1996 Taking a Close Look at Streamside Woods

June 1997 Foraging in the Quinnipiac Estuary

March 1998 Stream Biosurveys (G.T. Logan & S. Gadwa)

Sept. 2000 Muddy Waters

December 1997. Plant Colonization Processes and Patterns along Shorelines of Man-made Mitigation Basins in Relation to Reproductive and Life History Traits. MS Thesis. Dept. Ecology & Evolutionary Biology. Univ. of Connecticut, Storrs, CT. 181 pp.

1999. Logan, G.T. & S.N. Gadwa. *Quinnipiac River Watershed Association Stream Study*. Water Quality in the Quinnipiac River. Proceedings of a Symposium on the Impact of Nonpoint Source Pollution in the Quinnipiac River Watershed, pp. 66-70.

October 2000. A Report on the Water Quality of the Quinnipiac River. M. Tyrell, C. Cappannari, D. Galt, S. Gadwa, L. MacMillan, R. Walters. Report to the Steering Committee of the Quinnipiac River Watershed Partnership. Q.R.W.P. Water Quality Workgroup, New Haven, CT. 19 pp.

Winter 2003. Management of Invasive Plants: On-Site Open Space Management. The Habitat 15(2):3-4. Connecticut Association of Conservation and Inland Wetland Commissions, Inc.

Spring 2003. Management of Invasive Plants: Protecting Open Space and Wetlands, Tools for Land Use Boards and Town Staff. The Habitat 15(3):4-5. Connecticut Association of Conservation and Inland Wetland Commissions, Inc.

Sigrun N. Gadwa, M.S.

PUBLICATIONS:

July 2003. Interpreting Quinnipiac Songbird Surveys: Effects of Landscape Setting on Avian Community Composition. *The Connecticut Warbler*.23(3):81-114.

January 2004. Turtle Conservation in Connecticut. Quinnipiac River Watershed Association. 4pp.

WORKSHOPS & CONFERENCES: (selected)

New England Invasive Plant Summit, Framingham Massachusetts: Wetlands permitting – a potentially powerful tool to control invasive plants. September 19-20. 2003. (*Poster Presentation*)

Sedimentation and Erosion Control Review Session. USDA Natural Resource Conservation Service and CPESC (Certified Professionals in Erosion Control), Concord, NH, September, 2001

Riparian Buffer Function, Performance & Limitations. Urban Riparian Buffers Conference & Technical Training Session. April 1999.

Environmentally Sensitive Development along the Ten Mile River. Riverside Landscaping Conference. The Rivers Alliance of Connecticut. June 1998. (Guest Lecturer)

Water Quality in the Quinnipiac River: A Symposium on the Impact of Non Point Source Pollution in the Quinnipiac River Watershed. November 1998. (Presenter)

Our Hidden Wetlands: Vernal Pools in Connecticut. Co-sponsored by CT DEP and Center for Coastal and Watershed Systems. November 1997and January 1998

Aquatic Invertebrate & Stream Ecology Workshops. Quinnipiac River Watershed Association Workshop Series. September 1997, May 1998, June 1999, January 2000

Stormwater Technologies Conference. CTDEP. November 1997.

Quinnipiac River Watershed Association Forum on Non-Point Pollution: Significance of Wetlands and Wetland Buffers, October 1992

Sigrun N. Gadwa, M.S.

SUPPLEMENTARY INFORMATION:

1999 to present

Ecological Consultant, Carya Ecological Services, LLC

Ecological fieldwork and reporting: vegetation and wetland inventories, listed plant species searches, baseline biological data collection, wetland impacts assessment, vernal pool surveys, wildlife habitat monitoring, stream bio-assessments (EPA family level macro-invertebrate RBA protocol); preparing wetland restoration & mitigation plans; site plan reviews; water quality monitoring; wetland delineation & boundary verification ((ACOE plots); sedimentation & erosion inspections; over 75 projects. Contractor for CTDEP Wildlife Division: vegetation and wetland inventories & mapping of large Wildlife Management Areas (WMAs). Principal Ecologist for Rema Ecological Services, LLC (an environmental science collaborative) in Manchester and Newtown, CT. For the Quinnipiac River Watershed Association, responsible for purple loosestrife biological control program, and advisor for volunteer monitoring program. Chair of the Habitat Work Group of the Quinnipiac River Watershed Partnership, directing project to identify and document Quinnipiac watershed habitats in need of protection or restoration.

1995 to 1999

Quinnipiac River Watershed Association, Meriden, CT Executive Director and Staff Scientist

Development & coordination of volunteer monitoring program, including stream bioassessments, turbidity monitoring, and baseline bird and wildlife surveys; site plan reviews of projects impacting the watershed; writing testimony, publicity, educational materials, and grant reports and applications; organizing canoe trips, ecology workshops, and clean-ups; liaison with town and state officials.

1991 to 1995

De Leuw-Cather, Inc., East Haven, CT Environmental Planner/Field Ecologist

Field data collection, analysis, and report preparation, primarily for large highway projects; specialties included listed plant searches, wetland functional assessments, mitigation design, vegetation monitoring, & wetland delineation (ACOE method).

1987 to 1991

University of Connecticut Department of Civil Engineering, Storrs Wetlands Researcher

Part of an interdisciplinary team studying man-made replication wetlands and natural reference wetlands. Took part in research design; collected

Sigrun N. Gadwa, M.S.

SUPPLEMENTARY INFORMATION:

(continued)

vegetation, soils, & hydrologic data; literature searches; data analysis. Research used in producing a wetlands mitigation related manual for the Connecticut Department of Transportation and for master's thesis.

1974 to 1975

Teaching Assistant, Plant Systematics, Brown University.

1968 to 1975

Stewardship Volunteer, Long Island Nature Conservancy.

Nature trail development & maintenance, botanical inventories, writing preserve descriptions and self-guided nature trail brochures.