

FINAL PROGRESS REPORT

Date: July 30th 2014

Report Period: April 1st 2011 to June 30st 2014

Grant Project Period: April 1st 2011 to June 30st 2014 (including extension)

Grant Recipient: Manomet, Inc.

Grant Number: 11-DG-11420004-041

Recipient Contact Person: Andrew Whitman

Principal Investigator/Project Director: Andrew Whitman

Progress Achieve in Accomplishing Project Goals & Objectives (*Goals and objectives should correspond to the goals and objectives in the approved grant application*).

Goal 1 Use existing tools to assess how urban forests can help safeguard communities from impacts of climate change /Objective 1- (Data collection, Vulnerability assessment, Resiliency assessment, Ecosystem services assessment)

Goal 1: Use existing tools to assess how urban forests can help safeguard communities from impacts of climate change

Data collection Completed

Vulnerability assessment Completed

Resiliency assessment Completed

Ecosystem services assessment Completed

Goal 2 Build and disseminate guidance information that can reduce risk of climate change impacts to urban forests and communities / Objective 2

Literature review and meta-analysis Completed

Stakeholder evaluation of “climate-smart” management strategies Completed

Disseminate information through partners and stakeholder workshops Mostly completed (disseminated through newsletter articles and workshops, we will do a final posting through ME Forest Service, NH Forest Extension, and VT Urban and Community Forestry Council once everything is posted)

Goal 3 Explore ways of using ecosystem service markets to help financially support climate change adaptation of urban forests / Objective 3

Goal 3/Objective 1: Monetize carbon and ecosystem service values of urban and community forests – Completed, will posted to web by 1 Dec 2014.

Goal 3/Objective 2: Develop and evaluate feasibility of carbon offset project for Bath’s forests – Completed, we have completed a feasibility assessment of small carbon offset projects that use registered carbon credits and they are not uneconomical.

Goal 3/Objective 3: Feasibility assessment of payment for ecosystem services project for urban forestry – Completed, we assessed the concept of a voluntary carbon offset project (non-registered carbon credits) for urban forests for application in Bath, South Portland, and Sanford and concluded that they have limited utility. We thoroughly tested this approach in application to riparian sites in Maine and Vermont.

Goal 3/Objective 4: Stakeholder workshops - Urban forests and climate change (n=4, regional, and national) – We have held three workshops on forest adaptation and climate change in Sagadahoc County (about 30 people each). We reviewed climate change and adaptation strategies as part of a field tour on land trust land with New England Forest Foundation (23 people). We held workshops:

Local

“The Land Conservation Response to Climate Change: Adaptation Strategies” (Mount Grace Land Conservation Trust, 28 July 2011, Athol, Massachusetts.

“Developing a Climate Change Adaptation Plan for The Narrows WMA”, Vermont ANR, April 15th 2012; 10 participants.

“Changing Expectations for Forests & Agriculture: Managing for a Future Forest”, Kennebec Estuary Land Trust, Bath, ME, October 27, 2012, 70 participants.

“Urban and Community Forest Workshop on climate change and using I-tree for Sagadahoc Region”, (Topsham, ME, September 2013, 15 participants.

State Workshops

“Managing urban and community forests to increase community resiliency to climate change”, ME Land Trust Network Steering Committee, October 22, 2013, Augusta, ME.

“Adapting to Climate Change: Using Local Forests to Make Communities More Resilient to Climate Change”, Using Trees in the Urban Landscape conference, Tower Hill Botanic Garden, Boylston, MA; 75 participants.

“WeatherWise Worksheet for Land Trusts Forests”, Maine Land Trust Network Annual Workshop, Topsham, Maine, April 26th 2014; 65 participants.

“Using urban forests to increase community resiliency to climate change”, Vermont Urban & Community Forestry Council, Rutland, VT, 11 June 2014; 20 participants.

Regional Workshops

“Using urban forests to increase community resiliency to climate change”, NE SAF Annual Meeting, Nashua, NH, 26 March 2014; 65 participants.

“Using urban forests to increase community resiliency to climate change”, Local Solutions: Northeast Climate Change Preparedness Conference, Manchester, NH, 20 May 2014; 65 participants.

National Workshops

We unsuccessfully submitted presentation proposals for the 2014 Land Trust Rally and 2014 National SAF meetings

Goal 3/Objective 5: Newsletter- Money grows on trees: The Financial Value of Bath’s Forests – Versions of this article have been distributed by the Maine Townsman (magazine of the Maine Municipal Association, Forests for Maine’s Future (e-newsletter aimed at forest conservation forestry community), and the Bath Community Forestry News (goes to all citizens in Bath, Maine) and has been submitted for publication in the e-newsletter of New England ISA (goes to arborists across region).

Goal 3/Objective 6: Newsletter-Bath’s forests and climate change: safeguarding our community – Versions of this article have been provisionally accepted for publication in Bath Community Forestry News (goes to all citizens in Bath, Maine) and e-newsletter of New England ISA (goes to arborists across region).

Goal 3/Objective 7: Newsletter-Climate change adaptation and urban forests – Versions of this article have been submitted to and provisionally accepted by Bath Community Forestry News (goes to all citizens in Bath, Maine).

Difficulties Encountered (*As applicable, should include information on specific reasons why goals and objectives were not met, and analysis and explanations of cost overruns and high unit costs*)

Goal 1, 2, and 3 (all Objectives):

Problem(s): Lead staff person left project in middle of year.

Resolution/Corrective Action Plan and Schedule: We hired a new staff person.

Key Partner (Tom Hoerth) had a major medical consideration and separate personal situation arise during project period.

Status of Deliverables

Deliverables: Outreach

Stakeholder workshops - Completed (see above, n=4, state, regional) no national workshops (proposal were not accepted by national organizations sponsoring venues for national workshops)

Newsletter- Money grows on trees: The Financial Value of Bath’s Forests - Completed (see above)

Newsletter-Bath’s forests and climate change: safeguarding our community - Completed (see above)

Newsletter-Climate change adaptation and urban forests - Completed (see above)

Newsletter- Urban forests and ecosystem services: the feasibility of using ecosystem service markets to fund urban forestry projects - Completed (see above)

Deliverables: Technical Reports (titles)

How-to-case studies-Using I-tree software to assess vulnerabilities and resiliency of urban forests to climate change. - Completed, being formatted, to be posted to web by 1 Dec 2014

Creating climate-smart management plans for northern urban forests: A case study from Bath Maine - Drafted, to be formatted, to be posted to web by 1 Dec 2014

Weather-wise workbook of management strategies for safeguarding urban and community forests. - Completed, being formatted, to be posted to web by 1 Dec 2014

Urban forests, climate change, and ecosystem services: the feasibility of monetizing the ecological benefits of urban forests. - Completed and posted

Deliverables: Policy Outcomes

• - Revision of Bath’s Climate Action Plan to include municipal forest contributions to climate change adaptation - Completed, being formatted, to be posted to web by 1 Dec 2014

• - Adoption of climate-smart management strategies by the City of Bath, other communities in Sagadahoc County (goal >3), area land trusts (goal >5), and private land owners (goal >5). - Partially completed: adopted one community (City of Bath), three land trusts (New England Forestry Foundation, Kennebec estuary Land Trust, Brunswick-Topsham Land Trust), and no private landowners.

Signature of Authorized Official _____ Date 7/30/14 _____