

**V(A). Planned Program (Summary)**

**Program # 2**

**1. Name of the Planned Program**

Climate Change

**V(B). Program Knowledge Area(s)**

1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area   | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---------|--|-----------------|-----------------|----------------|----------------|
| 101     | Appraisal of Soil Resources  | 5%              |                 |                |                |
| 112     | Watershed Protection and Management  | 10%             |                 |                |                |
| 122     | Management and Control of Forest and Range Fires                                       | 15%             |                 |                |                |
| 123     | Management and Sustainability of Forest Resources                                      | 15%             |                 |                |                |
| 125     | Agroforestry   | 15%             |                 |                |                |
| 132     | Weather and Climate  | 25%             |                 |                |                |
| 403     | Waste Disposal, Recycling, and Reuse   | 10%             |                 |                |                |
| 803     | Sociological and Technological Change Affecting Individuals, Families, and Communities | 5%              |                 |                |                |
|         | <b>Total</b>   | 100%            |                 |                |                |

**V(C). Planned Program (Inputs)**

1. Actual amount of professional FTE/SYs expended this Program

| Year: 2010 | Extension |      | Research |      |
|------------|-----------|------|----------|------|
|            | 1862      | 1890 | 1862     | 1890 |
| Actual     | 4.5       | 0.0  | 0.0      | 0.0  |

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

| Extension           |                | Research       |                |
|---------------------|----------------|----------------|----------------|
| Smith-Lever 3b & 3c | 1890 Extension | Hatch          | Evans-Allen    |
| 109513              | 0              | 0              | 0              |
| 1862 Matching       | 1890 Matching  | 1862 Matching  | 1890 Matching  |
| 264343              | 0              | 0              | 0              |
| 1862 All Other      | 1890 All Other | 1862 All Other | 1890 All Other |
| 293602              | 0              | 0              | 0              |

**V(D). Planned Program (Activity)**

**1. Brief description of the Activity**

- General activities in support of Climate Change (Direct; Club, Conference, Program, Consultation, Scholarship, or Training)
- General activities in support of Climate Change (Indirect; Applied Research, Media, Internet, Publication, Resulting from Training)
- Marine Resources Management Activities (Direct; Club, Conference, Program, Consultation, Scholarship, or Training)
- Marine Resources Management Activities (Indirect; Applied Research, Media, Internet, Publication, Resulting from Training)
- Small Woodlot Management Activities (Direct; Club, Conference, Program, Consultation, Scholarship, or Training)
- Water Quality Resource Management Activities (Direct; Club, Conference, Program, Consultation, Scholarship, or Training)
- Water Quality Resource Management Activities (Indirect; Applied Research, Media, Internet, Publication, Resulting from Training)

**2. Brief description of the target audience**

- Agricultural Producers (Adult)
- Community Leaders (Adult)
- Extension - staff (Adult)
- Extension Staff (Adult)
- Forestland Owner (Adult)
- General Public (Adult)
- General Public (Youth)
- Small or Home-Based Business Owners - Current (Adult)
- Teachers (Adult)
- Volunteers (Adult)
- Watershed Stewards (Adult)

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

| 2010          | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---------------|------------------------|--------------------------|-----------------------|-------------------------|
| <b>Plan</b>   | {NO DATA}              | {NO DATA}                | {NO DATA}             | {NO DATA}               |
| <b>Actual</b> | 4119                   | 6794                     | 569                   | 0                       |

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

Year: 2010

Plan:

Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

| 2010          | Extension | Research | Total |
|---------------|-----------|----------|-------|
| <b>Actual</b> | 0         | 0        | 0     |

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Direct; Club, Conference, Program, Consultation, Scholarship, or Training

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 244    |

**Output #2**

**Output Measure**

- Indirect; Applied Research, Media, Internet, Publication, Resulting from Training

| Year | Target            | Actual |
|------|-------------------|--------|
| 2010 | {No Data Entered} | 128    |

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

| O. No. | OUTCOME NAME  |
|--------|---|
| 1      | Manage natural resources to promote land, water and air quality |
| 2      | Form/join networks for citizen action and education             |
| 3      | Demonstrate application of leadership skills                    |
| 4      | Adopt sustainable living practices                              |
| 5      | Assess community vulnerabilities, needs, and assets             |
| 6      | Adopt effective community strategies and solutions              |
| 7      | Evaluate Climate Change   |

## **Outcome #1**

### **1. Outcome Measures**

Manage natural resources to promote land, water and air quality

### **2. Associated Institution Types**

- 1862 Extension

### **3a. Outcome Type:**

Change in Action Outcome Measure

### **3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | {No Data Entered}          | 2517          |

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Maintaining a Valuable Asset; Sand Beaches: Sand beaches are a major contributor to the economies of Southern Maine coastal communities. Chronic erosion can damage property values and the economic potential of this valuable asset. Understanding changes due to erosion and making appropriate management decisions is a result of long term data collection and analysis.

#### **What has been done**

The Southern Maine Beach Profile Monitoring Program has been operating under the leadership of Maine Sea Grant and UMaine Extension since 1999. Our program coordinates community volunteers to engage in controlled monitoring of beach profiles in order to provide data on changes that may result in damage to beaches.

#### **Results**

Our 11 year dataset is routinely used as a basis for management decisions in order to maintain adjacent property values and the value of beaches to communities. As an example, our profiling data contributed to a recent decision to reconstruct a seawall at Higgins Beach in Scarborough Maine that helps sustain property values responsible for generating more than \$2.3 million in property taxes from adjacent properties. As a key indicator of the value seven communities (York, Ogunquit, Wells, Kennebunk, Saco, Scarborough, South Portland) all maintain support for the Program to help ensure long-term value of this important community asset.

### **4. Associated Knowledge Areas**

| <b>KA Code</b> | <b>Knowledge Area</b>               |
|----------------|-------------------------------------|
| 101            | Appraisal of Soil Resources         |
| 112            | Watershed Protection and Management |

|     |  |
|-----|--|
| 123 | Management and Sustainability of Forest Resources                                      |
| 125 | Agroforestry   |
| 403 | Waste Disposal, Recycling, and Reuse   |
| 803 | Sociological and Technological Change Affecting Individuals, Families, and Communities |

**Outcome #2**

**1. Outcome Measures**

Form/join networks for citizen action and education

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 95     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area   |
|---------|--|
| 112     | Watershed Protection and Management  |
| 122     | Management and Control of Forest and Range Fires                                       |
| 123     | Management and Sustainability of Forest Resources                                      |
| 132     | Weather and Climate  |
| 403     | Waste Disposal, Recycling, and Reuse   |
| 803     | Sociological and Technological Change Affecting Individuals, Families, and Communities |

**Outcome #3**

**1. Outcome Measures**

Demonstrate application of leadership skills

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 149    |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area   |
|---------|--|
| 112     | Watershed Protection and Management  |
| 122     | Management and Control of Forest and Range Fires                                       |
| 123     | Management and Sustainability of Forest Resources                                      |
| 403     | Waste Disposal, Recycling, and Reuse   |
| 803     | Sociological and Technological Change Affecting Individuals, Families, and Communities |

**Outcome #4**

**1. Outcome Measures**

Adopt sustainable living practices

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|------|---------------------|--------|
| 2010 | {No Data Entered}   | 52     |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area   |
|---------|--|
| 112     | Watershed Protection and Management  |
| 122     | Management and Control of Forest and Range Fires                                       |
| 123     | Management and Sustainability of Forest Resources                                      |
| 132     | Weather and Climate  |
| 403     | Waste Disposal, Recycling, and Reuse   |
| 803     | Sociological and Technological Change Affecting Individuals, Families, and Communities |

**Outcome #5**

**1. Outcome Measures**

Assess community vulnerabilities, needs, and assets

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | {No Data Entered}          | 5015          |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| <b>KA Code</b> | <b>Knowledge Area</b>  |
|----------------|--|
| 112            | Watershed Protection and Management  |
| 122            | Management and Control of Forest and Range Fires                                       |
| 123            | Management and Sustainability of Forest Resources                                      |
| 125            | Agroforestry   |
| 132            | Weather and Climate  |
| 403            | Waste Disposal, Recycling, and Reuse   |
| 803            | Sociological and Technological Change Affecting Individuals, Families, and Communities |

**Outcome #6**

**1. Outcome Measures**

Adopt effective community strategies and solutions

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | {No Data Entered}          | 168           |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| <b>KA Code</b> | <b>Knowledge Area</b>  |
|----------------|--|
| 112            | Watershed Protection and Management  |
| 122            | Management and Control of Forest and Range Fires                                       |
| 123            | Management and Sustainability of Forest Resources                                      |
| 403            | Waste Disposal, Recycling, and Reuse   |
| 803            | Sociological and Technological Change Affecting Individuals, Families, and Communities |

**Outcome #7**

**1. Outcome Measures**

Evaluate Climate Change

**2. Associated Institution Types**

- 1862 Extension

**3a. Outcome Type:**

Change in Knowledge Outcome Measure

**3b. Quantitative Outcome**

| <b>Year</b> | <b>Quantitative Target</b> | <b>Actual</b> |
|-------------|----------------------------|---------------|
| 2010        | {No Data Entered}          | 0             |

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Maine's Climate Future: In 2009 the 124th Maine Legislature passed a resolve to create a stakeholder-based group to evaluate climate change adaptation options for Maine.

**What has been done**

As requested by the state's Governor, Maine Sea Grant and UMaine Extension collaborated with the University of Maine Climate Change Institute and other partners to edit and produce Maine's Climate Future's: An Initial Assessment. This document served as the foundation for the statewide stakeholder process for climate preparation through a resolve from the legislature to work towards gathering data, information and recommendations for all sectors across Maine. This

included the commitment of 67 stakeholder participants meeting consistently during a one-year timeframe for which we contributed community-based education expertise for both the Steering Committee and the Marine Committee.

**Results**

This resulted in a consensus and summary documents provided to the legislature who in turn created a resolve to continue the work toward the development of a complete Climate Change Adaptation Plan for Maine, work that was initiated in the following legislative session.

**4. Associated Knowledge Areas**

| <b>KA Code</b> | <b>Knowledge Area</b> |
|----------------|-----------------------|
| 132            | Weather and Climate   |

**V(H). Planned Program (External Factors)**

**External factors which affected outcomes**

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Public Policy changes
- Populations changes (immigration, new cultural groupings, etc.)

**Brief Explanation**

**V(I). Planned Program (Evaluation Studies and Data Collection)**

**1. Evaluation Studies Planned**

- Before-After (before and after program)
- During (during program)
- Case Study

**Evaluation Results**

**Key Items of Evaluation**