V(A). Planned Program (Summary)

Program # 16

1. Name of the Planned Program

4.1 Natural Resource Management

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

<table>
<thead>
<tr>
<th>KA Code</th>
<th>Knowledge Area</th>
<th>%1862 Extension</th>
<th>%1890 Extension</th>
<th>%1862 Research</th>
<th>%1890 Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>101</td>
<td>Appraisal of Soil Resources</td>
<td>6%</td>
<td></td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>Soil, Plant, Water, Nutrient Relationships</td>
<td>19%</td>
<td></td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>Protect Soil from Harmful Effects of Natural Elements</td>
<td>11%</td>
<td></td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>123</td>
<td>Management and Sustainability of Forest Resources</td>
<td>9%</td>
<td></td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>Urban Forestry</td>
<td>2%</td>
<td></td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>125</td>
<td>Agroforestry</td>
<td>2%</td>
<td></td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>132</td>
<td>Weather and Climate</td>
<td>5%</td>
<td></td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>134</td>
<td>Outdoor Recreation</td>
<td>4%</td>
<td></td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>135</td>
<td>Aquatic and Terrestrial Wildlife</td>
<td>14%</td>
<td></td>
<td>17%</td>
<td></td>
</tr>
<tr>
<td>136</td>
<td>Conservation of Biological Diversity</td>
<td>27%</td>
<td></td>
<td>16%</td>
<td></td>
</tr>
<tr>
<td>214</td>
<td>Vertebrates, Mollusks, and Other Pests Affecting Plants</td>
<td>1%</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

Total 100% 100%

V(C). Planned Program (Inputs)

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

<table>
<thead>
<tr>
<th>Year: 2009</th>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1862</td>
<td>1890</td>
</tr>
<tr>
<td>Plan</td>
<td>9.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Actual</td>
<td>63.9</td>
<td>0.0</td>
</tr>
</tbody>
</table>

2. Institution Name: Cornell University

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

<table>
<thead>
<tr>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith-Lever 3b &amp; 3c</td>
<td>Hatch</td>
</tr>
<tr>
<td>290863</td>
<td>718092</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1862 Matching</th>
<th>1890 Matching</th>
<th>1862 Matching</th>
<th>1890 Matching</th>
</tr>
</thead>
<tbody>
<tr>
<td>290863</td>
<td>0</td>
<td>718092</td>
<td>0</td>
</tr>
</tbody>
</table>

1862 All Other | 1890 All Other | 1862 All Other | 1890 All Other |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
2. **Institution Name:** NY State Agricultural Experiment Station

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

<table>
<thead>
<tr>
<th>Extension</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smith-Lever 3b &amp; 3c</strong></td>
<td><strong>1890 Extension</strong></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>1862 Matching</strong></td>
<td><strong>1890 Matching</strong></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>1862 All Other</strong></td>
<td><strong>1890 All Other</strong></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

V(D). Planned Program (Activity)

1. **Brief description of the Activity**

This is a statewide educational program entailing a wide range of applied research activities and multiple education methods depending on local context and need. Campus-based faculty and extension associates, regional specialists and county-based educators all are involved in designing, implementing, and evaluating tailored educational efforts depending on the focus and scope of their role.

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

Residents and property owners are targeted with stewardship and natural resources protection for their properties. Businesses, organizations, and producers are targeted with information improved management practices and alternative land uses, such as agroforestry. Local government and community leaders are targeted with information related to governmental management of natural resources, such as land use planning and open space preservation. Environmental planners and managers and technical assistance providers, such as foresters, are targeted with in-depth information related to their audiences/constituents.

V(E). Planned Program (Outputs)

1. **Standard output measures**

<table>
<thead>
<tr>
<th>2009</th>
<th>Direct Contacts Adults</th>
<th>Indirect Contacts Adults</th>
<th>Direct Contacts Youth</th>
<th>Indirect Contacts Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>12000</td>
<td>100000</td>
<td>25000</td>
<td>35000</td>
</tr>
<tr>
<td>Actual</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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

*Patent Applications Submitted*

- **Year:** 2009
- **Plan:** 0
- **Actual:** {No Data Entered}

*Patents listed*

{No Data Entered}

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

*Number of Peer Reviewed Publications*

<table>
<thead>
<tr>
<th>2009</th>
<th>Extension</th>
<th>Research</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>0</td>
<td>290</td>
<td></td>
</tr>
</tbody>
</table>
2009 NY State Agricultural Experiment Station Research and Cornell University Research and Extension Combined Annual Report of Accomplishments and Results - 4.1 Natural Resource Management

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

● # non-credit instructional activities directed to this program.
Not reporting on this Output for this Annual Report

Output #2

Output Measure

● # non-credit instructional activity contact hours directed to this program.
Not reporting on this Output for this Annual Report

Output #3

Output Measure

● # of agricultural/ natural resources producers and business representatives completing educational programs on managing natural resources, invasive species, and/or biodiversity. (4.1.1a)
Not reporting on this Output for this Annual Report

Output #4

Output Measure

● # of organization and business representatives completing educational programs on managing natural resources, invasive species, and/or biodiversity. (4.1.2a)
Not reporting on this Output for this Annual Report

Output #5

Output Measure

● # of local government officials and community leaders completing educational programs on managing natural resources, invasive species, open space preservation, alternative land uses and/or biodiversity. (4.1.3a)
Not reporting on this Output for this Annual Report

Output #6

Output Measure

● # of consumers, residents, and landowners completing educational programs on natural resources protection, invasive species, and/or biodiversity. (4.1.4a)
Not reporting on this Output for this Annual Report

Output #7

Output Measure

● # of teachers and youth professionals and volunteers completing educational programs on natural resources protection, invasive species, and/or biodiversity. (4.1.5a)
Not reporting on this Output for this Annual Report

Output #8

Output Measure

● # of youth completing educational programs on natural resources protection, invasive species, and/or biodiversity. (4.1.6a)
Not reporting on this Output for this Annual Report

Report Date 06/09/2010
### V(G). State Defined Outcomes

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

<table>
<thead>
<tr>
<th>O. No.</th>
<th>OUTCOME NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Documented instances in which implementation of natural resources management, practices and/or land use policies lead to increased open space preservation, enhanced or protected natural resources, enhanced biodiversity, and/or increases in alternative land use. (4.1.3f)</td>
</tr>
<tr>
<td>2</td>
<td>Increased local economic activities attributable at least in part to enhanced natural resources management and/or increased alternative land uses. (4.1.3g)</td>
</tr>
<tr>
<td>3</td>
<td>Documented instances in which implementation of natural resources management practices by individual consumers, residents, and/or private landowners lead to increased open space preservation, enhanced or protected natural resources, enhanced biodiversity. (4.1.4d)</td>
</tr>
<tr>
<td>4</td>
<td># of youth documented to have chosen natural resources-related careers. (4.1.6e)</td>
</tr>
<tr>
<td>5</td>
<td>Documented instances in which implementation of natural resources management practices by agricultural/natural resources producers or other businesses persons lead to increased open space preservation, enhanced/protected natural resources, biodiversity and/or land use. (4.1.1d)</td>
</tr>
<tr>
<td>6</td>
<td># of agricultural/natural resources producers and business representatives who demonstrate knowledge gains about managing natural resources, invasive species, and/or biodiversity. (4.1.1b)</td>
</tr>
<tr>
<td>7</td>
<td># of organization and business representatives who demonstrate knowledge gains about managing natural resources, invasive species, and/or biodiversity. (4.1.2b)</td>
</tr>
<tr>
<td>8</td>
<td># of local government officials and community leaders who demonstrate knowledge gains about managing natural resources, invasive species, open space preservation, alternative land uses and/or biodiversity. (4.1.3b)</td>
</tr>
<tr>
<td>9</td>
<td># of consumers, residents, and landowners who demonstrate knowledge gains about natural resources management, invasive species, and/or biodiversity. (4.1.4b)</td>
</tr>
<tr>
<td>10</td>
<td># of teachers and youth professionals and volunteers who demonstrate knowledge gains about natural resources management, invasive species and/or biodiversity. (4.1.5b)</td>
</tr>
<tr>
<td>11</td>
<td># of youth who demonstrate knowledge gains about natural resources management, invasive species and/or biodiversity. (4.1.6b)</td>
</tr>
<tr>
<td>12</td>
<td># of agricultural/natural resources producers and business representatives documented to have modified existing practices or technologies and/or adopted new management practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.1c)</td>
</tr>
<tr>
<td>13</td>
<td># of organization and business representatives documented to have modified existing practices or technologies and/or adopted new management practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.2c)</td>
</tr>
<tr>
<td>14</td>
<td># of local government officials and community leaders documented to have modified existing practices or technologies and/or adopted new management practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.3c)</td>
</tr>
<tr>
<td>15</td>
<td># of communities documented to have thoroughly assessed the status of their natural resources. (4.1.3d)</td>
</tr>
<tr>
<td>16</td>
<td># of producers, businesses, local governments, organizations, landowners, and individuals collaborate to develop and implement natural resources management strategies. (4.1.3e)</td>
</tr>
<tr>
<td>17</td>
<td># of consumers, residents, and landowners documented to have modified existing practices or technologies and/or adopted new management practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.4c)</td>
</tr>
<tr>
<td>18</td>
<td># of teachers and youth professionals and volunteers who incorporate natural resources management and/or biodiversity knowledge into curriculum. (4.1.5c)</td>
</tr>
<tr>
<td>19</td>
<td># of youth documented to have modified existing practices and/or adopted new practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.6c)</td>
</tr>
</tbody>
</table>

Report Date 06/09/2010
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| # | # of youth introduced to variety of environmental and natural resources career options. (4.1.6d) |

Outcome #1

1. Outcome Measures

Documented instances in which implementation of natural resources management practices and/or land use policies lead to increased open space preservation, enhanced or protected natural resources, enhanced biodiversity, and/or increases in alternative land use. (4.1.3f)

Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

Increased local economic activities attributable at least in part to enhanced natural resources management and/or increased alternative land uses. (4.1.3g)

Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

Documented instances in which implementation of natural resources management practices by individual consumers, residents, and/or private landowners lead to increased open space preservation, enhanced or protected natural resources, enhanced biodiversity. (4.1.4d)

Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

# of youth documented to have chosen natural resources-related careers. (4.1.6e)

Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

Documented instances in which implementation of natural resources management practices by agricultural/natural resources producers or other business persons lead to increased open space preservation, enhanced/protected natural resources, biodiversity and/or land use. (4.1.1d)

Not Reporting on this Outcome Measure

Outcome #6

1. Outcome Measures

# of agricultural/natural resources producers and business representatives who demonstrate knowledge gains about managing natural resources, invasive species, and/or biodiversity. (4.1.1b)

Not Reporting on this Outcome Measure
Outcome #7

1. Outcome Measures

# of organization and business representatives who demonstrate knowledge gains about managing natural resources, invasive species, and/or biodiversity. (4.1.2b)

Not Reporting on this Outcome Measure

Outcome #8

1. Outcome Measures

# of local government officials and community leaders who demonstrate knowledge gains about managing natural resources, invasive species, open space preservation, alternative land uses and/or biodiversity. (4.1.3b)

Not Reporting on this Outcome Measure

Outcome #9

1. Outcome Measures

# of consumers, residents, and landowners who demonstrate knowledge gains about natural resources management, invasive species, and/or biodiversity. (4.1.4b)

Not Reporting on this Outcome Measure

Outcome #10

1. Outcome Measures

# of teachers and youth professionals and volunteers who demonstrate knowledge gains about natural resources management, invasive species and/or biodiversity. (4.1.5b)

Not Reporting on this Outcome Measure

Outcome #11

1. Outcome Measures

# of youth who demonstrate knowledge gains about natural resources management, invasive species and/or biodiversity. (4.1.6b)

Not Reporting on this Outcome Measure

Outcome #12

1. Outcome Measures

# of agricultural/natural resources producers and business representatives documented to have modified existing practices or technologies and/or adopted new management practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.1c)

Not Reporting on this Outcome Measure
Outcome #13

1. Outcome Measures

# of organization and business representatives documented to have modified existing practices or technologies and/or adopted new management practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.2c)

Not Reporting on this Outcome Measure

Outcome #14

1. Outcome Measures

# of local government officials and community leaders documented to have modified existing practices or technologies and/or adopted new management practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.3c)

Not Reporting on this Outcome Measure

Outcome #15

1. Outcome Measures

# of communities documented to have thoroughly assessed the status of their natural resources. (4.1.3d)

Not Reporting on this Outcome Measure

Outcome #16

1. Outcome Measures

# of producers, businesses, local governments, organizations, landowners, and individuals collaborate to develop and implement natural resources management strategies. (4.1.3e)

Not Reporting on this Outcome Measure

Outcome #17

1. Outcome Measures

# of consumers, residents, and landowners documented to have modified existing practices or technologies and/or adopted new management practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.4c)

Not Reporting on this Outcome Measure

Outcome #18

1. Outcome Measures

# of teachers and youth professionals and volunteers who incorporate natural resources management and/or biodiversity knowledge into curriculum. (4.1.5c)

Not Reporting on this Outcome Measure
Outcome #19

1. Outcome Measures

# of youth documented to have modified existing practices and/or adopted new practices to protect/enhance natural resources and/or enhance biodiversity. (4.1.6c)

Not Reporting on this Outcome Measure

Outcome #20

1. Outcome Measures

# of youth introduced to variety of environmental and natural resources career options. (4.1.6d)

Not Reporting on this Outcome Measure

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities

Brief Explanation

See unplanned programs reflecting NIFA priorities.

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

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- During (during program)
- Case Study

Evaluation Results

See unplanned programs reflecting NIFA priorities.

Key Items of Evaluation

See unplanned programs reflecting NIFA priorities.