V(A). Planned Program (Summary)

Program # 18

1. Name of the Planned Program

4.3 Waste Management and Prevention

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>133</td>
<td>Pollution Prevention and Mitigation</td>
<td>20%</td>
<td></td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td>403</td>
<td>Waste Disposal, Recycling, and Reuse</td>
<td>80%</td>
<td></td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
<td></td>
<td>100%</td>
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</tbody>
</table>

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>2.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Actual</td>
<td>16.0</td>
<td>0.0</td>
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</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>72716</td>
<td>182179</td>
</tr>
<tr>
<td>1862 Matching</td>
<td>1862 Matching</td>
</tr>
<tr>
<td>72716</td>
<td>182179</td>
</tr>
<tr>
<td>1862 All Other</td>
<td>1862 All Other</td>
</tr>
<tr>
<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>Smith-Lever 3b &amp; 3c</td>
<td>Hatch</td>
</tr>
<tr>
<td>0</td>
<td>2413</td>
</tr>
<tr>
<td>1862 Matching</td>
<td>1862 Matching</td>
</tr>
<tr>
<td>0</td>
<td>2413</td>
</tr>
<tr>
<td>1862 All Other</td>
<td>1862 All Other</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
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</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 waste reduction and management in their homes and on their properties. Businesses, organizations, and producers are targeted with information about reducing impacts of their operations. Local government and community leaders are targeted with information related to governmental management of waste, such as relationship between waste management and land use, effective recycling programs, and roadkill management. Environmental planners and managers and technical assistance providers are targeted with in-depth information related to their audiences/constituents. Teachers and youth professionals and volunteers are provided with curriculum and training. Youth are targeted with age appropriate education.

V(E). Planned Program (Outputs)

1. Standard output measures

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th></th>
<th>2009</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct Contacts Adults</td>
<td>Indirect Contacts Adults</td>
<td>Direct Contacts Youth</td>
<td>Indirect Contacts Youth</td>
</tr>
<tr>
<td>Plan</td>
<td>4500</td>
<td>50000</td>
<td>1500</td>
<td>15000</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></th>
<th>2009</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extension</td>
<td>Research</td>
<td>Total</td>
</tr>
<tr>
<td>Plan</td>
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<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Actual</td>
<td>{No Data Entered}</td>
<td>{No Data Entered}</td>
<td>0</td>
</tr>
</tbody>
</table>

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 and reducing waste. (4.3.1a)
   Not reporting on this Output for this Annual Report

Output #4

Output Measure

● # of organization and business representatives completing educational programs on managing and reducing waste. (4.3.2a)
   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 and reducing waste and the relationship between waste and land use management. (4.3.4a)
   Not reporting on this Output for this Annual Report

Output #6

Output Measure

● # of consumers, residents, and landowners completing educational programs on waste reduction and management. (4.3.5a)
   Not reporting on this Output for this Annual Report

Output #7

Output Measure

● # of youth completing educational programs on waste management and reduction. (4.3.6a)
   Not reporting on this Output for this Annual Report

Output #8

Output Measure

● # of teachers and youth professionals and volunteers completing educational programs on waste management and reduction. (4.3.7a)
   Not reporting on this Output for this Annual Report
## 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># of agricultural/natural resources producers and business representatives who demonstrate knowledge gains about waste management and reduction. (4.3.1b)</td>
</tr>
<tr>
<td>2</td>
<td># of organization and business representatives who demonstrate knowledge gains about waste management and reduction. (4.3.2b)</td>
</tr>
<tr>
<td>3</td>
<td># of local government officials and community leaders who demonstrate knowledge gains about waste management and reduction and the relationship between waste and land use management. (4.3.4b)</td>
</tr>
<tr>
<td>4</td>
<td># of consumers, residents, and landowners who demonstrate knowledge gains about waste management and reduction. (4.3.5b)</td>
</tr>
<tr>
<td>5</td>
<td># of youth who demonstrate knowledge gains about waste management and reduction. (4.3.6b)</td>
</tr>
<tr>
<td>6</td>
<td># of teachers and youth professionals and volunteers who demonstrate knowledge gains about waste management and reduction. (4.3.7b)</td>
</tr>
<tr>
<td>7</td>
<td># of agricultural/natural resources producers and business representatives documented to have modified existing practices or technologies and/or adopted new practices to manage and reduce waste. (4.3.1c)</td>
</tr>
<tr>
<td>8</td>
<td># of organization and business representatives documented to have modified existing practices or technologies and/or adopted new practices to manage and reduce waste. (4.3.2c)</td>
</tr>
<tr>
<td>9</td>
<td># of producers, businesses, local governments, organizations, landowners, and individuals who collaborate to develop and implement waste reduction and management strategies. (4.3.3a)</td>
</tr>
<tr>
<td>10</td>
<td># of local government officials and community leaders documented to have modified existing practices or technologies and/or adopted new practices to manage and reduce waste. (4.3.4c)</td>
</tr>
<tr>
<td>11</td>
<td># of consumers, residents, and landowners documented to have modified existing practices or technologies and/or adopted new practices to manage and reduce waste. (4.3.5c)</td>
</tr>
<tr>
<td>12</td>
<td># of youth documented to have modified existing practices and/or adopted new practices to manage and reduce waste. (4.3.6c)</td>
</tr>
<tr>
<td>13</td>
<td># of youth introduced to variety of environmental and natural resources career options. (4.3.6d)</td>
</tr>
<tr>
<td>14</td>
<td># of teachers and youth professionals and volunteers who incorporate waste reduction and management knowledge into curriculum. (4.3.7c)</td>
</tr>
<tr>
<td>15</td>
<td># of agricultural/natural resources producers and business representatives documented to have improved waste management practices. (4.3.1d)</td>
</tr>
<tr>
<td>16</td>
<td># Documented instances in which resource managers credit lower costs for remediation to implementation of improved waste management practices. (4.3.2d)</td>
</tr>
<tr>
<td>17</td>
<td>Documented instances in which resource managers credit reduced risk from waste handling and disposal; decreased waste volume; and improved environmental equity to implementation of improved waste management practices. (4.3.3b)</td>
</tr>
<tr>
<td>18</td>
<td># of local government officials and community leaders documented to have established or modified waste management policies to enhance and protect land and water resources. (4.3.4d)</td>
</tr>
<tr>
<td>19</td>
<td># of consumers, residents, and/or landowners, documented to have improved waste management practices. (4.3.5d)</td>
</tr>
<tr>
<td>20</td>
<td># of youth documented to have chosen waste management-related careers. (4.3.6e)</td>
</tr>
</tbody>
</table>
Documented instances in which public health officials credit decreased public health risks to implementation of improved waste management practices. (4.3.8a)

Documented instances in which resource managers credit lower costs for remediation to implementation of improved waste management practices. (4.3.8b)

Outcome #1

1. Outcome Measures

   # of agricultural/natural resources producers and business representatives who demonstrate knowledge gains about waste management and reduction. (4.3.1b)

   Not Reporting on this Outcome Measure

Outcome #2

1. Outcome Measures

   # of organization and business representatives who demonstrate knowledge gains about waste management and reduction. (4.3.2b)

   Not Reporting on this Outcome Measure

Outcome #3

1. Outcome Measures

   # of local government officials and community leaders who demonstrate knowledge gains about waste management and reduction and the relationship between waste and land use management. (4.3.4b)

   Not Reporting on this Outcome Measure

Outcome #4

1. Outcome Measures

   # of consumers, residents, and landowners who demonstrate knowledge gains about waste management and reduction. (4.3.5b)

   Not Reporting on this Outcome Measure

Outcome #5

1. Outcome Measures

   # of youth who demonstrate knowledge gains about waste management and reduction. (4.3.6b)

   Not Reporting on this Outcome Measure

Outcome #6

1. Outcome Measures

   # of teachers and youth professionals and volunteers who demonstrate knowledge gains about waste management and reduction. (4.3.7b)

   Not Reporting on this Outcome Measure
Outcome #7

1. Outcome Measures

# of agricultural/natural resources producers and business representatives documented to have modified existing practices or technologies and/or adopted new practices to manage and reduce waste. (4.3.1c)

Not Reporting on this Outcome Measure

Outcome #8

1. Outcome Measures

# of organization and business representatives documented to have modified existing practices or technologies and/or adopted new practices to manage and reduce waste. (4.3.2c)

Not Reporting on this Outcome Measure

Outcome #9

1. Outcome Measures

# of producers, businesses, local governments, organizations, landowners, and individuals who collaborate to develop and implement waste reduction and management strategies. (4.3.3a)

Not Reporting on this Outcome Measure

Outcome #10

1. Outcome Measures

# of local government officials and community leaders documented to have modified existing practices or technologies and/or adopted new practices to manage and reduce waste. (4.3.4c)

Not Reporting on this Outcome Measure

Outcome #11

1. Outcome Measures

# of consumers, residents, and landowners documented to have modified existing practices or technologies and/or adopted new practices to manage and reduce waste. (4.3.5c)

Not Reporting on this Outcome Measure

Outcome #12

1. Outcome Measures

# of youth documented to have modified existing practices and/or adopted new practices to manage and reduce waste. (4.3.6c)

Not Reporting on this Outcome Measure
Outcome #13

1. Outcome Measures

# of youth introduced to variety of environmental and natural resources career options. (4.3.6d)

Not Reporting on this Outcome Measure

Outcome #14

1. Outcome Measures

# of teachers and youth professionals and volunteers who incorporate waste reduction and management knowledge into curriculum. (4.3.7c)

Not Reporting on this Outcome Measure

Outcome #15

1. Outcome Measures

# of agricultural/natural resources producers and business representatives documented to have improved waste management practices. (4.3.1d)

Not Reporting on this Outcome Measure

Outcome #16

1. Outcome Measures

# Documented instances in which resource managers credit lower costs for remediation to implementation of improved waste management practices. (4.3.2d)

Not Reporting on this Outcome Measure

Outcome #17

1. Outcome Measures

Documented instances in which resource managers credit reduced risk from waste handling and disposal; decreased waste volume; and improved environmental equity to implementation of improved waste management practices. (4.3.3b)

Not Reporting on this Outcome Measure

Outcome #18

1. Outcome Measures

# of local government officials and community leaders documented to have established or modified waste management policies to enhance and protect land and water resources. (4.3.4d)

Not Reporting on this Outcome Measure
Outcome #19

1. Outcome Measures

   # of consumers, residents, and/or landowners, documented to have improved waste management practices. (4.3.5d)

   Not Reporting on this Outcome Measure

Outcome #20

1. Outcome Measures

   # of youth documented to have chosen waste management-related careers. (4.3.6e)

   Not Reporting on this Outcome Measure

Outcome #21

1. Outcome Measures

   Documented instances in which public health officials credit decreased public health risks to implementation of improved waste management practices. (4.3.8a)

   Not Reporting on this Outcome Measure

Outcome #22

1. Outcome Measures

   Documented instances in which resource managers credit lower costs for remediation to implementation of improved waste management practices. (4.3.8b)

   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

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.