Climate Smart Communities Webinar

Telephone call-in number

- 1-866-394-2346
- Code: 1982360347#
- No audio signal will be transmitted over the Internet
Welcome

Kim Farrow
Environmental Program Specialist
Office of Climate Change
New York State
Department of Environmental Conservation
Climate Smart Communities
Webinar

E-Mail Addresses

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Climate Smart Communities
Webinar

Website Address

http://www.dec.ny.gov/energy/50845.html
Climate Smart Community Webinars
Schedule: http://www.dec.ny.gov/energy/86246.html

• October 9, 10:30 a.m. Community Energy Options: Combined Heat and Power Plants, and Distributed Generation.
• November 11, 10:30 a.m. Community Energy Options: Microgrids and Community Choice Aggregation.

Coming Events

• September 26, 11:00 a.m. NY-Sun PV Trainers Network Introductory Webinar. https://training.ny-sun.ny.gov/ (click “Courses”)
New York’s Climate Smart Communities Certification Program

Local Action for Emissions Reduction and Climate Change Resiliency

http://www.dec.ny.gov/energy/96511.html

Mark Lowery
Climate Policy Analyst
Office of Climate Change
New York State Department of Environmental Conservation
Climate Smart Communities

A New York State Program of Climate Support for Municipal Governments

Information and assistance for local GHG emissions reduction and adaptation

• Department of Environmental Conservation
• Department of Transportation
• Department of Health
• Energy Research & Development Authority
• Department of State
• Public Service Commission

http://www.dec.ny.gov/energy/50845.html
Support for Local Climate Action

- **Pledge**: commitment to a complete local climate program
- **Information**: online guidance, webinars, listserv, decision-support tools, best management practices guides
- **Technical assistance**: CSC coordinators, Economic Development Growth Extension agents (EDGE),
- **Certification**: leadership recognition, framework
- **Funding**: may receive preference for funding, generally better positioned to compete for funds
141 Climate Smart Communities

New York State Climate Smart Communities

Legend
- ▲ CSC Villages
- ★ CSC Cities
- □ CSC Towns
- ▼ CSC Counties
- □ DEC Regions

0 20 40 80 Miles
Climate Smart Communities Certification

• Goals:
  – To encourage local action through recognition
  – To provide a more structured framework of local climate actions, while maintaining flexibility to all CSCs to be certified

• Program Organization:
  – 10 Pledge elements
  – Points earned upon documentation of completed actions
  – 1 to 10 Points per action
  – Some tiered
  – 13 Required
CSC Pledge Elements

1. Pledge to be a Climate Smart Community.

2. Set goals, inventory emissions, plan for climate action.

3. Decrease community energy use.

4. Increase community use of renewable energy.

5. Realize benefits of recycling and other climate-smart solid waste management practices.

6. Reduce greenhouse gas emissions through use of climate-smart land-use tools.

7. Enhance community resilience and prepare for the effects of climate change.

8. Support development of a green innovation economy.

9. Inform and inspire the public.

10. Commit to an evolving process of climate action.
Priority Actions

1.1 Pass a resolution adopting the CSC Pledge
1.2 Create a community Climate Smart Community task force focused on climate mitigation and adaptation
1.3 Appoint a Climate Smart Community coordinator
1.4 Create an internal green team focused on climate mitigation and adaptation
2.1 Develop a government operations GHG emissions inventory
2.2 Develop a community GHG emissions inventory
2.3 Establish a government operations emissions reduction target
2.4 Establish a community emissions reduction target
2.5 Develop a government operations climate action plan
2.6 Develop a community climate action plan
3.1 Conduct energy audits of local government buildings
7.1 Conduct a vulnerability assessment
7.3 Review existing community plans and projects to identify climate adaptation strategies and policies or projects that may decrease vulnerability
Performance & Innovation Points

Performance Bonus Points

• Demonstrated reductions in energy use and greenhouse gas emissions

Innovation Bonus Points

• Innovation in implementation of climate protection actions:
  – Advanced local actions not included in the rating system
  – Innovative approach to implementing an action in the rating system
<table>
<thead>
<tr>
<th>Award Level</th>
<th>Points</th>
<th>Pledge Elements</th>
<th>Priority Actions</th>
<th>Additional Priority Actions</th>
<th>Performance/Innovation Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered CSC</td>
<td>NA</td>
<td>PE1</td>
<td>1.2</td>
<td>NA</td>
<td>0</td>
</tr>
<tr>
<td>Certified CSC</td>
<td>120</td>
<td>PE1, PE2, PE3, + 2 more PEs</td>
<td>1.1, 1.3</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Bronze</td>
<td>250</td>
<td>PE1, PE2, PE3, + 4 more PEs</td>
<td>1.1, 1.3</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Silver</td>
<td>350</td>
<td>PE1, PE2, PE3, plus 5 more PEs</td>
<td>1.1, 1.3</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Gold</td>
<td>450</td>
<td>All</td>
<td>1.1, 1.3</td>
<td>11</td>
<td>20</td>
</tr>
</tbody>
</table>
Certification Manual

- Developed by VHB
- Funded by Hudson River Estuary Program
- Piloted in Hudson Valley
- First Certified CSCs:
  - Village of Dobbs Ferry (Bronze)
  - City of Kingston (Bronze)
  - City of Albany
  - Town Cortlandt
  - Orange County
  - City of Watervliet

Who’s next?
Climate Smart Communities Certification Program

Certification Manual

PLEDGE ELEMENT 7: PLAN FOR ADAPTATION TO UNAVOIDABLE CLIMATE CHANGE

Make a commitment to enhance local resilience by establishing a climate resiliency vision and associated goals, identifying vulnerabilities to climate change impacts for both government operations and the community, and developing and implementing strategies to address those vulnerabilities and increase overall community resilience.

<table>
<thead>
<tr>
<th>Action #</th>
<th>Action Name</th>
<th>Action Pathway Phase</th>
<th>Possible Points</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.9</td>
<td>Open new or expand existing cooling centers</td>
<td>Implement</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Strategies to Address Flooding**

<table>
<thead>
<tr>
<th>Action #</th>
<th>Action Name</th>
<th>Action Pathway Phase</th>
<th>Possible Points</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.10</td>
<td>Create or update a watershed assessment to identify flooding and water quality priorities</td>
<td>Assess, Plan, Govern</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>7.11</td>
<td>Adopt a floodplain management and protection ordinance to reduce vulnerability to flooding and erosion</td>
<td>Assess, Plan, Govern</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7.12</td>
<td>Conserve, revegetate and reconnect floodplains and buffers in riparian areas</td>
<td>Implement</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>7.13</td>
<td>Conserve nature areas for species migration and ecosystem resilience</td>
<td>Implement</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>7.14</td>
<td>Facilitate a strategic relocation of uses that are not water dependent from flood prone areas</td>
<td>Implement</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7.15</td>
<td>Promote community flood prevention strategies through the National Flood Insurance Program Community Rating System</td>
<td>Assess, Plan, Govern</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7.16</td>
<td>Use green infrastructure to manage stormwater in developed areas</td>
<td>Implement</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>7.17</td>
<td>Conserve wetlands and forests to manage stormwater, recharge groundwater and mitigate flooding</td>
<td>Implement</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>7.18</td>
<td>Use natural, nature-based or ecologically enhanced shoreline protection</td>
<td>Implement</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>7.19</td>
<td>Extend areas in which the two foot freeboard requirement applies</td>
<td>Implement</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7.20</td>
<td>Require consideration of sea-level rise in planning coastal development</td>
<td>Assess, Plan, Govern</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>7.21</td>
<td>Right-size bridges and culverts and remove unnecessary and hazardous dams</td>
<td>Implement</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>7.22</td>
<td>Develop or enhance early warning systems and community evacuation plans</td>
<td>Implement</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**Strategies to Address Extreme Heat**

<table>
<thead>
<tr>
<th>Action #</th>
<th>Action Name</th>
<th>Action Pathway Phase</th>
<th>Possible Points</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.23</td>
<td>Implement a water conservation and reuse program</td>
<td>Implement</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7.24</td>
<td>Encourage xeriscaping</td>
<td>Assess, Plan, Govern</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7.25</td>
<td>Implement a source water protection program</td>
<td>Implement</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

Please note: The recertification requirements for each action are subject to change in future versions of the CIC Certification Manual.
# Pledge Element 6 Actions

<table>
<thead>
<tr>
<th>#</th>
<th>Actions</th>
<th>Points</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land Use and Building Codes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2</td>
<td>Adopt a renewable energy ordinance</td>
<td>4</td>
<td>• Adopt a small-scale solar ordinance (1 pt)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Adopt a wind-power ordinance for very small, small, and large wind energy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>conversion systems (1 pt each)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Reference: Columbia Law School Center for Climate Change Law Model Ordinances</td>
</tr>
<tr>
<td>6.3</td>
<td>Establish green building codes</td>
<td>6</td>
<td>• Municipal buildings (1 pt)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Commercial buildings (2 pts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• High-rise multi-family residential buildings (1 pt)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• One and two-family dwellings (1 pt)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Low-rise multi-family residential dwellings (1 pt)</td>
</tr>
<tr>
<td>6.4</td>
<td>Create sustainable site design guidelines</td>
<td>4</td>
<td>• Adopted sustainable design standards</td>
</tr>
</tbody>
</table>
## Performance Bonus Points

<table>
<thead>
<tr>
<th>#</th>
<th>Actions</th>
<th>Points</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1</td>
<td>Reduce GHG emissions from government owned facilities</td>
<td>8</td>
<td>1) Reduce GHG emissions for govt owned facilities by 10% (2 pts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2) Reduce GHG emissions for govt owned facilities by 20% (4 pts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3) Reduce GHG emissions for govt owned facilities by 30% (6 pts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4) Reduce GHG emissions for govt owned facilities by 40% (7 pts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5) Reduce GHG emissions for govt owned facilities by 50% or more (8 pts)</td>
</tr>
<tr>
<td>12.2</td>
<td>Reduce GHG emissions from government owned vehicles</td>
<td>5</td>
<td>1) Reduce GHG emissions for govt owned vehicles by 10-20% (1 pts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2) Reduce GHG emissions for govt owned vehicles by 20-30% (2 pts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3) Reduce GHG emissions for govt owned vehicles by 30-40% (3 pts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4) Reduce GHG emissions for govt owned vehicles by 40-50% (4 pts)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5) Reduce GHG emissions for govt owned vehicles by 50% or more (5 pts)</td>
</tr>
</tbody>
</table>
Beginning the Certification Process

1. Review certification materials
2. Designate a project coordinator
3. Get organized
4. Gather publicly available information
5. Request materials from local government staff

Recommendation: Start with priority actions – see “First Steps” resources guide at

www.dec.ny.gov/energy/96532.html
Applying for Certification

1. Complete documentation submittal form for each action
2. E-mail form and required documentation for each action to climatechange@dec.ny.gov.
3. If necessary, mail to

   New York State Department of Environmental Conservation
   Office of Climate Change
   625 Broadway
   Albany, N.Y. 12233-1030
   Attn: CSC Certification

Recertify in five years
Benefits of Certification

- Demonstration of local values
- Structured action pathway to emissions reductions, energy savings, a more livable community and resiliency
- Recognition of leadership
  - Constituents
  - Homebuyers
  - Employers
- Better positioning for funding
- Signs!
Office of Climate Change
New York State
Department of Environmental Conservation
625 Broadway, Albany, NY 12233
(518) 402-8448
climatechange@dec.ny.gov
www.dec.ny.gov/energy/44992.htm

Climate Smart Communities
http://www.dec.ny.gov/energy/50845.html
WaterSense®
A National Brand for Local Results

Janice Whitney, EPA, Region 2 Liaison for the National WaterSense Program
Our national thirst for water is increasing!

- 1950-2000: U.S. population doubled; public supply system demand more than tripled
- 40 out of 50 states anticipating near-future water shortages
- Further stress by increasing demand coupled with the impacts of climate change

Inefficient Water Use

• Contributes to the strain on supplies

• Average family: 400 gallons of water per day
  – 70 percent residential water use
  – Older toilets (3.5 gallons per flush [gpf]) that are 60 percent less efficient than today’s high-efficiency (1.28 gpf) models
  – 5 to 10 percent of American homes with water leaks that drip at a rate of 90 gallons a day or more
Inefficient Water Use

• Residential outdoor water use accounts for nearly 9 billion gallons of water daily.

• Outdoor water use is estimated to account for 30 percent of total residential water use.
  – As much as 50 percent of the water applied to lawns and gardens is wasted.

As much as 50 percent of the water we use outdoors is wasted from inefficient watering methods and systems.

Curb your water waste!
Drought Can Happen Anywhere

- Weather patterns change, but drought happens in at least one part of the country each year.
- Climate change—with an additional number of “extreme” weather events—will only exacerbate the problem.
National Climate Assessment Released

http://nca2014.globalchange.gov/

Highlights

Explore highlights of the National Climate Assessment including an Overview, the report’s 12 overarching findings, and a summary of impacts by region.

→ EXPLORE HIGHLIGHTS

Full Report

Explore the entire report covering our changing climate, regions, cross sector topics, and response strategies in full detail.

→ EXPLORE THE REPORT
WaterSense listed among 10 EPA Recommendations for Potential State Agency Clean Water and Drinking Water Climate Change Adaptation Actions

**Appendix D: Potential State Agency Clean Water and Drinking Water Climate Change Adaptation Actions**

April 2014

<table>
<thead>
<tr>
<th>#</th>
<th>Actions for Climate Change Adaptation</th>
<th>State Water Quality Agency</th>
<th>State Drinking Water Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Promote Water and Climate Change Adaptation Training for Water Program Staff:</strong> Encourage State staff implementing water programs to take online training addressing the challenges that a changing climate poses for meeting clean water and drinking water goals.</td>
<td>✷</td>
<td>✷</td>
</tr>
<tr>
<td>2</td>
<td><strong>Be a WaterSense Partner:</strong> Promote water use efficiency by wastewater treatment plants and drinking water systems in the State by joining the WaterSense program as a partner and participating in a State water conservation program.</td>
<td>✷</td>
<td>✷</td>
</tr>
</tbody>
</table>
Related EPA Efforts - Climate Ready Water Utilities

Adaptation Strategies Guide for Water Utilities

Preparing for Extreme Weather Events: Workshop Planner for the Water Sector

Climate Resilience Evaluation and Awareness Tool 2.0 Exercise with Southern Nevada Water Authority
PLEDGE ELEMENT 3: DECREASE COMMUNITY ENERGY USE

- 3.4 INSTALL WATER-EFFICIENT FIXTURES

And

PLEDGE ELEMENT 7: PLAN FOR ADAPTATION TO UNAVOIDABLE CLIMATE CHANGE-

- 7.23 IMPLEMENT A WATER CONSERVATION AND REUSE PROGRAM
WaterSense

The U.S. Environmental Protection Agency’s (EPA’s) WaterSense program can be part of the solution.
What Is WaterSense?

• Voluntary partnership and labeling program launched by EPA in 2006

• Label with integrity that is backed by the credibility of EPA
  – WaterSense labeled products and programs independently certified for water efficiency and performance

• Simple way for consumers to identify products, new homes, and programs that save water and perform well
WaterSense uses the following factors in determining which products to label. Products must:

- Offer equal or superior performance
- Be about 20 percent more water-efficient than standard models
- Realize water savings on a national level
- Provide measurable results
- Achieve water efficiency through several technological options
- Be effectively differentiated by the WaterSense label
- Be independently certified
As of June 2014, WaterSense had more than 1,500 partners, more than 12,000 labeled products, and more than 325 labeled new homes. The program continues to grow each year.
WaterSense Labeled Products

- **Flushing Urinals** (≤0.5 gpf) >299
- **Tank-Type Toilets** (≤1.28 gpf) >2150
- **Showerheads** (≤2.0 gpm) >7445
- **Lavatory Faucets** >1900
- **Irrigation Controllers** >170
- **Pre-rinse Spray Valves** (≤1.28 gpm) >20
- **New Homes** >325

Water factors are also included in many ENERGY STAR qualified products.
Measuring the WaterSense Impact

757 billion gallons of water saved since 2006!

WaterSense has saved consumers $14.2 billion in water and energy bills.
Economic Program
Benefits

• Reduces the need for developing new water supplies and building new wastewater treatment facilities
• Can improve your bottom line
• Saves energy used to pump, heat, and treat water
• Provides a competitive edge for businesses as water quality regulations become stricter, and the cost of water increases
Environmental Program Benefits

- Reduces water use today so that water resources are maintained for future generations
- Maintains the health of aquatic environments
- Protects drinking water resources by decreasing the need to withdraw ground or surface water supplies for municipal or industrial demands
- Minimizes water pollution by decreasing the amount of runoff from landscaping and irrigation practices
- Helps mitigate the effects of drought
Health-Related Program Benefits

- Minimizes health risks associated with water pollution
- Reduces the amount of energy needed to treat wastewater, resulting in less energy demand and, therefore, less air pollution from power plants
Water conservation is one of many competing priorities for utilities.

Water efficiency is a key component of conservation planning and implementation.

WaterSense fits into your mission and makes it easy to for you to enhance your water conservation program by providing you with tools and resources.
| **Promotional Partners**     | ▪ Promote WaterSense labeled products and practices to customers  
|                            | ▪ Promote the concept of water efficiency and value of water  
|                            | ▪ Offer rebates for WaterSense labeled products (utilities)  |
| **Manufacturers**           | ▪ Manufacture WaterSense labeled products and promote them to buyers  |
| **Retailers/Distributors**  | ▪ Stock, promote, and sell WaterSense labeled products  |
| **Irrigation Partners**     | ▪ Promote WaterSense labeled products  
|                            | ▪ Practice water-efficient services  |
| **Builder Partners**        | ▪ Build WaterSense labeled new homes that save water indoors and out  |
Promotional Partners

- Promote WaterSense labeled products and water-efficient practices to consumers
- Educate consumers on the concept of water efficiency and value of water
- Offer incentives (e.g., rebates) to consumers for buying and installing WaterSense labeled products
Process to become a Promotional Partner

- Review Eligibility: http://www.epa.gov/watersense/partners/join.html;
- Develop marketing materials
- Hold one promotional event per year
- Report once a year about your promotional activities
Partnership Benefits

• Reduce research costs and increase consumer confidence by promoting water-efficient products that meet or exceed WaterSense performance criteria

• Membership in a national network of water efficiency leaders

• Recognition as a leader in water efficiency, including chance to earn additional recognition with annual WaterSense Partner of the Year awards
Partnership Benefits

• National campaigns to promote both WaterSense and water efficiency
  – Fix a Leak Week (March)
  – Sprinkler Spruce-Up (May)
  – Outdoor/drought outreach
  – Shower Better (October)

• Consistent national messaging to clearly educate consumers on the importance of saving water for future generations

• Marketing calendar with sample social media posts and customizable tools
Sample Resources
Joining WaterSense is easy!

- Review the eligibility information:  
  - [www.epa.gov/watersense/partners/eligible.html#promotional](http://www.epa.gov/watersense/partners/eligible.html#promotional)

- Review the *WaterSense Program Guidelines*:  
  - [www.epa.gov/watersense/docs/programguidelines.pdf](http://www.epa.gov/watersense/docs/programguidelines.pdf)

- Complete and sign the online partnership agreement:  
  - [www.epa.gov/watersense/partners/join.html](http://www.epa.gov/watersense/partners/join.html)
More Information

WaterSense Information Website: www.epa.gov/watersense
List of products
Partnership information
- Educational fact sheets
- Resources

E-mail: watersense@epa.gov
Toll-free Helpline: (866) WTR-SENS

Janice Whitney – EPA Region 2
E-mail: whitney.janice@epa.gov
Phone: (212) 637-3790

FLO is our WaterSense mascot. She makes personal appearances on occasion, as she travels the country promoting water efficiency and conservation.
Climate Smart Communities Webinar

E-Mail Addresses

- Mark Lowery
  mark.lowery@dec.ny.gov
- Kim Farrow
  kim.farrow@dec.ny.gov
- Climate Change Office
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