

PRESENTATION: PRESENTATION: REPORT FROM EMC RESULTING FROM
RESOLUTION NO. 2017087

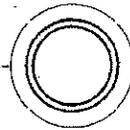
Steve MacAvery, Chair, Environmental Management Council presented the results regarding Fossil Fuels to the committee – presentation attached.

PRESENTATION: RECONNECTING STREAMS AND INCREASING RESILIENCY IN
THE HUDSON RIVER ESTUARY PROGRAM

Sean Carroll, Cornell Cooperative Extension, addressed the Committee on upcoming Watershed and Culvert Project Funding Opportunities. (See attachment).

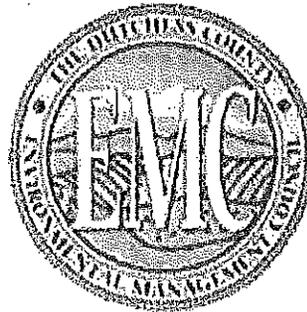
There being no further business, the meeting was adjourned.

EMC FFR Interim Report

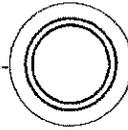


MARCH 2018

DUTCHESS COUNTY
ENVIRONMENTAL MANAGEMENT COUNCIL
FOSSIL FUEL REDUCTION SUBCOMMITTEE

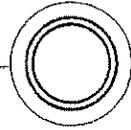


Purpose of Interim Report



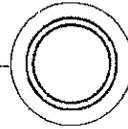
- Inform the Dutchess County Legislature about time-sensitive recommendations to reduce fossil fuel usage in Dutchess County
- Provide interim status on EMC FFR subcommittee's findings to-date

EMC FFR Subcommittee Background



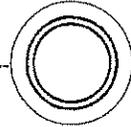
- Fossil Fuel Reduction Subcommittee formed in July 2017 at request of Dutchess County Legislature
- FFR Subcommittee's purpose:
 - *Provide recommendations to Dutchess County Legislature on actions the County can take to reduce fossil fuel usage*
 - Provide recommendations to Dutchess County Legislature on actions to be taken to encourage reduction in fossil fuel usage in the county at large
 - Provide recommendations to the Dutchess County Legislature on fossil fuel reduction goals

FFR Subcommittee Status



- FFR Subcommittee identified a list of 25 FFR research topics
- FFR Subcommittee has evaluated relevant NYS programs and what other counties (NY and US) have done
- FFR research topics have been cross-referenced with the NYS programs

State Programs Hierarchy



2015 NYS Reforming the Energy Vision (REV)

NYSERDA Clean Energy Communities (CEC)
Program

Climate Smart Communities Certification (CSC)

CEC – All of the 10 High Impact actions are relevant to fossil fuel reduction initiatives.

CSC – Out of 130 actions under the 10 CSC Pledge Elements, 92 actions are relevant to fossil fuel reduction initiatives, 83 directly and 9 indirectly.

NYS Reforming the Energy Vision Goals

MAKE ENERGY
MORE AFFORDABLE
FOR ALL NEW YORKERS

SUPPORT THE GROWTH OF
CLEAN ENERGY
INNOVATION

CUT
GREENHOUSE GAS EMISSIONS
80% BY 2050

EMPOWER
NEW YORKERS
TO MAKE MORE INFORMED
ENERGY CHOICES

IMPROVE
NEW YORK'S EXISTING
ENERGY
INFRASTRUCTURE

CREATE
NEW JOBS
AND BUSINESS
OPPORTUNITIES

PROTECT
NEW YORK'S
NATURAL RESOURCES

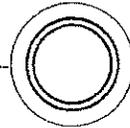
BUILD A
MORE RESILIENT
ENERGY SYSTEM

SUPPORT
CLEANER
TRANSPORTATION

 - FFR related goal

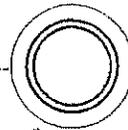
GROW
NEW YORK'S
ENERGY EFFICIENCY

Dutchess County's Advantageous Positioning



- Dutchess County has completed action on 3 of the required 4 CEC High Impact Actions; 1 more is needed for designation (total of 10 Actions)
- Dutchess County has taken actions that would count towards 10 of 10 required “Pledge Elements” in the CSC certification roadmap, already achieving an estimated 155 - 260 points out of 120 required for certification.
- CSC certification would be the 4th CEC action.
- CEC designation and CSC certification position Dutchess County to apply for available grants
- The Hudson Valley Regional Council (HVRC) will provide free technical support for NYSERDA programs through Aug. 2019 (available via CECP funding)
- Other NY counties/municipalities have been awarded over \$11 Million in CSC grants since 2015 and over \$1.7 Million in CEC grants

Interim Recommendations

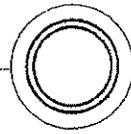


- Pursue CSC certification
- Pursue CEC designation

Next Steps:

- CSC certification and CEC designation
- Take the Climate Smart communities Pledge
- Utilize the CSC Certification Roadmap with focus on FFR actions
- Apply for available grant monies in the programs
- Appoint a DC CSC programs Coordinator to pursue FFR actions
- Appoint CSC community task force
- Task Force and CSC Coordinator to work with HVRC CEC Coordinator to achieve County's CSC certification and CEC designation

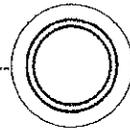
CEC 10 High Impact Actions



- ❖ Benchmarking
- ❖ Clean Energy Upgrades
- ❖ LED Street Lights
- ❖ **Clean Fleets**
- ❖ **Solarize**
- ❖ Unified Solar Permit
- ❖ Energy Code Enforcement Training
- ❖ Climate Smart Communities Certification (*potential 4th CEC action*)
- ❖ Community Choice Aggregation
- ❖ **Energize NY Finance**

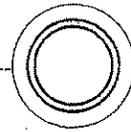
(**Bold** actions already completed by Dutchess County)

CEC & CSC Grants



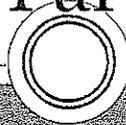
- \$5000 CEC grants available with no local share (applications reviewed until 9/30/19 or until funds runout)
- CSC Grant Program is a competitive 50/50 matching grant program available for two broad categories:
 - Up to **\$2,000,000** for implementation projects related to climate change adaptation (e.g., for flood risk reduction), and the reduction of greenhouse gases outside the power sector (e.g., for the reduction of vehicle miles travelled).
 - Up to **\$100,000** for assessments and planning activities, such as land use, transportation, and organic waste management.
 - 2018 CSC RFA to be announced in May and due in July.

Examples of CSC Grants Received by Other Municipalities in 2017



County / Municipality	Grant Amount	Associated Project
County of Erie	\$100,00	Climate Change Vulnerability Assessment
Village of Lancaster	\$22,000	Extreme Weather Vulnerability Assessment
Town of Niagra	\$275,559	Creek/ Property Restoration for Flood Protection
Town of Big Flats	\$45,000	Climate Smart Comprehensive Planning and Guidance
Town of Indian Lake	\$639,000	Construction of Firehouse/Regional Security Center
Village of Cobleskill	\$81,000	Construction of Grandview Drive Drainage Improvements
Village of Cooperstown	\$297,700	Grove Street Culvert Replacement Project
Village of Mohawk	\$155,455	Water Main Relocation
Village of Dobbs Ferry	\$306,656	Construction of Community Warming/Cooling/Charging Center
Town of Greenburgh	\$30,000	Implementation of Food Scrap Recycling Drop-off Facilities
Village of Irvington	\$299,317	Culvert Right-sizing
City of Kingston	\$750,000	Design & Construction of Franklin Street Complete Street Features
City of New Rochelle	\$804,350	Construction of New Rochelle Complete Streets
Town of Pleasant Valley	\$867,753	Town Hall Relocation Out of Flood Zone
Village of Rhinebeck	\$32,500	Floodproofing for Rhinebeck Low Lift Pump Station
Sullivan County	\$77,500	Sullivan County Organic Waste Management Plan
City of Cortland	\$2,000,000	Construction of Pedestrian/Bicycle Connections
City of Schenectady	\$28,000	Greenhouse Gas Inventory and Vulnerability Assessment

Hudson Valley County/Municipality Program Participation



CEC

Designated

- Ulster County
- Town of New Castle
- Village of Dobbs Ferry
- City of Kingston
- Town of Red Hook
- Town of Rosendale
- Village of Hastings-on-Hudson
- Village of Croton-on-Hudson
- Town of Ossining
- City of White Plains
- City of Yonkers
- Town of Somers
- Town of Marbletown
- City of New Rochelle
- City of Beacon
- City of Peekskill
- Town of Mamaroneck
- Village of Goshen
- Sullivan County

CSC

Registered / Certified

Dutchess County

• City of Beacon; Town of Dover; Town of Hyde Park; Town of LaGrange; Town of Red Hook; Town of Rhinebeck; Town of Wappinger; Village of Rhinebeck; Village of Tivoli; Village of Wappingers Falls

• Orange County

• County of Orange (Certified); Town of Woodbury; Village of Highland Falls; Village of Maybrook

• Putnam County

• Town of Philipstown

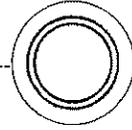
• Sullivan County

• County of Sullivan (Certified); Town of Bethel; Town of Cochecton; Town of Delaware; Town of Highland; Town of Lumberland; Town of Tusten

• Ulster County

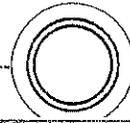
• County of Ulster (Bronze Certified); City of Kingston (Bronze Certified); Town of Marbletown; Town of Olive; Town of New Paltz; Town of Rosendale; Town of Saugerties; Town of Shandaken; Town of Woodstock; Village of New Paltz

Interim Report Conclusions



- Pursuing CEC designation and CSC certification provides an optimal pathway to FFR for Dutchess County
- Dutchess County should take initial application steps to provide adequate time for grant applications
- The HVRC and EMC can provide no-cost resources
- Other municipalities and nearby counties have shown that this can be done; we can learn from their experiences
- Grants are available for distribution; let's take advantage of them for the betterment of Dutchess County!
- TBD: There may be more beneficial work to be done in addition to CEC and CSC program actions; EMC will do further study and recommend any further course of action for fossil fuel reduction.

Glossary of Terms



Abbreviation	Meaning
CEC	Clean Energy Communities
CSC	Climate Smart Communities
DC	Dutchess County
EMC	Environmental Management Council
FFR	Fossil Fuel Reduction
HVRC	Hudson Valley Regional Council
NYS	New York State
NYSERDA	NYS Energy Research and Development Authority
REV	Reforming the Energy Vision
TBD	To Be Determined

Upcoming Watershed and Culvert Project Funding Opportunities

1. Tributary Restoration and Resiliency

- **Deadline:** April 18, 2018 – 3:00 PM
- **Funding source:** New York State Environmental Protection Fund, Hudson River Estuary Program and Ocean Great Lakes Program
- **Money:** \$1,025,000 is available. Minimum award amount is \$10,500 and the maximum award is \$1,025,000.
- **How to apply?** NYS Grants Gateway

Funding for projects to help restore free-flowing waters to benefit water quality, conserve and restore habitat, and increase flood resiliency for communities in the Hudson River estuary watershed.

What types of projects are eligible for funding?

- To be eligible, *projects must conserve and restore aquatic habitat connectivity for American eel and/or river herring found in the tributary streams of the Hudson River estuary watershed.* Primary priority will be given to dam removal projects that are in close proximity to the Hudson, because of their importance for improving habitat for American eel and river herring. Projects must also be designed to pass, at a minimum, a 1% annual chance storm (100-year flood) to promote flood resiliency.
- **Examples of projects which improve aquatic connectivity are: removal of dams; restoration of perched culverts to grade; replacement of culverts to reestablish natural stream-bottom conditions; and right-sizing of bridges and culverts.**
- Engineering and planning projects for removal of dams affecting eel or herring migration anywhere in the estuary watershed are also eligible for funding.
- Project timeline must show completion on or before September 30, 2021.

Who may apply?

Eligible applicants include Governmental Entities, Municipalities, and Quasi-Governmental Entities, including but not limited to Counties, Cities, Towns, Villages, or Indian nation or tribe recognized by the state or the United States with a reservation wholly or partly within the boundaries of New York State, or any combination thereof, Public Benefit Corporations, Public Authorities, Municipal Corporations, Soil and Water Conservation Districts, School Districts, and Community Colleges, and not-for-profit corporations with a 501(c)(3) designation. Projects eligible for state assistance must be located within the Estuary Watershed Boundaries.

2. Restoration of Watershed Connectivity

- **Deadline:** March 30, 2018 – 12:00 PM (noon)
- **Funding source:** New England Interstate Water Pollution Control Commission (NEIWPCC), in cooperation with the New York State Department of Environmental Conservation's (NYSDEC) Hudson River Estuary Program
- **Money:** \$210,000 is available. Projects budgets must be between \$100,000 and \$105,000.
- **How to apply?** Applicants must submit their proposals electronically through the NEIWPCC website.

Funding for projects that will help restore aquatic habitat connectivity for herring and eel, and reduce localized flood risks, and improve conditions on Hudson River Estuary tributaries.

What types of projects are eligible for funding?

- A regional approach to restoring aquatic connectivity and reducing flooding hazards to multiple municipalities.
- A successful applicant will create a municipal management plan that documents and prioritizes road-stream crossings (culverts and bridges) that have been assessed following the protocol of the North Atlantic Aquatic Connectivity Collaborative (NAACC).
- In addition to the creation of management plan, conceptual level replacement designs will be produced for at least the top three priority crossings and 100% shovel-ready plans for the top priority crossing. This is per municipality.

The ideal project would produce management plans, conceptual level and shovel-ready engineering plans for multiple municipalities.

Who may apply?

Applicants who are eligible to submit proposals in response to this RFP include: for-profit organizations and consulting firms, academic institutions, non-profit organizations, and municipalities. If an applicant is not a municipality, a letter of support from the impacted municipalities within the study is required. To be eligible for this RFP, the project must be within the Hudson River Estuary watershed

3. Watershed and Flood Mitigation Assessment

- **Deadline:** March 16, 2018 – 12:00 PM (noon)
- **Funding source:** New England Interstate Water Pollution Control Commission (NEIWPCC), in cooperation with the New York State Department of Environmental Conservation's (NYSDEC) Hudson River Estuary Program
- **Money:** \$110,000 is available. Projects budgets must be between \$100,000 and \$110,000.
- **How to apply?** Applicants must submit their proposals electronically through the NEIWPCC website.

Funding for a study that will assess flooding vulnerabilities in a Hudson River tributary watershed or subwatershed, and propose flood mitigation solutions that consider both engineering (e.g. roads, bridges, dam removal, and culverts) and natural system solutions (e.g. conservation or restoration of wetlands, forests).

What types of projects are eligible for funding?

The goal of this project is to collect, assess and provide information to communities to help them address flooding vulnerabilities and mitigate flood impacts, through measures that maintain, improve and restore natural processes and recognize the value of local wetlands and forests in a watershed. The outcomes from this RFP will encourage a multi-benefit approach that will help mitigate flooding impacts and inform local natural resource management policies regarding water and ecosystems.

Who may apply?

Applicants who are eligible to submit proposals in response to this RFP include: for-profit organizations and consulting firms, academic institutions, non-profit organizations, and municipalities. If an applicant is not a municipality, a letter of support from the impacted municipalities within the study is required. To be eligible for this RFP, the project must be within the Hudson River Estuary watershed

Cornell Cooperative Extension Dutchess County (CCEDC) 2018 Flood Resilience Work

Funding: NYSDEC Hudson River Estuary Program; Cornell University Water Resources Institute

- Ongoing work as part of the **Hudson Estuary Watershed Resilience Project**
- Partnership with Estuary Program, WRI, and CCEs in Dutchess, Columbia-Greene, Rockland, and Ulster Counties.

2018 Work in Dutchess County:

Culvert Prioritization and Management Plans

- Working with the *Town of Rhinebeck* to prioritize NAACC-assessed Town-owned culverts and develop a management plan for these culverts.
- Providing assistance in finding funding to right-size or replace prioritized culverts

Climate Smart Resiliency Planning Tool

- Working with: City of Beacon, City of Poughkeepsie, Town of Fishkill, Town of Pleasant Valley, Village of Red Hook, and Village of Wappingers Falls to support implementation of Climate Smart Community Adaptation Action 7.3, *Review existing community plans, policies and projects to identify climate adaptation strategies and policies or projects and policies or projects that may decrease vulnerability.*

Climate Smart Communities Certification Support

- Supporting the *Town of Red Hook* through the process of becoming a certified Climate Smart Community

Municipal Flood Preparedness Guide for Residents and Businesses

- Developing this guide for the *City of Beacon*, including:
 - List of emergency shelters (including addresses and information on which can accommodate pets)
 - List of safe areas for parking cars in case of a flood (including addresses)
 - List of safe areas for boats in case of flood (including addresses)
 - List of flood prone roads (including detailed descriptions of most susceptible portions, and/or illustrated on a map).
 - Evacuation routes (including detailed descriptions and/or illustrated on a map)
 - Where to get information on flood zones (e.g. town hall, library)
 - Information on the available emergency notification/communication systems (e.g. reverse 911, town or county system)
 - Emergency contacts (e.g. fire, police, village/city/town)