

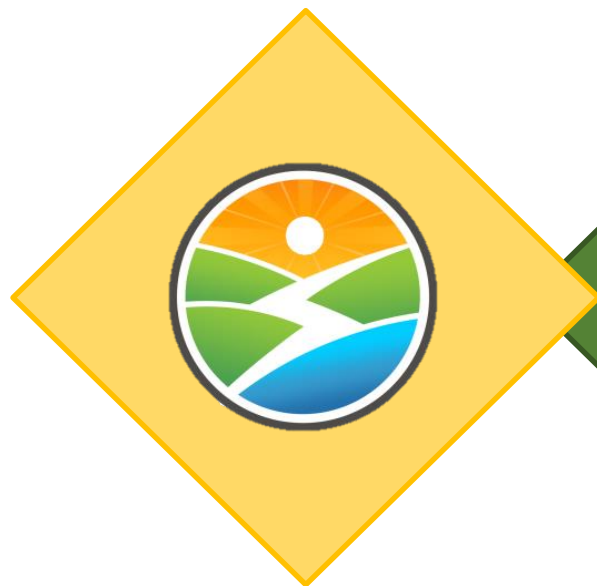


City of Dover Planning & Community
Development Department

The Citywide Resilience Plan and Beyond

Jackson Kaspari, Ph.D.
Resilience Manager

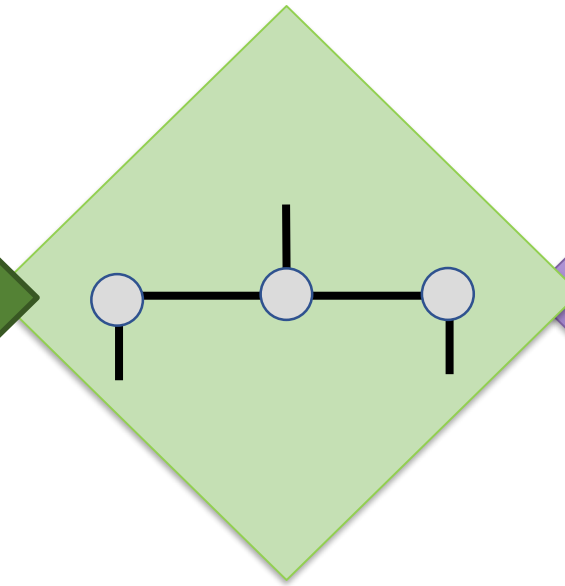
City Council Workshop
October 5th, 2022



Update on Dover
Community Power



Citywide Resilience
Plan Outline



Progress to
Date and Timeline



A Year in
Review

Update on Community Power

Review of Engagement



Deputy City Manager Parker, AICP

- ⚡ Dover's Member Director
- ⚡ Vice Chair of Coalition
- ⚡ Executive Committee Member
- ⚡ CEO Search Committee Member



Resilience Manager Kaspari, Ph.D.

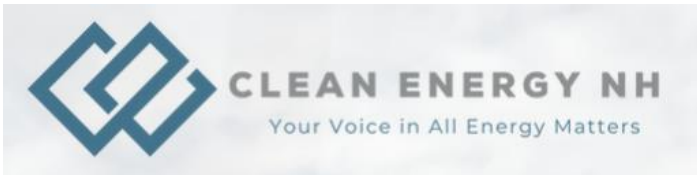
- ⚡ Dover's Alternate Member Director
- ⚡ Risk Management Committee Member

Update on Community Power

Successful RFP (Negotiations Underway)



- ⚡ Retail Customer Services
 - Utility data management
 - Customer billing
 - Customer notifications
- ⚡ \$750,000 in startup funding



- ⚡ Member Support Services



- ⚡ Energy Portfolio Risk Management
 - Power procurement
 - ISO-NE market operations
- ⚡ \$9.5M in credit support



- ⚡ Financial and Banking Services
 - Lockbox account

Update on Community Power

Regulatory Progress

- ⚡ Community Power Rules were approved for NH by the Joint Legislative Committee on Administrative Rules on 9/15/2022.
- ⚡ NH Public Utilities Commission adopted the rules on 9/26/2022.
- ⚡ Lebanon Community Power's Electric Aggregation Plan (EAP) was approved.
- ⚡ Enfield, Exeter, Hanover, Harrisville, Peterborough, Plainfield, Rye and Walpole planning to file with the PUC soon.
- ⚡ Nine additional communities including Dover actively drafting the EAPs.

FOR COMMUNITIES, BY COMMUNITIES.



**COMMUNITY
POWER COALITION**
OF NEW HAMPSHIRE

Update on Community Power

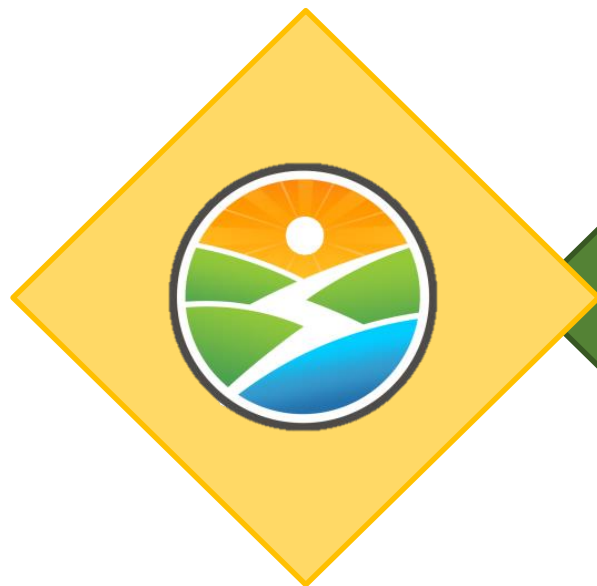
Dover's Next Steps – Joint Powers Agreement (JPA) Amendment

- ⚡ Most JPA articles may be amended with a 2/3 majority vote of Member representatives at CPCNH's annual meeting.
- ⚡ **Original JPA:** Stipulates that the JPA may only be amended at Annual Membership Meetings, which are held in April each year.
- ⚡ **Proposed Amendment:** Allows for amendments to JPA at regular and special meetings of Members (rather than restricting JPA amendments to once per year).
- ⚡ The Amendment was unanimously approved by Member Board on April 21, 2022, and requires Member Governing Body approval to become effective.

Update on Community Power

Dover's Next Steps – Electric Aggregation Plan (EAP)

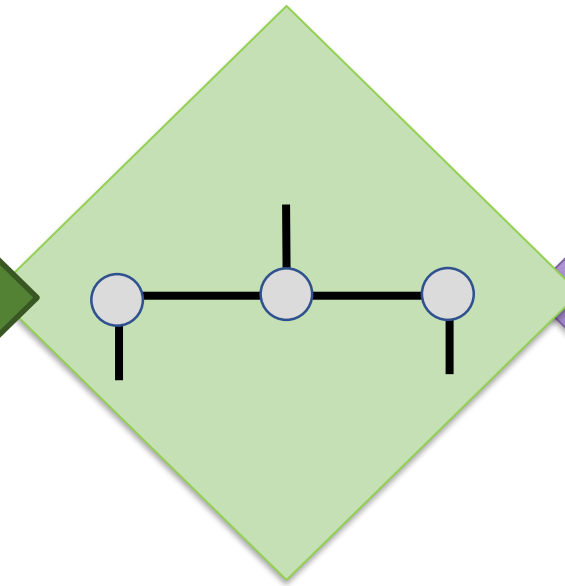




Update on Dover
Community Power



Citywide Resilience
Plan Outline



Progress to
Date and Timeline



A Year in
Review

Citywide Resilience Plan Outline

Section #1 – Introduction to Dover’s Resiliency

- ❖ Mission Statement (Tied to Resolutions and Masterplan)
- ❖ Definitions of Key Terms
- ❖ Executive Summary
- ❖ Examples of the City’s Progress (Path to Resilience)



Citywide Resilience Plan Outline

Section #2 – Community Initiatives

- ❖ Resilient Dover Outreach (Flyers, Webpage, Podcast Episodes, etc.)
- ❖ Potential of Dover Community Power
- ❖ Commercial Property Assessed Clean Energy (C-PACE)
- ❖ Weatherization and Efficiency
- ❖ Resilient Food Systems (Expanded Composting, Community Garden Expansion etc.)
- ❖ Resiliency Through Local Art



Citywide Resilience Plan Outline

Section #3 – Municipal Projects

- ❖ Overview of Municipal Energy Use
- ❖ Energy Audits (TBD Water System Results and Next Steps)
- ❖ Municipal Solar Expansion
- ❖ Integration of Heat Pump Technologies
- ❖ Fleet Electrification
- ❖ EVSE Expansion (Municipal and Public)
- ❖ Forest and Ecosystem Management

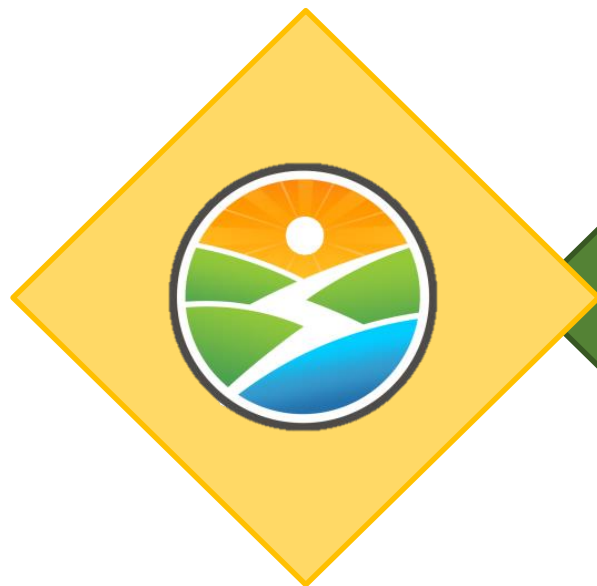


Citywide Resilience Plan Outline

Section #4 – Plan for Council Objectives & Implementation Strategy

- ❖ Relation of Prior Content to Council Goals
- ❖ Summary of Next Steps to Achieve Targets
- ❖ Implementation Table

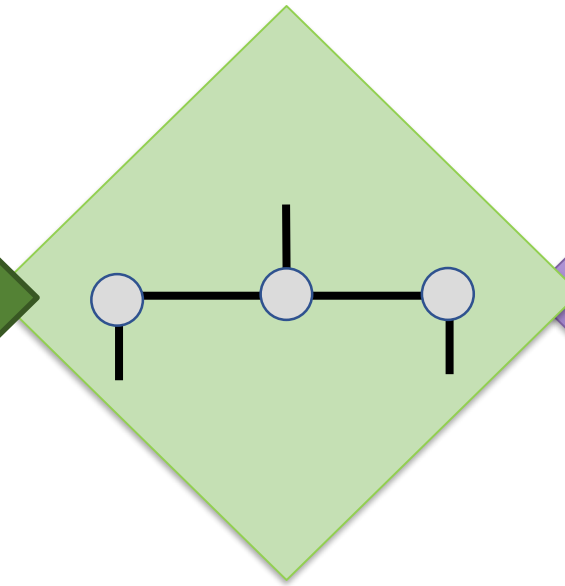




Update on Dover
Community Power



Citywide Resilience
Plan Outline



Progress to
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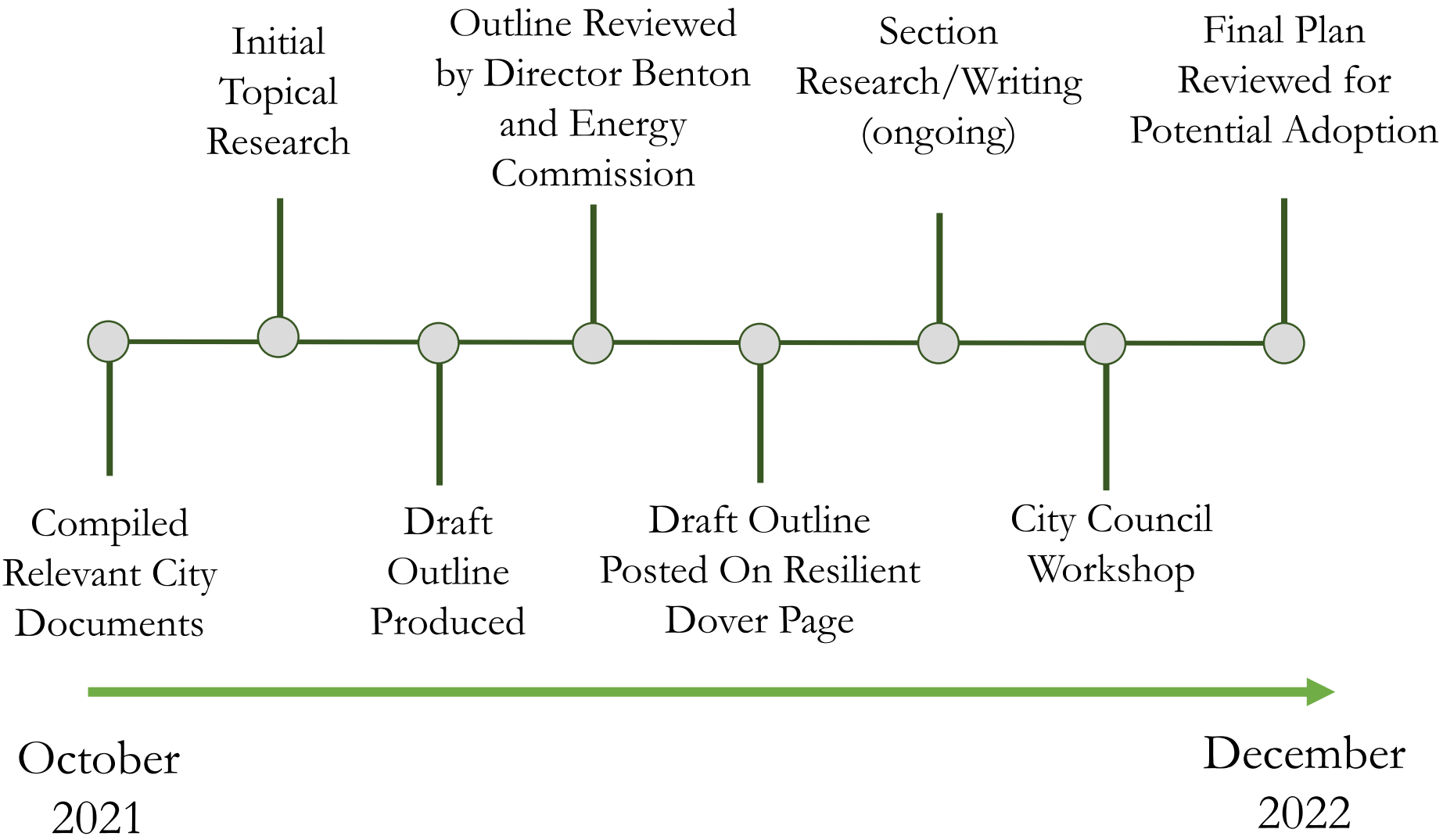


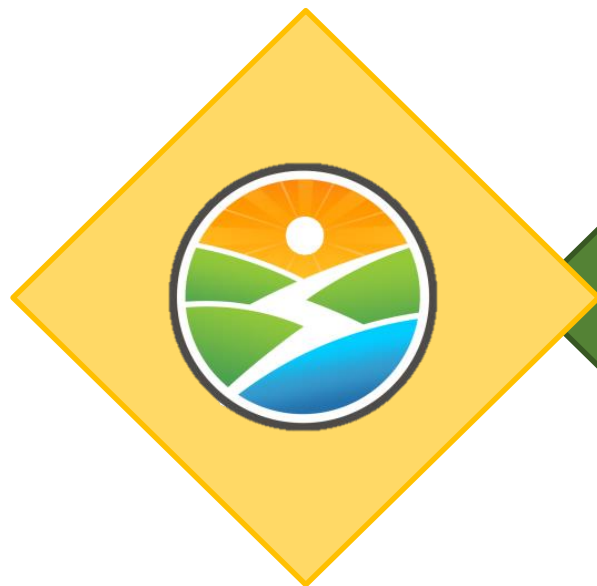
A Year in
Review

Plan Progress to Date

Section 1	Status	Section 2	Status	Section 3	Status	Section 4	Status
Mission Statement		RD Outreach	IP	Overview of Municipal Energy Use	IP	Relation to Council Goals	IP
Definitions	IP	Dover Community Power	IP	Energy Audits	IP	Summary of Next Steps	
Executive Summary		C-PACE	IP	Municipal Solar Expansion		Implementation Table	
Examples	IP	Weatherization & Efficiency		Integration of Heat Pumps	IP		
		Resilient Food Systems	IP	Fleet Electrification	IP		
		Local Art		EVSE Expansion	IP		
				Forest and Ecosystem Management	IP		

Timeline

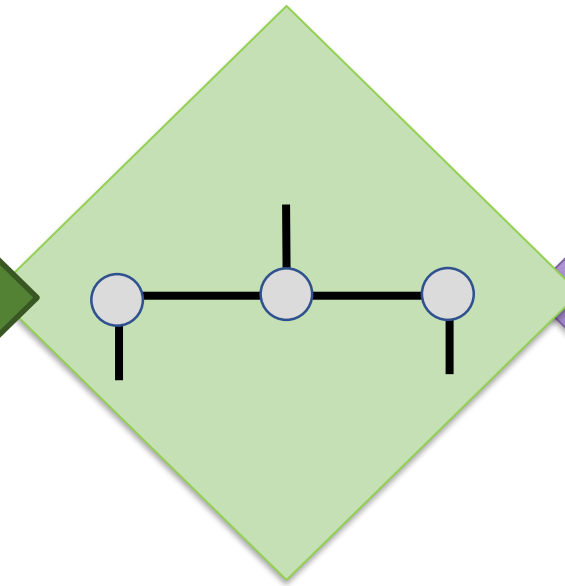




Update on Dover
Community Power



Citywide Resilience
Plan Outline



Progress to
Date and Timeline



A Year in
Review

Overview of Responsibilities



Staff Support For:

- ❖ Energy Commission
- ❖ Conservation Commission
- ❖ Open Lands Committee



Coordinates:

- ❖ Energy Projects
- ❖ Land Preservation and Conservation Program
- ❖ Grant Proposals
- ❖ Citywide Resilience Plan

Resiliency Projects Over the Last Year



- ❖ Climate Resources Forum
- ❖ Creation of Resilient Dover Web Page and Logo
- ❖ Creation of Outreach Flyers for Solar and Composting
- ❖ 2021 and 2022 Energy Commission EV Shows
- ❖ 2022 Energy Commission Report
- ❖ Acquisition of Arch Street Parcel
- ❖ Municipal EVSE RFP and Installation
- ❖ Hydro Net Metering Agreement
- ❖ Water System Energy Audit
- ❖ Dover Community Oyster Garden
- ❖ ArcGIS Conservation Easement Monitoring Tool
- ❖ Creation of Mitigation Priority List for Con Com
- ❖ NH Sea Grant Marine Debris Challenge Proposal
- ❖ Sustainability Fellow Proposal

Resiliency Projects Over the Last Year

Climate Resources Forum

Thursday, April 7th
5:30 PM – 7:00 PM
Virtual Event

Dover Climate Resources Forum

Hosted By: UNH Extension | NH Sea Grant &
Strafford Regional Planning Commission



Please join us for a virtual forum to learn about Dover's climate-related resources and discuss ways you can use them. This event is for all interested volunteer board, council, and committee members, as well as City staff. You'll learn about what information is available and talk with your peers about how it could be best used to support Dover's efforts to prepare for the impacts of a changing climate. This event was made possible through the efforts of Dover's Climate Forum Planning Committee with support from UNH Extension | NH Sea Grant and SRPC. Hope to see you there!

Register here:

www.tinyurl.com/Dover-Climate
Registration is required to receive the zoom link.

For more information,
contact Jackson Kaspani,
Resilience Coordinator
p: (603) 516-6008
e: j.kaspani@dover.nh.gov



For persons with disabilities requiring special accommodations, please contact Lisa.Wise@unh.edu prior to the event. Given ample time, we will make any reasonable effort to make accommodations. This project was funded, in part, by NOAA's Office for Coastal Management under the Coastal Zone Management Act in conjunction with the NHDES Coastal Program.

- ❖ Ad-hoc Climate Forum Planning Committee Comprised of Planning Board, Energy Commission and Conservation Commission Members worked with the Resilience Manager to Plan the event with support from UNH Extension | NH Sea Grant & Strafford Regional Planning Commission.
- ❖ The Committee reviewed Dover's climate resources, categorized them and produced 2-page fact sheets and corresponding videos.
- ❖ Content was added to Resilient Dover Web Page.
- ❖ Large representation of boards/committees during the event including: Board of Health, City Council, Cochecho Waterfront Advisory Committee, Conservation Commission, Energy Commission, Open Lands Committee, Planning Board and Transportation Advisory Committee.

Resiliency Projects Over the Last Year

Resilient Dover Web Page



- ❖ Worked with Outreach Coordinator Bassegio on the Creation of a Resilient Dover logo.
- ❖ Incorporated the Path to Resilience Project.
- ❖ Added section for the Citywide Resilience Plan.
- ❖ Produced “Green Tips” which provide information to the public about how to navigate the process of installing a solar array and options for local compositing.

Resiliency Projects Over the Last Year

Green Tips

CONSIDERING SOLAR?

Resilient Dover has gathered this list of resources to assist with your decision.

Topics from the GW Solar Institute

- Choosing a Solar Installer- vimeo.com/226367124
- Rooftop Solar Financing 101- vimeo.com/225889178
- Will Solar Save You Money?- vimeo.com/227971207



Homeowner's Guide to Solar Financing

- Clean Energy States Alliance's Homeowner's Guide- bit.ly/CESASolarFinancing

Recommended Pricing and Vendor Comparison Tools

- EnergySage Solar Cost Estimates and Comparisons- bit.ly/PanelCost
- SolarReviews Solar Cost Estimates and Comparisons- solarreviews.com



City of Dover Property Tax Exemption

- City of Dover Solar Energy Systems Exemption Application- bit.ly/DoverTaxExemption
- Revised Statutes Annotated (RSA)- bit.ly/RSASolar

Residential New Hampshire Rebate Program

- NH Residential Renewable Electrical Generation Rebate Program Information- bit.ly/NHRebateProgram



Federal Solar Tax Credit

- Federal Solar Investment Tax Credit Information- bit.ly/FederalTaxCreditInfo

Energy Production and Cost Estimate Tool

- National Renewable Energy Laboratory Cost and Energy Production Calculator- pvwatts.nrel.gov



COMPOSTING IN DOVER

Resilient Dover has gathered this information for residents interested in composting at home.

Drop Off

The City of Dover's Recycling Center at 265 Mast Road provides a bin at no-cost for residents to drop off their compost materials.

The 64-gallon tote is located at the Recycling Center between the corrugated cardboard bin and the used book building. It is available for resident drop-off anytime the Recycling Center is open.

For hours and information, visit bit.ly/Dover-Composting.

Residential Services

There are residential compost services that cover the Dover area that include delivering a compost bin for compost collection and pick-up of compost materials at your residence on a frequency of your choosing.

You can learn more about these services available in Dover here: mrfoxcomposting.com citycompost.com



Do It Yourself

You can also create your own space for composting materials at home.

If you do not have an area for an outdoor compost pile, you can compost materials indoors using a special type of bin.

The U.S. Environmental Protection Agency has provided resources on the needed materials and how to get started here: epa.gov/recycle/composting-home.



Resiliency Projects Over the Last Year

2021 and 2022 Energy Commission EV Shows

Saturday, November 13th 10:00 AM – 2:00 PM
St. Thomas Street
Dover, New Hampshire

EV Car Show

Hosted By: City of Dover Energy Commission



The City of Dover's Energy Commission is happy to announce the inaugural EV and plug-in hybrid car show. Join us on November 13th at St. Thomas Street, between the McConnell Center and Court House, to be introduced to EVs from a variety of dealers, private owners and Dover's municipal fleet!

Saturday, October 1st
12 p.m. – 3 p.m.

St. Thomas Street
Dover, NH

Electric Vehicle Show

at

APPLE HARVEST DAY



Hosted By: City of Dover's Energy Commission &
the Greater Dover Chamber of Commerce

The City of Dover's Energy Commission is partnering with the Greater Dover Chamber of Commerce to bring the EV Show to Apple Harvest Day! Come explore a range of EVs from e-bikes to trucks.

Dealers and owners will be onsite to share their vehicles and answer questions. We will also have experts from the Department of Environmental Services, Clean Energy New Hampshire, and the City of Dover in attendance.

Admission is free! Hope to see you there!

If you are an EV owner who would like to display your vehicle and share your experience, connect with us at:

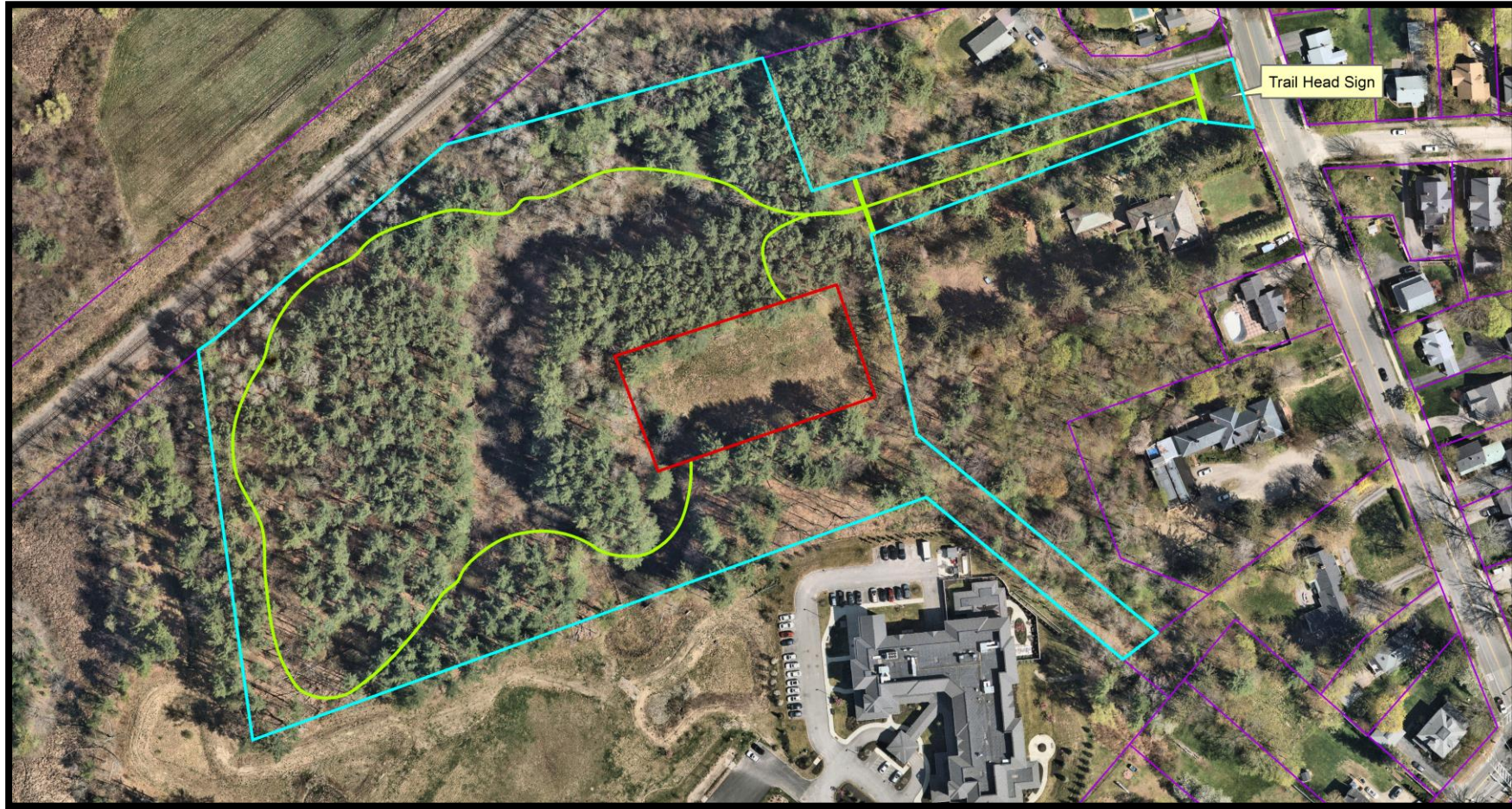
bit.ly/3Rci6gz

Apple Harvest Day Festival
is underwritten by:



Resiliency Projects Over the Last Year

Acquisition of Arch Street Parcel



Resiliency Projects Over the Last Year

Municipal EVSE RFP and Installation



- ❖ Led RFP process with input from Purchasing Agent Simmons, Fleet Supervisor Greene and IT Director Dove.
- ❖ Received 10 bids on the RFP and awarded the bid to Livingston Energy Group.
- ❖ Stations include online dashboard to allow for tracking of unique users as well as electricity use.
- ❖ Coordinating with Livingston to expand dashboard functionality.

Resiliency Projects Over the Last Year

Hydro Net Metering Agreement



&



- ❖ Identified two potential options and selected Standard Power.
- ❖ Agreement authorized by City Council Resolution R-2022.01.26-024.
- ❖ Agreement provides revenue stream to City without impacting ratepayers.
- ❖ Supports local hydro energy production.
- ❖ Yielded \$20,000 over two quarters since initiated.

Resiliency Projects Over the Last Year

Water System Energy Audit



- ❖ Financial assistance provided through NH Saves Program.
- ❖ Steve Bolles with Process Energy Services is working on the audit.
- ❖ Assisted with energy data and information related to the water systems.
- ❖ Audit will provide crucial information regarding opportunities to increase efficiency and integrate alternative energy.

Resiliency Projects Over the Last Year

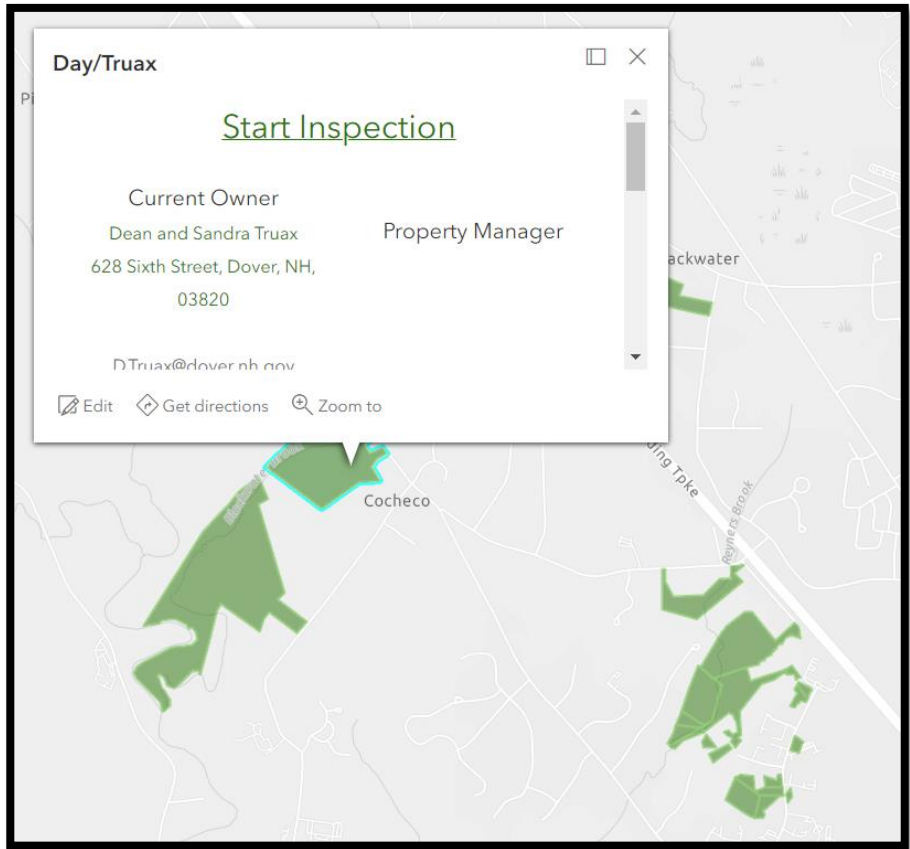
Dover Community Oyster Garden



- ❖ Collaboration with The Nature Conservancy and Children's Museum of New Hampshire.
- ❖ The Nature Conservancy held workshops and is collecting data on the growth of the spat.
- ❖ Oysters provide environmental benefit through nitrogen removal.
- ❖ The oysters will be moved to a restoration reef in the Great Bay.

Resiliency Projects Over the Last Year

ArcGIS Conservation Easement Monitoring Tool



- ❖ Collaborated with Asset Management Technician Pine.
- ❖ Added annually monitored easement layers into GIS tool.
- ❖ Enhances the Open Lands Committee's reporting capabilities.
- ❖ Allows for pinpoint documentation of features of interest or concern.

Resiliency Projects Over the Last Year

Proposed Mitigation Priority List for Conservation Commission

Priority Level	Project	NHDES Activity Type
Top	Purchase, conserve and restore Severino property and sand pit	Upland Buffer Preservation
Tier 1	Creation of living shoreline along Cochecho River	Restoration
Tier 2	Sixth Street Culvert Replacement	Enhancement
	Rayner's Brook Culvert Replacement	Enhancement
	Bellamy Culvert Replacement	Enhancement
	Tidal Culvert Improvements (refer to Coastal Hazard Mitigation Plan)	Enhancement
Tier 3	Chapel Street Ravine	Restoration
Tier 4	HLP BMP	Enhancement
Tier 5	Oak, Broadway and Central water management improvements	Enhancement
	Connect Chapel St. ravine to Cochecho outfall	Enhancement
Tier 6	Dam removal projects (conceptual at present)	Restoration

Regional Engagement



**COMMUNITY
POWER COALITION
OF NEW HAMPSHIRE**
For communities, by communities.



STRAFFORD
Regional Planning Commission



New England Municipal Sustainability Network

Thanks for your time!
Any questions?

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Planning & Community Development
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Email: j.kaspari@dover.nh.gov