Central Vermont Regional Planning Commission

BOARD OF COMMISSIONERS

April 10, 2018 at 7:00 pm

Central VT Chamber of Commerce Conference Room, 963 Paine Turnpike North, Berlin

5:30 pm – Town Plan Review Committee meeting & Public Hearing on Montpelier City Master Plan at CVRPC office

Page	Time[1]	Agenda
	7:00	**Adjustments to the Agenda** **Public Comments**
2	**7:05**	**Public Hearings**, *Eric Vorwald* (enclosed)[2] a) Regional Energy Plan b) 2016 Regional Plan Amendment
3	**7:20**	**Central Vermont Economic Development Corporation Report**, *Jamie Stewart* (enclosed) Quarterly update and discussion of Opportunity Zones
5	**7:35**	**Regional Energy Plan**, *Eric Vorwald* (enclosed)[2] a) Follow-up on interpretation of energy planning standards and energy generation facilities; consider options for revised language b) Potential action to accept the Plan as complete
27	**8:20**	**Municipal Plan Approval and Confirmation of Planning Process**, *Janet Shatney* (enclosed)[2] Resolution to approve the Montpelier City Master Plan and to confirm the planning process of the City of Montpelier.
28	**8:30**	**CVRPC Committees**, *Laura Hill-Eubanks* (enclosed) Brief discussion of committee duties in advance of appointments
	8:40	**Nominating Committee Report,** *Don La Haye* Presentation of final slate of candidates for Executive Committee; additional nominations
33	**8:50**	**Meeting Minutes** (enclosed)[2] a) February 13, 2018
37	**8:55**	**Reports** (enclosed) Updates and questions on Staff, Executive Director, and Committee Reports
	9:00	**Adjournment**

[1] Times are approximate unless otherwise advertised.
[2] Anticipated action item.

Central Vermont Regional Planning Commission

Notice of Public Hearings

The Central Vermont Regional Planning Commission will hold two consecutive public hearings on Tuesday, April 10, 2018 beginning at 7:00pm at the Central Vermont Chamber of Commerce (Lower Level), 33 Stewart Road, Berlin, Vermont 05602.

The first hearing will be to consider public comments on the draft Central Vermont Regional Energy Plan. This plan was developed to meet the standards of Act 174 of 2016. Following the public hearing, the Commission may take action to adopt the Central Vermont Regional Energy Plan.

The second hearing is to consider public comments on the draft amendments to the 2016 Central Vermont Regional Plan. The proposed amendments will address the requirements of Act 171 of 2016 related to forest integrity and Act 174 of 2016 related to energy planning. This is the first of two required public hearings as required under 24 VSA Section §4348.

Copies of both plans can be reviewed at the offices of Central Vermont Regional Planning Commission, 29 Main Street, Suite 4, Montpelier, during normal business hours or on-line at http://centralvtplanning.org. For additional information contact the CVRPC at 802.229.0389.

Vermont Agency of Commerce and Community Development

Opportunity Zones

Updated 03/21/18

The Tax Cuts and Jobs Act of 2017 included the creation of a new tax-incentive aimed at increasing private investment in low income census tracts (the same census tracts as defined by the New Market Tax Credit program). The law requires the Governor of Vermont to submit a recommendation to the Secretary of the Treasury naming up to 25 census tracts as "Opportunity Zones." Investors in these zones will receive preferential tax treatment when they invest in a newly created "Opportunity Fund." On March 21, 2018, Governor Scott submitted 25 census tracts in 17 communities to the U.S. Treasury Department for consideration to be named Opportunity Zones. The following tracts have been nominated (click here to view map):

- Barre City (southwest of Main Street) – census tract 50023955200
- Bennington (downtown and north) – census tracts 50003971200 and 50003970900
- Brattleboro (downtown) – census tracts 50025968500
- Burlington (waterfront, Pine Street Corridor, downtown) – census tracts 50007001000 and 50007000500
- Johnson – census tract 50015953200
- Lyndon (downtown Lyndonville and West of Broad and Main Street) – census tract 50005957200
- Newport City – census tracts 50019951500 and 50019951400
- Randolph – census tract 50017959400
- Rockingham (Bellows Falls) – census tract 50025967000
- Royalton – census tract 50027965100
- Rutland City (downtown core, west, and south) – census tracts 50021963300, 50021963100, and 50021963200
- St. Albans City (west of Main Street) - census tract 50011010700
- St. Johnsbury – census tracts 50005957400 and 50005957500
- South Burlington including City Center – census tract 50007003600
- Springfield – census tracts 50027966600 and 50027966700
- Vergennes – census tract 50001960300
- Winooski – census tracts 50007002500 and 50007002400

Representatives of ACCD worked with communities, development organizations and other stakeholders to narrow the list of more than 100 federally-recognized eligible census tracts down to the 25 recommended by the Governor. The Agency evaluated poverty and unemployment rates, population counts, the number of businesses and private sector jobs, available infrastructure, state designation program participation and development potential of each tract before making recommendations to Scott. ACCD sought input, published draft recommendations and amended its recommendations during the two months proceeding the March 21st nomination deadline through the stakeholder process outlined below.

Parties provide input on census tract selection, including adjoining non-NMTC census tracts:	February 14, 2018
The Agency publishes a draft recommendation on the web at accd.vermont.gov/OpportunityZones:	February 23, 2018
Parties provide feedback on the draft recommendation:	March 6, 2018
The Agency publishes a final draft recommendation on the web at accd.vermont.gov/OpportunityZones:	March 9, 2018
Parties provide feedback on the final draft:	March 16, 2018
Final recommendation made to Governor	March 20, 2018

ACCD is following developments from Treasury and the IRS about the designation of these nominations and awaiting further guidance on how investors can invest in these zones.

Central Vermont Regional Planning Commission

MEMO

Date: April 10, 2018

To: Board of Commissioners

From: Eric Vorwald, AICP, Senior Planner

Re: Regional Energy Plan Language Options

⌦ **ACTION REQUESTED:** Approve Regional Energy Plan language related to wind energy generation limitations.

At its February meeting, the Commission recommended the draft 2018 Central Vermont Regional Energy Plan be advanced to public hearing. The Commission asked staff to contact the Department of Public Service regarding its interpretation of a potential elevation threshold for the limitation on the height of wind generation facilities. Staff provided the language from the draft energy plan to the Department of Public Service and asked the Department:

1. Does limiting the height of wind generation to 100 feet throughout the region mean that we are also need to limit the height of any development (buildings, antennae, silos, etc.) to 100 feet?

2. If the answer to the first question is "yes", is there a way to exempt certain uses from this height limitation without running afoul of the requirement to treat all development equally?

The opinion that was provided from the Department of Public Service was:

"[M]y personal opinion is that the most straightforward thing to do is to similarly limit

other development, and that if there is a different treatment such as an exemption, there needs to be a strong rationale for why the developments and the commensurate impacts are not alike. Otherwise the concern [with respect to] the standards could be that there is an arbitrary rationale for treating like impacts in an unlike manner."

Based on this opinion, staff identified three options for consideration by the Commission.

Option 1 – Make no changes and leave the language as currently written with a height limitation of 100 feet.

As noted in the opinion from the Department of Public Service, this restriction may be similarly viewed to limit all development in the Region to 100 feet. Anything proposed that would be taller than 100 feet would be incompatible with the Regional Plan.

Option 2 – Increase the maximum allowable height to account for potential development constraints including tree canopy.

Similar to Option 1, this option would restrict the overall height of structures, but the maximum height would be increased. This would permit wind turbines to be built tall enough to clear an existing tree canopy in order to capture wind but limit the overall visual impact of the installation, and also allow flexibility in overall height of structures for non-wind related development. A possible maximum height limitation could be 160 feet to accommodate the average tree canopy to make residential or commercial wind energy generation possible.

Option 3 – Increase the maximum height and provide an upper limit on development.

Option 3 would include the provisions of Option 2 where an increased maximum height of structures would be established to allow flexibility in development and account for an average tree canopy, but also include a restriction on development above a specified elevation. Several municipalities in the Region currently have restrictions on development above specific elevations including Waitsfield (1,700 feet); Orange & Roxbury (1,800 feet); and Calais & Duxbury (1,500 feet). A possible elevation limitation would be 2,500 feet, which is consistent with other provisions of the Regional Plan and Act 250 permitting requirements.

Included with the agenda is proposed language that could be added to the existing text that would address each of the options listed above.

The draft 2018 Central Vermont Regional Energy Plan was intentionally written to limit the

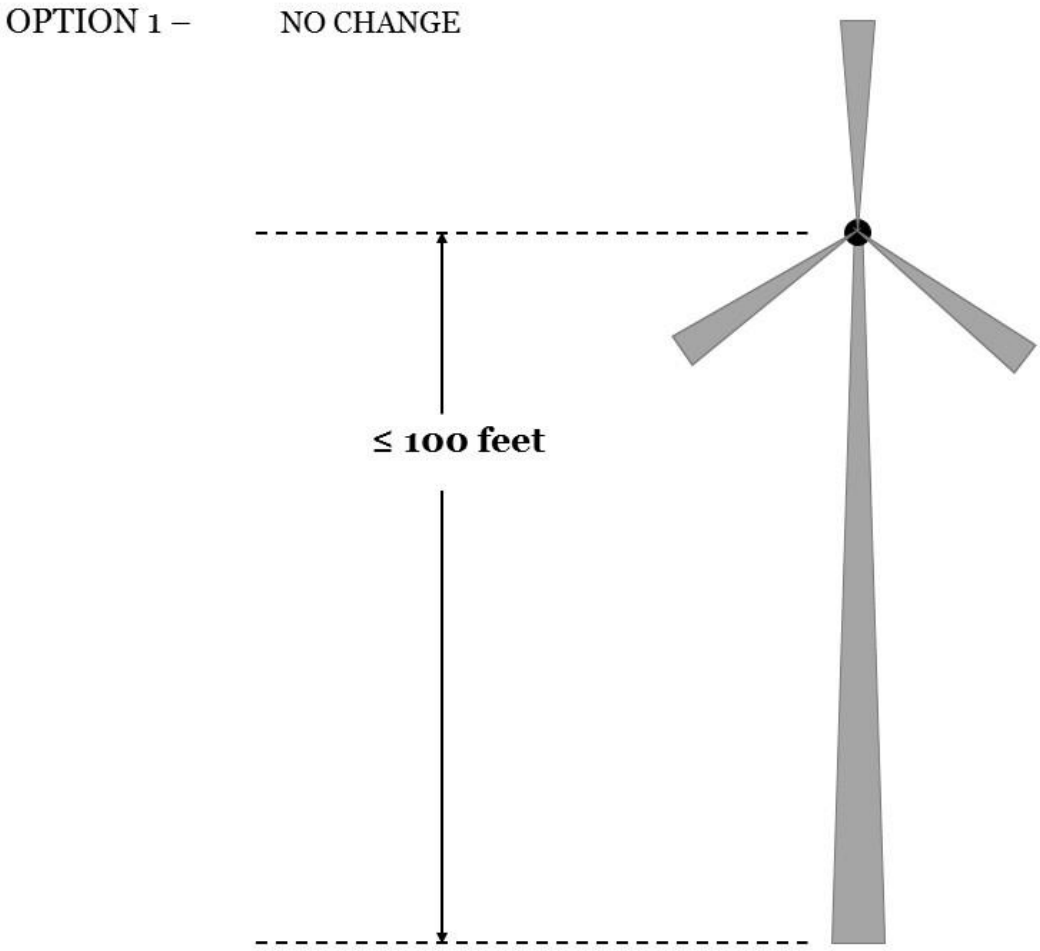
Region from dictating policy to municipalities. This is addressed in the Conflict Resolution section of the plan. Under the discussion of conflicts between a municipal energy plan and the regional energy plan, it notes that a municipal energy plan can be more restrictive or less restrictive as long as the policies are limited to the host municipality and do not impact a regional resource. This allows a municipality to determine the policies and actions that will be most appropriate for its specific needs. This could include greater restrictions on the type, location, or scale of renewable energy generation facilities.

PROPOSED OPTIONS AND LANGUAGE FOR THE CENTRAL VERMONT REGIONAL ENERGY PLAN APRIL 10, 2018

The following options pertain to text in paragraph 3 on page 14 of the Central Vermont Regional Energy Plan. Proposed text is added in red. Any deleted text will appear with a ~~strikeout~~.

OPTION 1 – NO CHANGE

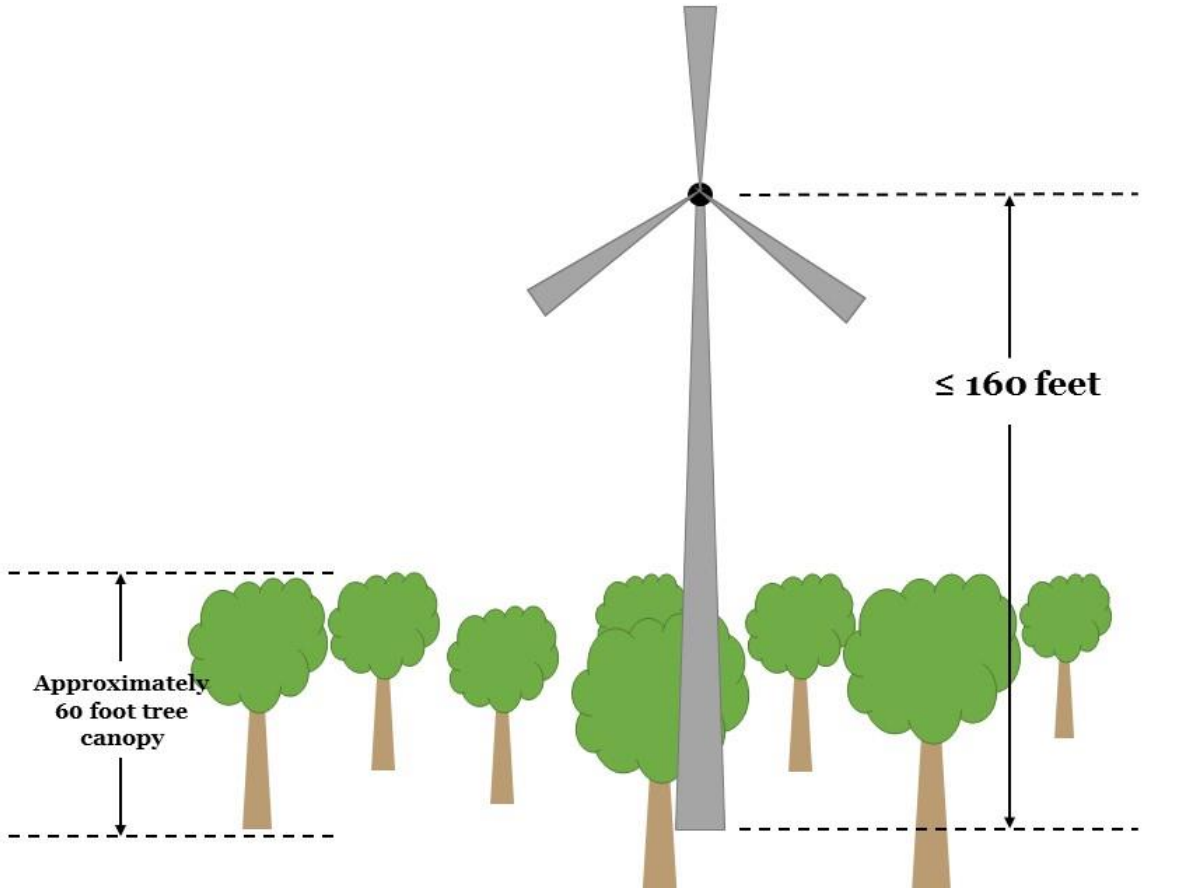
With this in mind, the Central Vermont Regional Planning Commission has determined that industrial-scale wind development is not compatible with the future land use patterns of Central Vermont. For the purposes of this plan, industrial-scale wind development will include any wind turbine with a hub height greater than 100 feet (excluding the blades). This is not intended to restrict the development of wind generation facilities at a residential or community scale where renewable energy can be provided to a targeted location.



OPTION 2 – INCREASE THE MAXIMUM HEIGHT TO ACCOUNT FOR POSSIBLE DEVELOPMENT CONSTRAINTS INCLUDING TREE CANOPY

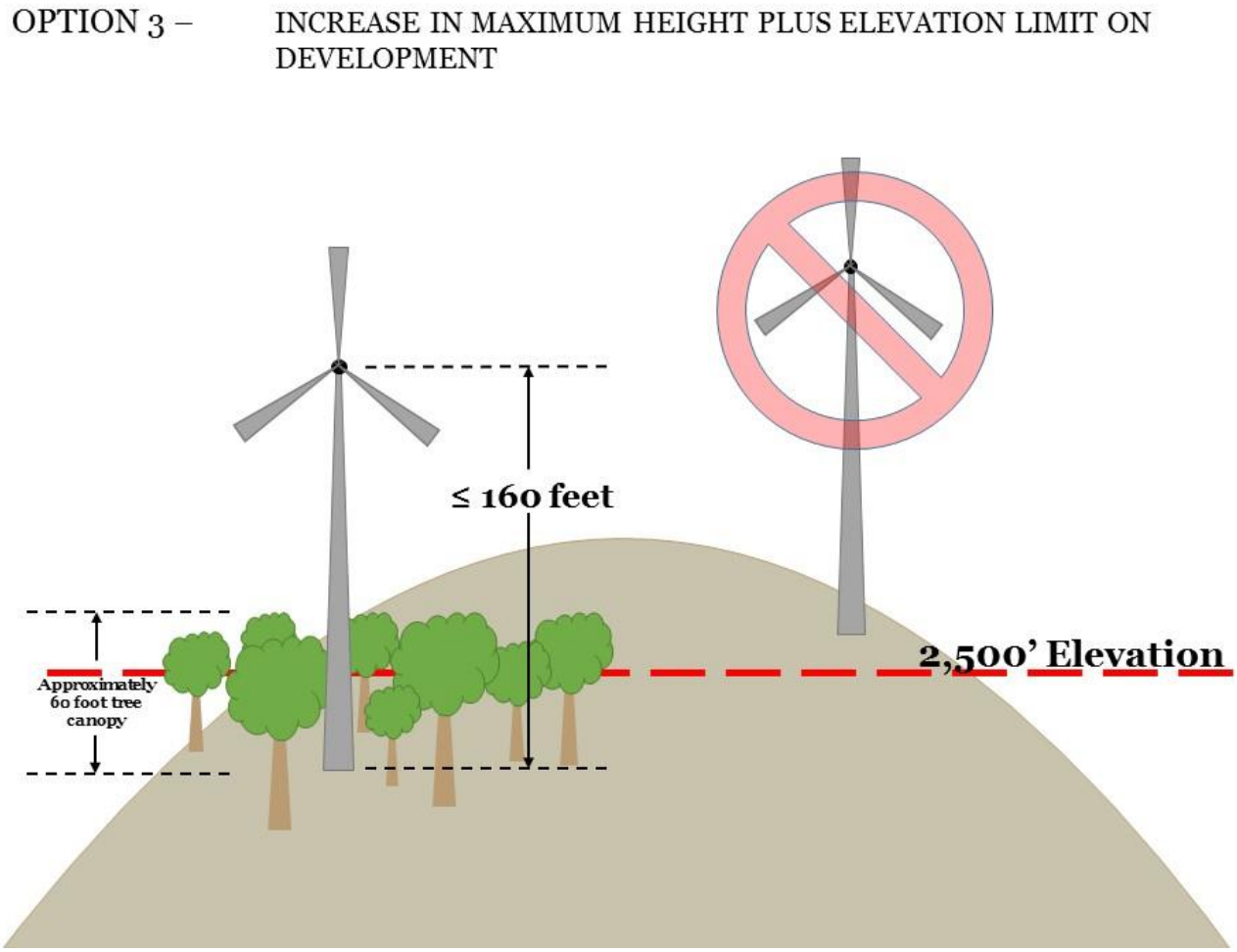
With this in mind, the Central Vermont Regional Planning Commission has determined that industrial-scale wind development is not compatible with the future land use patterns of Central Vermont. For the purposes of this plan, industrial-scale wind development will include any wind turbine with a hub height greater than ~~100 feet~~ 160 feet (excluding the blades). This is not intended to restrict the development of wind generation facilities at a residential or community scale where renewable energy can be provided to a targeted location.

OPTION 2 – INCREASE MAXIMUM HEIGHT TO ACCOUNT FOR DEVELOPMENT CONSTRAINTS INCLUDING TREE CANOPY



OPTION 3 – INCREASE IN MAXIMUM HEIGHT PLUS ELEVATION LIMIT ON DEVELOPMENT

With this in mind, the Central Vermont Regional Planning Commission has determined that industrial-scale wind development is not compatible with the future land use patterns of Central Vermont. For the purposes of this plan, industrial-scale wind development will include any wind turbine with a hub height greater than ~~100 feet~~ 160 feet (excluding the blades). ~~This is not intended to restrict the development of wind generation facilities at a residential or community scale where renewable energy can be provided to a targeted location.~~ Additionally, wind energy development will be prohibited above 2,500 feet in elevation consistent with the 2016 Central Vermont Regional Plan's future land use plan.



ANALYSIS & TARGETS

In order to adequately determine if the Central Vermont Region is on the right path to meeting it's share of the state's goal of 90% of the energy used being produced by renewable sources, an identification and analysis of current energy use is necessary. To this end, the following questions have been identified to help determine current energy use and targets for moving forward.

I. *Does the plan estimate current energy use across transportation, heating, and electric sectors?*

II. *Does the plan establish 2025, 2035, and 2050 targets for thermal and electric efficiency improvements, and use of renewable energy for transportation, heating, and electricity?*

III. *Does the plan evaluate the amount of thermal-sector conservation, efficiency, and conversion to alternative heating fuels needed to achieve these targets?*

IV. *Does the plan evaluate transportation system changes and land use strategies needed to achieve these targets?*

V. *Does the plan evaluate electric-sector conservation and efficiency needed to achieve these targets?*

These five questions and their respective responses serve as the basis for identifying where the region is now, where the region needs to go, and how it will get there in terms of its energy future.

The information needed to answer the five questions listed above was procured from various sources. This includes information from the American Community Survey (as part of the U.S. Census), The Vermont Agency of Transportation, the Vermont Department of Labor, the Vermont Department of Public Service, Efficiency Vermont, the Vermont Energy Investment Corporation (VEIC), and the Central Vermont Regional Planning Commission. A significant portion of the data related to targets was provided by the VEIC through a process known as Long-Range Energy Alternatives Planning or LEAP. This modeling factors in a significant number of data points and has been used extensively throughout the world for energy planning such as this.

The majority of the data in this section was developed with a "bottom up" approach. That is to say, the data was developed at a municipal scale to complete the requirements of Standard 5 of the Energy Planning Standards for Regional Plans. The municipal data was then aggregated to establish a regional total. The one primary exception to that is the LEAP data, which was modeled at a regional scale. The LEAP data serves as the basis for the conservation and efficiency targets that are included in this plan. To that end, it is important to note that the data provided herein is only a starting point and should be used to establish a general direction, not a required outcome. This data is presented as a way to gauge the region's overall progress towards achieving 90% of its regional energy used produced from renewable sources. As new or better data is provided or developed, these tables will be updated to reflect the changes.

I. Estimates of current energy use across transportation, heating, and electric sectors

In order to determine where we need to go with our energy future, it is important to know where we currently are. Included in this is an identification of the existing sources of energy generation. In general, energy can be divided into four basic categories where discussions can be focused. These include resource type, land use, transportation, and siting. While all four are related and interconnected, they all serve separate components that need to be addressed individually as well as collectively.

Resource Type

The 2016 State Comprehensive Energy Plan notes four primary resource types for energy that are used throughout the state. These include non-combustion based renewables (including wind, hydroelectric, and solar), combustion based renewables (including biomass), nuclear energy, and fossil fuels. Fossil fuels account for a majority of the energy used in the state with natural gas and petroleum products accounting for 62% of Vermont's total energy use[1].

Non-Combustion Based Renewables

Non-combustion based renewables includes all the typical sources of energy generation such as wind, solar, and hydroelectric. Based on information from the Vermont Department of Public Service and the Energy Action Network's Community Energy Dashboard, there are approximately 1,300 sites in Central Vermont that are producing renewable energy across the three resource types. This accounts for approximately 130,000 megawatt hours of energy produced annually within Central Vermont. This amounts to approximately 3.5% of the annual energy consumption in Central Vermont.

Combustion Based Renewables

A second category of renewable energy generation is combustion based. Combustion based renewables include methane gas, anaerobic digesters, biodiesel, combined heat and power, compost heat, and woody biomass. Combustion based renewables are used for both electricity generation and thermal heating.

When looking at combustion based renewables for thermal heating, woody biomass is the most common form in Central Vermont. Wood products or byproducts such as wood pellets or wood chips are the most popular form of biomass heating. According to data from the U.S. Energy Information Administration, in 2015 one in six Vermont households used some form of biomass as their primary home heating source.

Currently, the primary electricity generator of combustion based renewables is methane gas. In Central Vermont, the Moretown Landfill provides the primary source of electrical generation from biomass in the form of methane gas. According to the 2014 Green Mountain Power (GMP) Integrated Resource Plan, GMP has an agreement with Moretown Landfill to purchase 100% of their energy generation capacity totaling approximately three megawatts, through 2023. Additionally, the Washington Electric Cooperative receives a majority of its energy generation from the Coventry Landfill in Coventry, Vermont. According to the Washington Electric Cooperative's data, in 2014 over 53% of their power came from the Coventry facility. Table One indicates the existing renewable electricity generation for the Central Vermont region.

1. 2016 Comprehensive Energy Plan – p.389.

TABLE ONE EXISTING REGIONAL RENEWABLE ELECTRICITY GENERATION		
RESOURCE TYPE	**MEGAWATTS**	**MEGAWATT HOURS**
Solar	24	29,919
Wind	.14	486
Hydroelectric	25	88,467
Biomass (including wood, methane, and farm biogas)	3	13,091
Other	0	0
Total Existing Regional Renewable Electricity Generation	52.14	131,963

Notes:
1. Information provided by the Department of Public Service, 2015
2. Regional totals were aggregated from each municipal total therefore not all calculations will be consistent.
3. Municipal data can be found at http://centralvtplanning.org/programs/energy/municipal-energy-planning/

Nuclear Energy

The Central Vermont Region's energy portfolio has been significantly impacted by the decommissioning of the Vermont Yankee Nuclear Facility in Vernon, Vermont. This facility, which was shut down at the end of 2014, provided approximately 55% of the electrical generation capacity for the State of Vermont. To make up for the loss of generation from Vermont Yankee, utility companies throughout the state have filled this gap through a variety of ways and established long-term contracts with other market power providers. Sources for this electricity generator consist of both renewable and non-renewable sources including wind, solar, hydroelectric, natural gas or other in-state utility owned renewable generation contracts.

Based on data from the Vermont Public Service Department, in 2011 the majority of energy being provided to Central Vermont from Green Mountain Power, Hardwick Electric Department, Northfield Electric Department, and Washington Electric Cooperative was from hydroelectric sources including Hydro Quebec. In fact nuclear energy as a source accounted for only about 10% of the energy generation for the service providers in Central Vermont.

Fossil Fuels

Fossil fuels are all non-renewable sources of energy that are generally carbon based and formed over millions of years from organic matter (including plants and animals) that were gradually buried under layers of rock. These fuels include natural gas, coal, and oil. Fossil fuels are typically refined for use as gasoline or other distillate fuels such as diesel fuel; home heating oil; or transported as natural gas.

In general, the majority of fossil fuel usage is attributed to home heating (including water) in the form of natural gas or home heating oil, or for transportation to fuel vehicles. According to information from the U.S. Energy Information Administration, natural gas fired power plants are providing energy to Vermonters, however these plants are generally located outside of the state. Additional information regarding fossil fuels will be included in the discussion on transportation later in this document.

In order to further refine the existing energy picture within Central Vermont, the CVRPC calculated its current energy consumption for transportation, heating, and electric use. This included both commercial and residential heating information. This information is listed in Tables Two through Six.

TABLE TWO CURRENT REGIONAL TRANSPORTATION ENERGY USE	
DATA CATEGORY	**INFORMATION**
Total number of vehicles	45,584 vehicles
Average miles traveled per vehicle	12,500 miles
Total regional miles traveled	567,650,000 miles
Average gallons of fuel used per vehicle per year	576 gallons
Total regional gallons of fuel used per year	30,518,817
Transportation energy used per year (in Billions)	3,396 BTUs
Average regional cost per gallon of fuel	$2.31
Regional fuel costs per year	$70,488,465.00

Notes:
1. Regional totals were aggregated from each municipal total therefore not all calculations will be consistent.
2. Total vehicles provided by the American Community Survey.
3. Average miles traveled & Average gallons of fuel used per vehicle provided by VTrans.
4. Average cost per gallon of fuel provided by the CVRPC.
5. Information related to public transit is not included in this table.

TABLE THREE CURRENT REGIONAL RESIDENTIAL HEATING ENERGY USE BY FUEL SOURCE				
FUEL SOURCE	**NUMBER OF HOUSEHOLDS**	**PERCENT OF HOUSEHOLDS**	**REGIONAL HEATED SQUARE FOOTAGE**	**REGIONAL BTUs (in Billions)**
Natural Gas & Propane	5,983	22.2%	9,632,438	578
Electricity	1,206	4.5%	1,494,263	90
Fuel Oil	14,238	52.9%	24,431,228	1,466
Coal	66	.2%	132,664	8
Wood	5,031	18.7%	9,493,439	570
Other (includes solar)	392	1.5%	696,536	42
No Fuel	22	.1%	42,680	3
TOTAL	**26,938**	**100%**	**45,923,248**	**2,755**

Notes:
1. Regional totals were aggregated from each municipal total therefore not all calculations will be consistent.
2. Data provided by the American Community Survey.

TABLE FOUR CURRENT REGIONAL COMMERCIAL THERMAL (HEATING) ENERGY USE		
COMMERCIAL ESTABLISHMENTS	**AVERAGE THERMAL ENERGY USED PER ESTABLISHMENT**	**COMMERCIAL THERMAL ENERGY USED REGIONALLY**
2,647	699	1,847,355

Notes:
1. Regional totals were aggregated from each municipal total therefore not all calculations will be consistent.
2. Thermal energy use is expressed in Millions of BTUs.
3. Information provided by the Vermont Department of Labor and the Department of Public Service.

While Table Four identifies the amount of energy used regionally for commercial thermal (heating) purposes, Table Five provides a list of the sources of fuel being used by the commercial establishments in the region for thermal purposes. Even though a large percent of commercial establishments currently use electricity for their heating needs, non-renewable fuels such as propane and fuel oils are almost as common.

TABLE FIVE CURRENT REGIONAL COMMERCIAL HEATING USE BY FUEL SOURCE		
FUEL SOURCE	**NUMBER OF ESTABLISHMENTS**	**PERCENT OF ESTABLISHMENTS**
Biofuel	0	0.0%
Distillate Fuel Oil	505	19.1%
Electric Use	922	34.8%
LPG	381	14.4%
Natural Gas	0	0.0%
Residual Fuel Oil	51	2.0%
Wood & Wood Waste	165	6.2%
Other	623	23.5%
Total Commercial Establishments	**2,647**	**100%**

Notes:
1. Information derived from VEIC LEAP Modeling.
2. Data based on 2015 information

TABLE SIX CURRENT REGIONAL ELECTRICITY USE	
USE SECTOR	**CURRENT ELECTRICITY USE**
Residential	241,268 megawatt hours
Commercial & Industrial	353,117 megawatt hours
TOTAL	**594,385 megawatt hours**

Notes:
1. Regional totals were aggregated from each municipal total therefore not all calculations will be consistent.
2. Information provided by Efficiency Vermont.

II. 2025, 2035, and 2050 targets for thermal and electric efficiency improvements, and use of renewable energy for transportation, heating, and electricity

With the baseline information established for the region, the next step is to identify what targets need to be met in order for the region to achieve its share of the state's renewable energy goals. The 2016 State Comprehensive Energy Plan identifies target years of 2025, 2035, and 2050 as specific points to help measure progress. Using these same target years, the Central Vermont RPC has identified percentage targets for efficiency improvements regarding transportation, heating, and electricity.

The targets indicated in Tables Seven, Eight, and Nine are cumulative totals and account for the previous target year's percentages. For example, the residential thermal efficiency target for 2035 in Table Seven indicates that 42% of the residential units should be weatherized and efficient. This could be done through a combination of new construction or weatherization of existing structures. These are targets for the region to try and achieve and not a mandate on what they must accommodate.

The information in Tables Seven, Eight, and Nine were developed using the Long-Range Energy Alternatives Planning (LEAP) Model as provided by the Vermont Energy Investment Corporation (VEIC). VEIC was contracted to provide modeling support for this project and developed the LEAP model for each Regional Planning Commission to reflect their share of the state totals. The percentages are weighted heavier in the later years which assumes increases in efficiencies and technological improvements that will establish these targets.

TABLE SEVEN
REGIONAL TARGETS FOR THERMAL EFFICIENCY IMPROVEMENTS OF EXISTING STRUCTURES

SECTOR TYPE	2025	2035	2050
Residential Thermal Efficiency	20%	42%	92%
Commercial Thermal Efficiency	22%	33%	61%

Notes:
1. Information derived from VEIC LEAP Modeling.
2. Assumes a base year of 2015.
3. Percentages are cumulative for each target year.

Table Seven identifies the percentage of existing residential and commercial structures in Central Vermont that would need to be weatherized in each of the target years to meet the State's energy goals. These targets also assume that new structures will be built based on existing state energy codes and therefore meet or exceed the needed efficiency standards.

In addition to the thermal efficiency improvements of existing buildings outlined in Table Seven, Table Eight identifies the electric efficiency improvements needed for each target year to meet the renewable energy goals in the State's Comprehensive Energy Plan. The electric efficiency is an indication of how much efficiency is needed across all sectors. It is a comparison between anticipated electricity use for each target year versus the electricity use in the base year, which in this case, is 2010.

TABLE EIGHT REGIONAL TARGETS FOR ELECTRIC EFFICIENCY IMPROVEMENTS ACROSS ALL SECTORS			
SECTOR TYPE	**2025**	**2035**	**2050**
Electric Efficiency	1.5%	7.3%	15.2%

Notes:
1. Information derived from VEIC LEAP Modeling.
2. Assumes a base year of 2015.
3. Percentages are cumulative for each target year.

Table Eight outlines the electric efficiency improvements needed for each of the three target years. These targets would cover all sectors including electric, thermal (heating), and transportation. Many of these efficiencies will be met through technological changes and improvements that will occur over time, however conversions to more efficient technologies will need to be supported. Specific policies and actions to encourage conversions for efficiencies are outlined in the Pathways & Implementation Actions section.

Similar to Tables Seven and Eight, Table Nine identifies the percent of energy use to be derived from renewable sources for energy related to transportation and thermal needs. While energy needs for transportation and thermal uses are different, Table Nine is intended to identify percentage of renewable energy use for these two sectors and not intended to provide a parallel association between these two sectors.

TABLE NINE REGIONAL TARGETS FOR RENEWABLE ENERGY USE BY SECTOR			
SECTOR TYPE	**2025**	**2035**	**2050**
Transportation Use	9.6%	31.3%	90.2%
Thermal Use	52.3%	66.6%	92.5%

Notes:
1. Information derived from VEIC LEAP Modeling.
2. Assumes a base year of 2015.
3. Percentages are cumulative for each target year.

A major factor that will impact these targets are market forces which are beyond the control of an individual municipality or region. With that in mind, the region (and therefore the municipalities) should work to ensure barriers don't exist that would adversely impact the ability to reach these targets. The Pathways & Implementation Actions identified in this plan will discuss this in more detail.

TABLE TEN REGIONAL TARGETS FOR NEW RENEWABLE ELECTRIC ENERGY GENERATION			
SECTOR TYPE	**2025**	**2035**	**2050**
New Renewable Electric Energy Generation	104,620	167,404	418,531

Notes:
1. Information provided by The Department of Public Service.
2. Values are in megawatt hours.
3. Assumes a base year of 2015.

Table Ten notes the renewable electricity generation for each of the target years and is expressed in megawatt hours. The identification of these targets by megawatt hour is a significant factor because it represents energy (megawatt hours) as opposed to power (megawatt). In this case, the megawatt hours identified denote the amount of renewable energy that should be consumed as part of the total energy being consumed by the target years. This information was generated base on data provided by the Department of Public Service and information developed by the Regional Planning Commission.

III. Evaluation of the amount of thermal-sector conservation, efficiency, and conversion to alternative heating fuels needed to achieve these targets

One important way for each region to support and work collectively to achieve the state's goal of 90% renewable energy generation by 2050 is through conversion and development of alternative fuels. Conversions to more efficient technologies such as cold climate heat pumps for residential heating or switching to electric vehicles will mean that less energy needs to be generated as efficiencies in technologies increase. If less energy needs to be generated, the energy being generated from renewable sources will provide more of the demand over time.

Table Eleven outlines the thermal sector conversions to wood heat and heat pumps. For these tables residential and commercial uses are combined to indicate the total fuel switching needed.

TABLE ELEVEN
REGIONAL THERMAL SECTOR CONVERSIONS
(RESIDENTIAL & COMMERCIAL)

SYSTEM TYPE	2025	2035	2050
New Efficient Wood Heat Systems	117	108	966
New Heat Pumps	2,792	7,198	13,630

Notes:
1. Regional totals were aggregated from each municipal total therefore not all calculations will be consistent.
2. Information derived from VEIC LEAP Modeling.
3. Heat pumps includes both space heating and hot water heating.

The information in Table Eleven is derived from calculations based on information provided in the LEAP modeling data. As with other targets, the numbers identified for each target year represent the number of new systems needed to achieve the overall efficiency goals. It should be noted that Table Eleven only highlights efficient wood burning systems and heat pumps. This is an indication that using these two technologies could account for all the changes needed in Central Vermont regarding conversions from fossil fuel based heating systems such as fuel oil or natural gas.

Other options for conversion of residential and commercial heating systems may be available that would satisfy the goals of the state's comprehensive energy plan. Wood systems are being highlighted due to their renewable fuel. Heat pumps are being highlighted because the 2016 State Comprehensive Energy Plan focuses on electrification. Therefore a high efficiency electric heat pump would address the efficiency goals while the electricity to power the system being generated from renewable sources.

Another system type that should be encouraged is geothermal heating and cooling. Geothermal systems use the consistent temperature of the earth to either provide heat or cooling to homes and businesses. Geothermal systems generally require an electric fan to force air through the system, however like with other systems, the increase in efficiency through technology and the electrification of the grid make systems like this a viable option to address conservation and conversion of systems.

One challenge that will need to be addressed regarding conversions and conservation efforts will be the tracking and monitoring of system upgrades or improvements that address efficiency to increase weatherization of residential and commercial properties. While specific programs are set up to help track and score these changes, many homeowners and business owners make changes and upgrades as part of the normal lifecycle of a property. These systems are often upgraded without any formal acknowledgement of the possible efficiency improvements being made. In order to measure how the targets in Table Eleven are being met (or not being met), a methodology should be developed to ensure the necessary information is gathered when changes occur. This will be addressed in the Pathways and Implementation Actions section.

IV. Evaluation of transportation system changes and land use strategies needed to achieve these targets

Transportation

As noted in Table Two, the average vehicle miles traveled for residents in Central Vermont is approximately 12,500 miles per year. At an average cost of approximately $2.31 per gallon of fuel and an efficiency factor of approximately 22 miles per gallon of fuel, the average person living in Central Vermont is spending approximately $1,300 dollars on fuel each year. According to information from the American Automobile Association, the average cost of owning a vehicle can range from approximately $6,500 for a small sedan to $10,400 for an SUV[2]. By creating development patterns whereby uses are in closer proximity to where people live, work, or recreate, trips can be combined or alternative modes of transportation can be employed. This will reduce the vehicle miles traveled and therefore reduce the transportation costs to individuals.

Another option to consider when evaluating system changes is the conversion to electric or alternative fuel vehicles. Vehicles that are powered by renewable energy sources increase efficiency, reduce greenhouse gas emissions, and can reduce the need for fossil fuels. While switching to alternative fuel vehicles does not reduce the vehicle miles traveled, it does reduce the dependence on fossil fuels. These changes also require improvements to infrastructure such as grid capacity to transmit the electricity as well as an increase in the volume of charging stations to provide additional opportunities and locations for vehicle charging thus increasing the range of electric vehicles.

An evaluation of LEAP data and information from the American Community Survey identifies the number of vehicles needed to be switched from fossil fuels to renewable fuels. Specifically, conversion to electric vehicles and biodiesel vehicles was noted in the LEAP analysis in order to meet the needed reductions in energy related to transportation. Table Twelve identifies the number of electric and biodiesel vehicles needed for each of the three target years in order to meet the energy reduction goals related to transportation as identified in the LEAP analysis.

2. 2016 article from the American Automobile Association (AAA) http://newsroom.aaa.com/auto/your-driving-costs/. Costs include fuel, insurance, maintenance, registration, depreciation, and similar expenses associated with owning a vehicle and is based on driving 15,000 miles per year.

TABLE TWELVE REGIONAL TRANSPORTATION FUEL SWITCHING TARGETS			
FUEL TYPE	**2025**	**2035**	**2050**
Electric Vehicles	3,902	26,954	53,809
Biodiesel Vehicles	6,801	12,603	20,438

Notes:
1. Information derived from VEIC LEAP Modeling.
2. Assumes the replacement of existing vehicles with new alternative fuel vehicles.

It is important to note that Table Twelve indicates the number of fossil fuel based vehicles that would need to be replaced with alternative fuel vehicles to meet the reduction goals for transportation energy by each target year. That is to say that of all the new vehicles on the road in 2025, approximately 10,700 of those vehicles would need to use alternative fuels as the primary fuel type. For reference, electric vehicles would be similar to a standard passenger vehicle currently using gasoline and biodiesel vehicles would be consistent with light or heavy duty trucks that currently run on standard diesel fuels.

In addition to the information regarding transportation that is noted in this plan, the Central Vermont Regional Planning Commission maintains a regional transportation plan. Under the direction of a Transportation Advisory Committee (TAC), the CVRPC identifies annual transportation priorities to be considered by the Agency of Transportation. These priorities will help determine not only the direction of future transportation projects within the region, but may also impact land use decisions a the regional or local level. This underscores the importance to coordinate transportation objectives with land use priorities to ensure a coordinated approach to land development is pursued. The confluence of land use and transportation will impact future needs and impacts to energy use including conservation, conversions, infrastructure needs, and siting. The Regional Transportation Plan provides more significant detail on specific projects that may impact the Region's energy planning future and should be considered part of the Region's energy planning priorities.

Land Use

One key factor that impacts the amount of energy being used is land use. Land use directly impacts and influences our choices, especially as they relate to transportation. When land use patterns focus on density, compact development, or mixing of uses, the result can be an area that is walkable, bicycle friendly, or promote public transit use.

Land use planning and management can have a direct impact on how much energy is used and consumed in regard to transportation. As development density decreases (creating fewer lots or uses per acre), the impacts associated with that decrease in density will rise. This includes both costs and consumption of resources including energy to move people from place to place. As land uses are spread further from one another, more resources are required to link those uses together. This includes infrastructure such as roads or utilities; needs for emergency services such as police, fire, and ambulance, and increases in municipal service needs such as road maintenance.

In order to reduce the costs and needs for energy related to transportation and land uses, changes in land development will need to occur. One significant way that this can be addressed is through amendments to land development regulations such as zoning or subdivision. Changes to land development regulations that require

pedestrian facilities such as sidewalks or multi-use paths to connect uses or activity centers is one technique that can be used to help create alternative transportation options in a community. Additionally, smaller changes could be implemented that can have larger impacts. Examples of this include reducing lot sizes, reducing parking requirements, adjusting setbacks, implementing traffic calming measures, or increasing building heights are all ways to maximize development potential within the framework of existing land development regulations.

If a municipality does not have land development regulations, there are still avenues that can be explored from the non-regulatory side that would impact land development practices. For example, developing a capital plan for public utilities and services that is consistent with a municipal plan can identify and prioritize where public funds should be spent. This could include sidewalk connections, park & ride facilities, or water and wastewater services. Expansions to emergency services or road maintenance equipment can also be a way to signal intended growth. Receiving a state designation for a Downtown, Village Center, Growth Center, New Town Center, or New Neighborhood Development Area can provide the basis for non-regulatory growth management and the tools necessary to regulate development without a formally adopted set of regulations. Finally, having clear goals, policies, and action items identified in municipal plans will impact how a community grows and therefore how the connection between land use and transportation is addressed on a municipal basis.

Currently, 19 of the 23 municipalities in the Central Vermont Region have some form of development regulation. Six of the 19 only have zoning regulations in place while the other 13 have zoning and subdivision regulations. Additionally, 12 of the municipalities have an active state designation and several municipalities have multiple designations. For example, the City of Montpelier has both a Downtown and a Growth Center designation, while the Town of Calais has three village centers that are designated including Adamant, East Calais, and Maple Corners.

While the techniques noted herein can help provide avenues for changes to support development density and create compact development patterns, a primary factor that will influence development density is adequate infrastructure to accommodate water and wastewater. Water and wastewater infrastructure is critical to provide a development pattern that includes density, mixed uses, and alternative transportation options. This is done by moving the supply and treatment of water and wastewater off-site therefore, reducing the need for land to accommodate these facilities on-site. Doing so creates opportunities for smaller lots, denser development, increased building heights, and mixed uses. All of these are positive steps to reducing the need for infrastructure to accommodate single-occupancy vehicles such as parking areas, but also begin to support the critical mass that is necessary to support public transit.

As noted previously, regulatory and non-regulatory approaches can have an impact on energy use due to the future development patterns in a community. While there isn't a single approach that will address all of the Region's energy needs, municipalities are encouraged to identify what programs or actions will work best to implement their community's future transportation and land use planning. Specific actions from the Region that can assist with municipal transportation and land use priorities can be found in the next section of this plan regarding Pathways & Implementation Actions. Ultimately, positioning the municipalities to take control of their energy futures while working collectively as a region could be a successful outcome for all.

V. Evaluate electric-sector conservation and efficiency needed to achieve these targets

Conservation and efficiency of electricity is a key component to achieving the state's comprehensive energy planning goals. Over time, advancements in technology will provide a degree of the needed efficiency and conservation measures to achieve these goals, but also, efforts can be taken now to ensure that Central Vermont is on track to meet their conservation and efficiency targets. Targets for electric efficiency improvements for Central Vermont were previously noted in Table Eight. Information related to renewable energy generation, which is a necessary component in achieving these targets, is noted below.

Siting

A discussion of electric sector conversions and efficiencies should include information related to the ability to generate electricity through renewable means, but also to have a grid that can support the distribution of that electricity. An analysis of existing land and renewable resource potential will help determine what the capacity of the region is to generate and distribute local renewable energy. As noted previously, Table One identifies the current renewable generation for the region, while Table Thirteen identifies the potential generation for the region.

TABLE THIRTEEN
EXISTING POTENTIAL NEW REGIONAL RENEWABLE ELECTRIC ENERGY GENERATION

RESOURCE TYPE	MEGAWATTS	MEGAWATT HOURS
Rooftop Solar	40	49,268
Ground-mounted Solar	15,622	19,160,098
Wind	23,050	70,671,678
Hydroelectric	.01	28
Biomass & Methane[3]	Unknown	Unknown
Other	0	0
Total Potential Regional Renewable Energy Generation	38,713	89,881,072

Notes:
1. Regional totals were aggregated from each municipal total therefore not all calculations will be consistent.
2. Information calculated by the CVRPC based on data provided by the Vermont Center for Geographic Information and efficiency factors provided by the Department of Public Service.
3. Municipal data can be found at http://centralvtplanning.org/programs/energy/municipal-energy-planning/

Based on the information included in Table Thirteen, the municipalities in Central Vermont have enough potential resource area (both prime and secondary) that is not impacted by known or possible constraints (as defined in Appendix A) to sufficiently accommodate the megawatt hour allocation and meet their share of the state's renewable energy goal as noted previously in Table Ten. This means that the municipalities can reasonably identify additional constraints or preferred locations to align with their own land use planning goals if they so choose.

3. Biomass and methane are not restricted by resource locations and should be sited accordingly to provide maximum benefit to the greatest number of end users or to meet municipal needs. Siting will be more dependent on local regulatory controls and should be planned for accordingly.

To better understand the relationship between megawatts and megawatt hours, the following conversions are used. It should be noted that some renewable generation types are more efficient at producing energy when they are actively in production. For example, the wind does not always blow and the sun is not always shining, therefore a constant production of these resources may not be possible. On the other hand, methane generated from a landfill will be producing consistently for a finite number of years therefore, its efficiency factor will be greater for the useful life of the facility. Table Fourteen outlines the various renewable technologies including their capacity factor and annual megawatt hour output per installed megawatt of capacity.

Table Fourteen reinforces the fact that multiple options of renewable energy generation exist and can be utilized at a regional and municipal level. For all of these generation types, understanding where the resources that support these sources are the best or preferred is critical. This information will be further discussed in the mapping section, however planning for the siting of renewable energy generation will ensure that, like any other land use, a municipality has made a concerted effort to ensure compatibility with other uses while accounting for possible future needs.

TABLE FOURTEEN
RENEWABLE ENERGY GENERATION OUTPUTS & CAPACITY FACTORS

RESOURCE TYPE	CAPACITY FACTOR	ANNUAL MEGAWATT HOUR OUTPUT PER INSTALLED MEGAWATT
Solar	14% - 16%	1,300
Small Wind	20% - 25%	2,000
Utility Scale Wind	25% - 35%	2,600
Methane	60% - 90%	6,600
Biomass	60% - 80%	6,100
Small Hydroelectric	40% - 60%	4,400

Notes:
1. Information provided by the Vermont Department of Public Service.
2. "Capacity Factor" indicates the percent of time an identified resource is actively producing electricity.

As Table Fourteen indicates, solar installations have the lowest capacity factor, however the costs associated with installation of solar generation facilities are also low compared to other resource types. The economics of using a given resource may prove to be more of a consideration than the actual energy output. As such, measures may need to be considered to off-set the costs associated with higher capacity resource generators if they are to be viable throughout the region.

It should be noted that while biomass has a high level of annual output per installed megawatt, the source of the biomass should be taken into consideration. When possible, locally sourced biomass will have the greatest benefit to the community. In order to limit the secondary impacts associated with biomass, the origin of the fuel source should be considered. Transporting biomass from out of region or out of state will have increased costs and the impacts from transportation will off-set a portion of the efficiencies. Also, invasive species that impact woody biomass need to be considered.

Currently, there are two Federal quarantine regulations that are relevant to the movement of woody biomass (including chips, cordwood, and logs) from New York and Massachusetts. These include the emerald ash borer and the Asian longhorned beetle. Additionally, the State of Vermont has quarantines for external firewood and the hemlock woody adelgid. All of these factors need to be considered to ensure a sustainable supply of woody biomass can be sourced as locally as possible to limit the spread of these invasive species that could adversely impact the forest cover.

Central Vermont enjoys rich natural and scenic resources. This is represented by the peaks of the Worcester and Green Mountain ranges (including Camel's Hump State Park), which are characteristic of many Vermont communities. These areas are important to Central Vermont not only for their natural, scenic, and recreational value, but also for the predominance of critical plant and animal habitat that exists in the undisturbed forest blocks. In support of the protection of these areas, the 2016 Central Vermont Regional Plan identifies critical resources areas including wildlife habitat, steep slopes, and lands above 2,500 feet in elevation. These areas are specifically identified for their value as a regional resource.

With this in mind, the Central Vermont Regional Planning Commission has determined that industrial-scale wind development is not compatible with the future land use patterns of Central Vermont. For the purposes of this plan, industrial-scale wind development will include any wind turbine with a hub height greater than 100 feet (excluding the blades). This is not intended to restrict the development of wind generation facilities at a residential or community scale where renewable energy can be provided to a targeted location.

To further support this limitation on industrial-scale wind generation, the 2016 Central Vermont Regional Plan's Future Land Use identifies two distinct categories that encompass an overwhelmingly significant portion of the region. These categories are Rural and Resource and are delineated on the Future Land Use Map in Appendix A of the 2016 Central Vermont Regional Plan. These categories are described as:

Rural – These areas encompass much of the Region's large forest blocks, sand/gravel/mineral deposits, and prime agricultural soils that, when in productive use, contribute to the working landscape and have significant economic value.

Resource – These areas are dominated by lands requiring special protection or consideration due to their uniqueness, irreplaceable or fragile nature, or important ecological function. These include, protected lands; elevations above 2,500 feet (elevations above 1,700 feet in Waitsfield, as regulated); slopes of 25% or more; rare, threatened or endangered species and significant natural communities; wetlands; special flood hazard areas; and shoreline protection areas. As a subcategory of Resource lands, this plan recognizes critical resource areas as key sites that are particularly sensitive and should be given maximum protection.

Specific polices related to these two future land use districts include:

- Development should be designed to minimize its impact on the viability of agricultural operations or its contribution to fragmentation of large contiguous tracts of woodland.

- Identified wildlife corridors should be protected from fragmentation and uses that reduce their viability for movement of wildlife, particularly where they connect large contiguous tracts of land.

- Conservation of the natural landscape and careful management of lands is sought for these areas. Development in these areas should be subject to extensive planning, review and conditions that ensure its protection.

- Any development proposed within critical resource areas shall provide evidence as to why the development cannot be avoided, and shall provide mitigation for natural resources impacted by the development.

- The extension of permanent roads, energy transmission facilities, and utilities into Resource areas is discouraged.

An analysis of wind resource mapping for the Central Vermont Region identifies approximately 1,100 acres of unconstrained prime resource area for wind that is not located within the rural or resource future land use designations as described above. This acreage would equate to approximately 843,000 megawatt hours of energy generation potential. As such, the limitation on turbine height should not adversely impact the Region's ability to support all types of renewable energy generation.

If, through the development of a local energy plan consistent with Act 174, a municipality identifies industrial-scale wind generation as a community supported resource, the CVRPC may revise or amend this plan to consider the location(s) that has been identified. Prior to any amendments, the CVRPC will consider regional planning goals, mitigation of any identified constraints, and compatibility with the plans of adjacent municipalities.

Energy Storage

Finally, a discussion of electrical conservation and conversions would not be complete without acknowledging the potential limitations. Electricity as the primary power source for future needs will have to also consider the infrastructure and demand. If homes and vehicles are converted to electric power, there will be an increased demand for these resources in locations that may not currently be suited to provide that demand. Additionally, limitations on renewable resource technology will impact peak needs which may create a demand for storage of electrical power.

These factors will need to be considered in all our future decisions if a 90% renewable energy system is to become a reality. This may require potential changes to land use regulations that will accommodate battery or other storage options. Incentives to establish or upgrade infrastructure may be necessary and new construction may be required to include enhanced mechanical systems to handle increased electrical loads or design contingencies for fuel storage. While these challenges are not insurmountable, they will require an additional level of planning and consideration to ensure unforeseen issues are limited. More specific details regarding possible implementation actions to address these needs are included in the Pathways & Implementation Actions section of this plan.

Conclusion

As noted throughout this section, the Central Vermont Region faces challenges similar to the rest of the state regarding its energy future including the need for conservation, renewable energy development, and changing habits and attitudes towards renewable technology and land use choices. All of these components need to work together in order to ensure a collective and comprehensive approach to energy planning is initiated.

The information provided in this section has shown that Central Vermont has the ability to shape its energy future within the spectrum of the avenues that it can control. The unknown component is whether or not the changes and development will occur and when. The State Comprehensive Energy Plan has set a goal of 90% renewable energy by the year 2050. This goal is achievable if all stakeholders including the state, the region, municipalities, energy developers, private land owners, special interest groups, and interested citizens come together to discuss the issues and work collectively to identify the outcomes that satisfy the needs of the whole to the best of their ability.

This plan primarily explores renewable energy related to the production of electricity and electrification of the grid. In addition to the resources noted herein, it's important to consider other forms or technologies that could contribute to our renewable energy future. With advancements in safety, efficiency, and technology, the Region's energy future could look vastly different in the next five or ten years. This will not only impact the generation of energy, but the delivery and infrastructure to support distribution of energy.

Central Vermont Regional Planning Commission

RESOLUTION

WHEREAS, the City of Montpelier, Vermont prepared a municipal plan in accordance with Chapter 117 of Title 24 of the Vermont Statutes, and the Central Vermont Regional Planning Commission (CVRPC) found that the municipal plan meets all the requirements for approval under both the Commission's review process and Section §4350 of Chapter 117;

AND WHEREAS, 24 VSA §4350 requires that CVRPC consult with member municipalities with respect to their planning efforts, requires that a municipality have a plan approved by its regional planning commission in order to have its planning process confirmed, and requires that a municipality maintains the use of local funds for local and regional planning;

THEREFORE, BE IT RESOLVED THAT

The Regional Planning Commission concludes that the municipal plan:

1. is consistent with the goals established in Section §4302 of the Act;
2. is compatible with the 2016 Central Vermont Regional Plan, adopted July 12, 2016;
3. is compatible with the approved plans of other municipalities in the region; and
4. contains all the elements as required in Section §4382 of the Act;

AND does hereby **APPROVE** the Master Plan, Montpelier, VT, adopted December 20, 2017.

FURTHERMORE, in compliance with 24 VSA §4350, the CVRPC consulted with the City of Montpelier on May 22, 2017 and confirms the planning process of the City of Montpelier.

It is noted that when an adopted municipal plan expires, its approval also expires. Recommendations made by the Regional Planning Commission's Town Plan Review Committee are attached and should be considered when developing the next edition of the municipal plan. If the municipality has zoning or other regulatory bylaws or is considering adopting bylaws, it is important that the bylaws are in compliance with the current municipal plan.

ADOPTED by the Central Vermont Regional Planning Commission at its April 10, 2018 meeting.

_____

Juliana Potter, Chair

Committees and Annual Appointments

STANDING COMMITTEES

Executive Committee (Commission bylaws; Role of the Executive Committee 02/13/96)[1]
Meets: 4-6pm on the Monday of the week before the Commission meeting
Term: 1 year beginning June 1; officers typically serve for two years
Members: 4 officers and 3 at-large Commissioners elected annually
2018 Members: Julie Potter, Chair; Laura Hill-Eubanks, Vice Chair, Michael Gray, Treasurer; Dara Torre, Secretary; and Byron Attwood, Don LaHaye, and Steve Lotspeich, At-Large

Duties:

1) Carry out decisions and instructions of the Commission.
2) Recommend positions to be taken by the Commission, its committees, or staff.
3) Act on behalf of the Commission in the absence of a quorum of the Commission when time precludes the delay of decision or action until the next regular Commission meeting.
4) Execute other actions as outlined in Commission-adopted policy.
5) Management/Operations
   a. Approve the annual budget, ACCD contract, and Transportation contract
   b. Accept the annual audit
   c. Approve budget adjustments that may arise during the year
   d. Accept grants or other contracts with outside organizations or agencies, et al.
6) Personnel
   a. Approve the addition/elimination of staff positions and the retention of consultant services as recommended by the Executive Director
   b. Approve amendments to Personnel Policies
7) Contractual Commitments
   a. Approve contracts with consultants as provided for in the Commission's Procurement Procedures
   b. Approval of contracts will deem to be approval of the payment of invoices provided the work has been done to the satisfaction of the Executive Director.
8) Organizational Issues
   a. Determine and approve Commission meeting agendas
   b. Determine appropriate action on policy issues that arise from time to time including legislative issues, RPC allocation formula, or other issues affecting the Central Vermont region and its individual constituent cities and towns.

[1] Governing documents for Committee duties and roles are depicted in parenthesis.

Nominating Committee (Commission bylaws; Nominating Committee Guidelines 03/09/99
Meets: As needed, usually in March and April
Term: 1 year beginning June 1; members cannot serve two consecutive terms
Members: 3 Commissioners appointed by the Commission
2018 Members: Don La Haye, Waitsfield (Chair); Brian Fitzgerald, Duxbury; Ron Krauth, Middlesex

Duties: Nominate slate for Executive Committee, including officers and members at-large

ADVISORY COMMITTEES

Project Review Committee (Project Review Committee Procedures 06/01/10; Executive Committee Minutes 02/03/14; Rules of Procedure 09/12/17)
Meets: 4-6 pm on the fourth Thursday of the month; generally meets 7-9 times per year
Term: 3-year, staggered terms, appointed annually in June
Members: Five municipal Commissioners, one alternate, and project's host municipality Commissioner; one member must be an Executive Committee member
2018 Members (term ends): Brian Fitzgerald, Chair (2020); Bob Werneke (2018); Jerry D'Amico, Alternate (2018); Byron Atwood (2019); Laura Hill-Eubanks (2019); Janet Shatney (2020); Jamie Stewart, CVEDC (Ex-officio, non-voting)

Duties:

- Evaluate projects in relations to the Commission's criteria for Substantial Regional Impact (SRI) and provide a determination.
- Provide input and recommendations on behalf of the Board of Commissioners regarding project identified as meeting SRI.
- Evaluate potential cumulative impacts for specific projecs.
- Determine conformance with the Regional Plan for Act 250 and Section 248 applications.
- Provide guidance to staff on changes to the criteria for Substantial Regional Impact.

Regional Plan Review Committee (Commission Minutes 11/12/13)
Meets: As needed.
Term: No term established
Members: 5 CVRPC Commissioners and 4 regional organizations
Members: Laura Hill-Eubanks, Northfield; Dara Torre, Moretown; Ron Krauth, Middlesex; Janet Shatney, Barre City; Dan Hoxworth, Capstone Community Action; Scott Bascom, formerly VT Agency of Transportation; vacancies for one Commissioner, and two regional organizations

Duties: Develop updates to the Regional Plan for recommendation to the Commission.

Town Plan Review Committee

Meets: As needed

Term: 1 year, appointed in June

Members: 5 Commissioners; customarily, 1-2 Commissioners from adjacent communities appointed by Commission to participate on an ad hoc basis

2018 Members: Janet Shatney, Barre City (Chair); Bill Arrand, Worcester; Ron Krauth, Middlesex; Jerry D'Amico, Roxbury; and Ivan Shadis, Marshfield

Duties:

- Review municipal plans for conformance to statutory requirements and make recommendation to the Commission.
- Make recommendation to the Commission regarding Regional Approval of municipal plans and confirmation of a municipality's planning process.

Transportation Advisory Committee (Rules of Procedure 04/11/17)

Meets: 6:30 pm on the fourth Tuesday of each month

Term: 1 year, beginning June 1

Members: 23 town members appointed by municipalities and representatives of transit, airport, VTrans appointed by those organizations

2018 Members: Steve Lotspeich, Chair (Waterbury); Scott Bascom (Barre City); Jeff Tucker (Barre Town); Bob Wernecke (Berlin); Karen Deasey (Cabot); David Ellenbogen (Calais); Allen Quackenbush (Duxbury); Frank Pratt (East Montpelier); Kevin Russell (Fayston); Vacant (Marshfield); Ronald Krauth (Middlesex); Dona Bate (Montpelier); Joyce Manchester (Moretown); Jeff Schultz (Northfield); Lee Cattaneo (Orange); Bob Atchinson (Plainfield); Gerry D'Amico (Roxbury); Harrison Snapp (Waitsfield); Vacant (Warren); Ray McCormack (Washington); Vacant (Williamstown); Vacant (Woodbury); Bill Arrand (Worcester)

Duties:

- Foster public and member municipality participation in transportation planning.
- Update the Regional Transportation Plan for recommendation to the Board of Commissioners.
- Prioritize projects for the State Capital Budget and Transportation Improvement Program.
- Participate in special studies conducted by the Regional Planning Commission.
- Assist in the development of the Commission's annual transportation work program and budget.
- Provide input and policy recommendations to the Board of Commissioners regarding regional transportation issues, including review of State plans, policies, and legislation.

Personnel Policy Committee (a working committee of the Executive Committee; established 2014)

Meets: As needed

Term: None established

Members: 3 Commissioners

2018 Members: Julie Potter, Laura-Hill Eubanks, Steve Lotspeich

Duties: Recommend revisions to the Personnel Policies.

Brownfields Advisory Committee (Rules of Procedure 10/11/16)

Meets: As needed.

Term: 2 years

Members:

1) Voting - 5 Commissioners and 1 alternate, CVEDC, VT Dept. of Health, up to 12 members, at minimum representing housing, real estate, finance, at-risk populations, solid water and the environment
2) Non-voting members: EPA, VT Agency of Commerce, VT Dept. of Environmental Conservation

2016-2018 Members:

1) Voting - Janey Shatney (Barre City); Julie Potter (East Montpelier); Ron Krauth (Middlesex); Vacant (at-risk populations-Capstone Community Action); Steve Comolli (Downstreet Housing & Community Development); Gunner McCain (CVEDC); Tim Ross, (Finance-Union Bank); Vacant (real estate); Vacant (environment); Joan Marie Misek (VT Dept. of Health, Barre District)
2) Non-Voting - Dorrie Paar, EPA

Duties:

1) Recommend investment of brownfield funds to the Executive Committee.
2) Assist to identify and prioritize communities/neighborhoods in need of support.
3) Develop brownfield-related policies for recommendation to the Commission.
4) Provide oversight , and assist in the development of, the Commission's brownfields work program and budget.
5) Participate in public outreach efforts.
6) Maintain site selection criteria.
7) Review and prioritize nominated sites for inclusion in the Region’s brownfields program
8) Assist in the hiring of consultants and oversee consultant progress.

Clean Water Advisory Committee (established 2016)

Meets: As needed.

Term: Under development.

Members: Under development

2018 Members: Commissioners – Ron Krauth, Middlesex and Michael Gray, Woodbury; Other members have not been appointed.

Duties: Guide the Commission's work plan related to programs and projects that would be impacted by the Clean Water Act.

ANNUAL APPOINTMENTS

Vermont Association of Planning & Development Agencies

Meets: First Thursday of the month in June and December
Appointee: Commissioner
Term: 1 year
2018 Member: Julie Potter
Duties: Participate in two meetings a year

Vermont Economic Progress Council

Meets: Monthly, normally on the fourth Thursday of the month in Montpelier; attend only when there is an application from the region; participation is non-voting
Term: 1 year
Appointee: As desired by the Commission. RPCs usually designate their Executive Directors to VEPC, but some RPCs have designated Board members to the position.
2018 Member: Bonnie Waninger

Duties: Participate in two meetings a year

Green Mountain Transit (formerly CCTA dba GMTA)

Meets: Third Tuesday of the month at 7:30am in Burlington; 3 times a year, meets in different locations in its service area at 4 or 5 pm
Term: 3 years
Appointee: As desired by the Commission. RPCs usually designate their Executive Director or Transportation Planner to main links to the Commission's transportation program.
2018 Member: Bonnie Waninger (Commissioner); Dan Currier (Alternate)

Duties: Annually, set long-term goals to guide the General Manager and the priorities of the organization for that fiscal year; monitor progress in meeting the goals; participate on at least one committee as designated by the Chair

CENTRAL VERMONT REGIONAL PLANNING COMMISSION

DRAFT MINUTES

February 13, 2018

Commissioners:

☒	Barre City	Janet Shatney	☒	Montpelier	Kirby Keeton
☒	Barre Town	Byron Atwood	☐		Mike Miller, Alt.
☐		Mark Nicholson, Alt.	☒	Moretown	Dara Torre, Secretary
☒	Berlin	Robert Wernecke	☒	Northfield	Laura Hill-Eubanks, Vice-Chair
☐		Karla Nuissl, Alt.	☒	Orange	Lee Cattaneo
☒	Cabot	Amy Hornblas	☒	Plainfield	Bram Towbin
☒	Calais	John Brabant	☐		Robert Atchinson, Alt.
☐		Jan Ohlsson, Alt.	☒	Roxbury	Jerry D'Amico
☒	Duxbury	Brian Fitzgerald	☒	Waitsfield	Don La Haye
☐		Alan Quackenbush, Alt.	☐		Harrison Snapp, Alt.
☒	E. Montpelier	Julie Potter, Chair	☐	Warren	Daniel Raddock
☒		Jack Pauly, Alt.	☐	Washington	Gary Winders
☐	Fayston	Carol Chamberlin	☒	Waterbury	Steve Lotspeich
☐	Marshfield	Ivan Shadis	☐	Williamstown	VACANT
☒	Middlesex	Ron Krauth	☒	Woodbury	Michael Gray, Treasurer
			☒	Worcester	Bill Arrand

Staff: Bonnie Waninger, Pam DeAndrea, Clare Rock, and Eric Vorwald
Guests: Jamie Stewart (CVEDC), Padraic Monks (VT DEC Stormwater Program)

CALL TO ORDER

Chair J. Potter called the meeting to order at 7:02pm. The meeting began with introductions.

ADJUSTMENTS TO THE AGENDA

B. Waninger requested Commissioners verify or update contact information and distributed a list.

PUBLIC COMMENTS

None.

TOWN OF WAITSFIELD: TOWN PLAN APPROVAL AND CONFIRMATION OF PLANNING PROCESS

J. Shatney reported that the Town Plan Review Committee held a public hearing earlier that day to accept comments on the Waitsfield Town Plan. Representatives from Waitsfield participated. The Committee noted the plan had strong support for maintaining the character of the downtown. Waitsfield did not request plan review against Act 174 guidelines for local energy planning although it plans to so later. The Town Plan Review Committee recommended approval of Waitsfield's Town Plan and confirmation of its planning process. S. Lotspeich asked if the plan addressed Act 171's forest

integrity requirement. E. Vorwald responded that it had not; the plan was adopted prior to January 1, 2018 and was not required to address it.

B. Wernecke moved to adopt the resolution indicating the Commission's approval of the Waitsfield Town Plan and confirmation of the Town of Waitsfield Planning Process; D. LaHaye seconded. Motion carried.

ACHIEVING CLEAN WATER: STORMWATER PERMITS

Padraic Monks with VT DEC's Stormwater Program discussed DEC's stormwater permits and provided a preview of the Operational General Permit. As part of this permit, the "3-acre sites" permit may affect municipal and school facilities that have not been permitted previously. Monks reviewed reasons for the update and changes.

The 3-acre permit is a new retrofit permit for existing sites. These sites may either offset the impact of the development with Best Management Practices used on site or pay an impact fee. Impact fee funds can be used by developers of other sites that are able and willing to exceed stormwater requirements for their developments. If ¾ of the site is treated, then the site would be neutral and no fees would be applied. Amount reduced will be based on the BMP applied to the site, e.g., gravel wetland will treat 60% of phosphorus. Monks said the DEC will send a draft rule to interagency Committee on Administrative Rules (ICAR) this spring. He noted that H.576 expands offsets and lowers permit threshold for "new" and redevelopment from 1 acre to ½ acre.

Commissioners recommended ANR reach out to private landowners about this permit. Landowners may not know they will need a permit.

REGIONAL ENERGY PLAN

Vorwald reviewed changes to the plan, which had be highlighted in a memo and in the plan. Vorwald proposed to add text "above elevations of 2,500 feet" for consistency for resources in the regional plan. J. Brabant noted the "above 2500 feet" was not discussed by the energy committee. He said the guidance allows for limiting the scale of a technology but not banning a technology. Brabant proposed holding this change and having staff complete additional investigation into the issue.

Vorwald said the Commission must vote to advance a draft to public hearing by March 1. The public hearing would be April. Waninger clarified that the vote to advance was project-related.

B. Fitzgerald moved to advance the Regional Energy Plan to public hearing with changes to remove the reference to the above 2,500 feet limitations throughout the document; J. Brabant seconded. Motion carried.

2016 REGIONAL PLAN UPDATE

E. Vorwald reviewed the energy element of the Regional Plan. For the Regional Energy Plan to receive substantial deference, it needs to be incorporated into the Regional Plan. The energy element in the Region Plan would be updated with the Regional Energy Plan added as an appendix.

A. Hornblas requested staff ask the Public Service Department whether a region can limit the height for communications towers as well as wind towers.

B. Fitzgerald moved to advance the Regional Plan energy element to public hearing; J. Brabant seconded. Motion carried.

C. Rock discussed Act 171, the new forest integrity requirement for local and regional plans. To amend the 2016 Regional Plan, the Plan must also address forest integrity. For the 2016 Plan, the change was addressed through the land use element and a new map depicting highest priority forest blocks (interior and connectivity) and highest priority surface water and riparian areas.

B. Towbin moved to advance the Regional Plan changes to address forest integrity to public hearing. D. Torre seconded. Some discussion followed regarding the language of residential development causing the fragmentation. Motion carried. A. Hornblas abstained.

PROJECT TOUR: TOWN WEB MAPS

Tabled due to time constraints.

NOMINATING COMMITTEE APPOINTMENT

L. Hill-Eubanks reviewed the timeframe for nominations. Nominations will be finalized at April meeting and voting at May meeting. She noted there were three Commissioners interested in serving on the nominating committee.

D. La Haye moved to open nominations for the Nominating Committee; B. Towbin seconded. Motion carried.

D. La Haye nominated R. Krauth; R. Wernecke seconded the nomination.

R. Wernecke nominated Don La Haye; S. Lotspeich seconded the nomination.

A. Hornblas nominated B. Fitzgerald; J. Brabant seconded the nomination.

Chair Potter asked three times whether there were additional nominations. There being none, Potter closed nominations.

J. Brabant moved to appoint Don La Haye, Ron Krauth, and Brian Fitzgerald to the Nominating Committee; B. Arrand seconded. Motion carried.

MEETING MINUTES

B. Fitzgerald moved to approve the November 14, 2017 minutes; J. Shatney seconded. Motion carried.

REPORTS

J. Potter asked if there were any questions. There were none.

LEGISLATIVE UPDATE

B. Waninger briefly highlighted legislation initially proposed to develop a Clean Water Authority. The legislation has been modified to study the creation of such an authority, to create a committee to recommend a long term funding method for water quality; and to have the Clean Water Board to advise the Legislature. It also creates a water quality block grant program and encourages the creation of basin coalitions.

She discussed the right to practice forestry bill, which does for forestry operations what the agricultural sector already has.

She noted two bills would add a public safety element and a health element in town plans. She noted VAPDA has been testifying to incorporate these changes into existing elements rather than create new elements if the Legislature desires these changes.

CENTRAL VERMONT ECONOMIC DEVELOPMENT CORPORATION REPORT

J. Stewart highlighted legislation to create opportunity zones in communities. He noted these areas will not need a new Act 250 permit.

ADJOURNMENT

D. La Haye moved to adjourn the meeting at 9:05 pm; No need to second. Motion carried.

Respectfully submitted,

Pam DeAndrea

Central Vermont Regional Planning Commission

P: 802-229-0389 **Staff Report, April 2018** F: 802-223-1977

LAND USE PLANNING & MUNICIPAL ASSISTANCE

Regional Plan: Contact Eric Vorwald, Vorwald@cvregion.com.
Staff prepared and distributed draft updates and scheduled the first public hearing for April 10, 2018. Two hearings are required prior to adoption. The second hearing will tentatively be scheduled for the June commission meeting. No comments on the draft plan have been received to date.

Act 250: Contact Eric Vorwald, Vorwald@cvregion.com.
The Project Review Committee finalized and recommended the Commission approve the updated definition for Substantial Regional Impact. Staff will present this information to the Regional Plan Review Committee for input as well since the SRI definition will be included in the regional plan.

Staff is developing a public engagement process to gather input from CVRPC's municipalities and regional partners on improvements to Act 250. Input will be presented to Board of Commissioners and used to inform CVRPC's comments. The Commission on the Future of Act 250 will be hosting public input sessions this summer.

Regional Energy Planning: Contact Eric Vorwald, Vorwald@cvregion.com.
Staff prepared the approved draft for distribution as part of the regional plan update. A public hearing will occur at the April Commission meeting with possible acceptance of the plan. Staff prepared options for addressing wind energy facilities in follow-up to the February Commission meeting discussion.

Local Energy Planning: Contact Eric Vorwald, Vorwald@cvregion.com.
Staff completed reviews of the Barre City and Calais municipal plans for consistency with Act 174.

Municipal Plans: Staff presented a draft plan to Orange. The plan is nearing completion. Staff reviewed the Barre City Plan for conformance with Act 171 (forest integrity) and provided comments.

Zoning: Staff responded to a Request for Qualifications related to Zoning Amendments issued by East Montpelier. CVRPC has begun participating in municipal bid processes.

Mapping: Staff updated the draft Zoning District Map and the Future Land Use map for Marshfield. Staff continued the development of a region wide trail connections and recreation map in cooperation with the Wrightsville Beach Recreation District. Staff worked on creating Tax Increment Financing (TIF) maps for Montpelier's proposed TIF district. Staff assisted East Montpelier, Marshfield, and Orange with Town Plan maps with special consultation on Forest Integrity mapping.

Municipal Consultations: Consultations provide an overview of statutory changes, suggestions to strengthen the municipal plan, and discussion of municipal needs and CVRPC services. Staff completed consultations with Northfield and Barre City and consultation reports for Barre Town, Plainfield, and Fayston. Reports for Duxbury and Roxbury are in progress.

EMERGENCY PLANNING & HAZARD MITIGATION

Local Planning: Staff reminded towns of the need to update Local Emergency Management Plans (LEMP), and reviewed the Moretown LEMP. Having an adopted LEMP (formerly known as an LEOP) increases a municipality's Emergency Relief Assistance Fund (ERAF) rating, providing them with more state aid after a federally declared disaster. Contact Laura Ranker, ranker@cvregion.com.

The Local Emergency Management Plan requires the certifying individual to take ICS 402 or ICS 100. CVRPC is hosting an ICS 402 training on April 19 from 5:30 – 8:30 pm in the CVRPC office.

Local Emergency Management Directors/Coordinators (EMD/EMC): Staff responded to requests of local EMDs in support of their daily responsibilities.

State Hazard Mitigation Plan Update: Staff corresponded with State staff on incorporating invasive species, in particular the emerald ash borer, into the State Hazard Mitigation Plan update as a high hazard for Washington and Orange Counties.

Trainings and Workshops: Contact Laura Ranker at ranker@cvregion.com.
Staff promoted VEM's April ICS 402 series and assisted with registrations for the April 19 course. Outreach was targeted to newly elected officials and those without prior training. ICS 402 - Incident Command System Summary for Executives - provides an overview of the executive level of preparedness, response, and recovery. Town, city and school officials are encouraged to take part in one of the three-hour trainings being held. To register please visit: https://vermont.csod.com

Hazard Mitigation Program Grants: Contact Laura Ranker, ranker@cvregion.com.
Staff continued working with Warren and Marshfield on critical facility generator grants and with Middlesex on a home buyout. Calais and Montpelier intend to participate in a HMGP application for Local Hazard Mitigation Plan updates.

Plainfield received notice of eligibility for funding under the Flood Mitigation Assistance Grant Program. The notice means its Bridge Street bridge project is eligible and may be awarded funds.

LEPC #5: The Tier II reporting deadline is March 31. Staff fielded questions and information requests from facility operators, including municipal officials, on filing requirements and logistics, receipt of electronic and hard copy reports, and other topics.

Staff provided administrative and financial management support to LEPC 5. Ben Rose, VEM Recovery and Mitigation Section Chief, spoke at the LEPC's March meeting. CVRPC has been assisting to strengthen the LEPC for the past 3 years. As a result, meeting participation is increasing. Staff facilitated discussions with Vermont Psychiatric Care Hospital, LEPC 5, and VEM, to plan for a table top exercise. Staff began working with the LEPC Information Coordinator to develop a webpage presence on the CVRPC website.

Local Hazard Mitigation Plans (LHMP): Contact Laura Ranker, ranker@cvregion.com.
Staff supported communities in the development, review, and adoption of local hazard mitigation plans.

Barre Town: Staff received notice of FEMA Approval Pending Adoption and assisted the Town with the adoption process.

Cabot: Staff received notice of FEMA approval. This Plan in complete!

Duxbury: Staff made minor revisions requested by VEM and returned the Plan and Plan Review Tool for a second State review. Staff assisted with additional public outreach. VEM forwarded the Plan to FEMA for review. FEMA issued an "Approval Pending Adoption". This plan is nearly complete.

East Montpelier: Staff discussed Plan status with Town Administrator and responded to requests for sample FEMA approved LHMPs.

Middlesex: The Plan is under FEMA review.

Moretown: Staff provided resource materials for hazard risk assessment and prioritization for use at Town Meeting Day.

Plainfield: Staff provided guidance to Plan development and discussed mapping options.

Roxbury: Staff made revisions requested by FEMA and returned the Plan and Plan Review Tool for a second FEMA review.

Warren: Staff met with the Town Administrator to review the Plan development and update process. Staff provided guidance on creating a "planning team" to steer the process. Staff explained the hazard risk assessment process, ways to engage public participation and outreach, and provided resource materials and tools for use in performing the hazard risk assessment and prioritization.

Waterbury: Staff received notice of FEMA Plan approval . This Plan is complete!

Williamstown: Staff provided resource materials for the hazard risk assessment and prioritization for use at Town Meeting Day.

Worcester: Staff made revisions requested by VEM and returned the Plan and Plan Review Tool for a second State review.

Woodbury: Staff met with the Woodbury Selectboard and Planning Commission to review the Plan update process and next steps. Staff provided guidance on creating a "planning team" to steer the process. Staff reviewed the focus for the Plan updates and changes. Staff explained the hazard risk assessment process and ways to engage public participation and outreach. Staff provided resource materials and tools for use in performing the hazard risk assessment and prioritization.

Municipalities are invited to a 2-day Local Hazard Mitigation Planning workshop on May 22-23, 8:30am to 4:30pm in Waterbury. Day one will be an informal workshop on developing Local Hazard Mitigation Plans and meeting the requirements of the FEMA review tool. Day two will be a skill-share, allowing

planners to learn from each other and discuss effective planning processes. RSVPs are required to: stephanie.a.smith@vermont.gov or (802)241-5362.

Technical Assistance: Staff participated in the Emerald Ash Borer public informational meeting in Barre. Follow up actions with towns are being developed. Infestations were confirmed in Orange, Plainfield, Barre Town, and Groton.

Collaboration with Partners: Staff participated in an RPC/VEM monthly meeting. Staff assisted Green Mountain Power with municipal outreach efforts for a late spring table top exercise of the Emergency Action Plan for the Marshfield Dam #6 (Molly Pond dam). Staff assisted EPA Region I and VEM's Division of Fire Safety to distribute informational resources and training announcements to local EMDs, first responders, and LEPC representatives.

Waterbury Floodplain Management Working Group (FMWG): Staff participated the FMWG monthly meeting. Staff presented a River Corridor modifications summary. The FMWG will work to have the State make the Phase II River Corridor map modifications part of the State's draft Phase II maps. The process will involve review by the Waterbury Planning Commission, Selectboard, Trustees, and public before making a recommendation to the State.

Staff initiated conversations with Waterbury and Montpelier regarding collaboration on public outreach and training activities for CRS compliance requirements. Staff will continue to work with the FMWG and Montpelier to develop these activities for inclusion in CVRPC's FY19 workplan.

TRANSPORTATION

Counts: Staff collected data from the permanent Mad River counter. Contact Ashley Andrews, Andrews@cvregion.com, if your community would like CVRPC to complete traffic counts.

Transportation Studies: Staff worked with Plainfield to develop potential parking scenarios for the Town Hall/Opera House. CVRPC is assisting Waterbury with a scoping study for the Stowe Street Bridge #36. The study will identify bridge replacement alternatives. Staff and Waterbury representatives have begun drafting a scope of work.

Park & Rides: VTrans presented a new alternative for the Berlin Exit 7 VT Route 62 Park and Ride expansion to the Town and TAC. The TAC supported the alternative, which expands the lot to 110 parking spaces and adds better access for public transit buses. Berlin supported the alternative and requested the State continue working with an adjacent property owner to address impacts.

Public Transit: CVRPC represents Central Vermont on the GMT Board of Commissioners. Staff participated in the following Green Mountain Transit meetings:

- Operations Committee meeting – Reviewed progress on the Performance Improvement Plan and FY18 actions to address strategic goals; discussed employee satisfaction survey results.
- Next Gen Advisory Committee – Discussed draft service improvement recommendations. Cost neutral recommendations will be implemented in the short-term. Cost increase recommendations would be implemented as funding permits. Staff advocated that GMT discuss potential service changes with Waterbury, as local and commuter service changes have been proposed. Public meetings have been completed in Barre City and Montpelier and GMT staff have discussed potential changes with city staff.
- Board of Commissioners – Discussed progress on the NextGen Study update and Medicaid funding. Awarded 5-year audit services contract. See Committee Reports for update.

Byways: Staff has been assisting the Lamoille County Planning Commission with the expansion of the Green Mountain Byway to Cambridge, Johnson, Hyde Park, and Morristown. The Byway currently extends from Waterbury to Stowe.

Municipal Roads General Permit (MRGP): Staff have been working with DEC to develop a data standard and inventory tool update for the 2018 field season. Staff assisted Warren, Roxbury, Calais, and Montpelier with MRGP Road Erosion Inventory and Capital Plans.

NATURAL RESOURCES

Tactical Basin Planning Assistance: Contact Pam DeAndrea, deandrea@cvregion.com.
Staff supported the State's Tactical Basin Planning (TBP) efforts for the Winooski and White River Watersheds by:

- Providing project priorities for towns within the Winooski Watershed;
- Providing lists of municipalities that have or will have water quality and flood resilience protectiveness measures in town plans and ordinances/by-laws;
- Providing input on how municipalities can use landslide data developed by VT Geological Survey and Norwich University;
- Assisting with TBP action items for forestry protection and management practices
- Establishing a Central Vermont *Clean Water Advisory Committee* (CWAC). The Committee will learn about water quality policy and participate in project prioritization for Central Vermont**.**

The Draft Tactical Basin Plans for both the Winooski River and the White River will be ready this spring. Informational meetings will be held. The Winooski Basin Planner, Karen Bates, will be presenting the draft Basin Plan at the May Commission meeting.

Grant Assistance: Contact Pam DeAndrea, deandrea@cvregion.com, for project development and grant writing assistance for the Ecosystem Restoration Program (ERP). The application deadline is April 23. Stormwater Master Plans can be used by urban or rural communities to identify priority projects for implementation. The plans include 30% designs, which allow projects to move forward into the Clean

Water funding stream. Contact Pam to explore a stormwater master plan for your town or to apply for funds for implementation for projects outlined in completed plans.

Clean Water Block Grant Program: Barre City was awarded funds for a stormwater improvement project at Pouliot Avenue. Construction will begin this summer. CVRPC will assist with program management. Watershed Consulting Associates will provide final design and construction oversight. Projects that are ready for final design or implementation are eligible for this grant program. Funds are available now. Contact Pam DeAndrea, deandrea@cvregion.com.

Mad River Moretown Stream Geomorphic Assessment: The Draft River Corridor Plan is complete. Staff is working with Vermont River Management, contractor Bear Creek Environmental, and watershed groups to conduct outreach on the study and the projects identified in the plan. Moretown, Berlin and Duxbury are included in the plan. This plan identifies potential improvement projects for water, flood resilience, and habitat enhancement. A public meeting will be held on Tuesday, April, 10 at 6-8 PM at the Moretown Town Hall to present the plan to stakeholders, especially landowners within the river corridor in these communities. Contact Pam DeAndrea, deandrea@cvregion.com.

Mad River and Kingsbury Branch Stormwater Master Plans: Watershed Consulting Associates (WCA) is conducting a desktop assessment of possible stormwater concern areas in five Mad River towns and three Kingsbury Branch towns. This assessment targets locations for field visits. WCA will begin site visits of possible sites for consideration in the stormwater master plans shortly. After the field visits, each town will be provided with maps and site lists they can use to set priorities for action. Outreach meetings will be completed with stakeholders identified for the project.

Northfield Water Street Stormwater Mitigation: CVRPC and Northfield hired Watershed Consulting Associates and Aldrich & Elliott to conduct the final engineering and construction oversight for this project. The project involves final site design and constructions of a bioretention/infiltration system to capture runoff from 48 acres of residential development. The project will use a Downstream Defender®, an innovative vortex separator that removes particles, hydrocarbons, and floatable debris. Construction will begin this summer.

Forest Integrity: Contact Clare Rock, rock@cvregion.com.
The Upper Winooski Forest and Flood Resiliency project continues with steering committee meetings. Stakeholders have been brainstorming the most effective way to reach landowners for forest protection and management practices. GIS staff are conducting an analysis to help the committee identify forested land more vulnerable to runoff and erosion and potentially eligible for forestry management programs.

COMMUNITY DEVELOPMENT

Brownfields: Contact Clare Rock, rock@cvregion.com.
Assessment work in complete on 3 sites (Whiting, Ayers Auto, and 51 Prospect Street). The draft Corrective Action Plan for the Montpelier UES site is scheduled to be completed in April. Phase II work continues at Bonacorsi, and Phase II field work should happen in late April in Woodbury. Supplemental Phase II work is proposed at Granite Works and Keith Ave.

CVRPC offered to assist Bare City to seek alternate funding for the Keith Ave work as CVRPC has fully committed its funds. Staff submitted Keith Ave project information to two RPCs for funding consideration; one has declined to fund.

Staff submitted a brownfield budget adjustment to EPA and updated EPA's property profile information. At the prospective purchaser's invitation, staff participated in a meeting with DEC, CVRPC's consultant, and a prospective lender. The meeting reviewed the property's status and assisted the lender to understand the assessment, the corrective action process, and potential continuing obligations of a purchaser. The lender is better able to assess its risk as a result.

NEWS & ANNOUNCEMENTS

Office Manager: Nancy Chartrand joined CVRPC's team as Office Manager. Nancy has 13 years experience as an Office Manager and Administrative Assistant. Most recently, she served as Regional Operations Manager for the Windham Injury Management Group. Nancy and her partner live in Montpelier. Welcome, Nancy!

Professional Development: Staff participated in a webinar by Vermont Story Lab, coordinated by the High Meadows Fund. The webinar emphasized the importance of storytelling, and how to develop a story for the purpose of communicating information and reporting to grant funders.

Upcoming Meetings:

APRIL

Apr 10	6 pm	Moretown Mad River Corridor Plan Public Meeting, Moretown Town Hall
Apr 10	5:30 pm	Town Plan Review Committee, CVRPC Office
Apr 10	7 pm	Board of Commissioners, Central VT Chamber of Commerce, Berlin
Apr 16	4 pm	Brownfields Advisory Committee, CVRPC Office
Apr 24	6 pm	Transportation Advisory Committee, Central VT Chamber, Berlin
Apr 26	4 pm	Project Review Committee, CVRPC Office (if necessary)
Apr 26	7 pm	Mad River Valley Planning District Steering Committee, Waitsfield
Apr 30	4 pm	Executive Committee, CVRPC Office (This is the meeting for May)

MAY		
May 7	6 pm	LEPC 5, Central Vermont Medical Center, Conference Room 2
May 8	7 pm	Board of Commissioners, Central VT Chamber of Commerce, Berlin
May 17	7 pm	Mad River Valley Planning District Steering Committee, Waitsfield
May 21	4 pm	Brownfields Advisory Committee, CVRPC Office
May 22	6 pm	Transportation Advisory Committee, Central VT Chamber, Berlin
May 24	8:30 am	Act 250: The Next 50 Years Conference, VT Law School, South Royalton
May 31	4 pm	Project Review Committee, CVRPC Office (if necessary)

Visit CVRPC's web site at www.centralvtplanning.org to view our blog and for the latest planning publications and news.

Executive Director's Report

March 28, 2018

Emerald Ash Borer Preparedness Planning

Early this year, the Department of Forests, Parks, and Recreation confirmed the discovery of Emerald Ash Borer (EAB) in Orange, Barre, Plainfield, and Groton. EAB is an exotic, invasive insect that kills the majority of ash trees it infests. It spreads quickly, is difficult to detect, and eradication is not expected. 5% of Vermont's trees are ash.

State and Federal agencies are encouraging municipalities to prepare for EAB infestation. EAB may not show up in your community for many years. When it does, the impacts can include:

- a need to remove ash trees in municipal parks, forests, and road rights of way, either due to hazard trees or through management practices.
- incurring higher costs for wood utilization and disposal.
- a need to replant lost street trees and trees in municipal parks.
- fiscal impacts from wood quarantines that result in economic impacts to firewood producers, campgrounds, and other businesses that use or process ash wood.

CVRPC can provide services to your community to assist with preparedness planning. We can help:

- inventory and map the number of ash trees in your community. CVRPC developed an inventory app for UVM Extension that is being used by Waterbury.
- consider which ash trees to save, and whether you have the resources to save them.
- identify the potential cost of removing trees that will not be saved.
- determine disposal methods based on a tree's projected condition at the time of disposal.
- develop replanting plans.
- develop an Emerald Ash Borer response plan.
- incorporate your response plan into other municipal documents (hazard mitigation plan, forest management plan, street tree plans, etc.)
- link you with state and federal resources to answer your questions. A good place to start is https://vtcommunityforestry.org/community-planning/tree-pests.

For assistance, contact Pam DeAndrea at deandrea@cvregion.com. State and federal staff also are available to support communities working on preparedness planning.

The EAB detection occurred near the border of Washington, Orange, and Caledonia Counties. Early estimates suggest EAB may have been in Vermont at least 3-4 years. The State completed an EAB survey in Barre City, Barre Town, Plainfield, Washington, Groton, Topsam, and Corinth aimed at identifying if there are additional infestations. CVRPC will provide updates as they become available.

Central Vermont Regional Planning Commission

Committee & Appointed Representative Reports

April 2018

Meeting minutes for CVRPC Committees are available at www.centralvtplanning.org.

EXECUTIVE COMMITTEE (Monday of week prior to Commission meeting; 4pm)

- Completed a quarterly progress review of CVRPC 's FY18 Activities to achieve its 5-year goals.
- Provided input into FY19 Activities on 5-year goals.
- Finalized the Code of Conduct and Conflict of Interest Policy; recommended approval by the Board of Commissioners.
- Approved a proposal to celebrate CVRPC's 50th anniversary at the May Annual meeting.
- Conducted the annual evaluation of the Executive Director; increased the Director's salary by 4% as of July 1, 2018.

NOMINATING COMMITTEE (February and March; scheduled by Committee)
Presenting the following slate:

- Chair – Julie Potter, East Montpelier
- Vice Chair – Laura Hill-Eubanks, Northfield
- Treasurer – Michael Gray, Woodbury
- Secretary – Dara Torre, Moretown
- At Large - Byron Atwood, Barre Town (Past Chair)
- At Large - Steve Lotspeich, Waterbury
- At Large - Janet Shatney, Barre City

Additional nominations can be made at the Board of Commissioner's meeting.

PROJECT REVIEW COMMITTEE (4th Thursday, 4pm)
The Committee received a presentation from PGSR, LLC. regarding a proposed commercial development on an existing site in Waterbury. This project did not meet the thresholds for substantial regional impact; however, a hearing was scheduled, which categorized the project as a major application. The Committee engaged the applicant in questions and heard from the Waterbury representative to the Commission regarding the local process. The Project Review Committee voted to have staff send a letter to the applicant indicating the project did not qualify as having a substantial regional impact.

REGIONAL PLAN COMMITTEE (as needed; scheduled by Committee)
Did not meet.

TOWN PLAN REVIEW COMMITTEE (as needed; scheduled by Committee)
Did not meet. Meets April 10th to discuss regional approval of the Montpelier Master Plan and confirmation of the City's planning process.

TRANSPORTATION ADVISORY COMMITTEE (4th Tuesday; 6:30 pm)
VTrans presented on the Berlin Exit 7 Park and Ride expansion. Green Mountain Transit provided an update on its Comprehensive Services Analysis (a.k.a. the NextGen Plan) and bus services in Central VT. Montpelier Assistant City Manager Sue Allen provided an update on the 1 Taylor Street Multi Model Center. The Exit 7 Park and Ride design is being revised to address concerns raised by project neighbors, Berlin's Legislative Representative, and the TAC.

BROWNFIELDS ADVISORY COMMITTEE (4th Monday, 4pm)

- Prioritized enrolled sites for future funding. CVRPC has committed nearly all its brownfields funding. Priorities are: 1) complete Granite Works Supplemental Phase II and 2) completing Woodbury Phase II.
- Responded to several requests for brownfields assistance.
  - Approved funding for the petroleum portion of the Granite Works Supplemental Phase II. The hazardous materials portion will be funded by the property owner.
  - Did not approve the Keith Avenue Supplemental Phase II based on priorities established by the Committee. Staff will work with the City of Barre to explore alternative funding.
- Discussed committee member appointments and term expirations. The committee will be seeking at least one Commissioner representative and one Commissioner alternate.

CLEAN WATER ADVISORY COMMITTEE (to be determined)
Staff has solicited members for the CWAC and has received a great response. Seven individuals are interested in joining, including CVRPC Commissioners and representatives from watershed groups and municipalities (City Councils/planning commission/conservation commissions). The CEAC will convene this spring. Staff drafted Rules of Procedure for review by the CWAC and Board of Commissioners.

ENERGY ADVISORY COMMITTEE (As needed; scheduled by committee)
Did not meet.

VERMONT ASSOCIATION OF PLANNING & DEVELOPMENT AGENCIES

- Appointed FY19 VAPDA Officers Nominating Committee.
- Presentation from Chad Allen regarding VTrans effort to updates its Project Prioritization process. The existing process is 10 years old, and the Legislation mandated the inclusion of resiliency and health into it. VTrans determined it has inconsistent parameters across assets/modes, the evaluation criteria need to be revised, corridor management needs to be considered, and opportunities exist to increase efficiency. One area for update is how projects move into, *and out of,* the Capital Program. Evaluation criteria have been updated substantially.

VTrans anticipates the initial process will be completed by spring 2019. The new prioritization process should be fully operational in 2020 for use in the FY21 Capital Program.

- State agency staff discussed legislative bills in progress.
- May Ellen Mendl presented on VT 211. VAPDA agreed to support having the State fund a Disaster Specialist at 211. The After Action Plan for Tropical Storm Irene highlighted a need for Vermont to support and coordinate individual assistance. The Agency of Human Services accepted responsibility for this action under the State's Hazard Mitigation Plan. It has not move forward to implementation actions. VT 211 provided the support during Tropical Storm Irene as a onetime effort. It successfully acted as a screening and referral entity to link needs with resources.
- Discussed the need for project development and basin planning funds to maintain a pipeline of water quality projects that could be implemented. While there are many projects on ANR's "Go List", the projects are primarily conceptual ideas that need scoping and refinement to assess their implementation potential. VAPDA is recommending ANR or the Legislature establish a process that mirrors VTrans' project development pipeline to ensure the State can meet its water quality goals. ANR has not recognized project development as a need beyond limited funding provided through Ecosystem Restoration grants. At the same time, it is experiencing difficulty spending project implementation funds because there are not enough projects ready for implementation and eligible to use those funds. VAPDA has begun discussing this need with the Legislature.

VERMONT ECONOMIC PROGRESS COUNCIL

No applications from Central Vermont.

GREEN MOUNTAIN TRANSIT

- CCTA's name change passed the House (H.604, transportation bill) and is being considered by the Senate.
- Based on GMT's analysis of Medicaid funding formula impacts, the Vermont Department of Health Access has agreed to discuss a revised funding formula. The current Medicaid funding formula is resulting in substantial financial losses to public transit agencies in Vermont. Payment is based on the number of unique passengers, regardless of the number of rides each passenger takes. Methadone clinic transport accounts for up to 40% of GMT's rural rides. GMT is reimbursed the same per-month amount for a methadone clinic rider who takes 25 rides as a rider who takes one ride for a doctor's appointment.
- The Jeffersonville Commuter was funded by the three affected municipalities, allowing this service to continue for another year.
- Rachael Kennedy was hired as GMT's Senior Planner. She will implement long-term planning project and act as liaison with RPCs and municipalities. Rachael is a native of Warren, VT.
- The scope of the NextGen study was discussed. It currently is focused on how GMT can use its existing resources more effectively; the Study Advisory Committee recommended including information developed about future phases. Phases will be tied to a timeline. The Committee

also recommended the report describe stakeholder engagement. Proposed scheduled changes will be augmented with onboard surveys and feedback before being implemented.

- Approved awarding a 5-year audit services contract, on a yearly basis, to RHR Smith & Company, pending reference checks by staff.

MAD RIVER VALLEY PLANNING DISTRICT

The Planning District discussed the District's work plan. There was also discussion on funding options and reports regarding town meeting. New members for Waitsfield, Warren, and Sugarbush were introduced.

PLANNING FOR
EMERALD ASH BORER

Invasive tree pests, such as the emerald ash borer (EAB), pose serious challenges to Vermont's communities. By planning ahead and preparing, your community can minimize the impact of invasive tree pests and reduce the risk of spreading them. **Forest pest preparedness and response is ultimately the responsibility of municipal governments, businesses, and private landowners.** Federal and state staff are available for technical assistance and early detection.

Start planning at
GO.UVM.EDU/EAB

IS YOUR COMMUNITY READY?

HOW MANY ASH TREES DO YOU HAVE?

WHOSE RESPONSIBILITY IS IT TO TREAT OR REMOVE TREES?

HOW WILL YOU DISPOSE OF THE TREES?

WHAT WILL YOU PLANT NEXT?

MEREDITH WHITNEY
Forest Pest Outreach Coordinator
802-476-2003 Ext 202
Meredith.Whitney@uvm.edu

UNIVERSITY OF VERMONT EXTENSION
CULTIVATING HEALTHY COMMUNITIES

VERMONT

INFORMATIONAL ONLY

EAB PREPAREDNESS CHECKLIST FOR VERMONT CITIES AND TOWNS

Emerald Ash Borer (EAB) was confirmed in northern Orange Country, Vermont in 2018. Your town can take the following steps to reduce the impact of EAB when it reaches your community.

COLLABORATION

- ✓ **FORM AN EAB WORKING GROUP OF KEY PLAYERS IN YOUR TOWN** such as conservation commission or selectboard members, Forest Pest First Detectors, Master Gardeners, foresters, and other interested and engaged citizens dedicated to natural resource conservation. Define roles and responsibilities within your group and identify a team leader who keeps the momentum going.

ACTION

- ✓ **DETERMINE HOW CLOSE YOU ARE TO THE CURRENT VERMONT EAB INFESTATION.** You can find the most up-to-date information and maps on Vermont's infestation at VTinvasives.org.
- ✓ **COMPLETE AN INVENTORY.** Learn how many ash trees are present in your town and, if feasible, their size and condition. Several inventory methods exist -- contact Meredith Whitney of UVM Extension for support at 802-476-2003 or meredith.whitney@uvm.edu.
- ✓ **CONDUCT A SURVEY FOR EAB.** A late winter drive or walk may reveal 'blonding' in the crown or on the trunk of ash trees. This happens when woodpeckers fleck bark of the tree while searching for EAB and is a good sign of new infestations.

DECISION

- ✓ **TRIAGE TREES FOR TREATMENT AND REMOVAL.** Identify high-value ash trees you'll want to preserve through chemical treatment as well as trees you are sure will need to be removed. You may be able to complete this step during your inventory work.
- ✓ **BUDGET FOR THE FUTURE.** Consider treatment, removal, and replacement costs. The EAB Cost Calculator is an excellent resource to assist you. https://int.entm.purdue.edu/ext/treecomputer/
- ✓ **DON'T PLANT ASH.** Every ash you plant now will need to be treated or removed when EAB arrives in your town.

EDUCATION

- ✓ **HOLD A PUBLIC EDUCATIONAL PROGRAM IN YOUR TOWN.** Everyone will be affected when EAB arrives. People should know what to expect and what options are available. The Vermont Urban & Community Forestry Program can provide these programs to your town, free of charge – learn more at VTcommunityforestry.org.
- ✓ **HOLD A FIELD TRAINING EXERCISE.** Involve town staff as well as others who are interested. Go over ash identification and signs of EAB, especially 'blonding' caused by woodpecker activity.
- ✓ **VISIT VTINVASIVES.ORG** To learn more about emerald ash borer and how to get involved.

Adapted from UNH Cooperative Extension

Central Vermont Regional Planning Commission

March 23, 2018

INFORMATIONAL ONLY

Ms. Susan Baird, District Coordinator
District 5 Environmental Commission
10 Baldwin Street
Montpelier, Vermont 05663-3201

RE: 5W1584 - PGSR, LLC – Determination of Regional Impact

Dear Ms. Baird;

The Central Vermont Regional Planning Commission (CVRPC) received an Act 250 application for PGSR, LLC on February 23, 2018. This application is for the construction of an approximately 18,500 square foot building along U.S. Route 2 in the Town of Waterbury. The new structure will be used for retail and amusement purposes and will be constructed on an existing lot.

On March 22, 2018, the CVRPC's Project Review Committee met and discussed this project in relation to consistency with the Regional Plan and the possibility of this project meeting the thresholds for Substantial Regional Impact. At this meeting, the Project Review Committee determined that the above referenced project does not currently qualify as a project having Substantial Regional Impact as noted in the CVRPC's policies and procedures.

Based on this determination, the CVRPC does not intend to submit testimony or comments on this project. However, the CVRPC reserves the right to reevaluate this project and provide comments if conditions or circumstances regarding this petition were to change. Please feel free to contact the CVRPC if you have any questions or need additional information.

Regards,

Eric Vorwald, AICP
Senior Planner

Cc: Certificate of Service List as attached

Central Vermont Regional Planning Commission

March 7, 2018

INFORMATIONAL ONLY

Lea Kilvadyova, Regional Planner
Lamoille County Planning Commission
P.O. Box 1637
Morrisville, Vermont 05661

Dear Ms. Kilvadyova;

The Central Vermont Regional Planning Commission (CVRPC) received the proposed amendments to the 2015 – 2023 Lamoille County Regional Plan on February 7, 2018. The proposed amendments are intended to address the enhanced energy planning as described in Act 174 of 2016 by amending the energy chapter of the existing Lamoille County Plan. The CVRPC reviewed the proposed amendments for consistency with the 2016 Central Vermont Regional Plan and the draft 2018 Central Vermont Regional Energy Plan.

Based on the information contained in the proposed amendment, the text being considered is consistent with the goals and policies of the 2016 Central Vermont Regional Plan and the draft 2018 Central Vermont Regional Energy Plan.

On behalf of the Central Vermont Reginald Planning Commission, thank you for providing this information to the CVRPC and continuing the on-going partnership and coordination between our two planning agencies. Please do not hesitate to contact me if you have any questions or would like additional information.

Regards,

Eric Vorwald, AICP
Senior Planner

29 Main Street Suite 4 Montpelier Vermont 05602
802-229-0389 E Mail: CVRPC@CVRegion.com

Central Vermont Regional Planning Commission

MEMO

Date: April 5, 2018
To: Board of Commissioners
From: Bonnie Waninger, Executive Director
Re: FY19 Work Plan activities

⌦ **Action Requested:** Provide input into CVRPC's FY19 work plan by assisting staff to confirm or focus project needs in your municipality by April 17.

Input is welcome via email or phone, or by marking up the enclosed document and returning it via mail.

CVRPC is beginning the process of creating its annual work program. The work program describes our activities for the next fiscal year (July 1, 2018 - June 30, 2019). It implement the strategies of the Regional Plan and helps municipalities implement their local plans.

The enclosed table represents confirmed and potential activities identified by staff for each municipality. Staff requests input from Commissioners regarding assistance needs for their municipality.

- Are there additional activities that should be explored with your municipality?
- Are there activities that should be removed because assistance isn't required?
- What potential activities should be further explored to confirm whether your municipality needs assistance?

CVRPC receives local, state, and federal funds from a variety of sources for various planning programs. With increasing demand for limited public funds, staff is working to identify projects requiring assistance as early as possible. Projects included in the work program are guaranteed assistance. Other projects may receive assistance as resources permit. We hope this new approach will benefit the region as well as better meet the needs of local communities.

Staff will provide a draft work plan to the Executive Committee at its May meeting (April 30). The Committee adopts the final work plan and budget in June. Please contact me (Waninger@cvregion.com, 802-229-0389) if you have any questions.

FY19 DRAFT CVRPC WORK PLAN – ASSISTANCE BY MUNICIPALITY

INFORMATIONAL ONLY – PLEASE CONTACT BONNIE WITH INPUT FOR YOUR MUNICIPALITY

LEGEND

P = Potential Assistance	A = Adoption Only
X = Confirmed Assistance	M = Maps Only
	T = Transportation Only

Program Area →	Community Development								Public Safety			Transportation							Natural Resources			Cross Discipline						
ACTIVITY → TOWN ↓	Municipal Plan	Energy Plan	River Corridor Bylaw	Zoning	Consultation	Designation Assist.	Brownfields	Economic Dev.	LEOP	LHMP	Disaster Recovery (MOU)	Class 4 Road grant	Road Erosion Inv.	Traffic Count	Bridge/Culvert Inv.	Sign Inventory	Road Surface Management	Grants In Aid	Upper Winooski Resilience	Stormwater Masterplan	Clean Water Block Grant	Capital Planning	Training	Project Development	Grant Writing	Grant Administration	Project Management	Special Project
Barre City	X	X					X		X					P				P			X			P: Stormwater Implementation P: HMGP generator	P: Stormwater Implementation P: HMGP generator		P: Stormwater Implementation	P: Trash Rack Study
Barre Town	P	P,A				X			X				P	P	P			P						P: Stormwater Implementation	P: Stormwater Implementation		P: Stormwater Implementation	
Berlin	P					X			X	X				P				P						P: Stormwater Implementation	P: Stormwater Implementation		P: Stormwater Implementation	X: Exit 7 Park & Ride TA
Cabot								P	X		X		X	P				P	X						P: HMHP LHMP	P: HMGP Dam Removal		P: Eco Dev Study TA
Calais	P	X	P		X				X			X	X	P		X		P		X				P: Stormwater Implementation	P: HMGP LHMP P: Stormwater Implementation P: Town Hall Culvert		P: Stormwater Implementation	
Duxbury									X	X	X			P				P		X								
East Montpelier		P,A		P					X	P	X		X	P			X	P		X		T						
Fayston	P		P						X				X	P	X			P		X		P,T						P: Murphy Road Landslide
Marshfield		X	P	P					X		X			P	X			P	X						P: HMGP LHMP	P: HMGP generator		
Middlesex	P		P						X					P				P							P: HMGP home buyout P: Stormwater MP			
Montpelier		P					X		X					P				P							P: HMGP LHMP			P: 10-Minute Walk Initiative mapping
Moretown					X				X	X		X		P				P		X								X: River Corridor Plan
Northfield	P	P	P						X				X	P	X							T			P: HMGP Slope Stabilization			X: Water Street stormwater install
Orange	X		P						X				X	P			X	P				T						P: Town Forest Management Plan update
Plainfield	P	P	P						X	X				P	X			P	X					P: ARC Shelter P: EOC Development P: Stormwater Implementation	P: Stormwater Implementation	P: FMA Bridge Design/Construct	P: Stormwater Implementation P: FMA Bridge Design/Construct	P: Web Map
Roxbury	P		P						X					P				P										

Program Area →	Community Development								Public Safety			Transportation							Natural Resources			Cross Discipline						
ACTIVITY→ TOWN ↓	Municipal Plan	Energy Plan	River Corridor Bylaw	Zoning	Consultation	Designation Assist.	Brownfields	Economic Dev.	LEOP	LHMP	Disaster Recovery (MOU)	Class 4 Road grant	Road Erosion Inv.	Traffic Count	Bridge/Culvert Inv.	Sign Inventory	Road Surface Management	Grants In Aid	Upper Winooski Resilience	Stormwater Masterplan	Clean Water Block Grant	Capital Planning	Training	Project Development	Grant Writing	Grant Administration	Project Management	Special Project
Waitsfield		P	P			X			P			X		P				P		X					P: HMGP Flood Chute			
Warren		X							X	X				P	X			P		X		X			P: HMGP Shelter Generator			
Washington	P		P						X			P	P	P	X			P							P: HMGP LHMP P: HMGP Fire Dept Generator			
Waterbury	P	P,A	P						X					P	X			P							P: Stormwater MP			X: Stowe Street Bridge Study X: Floodplain Committee
Williamstown					X				X	P			X	P	X			P				T			P: Stormwater MP			
Woodbury						P	X		X	X			X	P				P				T						
Worcester			P						X				X	P				P				T			P: Stormwater MP			