Beyond the statutory requirements of the Regional Plan as laid out in Vermont statute Title 24 VSA Chapter 117 Section 4347 "Purpose of a Regional Plan", the CVRPC, "views the Plan as a means to enhance the lives of the Region's residents." Therefore, quality of life is the guiding principle of the Plan factoring in a safe environment, job opportunities, natural beauty the landscape provides, educational quality, and low crime rate. Some of the broad policies of the CVRP that are most pertinent to the 2018 White River Basin - Basin 9, Tactical Basin Plan Draft are:

- Encourage planning that identifies, respects and preserves our important historic, natural, cultural, and recreational resources.
- Seek to maintain healthy environment and to respect the Region's historic settlement patterns.
- Encourage development patterns which result in more energy efficient transportation patterns.
- Encourage investment in public facilities and services in areas of population and economic growth.
- Support the identification and utilization of economic growth centers as a method of achieving development patterns that are
  mutually advantageous to the environment and the socio-economic needs of the Region's towns.

There are eleven identified priority waters for *remediation* listed in the Tactical Basin Plan (Figure 2) however, none of these waters are in the Central Vermont region. Despite this, the strategies goals and objectives are mutually supported by each Plan. They are listed below.

- Encourage river restoration and protection efforts;
- Review VDEC data and VFWD data for improvements
- Monitor swimming holes /areas to protect public health
- Use Best Management Practices (BMP)
- Offer septic socials (see definition below taken from TBP document)
- Follow 2011 VT Total Maximum Daily Load (TMDL) standards
- Implement high priority projects recommended in Stream Geomorphic Assessment (SGA)
- Encourage towns to adopt local river corridor an flood hazard protection standards
- Implement Required Agricultural Practices and outreach to farmers develop storm water master plans and implement high priority projects
- Perform waste water treatment facility monitoring
- Conduct road erosion inventories on hydro geologically connected roads segments and implement road BMP to meet Municipal Roads General Permit (MRGP) standards, coordinate with partners VFWG,WRP, DEC, landowners
- Educate lakeshore community on BMPs for water quality
- · Establish long term trend data
- Initiate aquatic invasive species (AIS) monitoring and water chemistry monitoring
- Assist with outreach by VT Waste Management and Prevention Division to landowners identify opportunities for riparian and aquatic area habitat restoration and protection

The White River Tactical Basin plan, Basin-9, defines a septic social as follows:

### "Septic Socials -

Septic socials are neighborhood gatherings where homeowners learn about the options for a well-functioning septic system and the good maintenance practices, including household products that are kind to septic systems. The event provides an informal opportunity for people who may never have seen a septic system to learn about them. The host opens the gathering by talking about the importance of water quality protection. A septic system specialist discusses operation and maintenance of septic systems using the host homeowner's system as the demonstration model. Attendees are provided with brochures and other resource materials to take home. Septic socials are best for areas with old septic systems that may be having an impact on water quality. These places are often around lakes with old camps or buildings built for seasonal use that are now seeing more activity year-round. Septic socials can also be held in riverbank communities. More information about septic socials can be found at: <a href="http://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/lake-wise-septic-system-socials">http://dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/lake-wise-septic-system-socials</a>

The following table summary is based on the 59 priority implementation actions identified in the Basin-9 Plan, (Table 20), to address protection and restoration priorities for the basin and the 53 water monitoring recommendations, (Table 21), as they relate specifically to the four towns in the CV Region. The 2018 White River Basin - Basin 9, Tactical Basin Plan Draft (WRTBP) and the 2016 Central Vermont Regional Plan, amended 2018 (CVRP) contain overarching conforming Goals and Objectives. The table below lists the WRTBP's priority mitigation strategies and actions as they relate specifically to the municipalities of Roxbury, Williamstown, and Washington located in the CVRPC region and identifies those Regional Plan goals, policies, and strategies which are mutually supportive. A detailed summary outlining the conforming sections of the Regional Plan follows the table. When applicable, notes are added to the table to further comments on the relationship between the recommended priority and the Regional Plan. Footnotes are used when the conforming goals, policies, and strategies of the Regional Plan have a specific and direct correlation to the Basin-9 strategy being reviewed for conformance.

<sup>\*</sup>Based on Table 20 and Table 21 of the White River Basin-Basin 9, Draft Tactical Basin Plan (TBP) as they relate specifically to the municipalities of Roxbury, Williamstown, and Washington located in the CVRPC region.

2018 White River Basin - Basin 9, Tactical Basin Plan Draft (9/4/2018)	2016 Central Vermont Regional Plan, amended 2018	
PRIORITY STRATEGIES AND ACTIONS with Purpose.  IMPAIRED WATERS - Restore	GOALS and POLICIES  (AS CONTAINED THROUGHOUT THE PLAN; strategies can be found listed in the summary at the back)	NOTES
Strategy #1. Develop a Phase II SGA and River Corridor Plan for the Second Branch of the White River. (Locations identified Royalton, Chelsea, and Tunbridge).  Purpose: Identify projects that will identify and address nutrient and sediment inputs; implement bacterial TMDL.	FUTURE LAND USE PLANNING AREAS POLICIES: Policies: 10. Identify key areas with flood storage capacity and encourage floodplain protection measures such as land acquisition or restrictive land use regulation in areas upstream of Regional and Town Centers.  RESOURCE LAND USE PLANNING POLICIES: Policies: 1. 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. Policies: 5. Avoid or limit development and investment in identified flood hazard areas, where feasible.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES: GOAL 1: To promote sound management, conservation and use of the Region's natural resources. Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.  Policies: 2. Encourage the improved identification and mapping of surface and groundwater resources. Policies: 3. Support the betterment of surface water quality in the Region. (Numerous strategies are identified in the Regional Plan in support of this policy. See detailed summary at the back of this table.) Policies: 5. Avoid or limit development and investment in identified flood hazard areas. Where	Towns identified did not include Williamstown in the CVRPC region or the TROPC towns of Randolph and Brookfield which make up the majority of this subbasin, and Bethel. The TBP Appendix A. 2013 Basin 9 Report Card states, "This is the largest SGA data gap in the White River watershed and is the highest priority for Phase 2 SGA in this basin." This action was carried over into this 2018 TBP.

established economic and institutional centers exist, development in these centers shall adhere to strict floodplain management standards to minimize flood damage and public safety risk.

GOAL 3. Encourage the historic settlement pattern of compact village and urban centers separated by rural country side while promoting development in economically viable locations.

Policies: 1. New development should be planned so as to respect the historic settlement pattern of compact villages, neighborhoods, and urban centers separated by rural countryside. Accordingly, CVRPC:

 Recognizes that some environmental and development "trade off" will be necessary to achieve desired growth patterns...

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central **Vermont Regional Plan.** 

GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

### **FACILITIES, SERVICES AND UTILITIES GOALS, POLICIES AND STRATEGIES:**

Wastewater Treatment Goal: Improvement and expansion of wastewater treatment facilities and options so as to protect public health, maximize public investment, and reinforce desired patterns of growth.

Policies: 1. This Plan supports efforts to improve existing wastewater collection and treatment systems.

Policies: 3. Encourage continued efforts to improve water quality through the separation of combined sewers or other method to ameliorate the harmful impacts of combined sewer overflows Policies: 4. Support efforts to upgrade components of aging wastewater system to address

depreciation, improve energy efficiency and increase flood resiliency of the Region's systems. Policies: 13. CVRPC encourages the use of shoreline zoning powers (24 V.S.A., Chapter 117, and Section 4411), in compliance with the Vermont Shoreland Protection Act, to regulate the design of

sanitary facilities on lands adjacent to surface waters.

#### **EMERGENCY MANAGEMENT GOALS AND POLICIES:**

In Table 20, Strategy 1, Consider the addition of Williamstown under the Town column.

**CVRPC** supports DECs priority to focus on nonforested areas in determining segments for completion under the SGA's. Therefore, CVRPC understands if Williamstown. having a heavily forested land cover, is not part of the Phase II SGA for the Second Branch.

Although not CVRPC towns, Randolph. Brookfield and Bethel should be considered for the SGA.

	GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.  GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts  ECONOMIC GOALS, POLICIES AND STRATEGIES  Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.  Policy: 5. Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.	
Strategy #2. Identify, develop and rank a list of projects in the First Branch River Corridor Plan that will likely reduce bacteria, sediment and nutrient input to the river. (Locations identified Royalton, Chelsea, Tunbridge)  Purpose: Address bacterial inputs and encourage stream equilibrium; implement bacterial TMDL.	RESOURCE LAND USE PLANNING POLICIES: Policies: 1. 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.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES: GOAL 1: To promote sound management, conservation and use of the Region's natural resources. Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.  Policies: 3. Support the betterment of surface water quality in the Region. (Numerous strategies are identified in the Regional Plan in support of this policy. See detailed summary at the back of this table.)  Policies: 6. Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property loss.  Policies: 7. Minimize fragmentation of forest blocks and habitat connectors. GOAL 2. To enhance and support the viability of the Region's resource based industries. Policies: 1. CVRPC Supports and encourages the protection and continued productivity of viable	In Table 20, Strategy 2, Add Washington under Town column. Towns identified did not include Washington and Williamstown located in the CVRPC region. Washington was included in the First Branch Phase II SGA but Williamstown was not. Geomorphic condition in

primary agricultural soils, productive forest land, and mineral resources. Sound land use planning including flexible development options, fair government pricing taxation and subsidy programs, agricultural diversity, and promotion of value- added products and industries are viewed a means to this end.

GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 8.** It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

**Policies: 9b** Encourage landscaping with native species over the use of non-native species, particularly in non-urban environments. Work with UVM Extension Master Gardner's on educating homeowners on the use of native tree and plants.

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

**Policies. 1.** New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. Methods to achieve this objective include: (several provided in plan) - avoid construction on steep slopes (>25%) and in high elevations above 2,500 feet; stabilize entrances; minimize removal of native vegetation; minimize amount of disturbed soil; provide vegetated buffers.

**Policies: 2.** Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations). Objectives and applications are several including: storm water retention ponds, dry basins, filter strips, grass and rock swales, infiltration basins and surfaces, and erosion control measures.

**Policies: 3.** Acceptable Management Practices (AMP), as defined by the Vermont Agency of Natural Resources, should be employed on all agricultural, silvacultural, and earth extraction operations.

**Policies: 4**. Efforts should be made to minimize the extent of impervious surfaces and surface runoff associated with parking facilities.

Policies: 5. Municipalities' should consider adopting policies and practices to reduce the volume and

Washington is shown as fair in Figure 12, TBP and therefore consideration should be given to projects in this community.

impacts of storm water runoff, including:

- Encourage storm water management through the use of BMP's in local plans, zoning bylaws, and building permits;
- Protect high elevations and steep slopes from intensive development in local bylaws;
   properly sizing and maintaining culverts;
- Properly maintaining ditches on dirt roads to slow runoff and filter sediments as per the "Road Design and Maintenance Handbook" published by VLRP;
- Separating combined storm water/sewer systems (CSO's) which can discharge raw sewage to surface waters during big storms.

#### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.

**Policies: 7**. Support the planning and design of the Region's transportation system to encourage development and re-development in existing villages, cities, designated growth centers.

GOAL 2. To preserve and maintain the existing transportation system.

**Policies: 1.** Support the necessary steps for evaluating, prioritizing, and implementing preventative maintenance programs for all elements of the transportation system.

**Policies: 2**. Promote a funding strategy that realizes maximum use of all available resources to ensure adequate maintenance of the existing transportation system.

GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

**Policies: 1.** Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).

GOAL 6. To make necessary improvements to achieve a transportation system appropriately structured and designed to safely, effectively and economically move goods and peoples.

GOAL 8. To promote a Regional transportation system that preserves and enhances residential and economic development potential in growth areas.

**Policies: 3.** Encourage transportation system improvements that renew and improve downtowns, growth areas, and neighborhoods.

#### **FACILITIES, SERVICES AND UTILITIES GOALS, POLICIES AND STRATEGIES:**

<u>Wastewater Treatment Goal</u>: Improvement and expansion of wastewater treatment facilities and options so as to protect public health, maximize public investment, and reinforce desired patterns of growth.

**Policies: 1.** This Plan supports efforts to improve existing wastewater collection and treatment systems.

**Policies: 3**. Encourage continued efforts to improve water quality through the separation of combined sewers or other method to ameliorate the harmful impacts of combined sewer overflows.

**Policies: 4.** Support efforts to upgrade components of aging wastewater system to address depreciation, improve energy efficiency and increase flood resiliency of the Region's systems.

**Policies: 13.** CVRPC encourages the use of shoreline zoning powers (24 V.S.A., Chapter 117, and Section 4411), in compliance with the Vermont Shoreland Protection Act, to regulate the design of sanitary facilities on lands adjacent to surface waters.

<u>Electric Power Goal</u>: Improvement and expansion of electric power generation methods and infrastructure so as to provide adequate service, conserve energy, maximize benefits of public investments, minimize impacts on aesthetics, ecological and recreational resources, and protect public health.

**Policies: 9.** Resource areas, as identified by this Plan, shall be avoided wherever possible, in the location or routing of new substation or transmission facilities.

<u>OUTDOOR RECREATION GOAL</u>: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.

**Policies: 2.** CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.

**Policies: 4**. Municipalities should develop and implement strategies to protect important recreation lands. Actions such as securing voluntary easements, fee or less than fee acquisition, subdivision or zoning regulations which contain provisions for common open space, impact fees or other contractual arrangement are encouraged as alternatives for achieving permanent or semi-permanent protection.

### **EMERGENCY MANAGEMENT GOALS AND POLICIES:**

GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.

GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts.

**Policies: 4.** Encourage municipalities to adopt minimum standards for public roads, bridges, and culverts (using the Vermont Local Roads Program and FEMA's Standards.

**Policies: 5.** Encourage municipalities to implement land use policies and development regulations that consider the potential impacts of disasters on people and property.

**Policies: 6.** Discourage residential, commercial, or residential development in floodplains.

**Policies: 7**. Maintain, wherever possible, vegetated buffer strips adjacent to all waterways to reduce the occurrence and magnitude of flooding.

**Policies: 8.** Encourage municipalities to amend flood hazard regulations so they comply with current NFIP requirements.

**Policies: 9.** Provide local officials with information on programs and funding available through FEMA and/or VEM emergency management and hazard mitigation projects.

From an emergency management perspective the Regional Plan discourages development and investment in floodplains, yet it should be noted that overall the Regional Plan (as outlined within the Land Use Chapter) recognizes that our Regional and Town Centers are locations for continued investment and redevelopment. Due to the historic nature of the region, portions of these Regional and Town Centers are located in floodplains and possibly even within River Corridors. Strict conformance with the Tactical Basin Plan Objective may not be achievable unless the Basin Plan recognizes the presence of existing development in river corridors and floodplains and provides an allowance for certain or special circumstances. It should be noted that municipal regulations within some central Vermont municipalities do allow development within floodplains.

While **landslide** not explicated mentioned in a Goal or Policy, the Emergency Management section of the Facilities, Services and Utilities Chapter states that "[I]n Central Vermont, the most common types of natural disasters include: floods, winter storms, hurricanes, landslides, wildfires, earthquakes, and even tornadoes." (page # 5-35)

#### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers

	and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.  Policy: 8. Support the continued use and sustainability of our natural resources and associated industries.  C. Ensure that resource extraction operations follow best management practices to minimize impacts to the local and surrounding environment and other land uses, and to allow for site restoration.  GOAL 4. Dynamic and resilient downtowns, villages and commercial districts.  Policy 14: Focus infrastructure investments in downtowns, village centers and growth centers and promote use of healthy community design principles in public investments and land use regulations.  Policy 15: Increase economic resilience by mitigation of and adaptation to extreme weather events and flooding.  B. Develop and implement outreach strategies targeted to business and residential property owners to raise awareness of flood risk and promote strategies and resources to reduce vulnerabilities.  C. Work with communities to upgrade flood hazard bylaws and improve storm water mitigation strategies in order to minimize risk to homes, businesses and public infrastructure.  D. Encourage communities to direct new commercial or industrial development to areas not at risk from erosion and inundation flood hazards, where feasible.  E. Consider the benefit to local and regional economic resilience when prioritizing assistance with Hazard Mitigation Assistance grants.	
FLOW ALTERED WATERS - Restore		
Strategy #9. Proceed with flow study to determine water quality status and recommendations for flow regulation on Flint Brook. (Located in Roxbury)	RESOURCE LAND USE PLANNING POLICIES:  Policies: 1. 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.  Policies: 2. 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.	

Purpose: Determine if artificial flow regulation is having a negative impact on water quality. Currently funded by VFWD and federal grant.

#### **GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:**

**GOAL 1:** To promote sound management, conservation and use of the Region's natural resources.

**Policies: 1.** Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.

**Policies: 3.** Support the betterment of surface water quality in the Region.

**Strategy 3d.** Native vegetated strips in riparian zones and shoreland areas should be protected and maintained according to Best Management Practices outlined in the Vermont Handbook for Shoreland Development and VT ANR Guidance Regarding Riparian Buffers to protect functional habitat and improve water quality.

GOAL 4: To protect environmentally sensitive or unique areas.

<u>OUTDOOR RECREATION GOAL</u>: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.

**Policies: 2.** CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.

**Policies: 6.** Priority consideration should be given to rehabilitating and update existing recreational facilities.

#### **EMERGENCY MANAGEMENT GOALS AND POLICIES:**

GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.

GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts.

**Policies: 7**. Maintain, wherever possible, vegetated buffer strips adjacent to all waterways to reduce the occurrence and magnitude of flooding.

#### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands,

STRESSED WATERS - Restore HIGH-QUALITY WATERS - Protect	protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.  Policy: 8. Support the continued use and sustainability of our natural resources and associated industries.	No CVRPC identified Towns.
Strategy #27. Reclassify waters recommended for A(1) and B(1) status to protect high quality fisheries and aquatic biota. (Location in Multi towns; this includes Washington in CV region)  Purpose: Determine if additional protections should be implemented to maintain high quality water condition.	OUTDOOR RECREATION GOAL: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.  Policies: 2. CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.  Policies: 4. Municipalities should develop and implement strategies to protect important recreation lands. Actions such as securing voluntary easements, fee or less than fee acquisition, subdivision or zoning regulations which contain provisions for common open space, impact fees or other contractual arrangement are encouraged as alternatives for achieving permanent or semi-permanent protection.  Policies: 5. Public access to rivers, streams, lakes, ponds, and recreation lands is a need in the Region. Municipalities, the State, and private groups, such as land trusts, should coordinate efforts to provide for improved access to the Region's surface waters. At the same time, significant water related natural areas should be maintained and protected.  Policies: 6. Priority consideration should be given to rehabilitating and update existing recreational facilities.  ¹Policies: 7. CVRPC supports the maintenance or upgrading of existing surface water classifications to reflect their actual recreational uses, except where lower classifications may be needed for municipal sewage treatment projects.  RESOURCE LAND USE PLANNING POLICIES: Policies: 1. 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.	CVRPC supports the reclassification In Table 20, Strategy 27, Add CVRPC under Partner column; add Figure 1 under Waterbody column.

<sup>&</sup>lt;sup>1</sup> Policies 7 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #27.

why the development cannot be avoided, and shall provide mitigation for natural resources impacted by the development.

**Policies: 3.** The extension of permanent roads, energy transmission facilities, and utilities into Resource areas is discouraged.

**Policies: 4.** Development on wetlands, steep slopes of 25% or more, and ridge lines should be avoided.

**Policies: 5.** Avoid or limit development and investment in identified flood hazard areas, where feasible.

#### **GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:**

GOAL 1: To promote sound management, conservation and use of the Region's natural resources.

**Policies: 1.** Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.

**Policies: 3**. Support the betterment of surface water quality in the Region. (*In addition to strategy 3b, numerous strategies are identified in the Regional Plan in support of this policy. See detailed summary at the back of this table.)* 

**2Strategy 3b.** CVRPC opposes the downgrading of surface water classification unless such action is required to accommodate treated effluent from new or expanded municipal sewage treatment facilities. The Commission also opposes the upgrading of surface waters classifications where such upgrading might be misleading or dangerous to users.

Policies: 7. Minimize fragmentation of forest blocks and habitat connectors.

GOAL 3. Encourage the historic settlement pattern of compact village and urban centers separated by rural country side while promoting development in economically viable locations.

GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 8.** It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

**Policies: 9b** Encourage landscaping with native species over the use of non-native species, particularly in non-urban environments. Work with UVM Extension Master Gardner's on educating

<sup>&</sup>lt;sup>2</sup> Strategy 3b of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #27.

homeowners on the use of native tree and plants.

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

**Policies. 1.** New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. Methods to achieve this objective include: (several provided in plan) - avoid construction on steep slopes (>25%) and in high elevations above 2,500 feet; stabilize entrances; minimize removal of native vegetation; minimize amount of disturbed soil; provide vegetated buffers.

**Policies: 2.** Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations). Objectives and applications are several including: storm water retention ponds, dry basins, filter strips, grass and rock swales, infiltration basins and surfaces, and erosion control measures.

**Policies: 3.** Acceptable Management Practices (AMP), as defined by the Vermont Agency of Natural Resources, should be employed on all agricultural, silvacultural, and earth extraction operations.

**Policies: 4**. Efforts should be made to minimize the extent of impervious surfaces and surface runoff associated with parking facilities.

**Policies: 5**. Municipalities' should consider adopting policies and practices to reduce the volume and impacts of storm water runoff, including...

### **TRANSPORTATION GOALS AND POLICIES**

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.

**Policies: 7**. Support the planning and design of the Region's transportation system to encourage development and re-development in existing villages, cities, designated growth centers.

GOAL 2. To preserve and maintain the existing transportation system.

GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

**Policies: 1.** Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).

GOAL 6. To make necessary improvements to achieve a transportation system appropriately structured and designed to safely, effectively and economically move goods and peoples. FACILITIES, SERVICES AND UTILITIES GOALS, POLICIES AND STRATEGIES:

<u>Wastewater Treatment Goal</u>: Improvement and expansion of wastewater treatment facilities and options so as to protect public health, maximize public investment, and reinforce desired patterns of growth.

**Policies: 1.** This Plan supports efforts to improve existing wastewater collection and treatment systems.

**Policies: 3**. Encourage continued efforts to improve water quality through the separation of combined sewers or other method to ameliorate the harmful impacts of combined sewer overflows.

<u>Electric Power Goal</u>: Improvement and expansion of electric power generation methods and infrastructure so as to provide adequate service, conserve energy, maximize benefits of public investments, minimize impacts on aesthetics, ecological and recreational resources, and protect public health.

**Policies: 9.** Resource areas, as identified by this Plan, shall be avoided wherever possible, in the location or routing of new substation or transmission facilities.

### **WIRELESS COMMUNICATIONS:**

**Policies: 9.** Access Roads should be designed to minimize their impact on scenic, agricultural, forestry, and natural resources.

#### **HOUSING GOALS, POLICIES AND ACTIONS**

Goals: 3. To promote preservation of the existing housing stock and the development of future housing in the village/town and employment centers of the Region, or those areas designated as Growth Centers.

**Policies: 5.** The majority of new housing should be constructed in town centers and designated growth centers.

### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of

	historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and	
	healthy lifestyles, and increased access to recreational opportunities and amenities.	
	<b>Policy: 8.</b> Support the continued use and sustainability of our natural resources and associated industries.	
	<b>C</b> . Ensure that resource extraction operations follow best management practices to minimize impacts to the local and surrounding environment and other land uses, and to allow for site restoration.	
Strategy #28. Provide	GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:	In Table 20,
outreach to towns on B(1)	GOAL 1: To promote sound management, conservation and use of the Region's natural resources.	Strategy 28, Add
candidate waters. Waters	Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24,	CVRPC under
identified in Figures 10 and 11 and Table 6 of TBP. (See	Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.	Partner column; add Figure 1
above)	<sup>3</sup> Policies: 4. Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.	under Waterbody column.
Purpose: Ensure towns and	Strategy 5e. Assist municipalities in identifying and limiting development on lands adjacent to	
community members	waterways that provide flood storage or other beneficial function through acquisition, easement,	
understand reclassification for	deed restriction or zoning that encourages cluster design, particularly for those upstream floodplains	
protection.	that provide flood protection functions for the Region's downtowns and village centers.	
protestioni	OUTDOOR RECREATION GOAL: To promote adequate access to a wide range of high quality	
	outdoor recreation experiences to all sectors of the population.	
	Policies: 2. CVRPC encourages, in particular, those recreation activities that focus on, respect,	
	enhance, and educate, about the natural environment.	
	Policies: 4. Municipalities should develop and implement strategies to protect important recreation	
	lands. Actions such as securing voluntary easements, fee or less than fee acquisition, subdivision or	
	zoning regulations which contain provisions for common open space, impact fees or other	
	contractual arrangement are encouraged as alternatives for achieving permanent or semi- permanent protection.	
	<sup>3</sup> Policies: 7. CVRPC supports the maintenance or upgrading of existing surface water classifications to	
	reflect their actual recreational uses, except where lower classifications may be needed for	
	municipal sewage treatment projects.	

<sup>&</sup>lt;sup>3</sup> Policies 4 and Policies 7 of the Regional Plan have a specific and direct correlation to the Basin-9 Plan Strategy #28.

STORMWATER RUNOFF -		
Maintain, enhance, and protect		
Strategy #29. Complete road erosion inventories (Basinwide) (Locations identified Bethel, Brookfield, Royalton, Tunbridge, Hartford, Barnard, Pomfret, Rochester).  Purpose: Identify water quality improvements on hydrologically connected road segments.	TRANSPORTATION GOALS AND POLICIES GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.  Policies: 7. Support the planning and design of the Region's transportation system to encourage development and re-development in existing villages, cities, designated growth centers.  GOAL 2. To preserve and maintain the existing transportation system.  Policies: 1. Support the necessary steps for evaluating, prioritizing, and implementing preventative maintenance programs for all elements of the transportation system.  Policies: 2. Promote a funding strategy that realizes maximum use of all available resources to ensure adequate maintenance of the existing transportation system.  GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.  Policies: 1. Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).  GOAL 6. To make necessary improvements to achieve a transportation system appropriately structured and designed to safely, effectively and economically move goods and peoples.  GOAL 8. To promote a Regional transportation system that preserves and enhances residential and economic development potential in growth areas.  Policies: 3. Encourage transportation system improvements that renew and improve downtowns, growth areas, and neighborhoods.  EMERGENCY MANAGEMENT GOALS AND POLICIES:  GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.  GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts.  Policies: 4. Encourage municipalit	Washington is not completed in CV region. In Table 20, Strategy 29, Add Washington as a town under the "on the radar" column; Add CVRPC under Partner column. Correct Table 12. Status of towns with Road Erosion Inventories, now required by the MRGP on page 63.

**Policies: 5.** Encourage municipalities to implement land use policies and development regulations that consider the potential impacts of disasters on people and property.

Policies: 6. Discourage residential, commercial, or residential development in floodplains.

**Policies: 7**. Maintain, wherever possible, vegetated buffer strips adjacent to all waterways to reduce the occurrence and magnitude of flooding.

**Policies: 8.** Encourage municipalities to amend flood hazard regulations so they comply with current NFIP requirements.

**Policies: 9.** Provide local officials with information on programs and funding available through FEMA and/or VEM emergency management and hazard mitigation projects.

#### **GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:**

GOAL 1: To promote sound management, conservation and use of the Region's natural resources.

**Policies: 1.** Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.

**Policies: 3**. Support the betterment of surface water quality in the Region. (*Numerous strategies are identified in the Regional Plan in support of this policy. See detailed summary at the back of this table.*)

**Policies: 6.** Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property loss.

Policies: 7. Minimize fragmentation of forest blocks and habitat connectors.

GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 8.** It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

**Policies: 9b** Encourage landscaping with native species over the use of non-native species, particularly in non-urban environments. Work with UVM Extension Master Gardner's on educating homeowners on the use of native tree and plants.

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property

	damage and negative impacts on surface and groundwater.  Policies. 1. New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. Methods to achieve this objective include: (several provided in plan) - avoid construction on steep slopes (>25%) and in high elevations above 2,500 feet; stabilize entrances; minimize removal of native vegetation; minimize amount of disturbed soil; provide vegetated buffers.  Policies: 2. Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations). Objectives and applications are several including: storm water retention ponds, dry basins, filter strips, grass and rock swales, infiltration basins and surfaces, and erosion control measures.  Policies: 3. Acceptable Management Practices (AMP), as defined by the Vermont Agency of Natural Resources, should be employed on all agricultural, silvacultural, and earth extraction operations.  Policies: 4. Efforts should be made to minimize the extent of impervious surfaces and surface runoff associated with parking facilities.  Policies: 5. Municipalities' should consider adopting policies and practices to reduce the volume and impacts of storm water runoff, including:  • Encourage storm water management through the use of BMP's in local plans, zoning bylaws, and building permits;  • Protect high elevations and steep slopes from intensive development in local bylaws; properly sizing and maintaining culverts;  • Properly maintaining ditches on dirt roads to slow runoff and filter sediments as per the "Road Design and Maintenance Handbook" published by VLRP;  • Separating combined storm water/sewer systems (CSO's) which can discharge raw sewage to surface waters during big storms.	
Strategy #31. Develop stormwater master plans for Randolph, Hartford, Bethel, Royalton, and Rochester. Purpose: Identify priorities for	FUTURE LAND USE PLANNING AREAS POLICIES:  Policies: 1. In order to maintain the existing settlement patterns, higher density residential, commercial, and industrial development should be located in Regional Centers and Town Centers.  Policies: 10. Identify key areas with flood storage capacity and encourage floodplain protection measures such as land acquisition or restrictive land use regulation in areas upstream of Regional and Town Centers.	In Table 20, Strategy 31, Add Williamstown under Town column, Add CVRPC under

nutrient and	d sediment removal
from stormy	water runoff.

### **GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:**

**GOAL 1:** To promote sound management, conservation and use of the Region's natural resources. **Policies: 1.** Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.

**Policies: 2.** Encourage the improved identification and mapping of surface and groundwater resources.

**Policies: 3**. Support the betterment of surface water quality in the Region. (*Numerous strategies are identified in the Regional Plan in support of this policy. See detailed summary at the back of this table*)

**Policies: 4.** Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.

**Policies: 5.** Avoid or limit development and investment in identified flood hazard areas. Where established economic and institutional centers exist, development in these centers shall adhere to strict floodplain management standards to minimize flood damage and public safety risk.

**Strategy 5a.** Continue to conduct outreach to municipalities regarding the most recent state River Corridor maps as delineated by the Agency of Natural Resources and their implications.

**Strategy 5b.** Encourage and provide technical assistance to municipalities in enhancing the regulatory standards in their municipal flood hazard regulations, including the incorporation of River Corridor regulations.

**Strategy 5c.** Fill and new structures within mapped floodways as identified ion FEMA Flood Insurance Rate Maps shall be prohibited, except where a substantial public benefit is provided.

**Strategy 5d**. Wetlands that provide a flood storage function as determined by the VT Wetlands Program should be left undisturbed or development should be required to provide compensatory storage or restoration on-site or in the immediate vicinity, if disturbed.

**Strategy 5e.** Assist municipalities in identifying and limiting development on lands adjacent to waterways that provide flood storage or other beneficial function through acquisition, easement, deed restriction or zoning that encourages cluster design, particularly for those upstream floodplains that provide flood protection functions for the Region's downtowns and village centers.

**Policies: 6.** Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property

Partner column.
This will also
ensure
compatibility with
the 2018 Draft
Winooski TBP
which identifies
Williamstown as a
priority for
development of a
Stormwater
Master Plan.

loss.

Policies: 7. Minimize fragmentation of forest blocks and habitat connectors.

GOAL 3. Encourage the historic settlement pattern of compact village and urban centers separated by rural country side while promoting development in economically viable locations.

**Policies: 1**. New development should be planned so as to respect the historic settlement pattern of compact villages, neighborhoods, and urban centers separated by rural countryside. Accordingly, CVRPC:

- Supports the appropriate expansion of existing settlements, particularly where excess
  infrastructural capacity exists. (The existing settlements within Central Vermont are those
  areas currently served by public water and/or sewer systems or characterized by higher
  densities of development. Existing settlements include, but are not limited to, the
  downtowns and cities, the villages and the myriad concentrated residential neighborhoods.)
- Encourages "in fill" development and adaptive reuse of buildings in existing settlements.
- Recognizes that some environmental and development "trade off" will be necessary to achieve desired growth patterns...

### GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 8.** It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

**Policies: 9b** Encourage landscaping with native species over the use of non-native species, particularly in non-urban environments. Work with UVM Extension Master Gardner's on educating homeowners on the use of native tree and plants.

<sup>4</sup>GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

**Policies. 1.** New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. Methods to achieve this objective include: (several provided in plan) - avoid construction on steep slopes (>25%) and in high elevations above 2,500 feet; stabilize entrances; minimize removal of native vegetation; minimize amount of disturbed soil; provide vegetated buffers.

<sup>&</sup>lt;sup>4</sup> Goal 7 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #31.

**Policies: 2.** Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations). Objectives and applications are several including: storm water retention ponds, dry basins, filter strips, grass and rock swales, infiltration basins and surfaces, and erosion control measures.

**Policies: 3.** Acceptable Management Practices (AMP), as defined by the Vermont Agency of Natural Resources, should be employed on all agricultural, silvacultural, and earth extraction operations.

**Policies: 4**. Efforts should be made to minimize the extent of impervious surfaces and surface runoff associated with parking facilities.

**Policies: 5**. Municipalities' should consider adopting policies and practices to reduce the volume and impacts of storm water runoff, including:

- Encourage storm water management through the use of BMP's in local plans, zoning bylaws, and building permits;
- Protect high elevations and steep slopes from intensive development in local bylaws;
   properly sizing and maintaining culverts;
- Properly maintaining ditches on dirt roads to slow runoff and filter sediments as per the "Road Design and Maintenance Handbook" published by VLRP;
- Separating combined storm water/sewer systems (CSO's) which can discharge raw sewage to surface waters during big storms.

#### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.

**Policies: 7**. Support the planning and design of the Region's transportation system to encourage development and re-development in existing villages, cities, designated growth centers.

### GOAL 2. To preserve and maintain the existing transportation system.

**Policies: 1.** Support the necessary steps for evaluating, prioritizing, and implementing preventative maintenance programs for all elements of the transportation system.

**Policies: 2.** Promote a funding strategy that realizes maximum use of all available resources to ensure adequate maintenance of the existing transportation system.

GOAL 5. To establish a transportation system that minimizes consumption of resources and

#### maximizes the protection of the environment.

**Policies: 1.** Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).

GOAL 6. To make necessary improvements to achieve a transportation system appropriately structured and designed to safely, effectively and economically move goods and peoples.

GOAL 8. To promote a Regional transportation system that preserves and enhances residential and economic development potential in growth areas.

**Policies: 3.** Encourage transportation system improvements that renew and improve downtowns, growth areas, and neighborhoods.

#### **RESOURCE LAND USE PLANNING POLICIES:**

**Policies: 1.** 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.

**Policies: 2.** 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.

**Policies: 3.** The extension of permanent roads, energy transmission facilities, and utilities into Resource areas is discouraged.

**Policies: 4.** Development on wetlands, steep slopes of 25% or more, and ridge lines should be avoided.

**Policies: 5.** Avoid or limit development and investment in identified flood hazard areas, where feasible.

### FACILITIES, SERVICES AND UTILITIES GOALS, POLICIES AND STRATEGIES:

<u>Wastewater Treatment Goal</u>: Improvement and expansion of wastewater treatment facilities and options so as to protect public health, maximize public investment, and reinforce desired patterns of growth.

**Policies: 1.** This Plan supports efforts to improve existing wastewater collection and treatment systems.

**Policies: 3.** Encourage continued efforts to improve water quality through the separation of combined sewers or other method to ameliorate the harmful impacts of combined sewer overflows

**Policies: 4.** Support efforts to upgrade components of aging wastewater system to address depreciation, improve energy efficiency and increase flood resiliency of the Region's systems.

**Policies: 13.** CVRPC encourages the use of shoreline zoning powers (24 V.S.A., Chapter 117, and Section 4411), in compliance with the Vermont Shoreland Protection Act, to regulate the design of sanitary facilities on lands adjacent to surface waters.

#### **EMERGENCY MANAGEMENT GOALS AND POLICIES:**

GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.

GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts.

**Policies: 4.** Encourage municipalities to adopt minimum standards for public roads, bridges, and culverts (using the Vermont Local Roads Program and FEMA's Standards).

**Policies: 5.** Encourage municipalities to implement land use policies and development regulations that consider the potential impacts of disasters on people and property.

Policies: 6. Discourage residential, commercial, or residential development in floodplains.

**Policies: 7**. Maintain, wherever possible, vegetated buffer strips adjacent to all waterways to reduce the occurrence and magnitude of flooding.

**Policies: 8.** Encourage municipalities to amend flood hazard regulations so they comply with current NFIP requirements.

**Policies: 9.** Provide local officials with information on programs and funding available through FEMA and/or VEM emergency management and hazard mitigation projects.

#### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.

Policy: 7. .... These efforts to maintain and plan for adequate systems to support business growth and

	expansion include support of:Water, wastewater and storm water management systems in locations that allow tor appropriately-scaled commercial and industrial expansion, higher densities and co-location of jobs, housing and services.  GOAL 4. Dynamic and resilient downtowns, villages and commercial districts.  Policy 14: Focus infrastructure investments in downtowns, village centers and growth centers and promote use of healthy community design principles in public investments and land use regulations.  Policy 15: Increase economic resilience by mitigation of and adaptation to extreme weather events and flooding.  B. Develop and implement outreach strategies targeted to business and residential property owners to raise awareness of flood risk and promote strategies and resources to reduce vulnerabilities.  C. Work with communities to upgrade flood hazard bylaws and improve storm water mitigation strategies in order to minimize risk to homes, businesses and public infrastructure.  D. Encourage communities to direct new commercial or industrial development to areas not at risk from erosion and inundation flood hazards, where feasible.  E. Consider the benefit to local and regional economic resilience when prioritizing assistance with Hazard Mitigation Assistance grants.	
BACTERIA AND NUTRIENT		
RUNOFF FROM AGRICULTURAL		
LANDS - Restore		
Strategy #37. Target farm inspections on areas with data suggests elevated nutrient loading and E. coli communities. (Locations identified Basin-wide)  Purpose: Reduce nutrient and	RURAL AND HAMLET LAND USE PLANNING POLICIES:  Policies: 1. Development should be designed to minimize its impact on the viability of agricultural operations or its contribution to fragmentation of forest Blocks.  RESOURCE LAND USE PLANNING POLICIES:  Policies: 1. 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.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:	
bacteria run-off in target areas to improve water quality	GOAL 1: To promote sound management, conservation and use of the Region's natural resources.  Policies: 2. Encourage the improved identification and mapping of surface and groundwater resources.  Policies: 3. Support the betterment of surface water quality in the Region.	

**Strategy 3a.** Storage and utilization of fertilizers, pesticides, petro-chemicals, herbicides, sludge, or other potentially harmful industrial, agricultural, commercial or residential materials, must be accomplished in a manner compatible with existing regulations.

### GOAL 2. To enhance and support the viability of the Region's resource based industries.

**Policies: 1.** CVRPC Supports and encourages the protection and continued productivity of viable primary agricultural soils, productive forest land, and mineral resources. Sound land use planning including flexible development options, fair government pricing taxation and subsidy programs, agricultural diversity, and promotion of value- added products and industries are viewed a means to this end.

GOAL 3. Encourage the historic settlement pattern of compact village and urban centers separated by rural country side while promoting development in economically viable locations.

**Policies: 1**. New development should be planned so as to respect the historic settlement pattern of compact villages, neighborhoods, and urban centers separated by rural countryside. Accordingly, CVRPC: ...

GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 8.** It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

**Policies. 1.** New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. Methods to achieve this objective include: (several provided in plan).

**Policies: 2.** Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations). Objectives and applications are several including: storm water retention ponds, dry basins, filter strips, grass and rock swales, infiltration basins and surfaces, and erosion control measures.

Policies: 3. Acceptable Management Practices (AMP), as defined by the Vermont Agency of Natural

	<del>,</del>	
	Resources, should be employed on all agricultural, silvacultural, and earth extraction operations.  Policies: 4. Efforts should be made to minimize the extent of impervious surfaces and surface runoff associated with parking facilities.  Policies: 5. Municipalities' should consider adopting policies and practices to reduce the volume and impacts of storm water runoff, including:  • Encourage storm water management through the use of BMP's in local plans, zoning bylaws, and building permits;  HOUSING GOALS, POLICIES AND ACTIONS  Goals: 3. To promote preservation of the existing housing stock and the development of future housing in the village/town and employment centers of the Region, or those areas designated as Growth Centers.  Policies: 5. The majority of new housing should be constructed in town centers and designated growth centers.	
STREAM EQUILIBRIUM AND		
WETLAND, FLOODPLAIN, &		
RIVER CORRIDOR PROTECTION		
- Protect		
Strategy #39. Municipal	FUTURE LAND USE PLANNING AREAS POLICIES:	
outreach for adoption of river	Policies: 1. In order to maintain the existing settlement patterns, higher density residential,	
corridor protection - towns are	commercial, and industrial development should be located in Regional Centers and Town Centers.	
prioritized based on the value	<b>Policies: 3.</b> Encourage infill, redevelopment, adaptive reuse of existing buildings and reuse of "brownfield" sites in Regional and Town Centers. Encourage the revitalization and reuse of viable	
of protection by stream	historic structures whenever possible.	
density and upstream	<b>Policies: 5</b> Priority for the use of public funding for the maintenance or improvement of	
protection value. (Locations	infrastructure shall be for those that support concentrated development in regional and Town	
identified include Roxbury)	Centers.	
Purpose: Establish protections	<b>Strategy 5a.</b> Support identification of corridors for new roads or road segments in and around	
for towns that will reduce	Regional and Town Centers as part of a local planning process, and support for construction of those	
water quality impacts of	roads and utility infrastructure to help drive growth in a way that supports compact center	
encroachment.	development.  5 Policies: 10. Identify key areas with flood storage capacity and encourage floodplain protection	
	- Silvies: 20: Identity key dieds with hood storage capacity and encodinge hoodplain protection	

<sup>&</sup>lt;sup>5</sup> Policies 10 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #39.

measures such as land acquisition or restrictive land use regulation in areas upstream of Regional and Town Centers.

### **INDUSTRIAL LAND USE PLANNING AREA POLICIES:**

**Policies: 1.** Industrial uses are encouraged to locate first in existing industrial areas and secondly in industrial areas assigned in municipal plans which are in accordance with the goals and policies included in this plan.

### **RESOURCE LAND USE PLANNING POLICIES:**

**Policies: 1.** 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.

**Policies: 2.** 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.

**Policies: 3.** The extension of permanent roads, energy transmission facilities, and utilities into Resource areas is discouraged.

**Policies: 4.** Development on wetlands, steep slopes of 25% or more, and ridge lines should be avoided.

<sup>6</sup>**Policies: 5.** Avoid or limit development and investment in identified flood hazard areas, where feasible.

### **GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:**

GOAL 1: To promote sound management, conservation and use of the Region's natural resources.

**Policies: 1.** Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.

**Policies: 2.** Encourage the improved identification and mapping of surface and groundwater resources.

**Policies: 3**. Support the betterment of surface water quality in the Region. (In addition to strategy 3e, numerous strategies are identified in the Regional Plan in support of this policy. See detailed summary at the back of this table.)

**Strategy 3e.** Encourage and assist with the acquisition of conservation easements along waterways according to priorities identified in River Corridor Plans.

<sup>&</sup>lt;sup>6</sup> Policies 5 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #39.

**Policies: 4.** Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.

**Policies: 5.** Avoid or limit development and investment in identified flood hazard areas. Where established economic and institutional centers exist, development in these centers shall adhere to strict floodplain management standards to minimize flood damage and public safety risk. (In addition to strategy 5a and 5b, other strategies are identified in the Regional Plan in support of this policy. See detailed summary at the back of this table.)

<sup>7</sup>**Strategy 5a.** Continue to conduct outreach to municipalities regarding the most recent state River Corridor maps as delineated by the Agency of Natural Resources and their implications.

**7Strategy 5b.** Encourage and provide technical assistance to municipalities in enhancing the regulatory standards in their municipal flood hazard regulations, including the incorporation of River Corridor regulations.

<sup>7</sup>Policies: 6. Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property loss.

### GOAL 2. To enhance and support the viability of the Region's resource based industries.

**Policies: 1.** CVRPC Supports and encourages the protection and continued productivity of viable primary agricultural soils, productive forest land, and mineral resources. Sound land use planning including flexible development options, fair government pricing taxation and subsidy programs, agricultural diversity, and promotion of value- added products and industries are viewed a means to this end.

GOAL 3. Encourage the historic settlement pattern of compact village and urban centers separated by rural country side while promoting development in economically viable locations.

**Policies: 1.** New development should be planned so as to respect the historic settlement pattern of compact villages, neighborhoods, and urban centers separated by rural countryside. Accordingly, CVRPC:

Supports the appropriate expansion of existing settlements, particularly where excess
infrastructural capacity exists. (The existing settlements within Central Vermont are those
areas currently served by public water and/or sewer systems or characterized by higher
densities of development. Existing settlements include, but are not limited to, the
downtowns and cities, the villages and the myriad concentrated residential neighborhoods.)

<sup>&</sup>lt;sup>7</sup>Strategy 5a, 5b, and Policies 6 have a specific and direct correlation to the Basin-9 Plan Strategy #39

- Encourages "in fill" development and adaptive reuse of buildings in existing settlements.
- Recognizes that some environmental and development "trade off" will be necessary to achieve desired growth patterns...

### GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 9b** Encourage landscaping with native species over the use of non-native species, particularly in non-urban environments. Work with UVM Extension Master Gardner's on educating homeowners on the use of native tree and plants.

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

**Policies: 3.** Acceptable Management Practices (AMP), as defined by the Vermont Agency of Natural Resources, should be employed on all agricultural, silvacultural, and earth extraction operations.

**Policies: 4**. Efforts should be made to minimize the extent of impervious surfaces and surface runoff associated with parking facilities.

**Policies: 5**. Municipalities' should consider adopting policies and practices to reduce the volume and impacts of storm water runoff, including:

- Encourage storm water management through the use of BMP's in local plans, zoning bylaws, and building permits;
- Protect high elevations and steep slopes from intensive development in local bylaws; properly sizing and maintaining culverts;
- Properly maintaining ditches on dirt roads to slow runoff and filter sediments as per the "Road Design and Maintenance Handbook" published by VLRP;
- Separating combined storm water/sewer systems (CSO's) which can discharge raw sewage to surface waters during big storms.

#### **ENERGY GOALS AND POLICIES**

**Reducing Transportation Energy Demand....** 

GOAL: Support alternative transportation options and alternative fuel vehicles throughout the region.

Patterns and Densities of Land Use ...

GOAL: Land use policies support compact development in compact, mixed-use centers.

**Policy:** Strongly prioritize development in compact, mixed -use centers when feasible and appropriate; and identify ways to make compact development more feasible throughout Central Vermont.

### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.

**Policies: 7**. Support the planning and design of the Region's transportation system to encourage development and re-development in existing villages, cities, designated growth centers.

### GOAL 2. To preserve and maintain the existing transportation system.

**Policies: 1.** Support the necessary steps for evaluating, prioritizing, and implementing preventative maintenance programs for all elements of the transportation system.

**Policies: 2**. Promote a funding strategy that realizes maximum use of all available resources to ensure adequate maintenance of the existing transportation system.

GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

**Policies: 1.** Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).

GOAL 6. To make necessary improvements to achieve a transportation system appropriately structured and designed to safely, effectively and economically move goods and peoples.

GOAL 8. To promote a Regional transportation system that preserves and enhances residential and economic development potential in growth areas.

**Policies: 3.** Encourage transportation system improvements that renew and improve downtowns, growth areas, and neighborhoods.

### **FACILITIES, SERVICES AND UTILITIES GOALS, POLICIES AND STRATEGIES:**

<u>Wastewater Treatment Goal</u>: Improvement and expansion of wastewater treatment facilities and options so as to protect public health, maximize public investment, and reinforce desired patterns of growth.

**Policies: 1.** This Plan supports efforts to improve existing wastewater collection and treatment systems.

**Policies: 3**. Encourage continued efforts to improve water quality through the separation of combined sewers or other method to ameliorate the harmful impacts of combined sewer overflows.

**Policies: 4.** Support efforts to upgrade components of aging wastewater system to address depreciation, improve energy efficiency and increase flood resiliency of the Region's systems.

**Policies: 13.** CVRPC encourages the use of shoreline zoning powers (24 V.S.A., Chapter 117, and Section 4411), in compliance with the Vermont Shoreland Protection Act, to regulate the design of sanitary facilities on lands adjacent to surface waters.

<u>Electric Power Goal</u>: Improvement and expansion of electric power generation methods and infrastructure so as to provide adequate service, conserve energy, maximize benefits of public investments, minimize impacts on aesthetics, ecological and recreational resources, and protect public health.

**Policies: 9.** Resource areas, as identified by this Plan, shall be avoided wherever possible, in the location or routing of new substation or transmission facilities.

<u>OUTDOOR RECREATION GOAL</u>: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.

**Policies: 2.** CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.

**Policies: 4**. Municipalities should develop and implement strategies to protect important recreation lands. Actions such as securing voluntary easements, fee or less than fee acquisition, subdivision or zoning regulations which contain provisions for common open space, impact fees or other contractual arrangement are encouraged as alternatives for achieving permanent or semi-permanent protection.

**Policies: 5.** Public access to rivers, streams, lakes, ponds, and recreation lands is a need in the Region. Municipalities, the State, and private groups, such as land trusts, should coordinate efforts to provide for improved access to the Region's surface waters. At the same time, significant water related natural areas should be maintained and protected.

<u>HISTORICAL AND ARCHIOLOGICAL RESOURCE GOAL</u>: To promote the protection and use of the Region's historical and archeological resources.

**Policies: 4.** CVRPC encourages the restoration, rehabilitation, and adaptation of historic structures where feasible, as this minimizes the environmental impact of developing by conserving raw materials, using land already developed, employing existing services.

#### WIRELESS COMMUNICATIONS:

**Policies: 9.** Access Roads should be designed to minimize their impact on scenic, agricultural, forestry, and natural resources.

#### **EMERGENCY MANAGEMENT GOALS AND POLICIES:**

GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.

GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts.

**Policies: 4.** Encourage municipalities to adopt minimum standards for public roads, bridges, and culverts (using the Vermont Local Roads Program and FEMA's Standards).

<sup>8</sup>Policies: 5. Encourage municipalities to implement land use policies and development regulations that consider the potential impacts of disasters on people and property.

<sup>8</sup>Policies: 6. Discourage residential, commercial, or residential development in floodplains.

**Policies: 7**. Maintain, wherever possible, vegetated buffer strips adjacent to all waterways to reduce the occurrence and magnitude of flooding.

**Policies: 8.** Encourage municipalities to amend flood hazard regulations so they comply with current NFIP requirements.

**Policies: 9.** Provide local officials with information on programs and funding available through FEMA and/or VEM emergency management and hazard mitigation projects.

From an emergency management perspective the Regional Plan discourages development and investment in floodplains, yet it should be noted that overall the Regional Plan (as outlined within the Land Use Chapter) recognizes that our Regional and Town Centers are locations for continued investment and redevelopment. Due to the historic nature of the region, portions of these Regional and Town Centers are located in floodplains and possibly even within River Corridors. Strict conformance with the Tactical Basin Plan Objective may not be achievable unless the Basin Plan recognizes the presence of existing development in river corridors and floodplains and provides an allowance for certain or special circumstances. It should be noted that municipal regulations within some central Vermont municipalities do allow development within floodplains.

### **HOUSING GOALS, POLICIES AND ACTIONS**

Goals: 3. To promote preservation of the existing housing stock and the development of future housing in the village/town and employment centers of the Region, or those areas designated as

<sup>&</sup>lt;sup>8</sup> Policies 5 and Policies 6 of the Regional Plan have a specific and direct correlation to the Basin-9 Plan Strategy #39.

#### **Growth Centers.**

**Policies: 5.** The majority of new housing should be constructed in town centers and designated growth centers.

**Policies: 6.** The Region's existing housing stock should be preserved and renovated. Adaptive reuse of older and historic buildings should be encouraged especially in town centers.

**Actions:** Encourage the adoption of local land use regulations and bylaws that allow concentrated development where appropriate infrastructure can be made or is available.

### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.

**Policy: 6.** Ensure availability of commercial and industrial space to meet employment and business expansion needs.

**D.** For uses that do not require a rural location, guide and assist commercial, industrial, and institutional uses to locate in downtowns, villages and adjacent industrial areas, or at those locations in the fringe areas that have been significantly developed and are zoned for such purposes.

**Policy: 7. ....**These efforts to maintain and plan for adequate systems to support business growth and expansion include support of: ...Water, wastewater and storm water management systems in locations that allow tor appropriately-scaled commercial and industrial expansion, higher densities and co-location of jobs, housing and services.

**Policy: 8.** Support the continued use and sustainability of our natural resources and associated industries.

**C.** Ensure that resource extraction operations follow best management practices to minimize impacts to the local and surrounding environment and other land uses, and to allow for site restoration.

GOAL 4. Dynamic and resilient downtowns, villages and commercial districts.

	Policy 14: Focus infrastructure investments in downtowns, village centers and growth centers and promote use of healthy community design principles in public investments and land use regulations.  Policy 15: Increase economic resilience by mitigation of and adaptation to extreme weather events and flooding.  B. Develop and implement outreach strategies targeted to business and residential property owners to raise awareness of flood risk and promote strategies and resources to reduce vulnerabilities.  C. Work with communities to upgrade flood hazard bylaws and improve storm water mitigation strategies in order to minimize risk to homes, businesses and public infrastructure.  D. Encourage communities to direct new commercial or industrial development to areas not at risk from erosion and inundation flood hazards, where feasible.  E. Consider the benefit to local and regional economic resilience when prioritizing assistance with Hazard Mitigation Assistance grants.	
Strategy #43. Continue to work on dam removal prioritization, design and implementation on high priority sites. (Locations identified Multiple towns, basin-wide)  Purpose: Encourage stream equilibrium; increase aquatic organism passage; reduce channel erosion.	FUTURE LAND USE PLANNING AREAS POLICIES:  Policies: 5Priority for the use of public funding for the maintenance or improvement of infrastructure shall be for those that support concentrated development in regional and Town Centers.  RESOURCE LAND USE PLANNING POLICIES: Policies: 1. 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.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES: GOAL 1: To promote sound management, conservation and use of the Region's natural resources. Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.  Policies: 3. Support the betterment of surface water quality in the Region.  10 Strategy 3f. Assist with and support efforts to remove dams that are not serving a useful purpose and other artificial barriers from rivers and streams. Help identify dams that are not serving a useful purpose and that should be listed for removal in conformance with state and federal rules and regulations.  Policies: 4. Encourage enhanced educational opportunities on watershed functions, protection and	Active Dams in Williamstown for recreation purposes: Goyette (private ownership) and Rood Pond (State of VT ownership). Active dam in Washington with little known information about it is the Washington-5. Removal is not anticipated. Historic dams in Williamstown are Staples Pond

<sup>&</sup>lt;sup>9</sup> Actions B, C, and D of the Regional Plan have a specific and direct correlation to the Basin-9 Plan Strategy #39.

<sup>&</sup>lt;sup>10</sup> Strategy 3f of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #43.

restoration, particularly those targeted to youth.

**Strategy 5c.** Fill and new structures within mapped floodways as identified ion FEMA Flood Insurance Rate Maps shall be prohibited, except where a substantial public benefit is provided. **Policies 6.** Improve flood resilience planning, education and outrooch activities to greate a sities.

**Policies: 6.** Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property loss.

GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 8.** It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

#### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.

<u>OUTDOOR RECREATION GOAL</u>: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.

**Policies: 2.** CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.

**Policies: 4**. Municipalities should develop and implement strategies to protect important recreation lands. Actions such as securing voluntary easements, fee or less than fee acquisition, subdivision or zoning regulations which contain provisions for common open space, impact fees or other contractual arrangement are encouraged as alternatives for achieving permanent or semi-permanent protection.

**Policies: 5.** Public access to rivers, streams, lakes, ponds, and recreation lands is a need in the Region. Municipalities, the State, and private groups, such as land trusts, should coordinate efforts to provide for improved access to the Region's surface waters. At the same time, significant water related natural areas should be maintained and protected.

**Policies: 6.** Priority consideration should be given to rehabilitating and update existing recreational facilities.

(breached) and Matson (deleted). These dams are not causing considerable constriction of the stream channel or impediment to aquatic organism passage (Page 70 TBP).

	HISTORICAL AND ARCHIOLOGICAL RESOURCE GOAL: To promote the protection and use of the Region's historical and archeological resources.  Policies: 4. CVRPC encourages the restoration, rehabilitation, and adaptation of historic structures where feasible, as this minimizes the environmental impact of developing by conserving raw materials, using land already developed, employing existing services.	
Strategy #44. Continue work to assess, prioritize, design, and implement high -priority culvert replacement projects. (Locations identified Multiple towns)  Purpose: Encourage stream equilibrium; increase aquatic organism passage; reduce channel erosion.	FUTURE LAND USE PLANNING AREAS POLICIES: Policies: 5Priority for the use of public funding for the maintenance or improvement of infrastructure shall be for those that support concentrated development in regional and Town Centers. Policies: 10. Identify key areas with flood storage capacity and encourage floodplain protection measures such as land acquisition or restrictive land use regulation in areas upstream of Regional and Town Centers. RESOURCE LAND USE PLANNING POLICIES: Policies: 1. 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. Policies: 2. 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. Policies: 3. The extension of permanent roads, energy transmission facilities, and utilities into Resource areas is discouraged. GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES: GOAL 1: To promote sound management, conservation and use of the Region's natural resources. Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24,	No known projects currently in the four towns in the CV region.
	Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.  Policies: 2. Encourage the improved identification and mapping of surface and groundwater resources.  Policies: 3. Support the betterment of surface water quality in the Region. (Numerous strategies are identified in the Regional Plan in support of this policy. See detailed summary at the back of this table.)	

**Policies: 6.** Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property loss.

Policies: 7. Minimize fragmentation of forest blocks and habitat connectors.

GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 8.** It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

**Policies. 1.** New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. Methods to achieve this objective include: (several provided in plan).

**Policies: 2.** Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations). Objectives and applications are several including: storm water retention ponds, dry basins, filter strips, grass and rock swales, infiltration basins and surfaces, and erosion control measures.

**Policies: 5**. Municipalities' should consider adopting policies and practices to reduce the volume and impacts of storm water runoff, including:

- Encourage storm water management through the use of BMP's in local plans, zoning bylaws, and building permits;
- Protect high elevations and steep slopes from intensive development in local bylaws;
   properly sizing and maintaining culverts;
- Properly maintaining ditches on dirt roads to slow runoff and filter sediments as per the "Road Design and Maintenance Handbook" published by VLRP.

#### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central

### **Vermont Regional Plan.**

**Policies: 7**. Support the planning and design of the Region's transportation system to encourage development and re-development in existing villages, cities, designated growth centers.

#### GOAL 2. To preserve and maintain the existing transportation system.

**Policies: 1.** Support the necessary steps for evaluating, prioritizing, and implementing preventative maintenance programs for all elements of the transportation system.

**Policies: 2**. Promote a funding strategy that realizes maximum use of all available resources to ensure adequate maintenance of the existing transportation system.

GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

<sup>11</sup>Policies: 1. Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).

GOAL 6. To make necessary improvements to achieve a transportation system appropriately structured and designed to safely, effectively and economically move goods and peoples.

GOAL 8. To promote a Regional transportation system that preserves and enhances residential and economic development potential in growth areas.

**Policies: 3.** Encourage transportation system improvements that renew and improve downtowns, growth areas, and neighborhoods.

<u>OUTDOOR RECREATION GOAL</u>: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.

**Policies: 2.** CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.

**Policies: 4**. Municipalities should develop and implement strategies to protect important recreation lands. Actions such as securing voluntary easements, fee or less than fee acquisition, subdivision or zoning regulations which contain provisions for common open space, impact fees or other contractual arrangement are encouraged as alternatives for achieving permanent or semi-permanent protection.

**Policies: 5.** Public access to rivers, streams, lakes, ponds, and recreation lands is a need in the Region. Municipalities, the State, and private groups, such as land trusts, should coordinate efforts to provide for improved access to the Region's surface waters. At the same time, significant water

<sup>&</sup>lt;sup>11</sup> Policies 1 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #44.

related natural areas should be maintained and protected.

**Policies: 7.** CVRPC supports the maintenance or upgrading of existing surface water classifications to reflect their actual recreational uses, except where lower classifications may be needed for municipal sewage treatment projects.

### **EMERGENCY MANAGEMENT GOALS AND POLICIES:**

GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.

GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts.

**Policies: 4.** Encourage municipalities to adopt minimum standards for public roads, bridges, and culverts (using the Vermont Local Roads Program and FEMA's Standards).

**Policies: 5.** Encourage municipalities to implement land use policies and development regulations that consider the potential impacts of disasters on people and property.

**Policies: 6.** Discourage residential, commercial, or residential development in floodplains.

**Policies: 7**. Maintain, wherever possible, vegetated buffer strips adjacent to all waterways to reduce the occurrence and magnitude of flooding.

**Policies: 8.** Encourage municipalities to amend flood hazard regulations so they comply with current NFIP requirements.

**Policies: 9.** Provide local officials with information on programs and funding available through FEMA and/or VEM emergency management and hazard mitigation projects.

#### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.

**Policy: 8.** Support the continued use and sustainability of our natural resources and associated industries.

	GOAL 4. Dynamic and resilient downtowns, villages and commercial districts.
	Policy 14: Focus infrastructure investments in downtowns, village centers and growth centers and
	promote use of healthy community design principles in public investments and land use regulations.
	<b>Policy 15:</b> Increase economic resilience by mitigation of and adaptation to extreme weather events and flooding.
	<b>B.</b> Develop and implement outreach strategies targeted to business and residential property owners
	to raise awareness of flood risk and promote strategies and resources to reduce vulnerabilities.
	C. Work with communities to upgrade flood hazard bylaws and improve storm water mitigation
	strategies in order to minimize risk to homes, businesses and public infrastructure.
	D. Encourage communities to direct new commercial or industrial development to areas not at risk
	from erosion and inundation flood hazards, where feasible.
	<b>E.</b> Consider the benefit to local and regional economic resilience when prioritizing assistance with Hazard Mitigation Assistance grants.
	GOAL 5. Sustainable and viable agricultural and forest lands.
	A. Support efforts to develop and update local and region-wide inventories of natural, historic,
	scenic agricultural and recreational assets at the local level to support tourism and quality of life
	promotion.
Strategy #47. Review new	FUTURE LAND USE PLANNING AREAS POLICIES:
natural resource mapping and	<sup>12</sup> Policies: 10. Identify key areas with flood storage capacity and encourage floodplain protection
make recommendations for	measures such as land acquisition or restrictive land use regulation in areas upstream of Regional
improving wetland mapping in	and Town Centers.
target towns. (Locations	RESOURCE LAND USE PLANNING POLICIES:
identified All towns)	<sup>12</sup> Policies: 1. Conservation of the natural landscape and careful management of lands is sought for
identified All towns)	these areas. Development in these areas should be subject to extensive planning, review, and
Purpose: Protect wetland functions and values of significant wetlands that are not mapped.	conditions that ensure its protection.
	Policies: 4. Development on wetlands, steep slopes of 25% or more, and ridge lines should be
	avoided.
	GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:
	<sup>12</sup> GOAL 1: To promote sound management, conservation and use of the Region's natural resources.
	<sup>12</sup> Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A.
	24, Chapter 118) to assist in the identification, study, maintenance and protection of important

<sup>&</sup>lt;sup>12</sup> Policies 10, Policies 1, Goal 1 and associated Policies 1 of the Regional Plan have a specific and direct correlation to the Basin-9 Plan Strategy #47.

natural resources.

<sup>13</sup>Policies: 2. Encourage the improved identification and mapping of surface and groundwater resources.

<sup>13</sup>**Strategy 2b.** Support towns in identifying wetlands and vernal pools that are not already mapped by the State of Vermont.

**Policies: 3.** Support the betterment of surface water quality in the Region.

<sup>13</sup>Strategy 3d. Native vegetated strips in riparian zones and shoreland areas should be protected and maintained according to Best Management Practices outlined in the Vermont Handbook for Shoreland Development and VT ANR Guidance Regarding Riparian Buffers to protect functional habitat and improve water quality.

**Policies: 4.** Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.

<sup>13</sup>Strategy 5d. Wetlands that provide a flood storage function as determined by the VT Wetlands Program should be left undisturbed or development should be required to provide compensatory storage or restoration on-site or in the immediate vicinity, if disturbed.

<sup>13</sup>Strategy 5e. Assist municipalities in identifying and limiting development on lands adjacent to waterways that provide flood storage or other beneficial function through acquisition, easement, deed restriction or zoning that encourages cluster design, particularly for those upstream floodplains that provide flood protection functions for the Region's downtowns and village centers.

**Policies: 6.** Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property loss.

GOAL 3. Encourage the historic settlement pattern of compact village and urban centers separated by rural country side while promoting development in economically viable locations.

**Policies: 1**. New development should be planned so as to respect the historic settlement pattern of compact villages, neighborhoods, and urban centers separated by rural countryside. Accordingly, CVRPC:

• Recognizes that some environmental and development "trade off" will be necessary to achieve desired growth patterns...

<sup>13</sup>GOAL 4: To protect environmentally sensitive or unique areas.

Policies: 1. Natural and fragile areas identified in this Plan should receive protection from harmful

<sup>13</sup> Policies 2, Strategy 2b, Strategy 3d, 5d, 5e, and Goal 4 of the Regional Plan have a specific and direct correlation to the Basin-9 Plan Strategy #47.

uses.

<sup>14</sup>Policies: 8. It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

#### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.

GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

**Policies: 1.** Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites)

<u>Electric Power Goal</u>: Improvement and expansion of electric power generation methods and infrastructure so as to provide adequate service, conserve energy, maximize benefits of public investments, minimize impacts on aesthetics, ecological and recreational resources, and protect public health.

**Policies: 9.** Resource areas, as identified by this Plan, shall be avoided wherever possible, in the location or routing of new substation or transmission facilities.

<u>OUTDOOR RECREATION GOAL</u>: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.

**Policies: 2.** CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.

**Policies: 4**. Municipalities should develop and implement strategies to protect important recreation lands. Actions such as securing voluntary easements, fee or less than fee acquisition, subdivision or zoning regulations which contain provisions for common open space, impact fees or other contractual arrangement are encouraged as alternatives for achieving permanent or semi-permanent protection.

#### **WIRELESS COMMUNICATIONS:**

**Policies: 9.** Access Roads should be designed to minimize their impact on scenic, agricultural, forestry, and natural resources.

<sup>14</sup> Policies 8 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #47.

#### **EMERGENCY MANAGEMENT GOALS AND POLICIES:**

GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.

GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts.

**Policies: 4.** Encourage municipalities to adopt minimum standards for public roads, bridges, and culverts (using the Vermont Local Roads Program and FEMA's Standards).

Policies: 6. Discourage residential, commercial, or residential development in floodplains.

**Policies: 7**. Maintain, wherever possible, vegetated buffer strips adjacent to all waterways to reduce the occurrence and magnitude of flooding.

**Policies: 8.** Encourage municipalities to amend flood hazard regulations so they comply with current NFIP requirements.

#### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.

**Policy: 8.** Support the continued use and sustainability of our natural resources and associated industries.

### GOAL 4. Dynamic and resilient downtowns, villages and commercial districts.

**Policy 14:** Focus infrastructure investments in downtowns, village centers and growth centers and promote use of healthy community design principles in public investments and land use regulations.

**Policy 15:** Increase economic resilience by mitigation of and adaptation to extreme weather events and flooding.

**B.** Develop and implement outreach strategies targeted to business and residential property owners to raise awareness of flood risk and promote strategies and resources to reduce vulnerabilities.

**C.** Work with communities to upgrade flood hazard bylaws and improve storm water mitigation

	strategies in order to minimize risk to homes, businesses and public infrastructure. <b>D.</b> Encourage communities to direct new commercial or industrial development to areas not at risk from erosion and inundation flood hazards, where feasible. <b>GOAL 5. Sustainable and viable agricultural and forest lands. A.</b> Support efforts to develop and update local and region-wide inventories of natural, historic, scenic agricultural and recreational assets at the local level to support tourism and quality of life promotion.	
Strategy #48. Continue and expand riparian buffer programs. Prioritize buffer plantings based upon recommendations in completed River Corridor Plans and target where previous studies have document water quality issues. (Locations identified Multiple towns, Basin-wide)  Purpose: Improve geomorphic compatibility, habitat, water quality, and flood resilience.	FUTURE LAND USE PLANNING AREAS POLICIES:  Policies: 1. In order to maintain the existing settlement patterns, higher density residential, commercial, and industrial development should be located in Regional Centers and Town Centers.  Policies: 3. Encourage infill, redevelopment, adaptive reuse of existing buildings and reuse of "brownfield" sites in Regional and Town Centers. Encourage the revitalization and reuse of viable historic structures whenever possible.  Policies: 10. Identify key areas with flood storage capacity and encourage floodplain protection measures such as land acquisition or restrictive land use regulation in areas upstream of Regional and Town Centers.  INDUSTRIAL LAND USE PLANNING AREA POLICIES:  Policies: 1. Industrial uses are encouraged to locate first in existing industrial areas and secondly in industrial areas assigned in municipal plans which are in accordance with the goals and policies included in this plan.  RESOURCE LAND USE PLANNING POLICIES:  Policies: 1. 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.  Policies: 2. 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.  Policies: 3. The extension of permanent roads, energy transmission facilities, and utilities into Resource areas is discouraged.  Policies: 4. Development on wetlands, steep slopes of 25% or more, and ridge lines should be	Roxbury has interim river corridor regulations. Roxbury and Williamstown do not have a completed River Corridor Plan. Warren and Washington have a completed River Corridor Plan done in 2008 and 2014, respectively.
	Resource areas is discouraged.	

**Policies: 5.** Avoid or limit development and investment in identified flood hazard areas, where feasible.

### **GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:**

**GOAL 1:** To promote sound management, conservation and use of the Region's natural resources.

**Policies: 1.** Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.

**Policies: 2.** Encourage the improved identification and mapping of surface and groundwater resources.

**Policies: 3**. Support the betterment of surface water quality in the Region.

<sup>15</sup>Strategy 3d. Native vegetated strips in riparian zones and shoreland areas should be protected and maintained according to Best Management Practices outlined in the Vermont Handbook for Shoreland Development and VT ANR Guidance Regarding Riparian Buffers to protect functional habitat and improve water quality.

<sup>15</sup>**Strategy 3e.** Encourage and assist with the acquisition of conservation easements along waterways according to priorities identified in River Corridor Plans.

<sup>15</sup>**Strategy 3g.** Assist landowners in identifying funding opportunities to support buffer-plantings on their properties that would support stream bank and shoreland restoration.

<sup>15</sup>**Policies: 4.** Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.

**Policies: 5.** Avoid or limit development and investment in identified flood hazard areas. Where established economic and institutional centers exist, development in these centers shall adhere to strict floodplain management standards to minimize flood damage and public safety risk.

<sup>15</sup>**Strategy 5a.** Continue to conduct outreach to municipalities regarding the most recent state River Corridor maps as delineated by the Agency of Natural Resources and their implications.

<sup>15</sup>**Strategy 5b.** Encourage and provide technical assistance to municipalities in enhancing the regulatory standards in their municipal flood hazard regulations, including the incorporation of River Corridor regulations.

**Strategy 5c.** Fill and new structures within mapped floodways as identified in FEMA Flood Insurance Rate Maps shall be prohibited, except where a substantial public benefit is provided.

<sup>15</sup>Strategy 5d. Wetlands that provide a flood storage function as determined by the VT Wetlands

<sup>15</sup>Strategy 3d, 3e, 3g, Policies 4, Strategy 5a, 5b, and 5d of the Regional Plan have a specific and direct correlation to the Basin-9 Plan Strategy #48.

Program should be left undisturbed or development should be required to provide compensatory storage or restoration on-site or in the immediate vicinity, if disturbed.

<sup>16</sup>**Strategy 5e.** Assist municipalities in identifying and limiting development on lands adjacent to waterways that provide flood storage or other beneficial function through acquisition, easement, deed restriction or zoning that encourages cluster design, particularly for those upstream floodplains that provide flood protection functions for the Region's downtowns and village centers.

<sup>16</sup>**Policies: 6.** Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property loss.

<sup>16</sup>GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

<sup>16</sup>Policies: 8. It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

<sup>16</sup>**Policies: 9b** Encourage landscaping with native species over the use of non-native species, particularly in non-urban environments. Work with UVM Extension Master Gardner's on educating homeowners on the use of native tree and plants.

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

<sup>16</sup>**Policies. 1.** New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. Methods to achieve this objective include: (several provided in plan) - avoid construction on steep slopes (>25%) and in high elevations above 2,500 feet; stabilize entrances; minimize removal of native vegetation; minimize amount of disturbed soil; provide vegetated buffers.

**Policies: 2.** Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations).

**Policies: 3.** Acceptable Management Practices (AMP), as defined by the Vermont Agency of Natural Resources, should be employed on all agricultural, silvacultural, and earth extraction operations.

Policies: 5. Municipalities' should consider adopting policies and practices to reduce the volume and

<sup>&</sup>lt;sup>16</sup> Strategy 5e, Policies 6, Goal 4, Policies 8, Policies 9b, and Policies 1 of Goal 7 of the Regional Plan have a specific and direct correlation to the Basin-9 Plan Strategy #48.

impacts of storm water runoff, including: ...

#### **ENERGY GOALS AND POLICIES**

GOAL: Land use policies support compact development in compact, mixed-use centers.

**Policy:** Strongly prioritize development in compact, mixed -use centers when feasible and appropriate; and identify ways to make compact development more feasible throughout Central Vermont.

#### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.

**Policies: 7**. Support the planning and design of the Region's transportation system to encourage development and re-development in existing villages, cities, designated growth centers.

#### GOAL 2. To preserve and maintain the existing transportation system.

**Policies: 1.** Support the necessary steps for evaluating, prioritizing, and implementing preventative maintenance programs for all elements of the transportation system.

**Policies: 2**. Promote a funding strategy that realizes maximum use of all available resources to ensure adequate maintenance of the existing transportation system.

GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

<sup>17</sup>Policies: 1. Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).

### FACILITIES, SERVICES AND UTILITIES GOALS, POLICIES AND STRATEGIES:

<u>Wastewater Treatment Goal</u>: Improvement and expansion of wastewater treatment facilities and options so as to protect public health, maximize public investment, and reinforce desired patterns of growth.

**Policies: 1.** This Plan supports efforts to improve existing wastewater collection and treatment systems.

<sup>18</sup>Policies: 13. CVRPC encourages the use of shoreline zoning powers (24 V.S.A., Chapter 117, and Section 4411), in compliance with the Vermont Shoreland Protection Act, to regulate the design of sanitary facilities on lands adjacent to surface waters.

<sup>&</sup>lt;sup>17</sup> Policies 1 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #48.

<sup>&</sup>lt;sup>18</sup> Policies 13 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #48.

#### **EMERGENCY MANAGEMENT GOALS AND POLICIES:**

GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.

GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to respond to disaster events and recover from their impacts.

**Policies: 4.** Encourage municipalities to adopt minimum standards for public roads, bridges, and culverts (using the Vermont Local Roads Program and FEMA's Standards

<sup>19</sup>**Policies: 5.** Encourage municipalities to implement land use policies and development regulations that consider the potential impacts of disasters on people and property.

<sup>19</sup>Policies: 6. Discourage residential, commercial, or residential development in floodplains.

<sup>19</sup>**Policies: 7**. Maintain, wherever possible, vegetated buffer strips adjacent to all waterways to reduce the occurrence and magnitude of flooding.

**Policies: 8.** Encourage municipalities to amend flood hazard regulations so they comply with current NFIP requirements

#### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.

GOAL 4. Dynamic and resilient downtowns, villages and commercial districts.

**Policy 14:** Focus infrastructure investments in downtowns, village centers and growth centers and promote use of healthy community design principles in public investments and land use regulations.

<sup>19</sup>**Policies 15:** Increase economic resilience by mitigation of and adaptation to extreme weather events and flooding.

<sup>19</sup>**B.** Develop and implement outreach strategies targeted to business and residential property owners to raise awareness of flood risk and promote strategies and resources to reduce vulnerabilities.

<sup>&</sup>lt;sup>19</sup>Policies 5, 6, 7, and 15, and Action B of Policies 15 of the Regional Plan have a specific and direct correlation to the Basin-9 Plan Strategy #48.

	<ul> <li>C. Work with communities to upgrade flood hazard bylaws and improve storm water mitigation strategies in order to minimize risk to homes, businesses and public infrastructure.</li> <li>D. Encourage communities to direct new commercial or industrial development to areas not at risk from erosion and inundation flood hazards, where feasible.</li> <li>E. Consider the benefit to local and regional economic resilience when prioritizing assistance with Hazard Mitigation Assistance grants.</li> </ul>	
WATER QUALITY ON LAKES AND PONDS - Protection and remediation		
Strategy #49. Using Lake Wise assessment model, assess the public Fish & Wildlife access on Rood Pond and upgrade if recommended. (Location identified Williamstown)  Purpose: Assess and improve water quality where BMPs are recommended on a high-quality water.	RESOURCE LAND USE PLANNING POLICIES:  Policies: 1. 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.  Policies: 2. 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.  Policies: 3. The extension of permanent roads, energy transmission facilities, and utilities into Resource areas is discouraged.  Policies: 4. Development on wetlands, steep slopes of 25% or more, and ridge lines should be avoided.  Policies: 5. Avoid or limit development and investment in identified flood hazard areas, where feasible.  20 OUTDOOR RECREATION GOAL: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.  Policies: 2. CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.  20 Policies: 4. Municipalities should develop and implement strategies to protect important recreation lands. Actions such as securing voluntary easements, fee or less than fee acquisition, subdivision or zoning regulations which contain provisions for common open space, impact fees or other contractual arrangement are encouraged as alternatives for achieving permanent or semi-permanent protection.	

<sup>20</sup> Outdoor Recreation Goal and Policies 4 of the Regional Plan have a specific and direct correlation to the Basin-9 Plan Strategy #49.

<sup>21</sup>Policies: 5. Public access to rivers, streams, lakes, ponds, and recreation lands is a need in the Region. Municipalities, the State, and private groups, such as land trusts, should coordinate efforts to provide for improved access to the Region's surface waters. At the same time, significant water related natural areas should be maintained and protected.

<sup>22</sup>**Policies: 6.** Priority consideration should be given to rehabilitating and update existing recreational facilities.

#### **GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:**

GOAL 1: To promote sound management, conservation and use of the Region's natural resources.

**Policies: 1.** Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.

**Policies: 3**. Support the betterment of surface water quality in the Region.

**Strategy 3e.** Encourage and assist with the acquisition of conservation easements along waterways according to priorities identified in River Corridor Plans.

**Strategy 5c.** Fill and new structures within mapped floodways as identified ion FEMA Flood Insurance Rate Maps shall be prohibited, except where a substantial public benefit is provided.

GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 8.** It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

**Policies. 1.** New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. Methods to achieve this objective include: (*several provided in plan*) -

**Policies: 2.** Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations). Objectives and applications are several including: storm water retention ponds, dry basins, filter strips, grass and rock swales, infiltration basins and surfaces, and

<sup>&</sup>lt;sup>21</sup> Policies 5 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #49.

<sup>&</sup>lt;sup>22</sup> Policies 6 of the Regional Plan has a specific and direct correlation to the Basin-9 Plan Strategy #49.

The state of the s		
	erosion control measures.	
	<b>Policies: 3.</b> Acceptable Management Practices (AMP), as defined by the Vermont Agency of Natural	
	Resources, should be employed on all agricultural, silvacultural, and earth extraction operations.	
	<b>Policies: 4</b> . Efforts should be made to minimize the extent of impervious surfaces and surface runoff	
	associated with parking facilities.	
	TRANSPORTATION GOALS AND POLICIES	
	GOAL 2. To preserve and maintain the existing transportation system.	
	<b>Policies: 1.</b> Support the necessary steps for evaluating, prioritizing, and implementing preventative	
	maintenance programs for all elements of the transportation system.	
	<b>Policies: 2</b> . Promote a funding strategy that realizes maximum use of all available resources to	
	ensure adequate maintenance of the existing transportation system.	
	GOAL 5. To establish a transportation system that minimizes consumption of resources and	
	maximizes the protection of the environment.	
	<b>Policies: 1.</b> Support efforts to minimize negative environmental impacts associated with the	
	transportation system (including air quality, noise levels, surface water, vegetation, agricultural land,	
	fragile areas, and historical/archaeological sites).	
	ECONOMIC GOALS, POLICIES AND STRATEGIES	
	Goal: 2. Business retention, growth and development that anticipates and meet market	
	opportunities.	
	<b>Policy: 5.</b> Implement the goals and policies presented in the Utilities, Facilities, and Services and Land	
	Use elements of this Plan that enhance and optimize quality of place to attract and retain employers	
	and residents. These efforts to enhance and optimize quality of place include preservation of	
	historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands,	
	protection of natural resources and environmental quality, expansion of local food systems and	
	healthy lifestyles, and increased access to recreational opportunities and amenities.	
	Policy: 8. Support the continued use and sustainability of our natural resources and associated	
	industries.	
Strategy #50. Establish Lay	RESOURCE LAND USE PLANNING POLICIES:	
Monitor on lakes	Policies: 1. Conservation of the natural landscape and careful management of lands is sought for	
recommended by the Lakes	these areas. Development in these areas should be subject to extensive planning, review, and	
and Ponds Program. (Locations	conditions that ensure its protection.	
and Fullus Flugiani. (Lucations	·	

identified Brookfield, Sharon
and Williamstown)

Purpose: Establish long-term trend data on lakes with significant shoreline development and potential water quality issues.

**Policies: 2.** 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.

**Policies: 3.** The extension of permanent roads, energy transmission facilities, and utilities into Resource areas is discouraged.

**Policies: 4.** Development on wetlands, steep slopes of 25% or more, and ridge lines should be avoided.

**Policies: 5.** Avoid or limit development and investment in identified flood hazard areas, where feasible.

### **GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:**

**GOAL 1:** To promote sound management, conservation and use of the Region's natural resources.

**Policies: 1.** Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.

**Policies: 3**. Support the betterment of surface water quality in the Region. (*Many strategies related to shoreland, lakes and ponds are identified in the Regional Plan in support of this policy. See detailed summary at the back of this table.)* 

**Policies: 4.** Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.

GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

**Policies. 1.** New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff.

**Policies: 2.** Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations).

**Policies: 4**. Efforts should be made to minimize the extent of impervious surfaces and surface runoff associated with parking facilities.

**Policies: 5**. Municipalities' should consider adopting policies and practices to reduce the volume and impacts of storm water runoff, including: ...

#### TRANSPORTATION GOALS AND POLICIES

GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

**Policies: 1.** Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).

#### **FACILITIES, SERVICES AND UTILITIES GOALS, POLICIES AND STRATEGIES:**

<u>Wastewater Treatment Goal</u>: Improvement and expansion of wastewater treatment facilities and options so as to protect public health, maximize public investment, and reinforce desired patterns of growth.

**Policies: 13.** CVRPC encourages the use of shoreline zoning powers (24 V.S.A., Chapter 117, and Section 4411), in compliance with the Vermont Shoreland Protection Act, to regulate the design of sanitary facilities on lands adjacent to surface waters.

<u>OUTDOOR RECREATION GOAL</u>: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.

**Policies: 2.** CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.

**Policies: 5.** Public access to rivers, streams, lakes, ponds, and recreation lands is a need in the Region. Municipalities, the State, and private groups, such as land trusts, should coordinate efforts to provide for improved access to the Region's surface waters. At the same time, significant water related natural areas should be maintained and protected.

#### **HOUSING GOALS, POLICIES AND ACTIONS**

**Policies: 5.** The majority of new housing should be constructed in town centers and designated growth centers.

#### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers

	and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.  GOAL 5. Sustainable and viable agricultural and forest lands.  A. Support efforts to develop and update local and region-wide inventories of natural, historic, scenic agricultural and recreational assets at the local level to support tourism and quality of life promotion.	
FORESTS AND WATER QUALITY - Maintain and protect		No CVRPC identified Towns.
RECREATIONAL USES		No CVRPC identified Towns.
AQUATIC AND RIPARIAN INVASIVE SPECIES		
Strategy #57.Initiate regular monitoring and AIS (Aquatic Invasive Species) spread prevention through signage or VIP program at Colton Pond, Rood Pond, McIntosh Pond, Sunset Lake and Lake Mitchell. (Locations identified include Williamstown)  Purpose: Prevent spread of invasive species harmful to water resources.	RESOURCE LAND USE PLANNING POLICIES:  Policies: 1. 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.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES: GOAL 1: To promote sound management, conservation and use of the Region's natural resources. Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.  Policies: 3. Support the betterment of surface water quality in the Region.  Strategy 3d. Native vegetated strips in riparian zones and shoreland areas should be protected and maintained according to Best Management Practices outlined in the Vermont Handbook for Shoreland Development and VT ANR Guidance Regarding Riparian Buffers to protect functional habitat and improve water quality.  Policies: 4. Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.	

GOAL 4: To protect environmentally sensitive or unique areas.

**Policies: 1**. Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 9b** Encourage landscaping with native species over the use of non-native species, particularly in non-urban environments. Work with UVM Extension Master Gardner's on educating homeowners on the use of native tree and plants.

#### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.

GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

**Policies: 1.** Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites).

<u>OUTDOOR RECREATION GOAL</u>: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.

**Policies: 2.** CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.

**Policies: 5.** Public access to rivers, streams, lakes, ponds, and recreation lands is a need in the Region. Municipalities, the State, and private groups, such as land trusts, should coordinate efforts to provide for improved access to the Region's surface waters. At the same time, significant water related natural areas should be maintained and protected.

#### **ECONOMIC GOALS, POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and

	healthy lifestyles, and increased access to recreational opportunities and amenities. <b>Policy: 8.</b> Support the continued use and sustainability of our natural resources and associated industries.	
2018 White River Basin -Basin 9, Tactical Basin Plan Draft (9/4/2018)	2016 Central Vermont Regional Plan, amended 2018	
PRIORITY MONITORING AND ASSESSMENT RECOMMENDATIONS	GOALS, POLICIES, AND ACTIONS (AS CONTAINED THROUGHOUT THE PLAN)	
Lakes and Ponds		
6. Rood Pond - Recruit Lay Monitor Volunteers to collect water quality. VT DEC to monitor high Total Nitrogen values and identify potential sources. Purpose: To establish long- term data trends on a larger lake with historically good in- lake water quality and high biodiversity. To determine if TN values are still high and if they are to determine the source(s).	RESOURCE LAND USE PLANNING POLICIES:  Policies: 1. 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.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:  GOAL 1: To promote sound management, conservation and use of the Region's natural resources.  Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.  Policies: 3. Support the betterment of surface water quality in the Region.  Policies: 4. Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.  GOAL 4: To protect environmentally sensitive or unique areas.  Policies: 1. Natural and fragile areas identified in this Plan should receive protection from harmful uses.	Located in Williamstown.  See also Strategy #50 above.
<b>11. Roxbury Flat</b> - Check for Aquatic Invasive Species (AIS).	RESOURCE LAND USE PLANNING POLICIES:  Policies: 1. 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.	Located in Roxbury.

Purpose: To determine presence of AIS.	GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES: GOAL 1: To promote sound management, conservation and use of the Region's natural resources. Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources. Policies: 3. Support the betterment of surface water quality in the Region. Policies: 4. Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth. GOAL 4: To protect environmentally sensitive or unique areas. Policies: 1. Natural and fragile areas identified in this Plan should receive protection from harmful uses.	See also Strategy # 57 above.
Rivers and Streams		
14. Flint Brook - Bioassessment and water chemistry.  Purpose: Determine if there are existing impacts to aquatic life support.	RESOURCE LAND USE PLANNING POLICIES:  Policies: 1. 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.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES: GOAL 1: To promote sound management, conservation and use of the Region's natural resources. Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources. Policies: 3. Support the betterment of surface water quality in the Region. Policies: 4. Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth. GOAL 4: To protect environmentally sensitive or unique areas. Policies: 1. Natural and fragile areas identified in this Plan should receive protection from harmful uses.	Located in Roxbury. See also Strategy #9 above.

15. Third Branch (above and below Flint Brook) - Bioassessment and water chemistry. Purpose: Determine if there	RESOURCE LAND USE PLANNING POLICIES: Policies: 1. 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.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES: GOAL 1: To promote sound management, conservation and use of the Region's natural resources.	Located in Roxbury. See also Strategy #9 above.
are existing impacts to aquatic life support	Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.  Policies: 3. Support the betterment of surface water quality in the Region.  Policies: 4. Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.  GOAL 4: To protect environmentally sensitive or unique areas.  Policies: 1. Natural and fragile areas identified in this Plan should receive protection from harmful uses.	
51. Sandusky Brook - Bioassessment and water chemistry. Purpose: Data gap- collect new data to determine condition	RESOURCE LAND USE PLANNING POLICIES:  Policies: 1. 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.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:  GOAL 1: To promote sound management, conservation and use of the Region's natural resources.  Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.  Policies: 3. Support the betterment of surface water quality in the Region.  Policies: 4. Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.  GOAL 4: To protect environmentally sensitive or unique areas.  Policies: 1. Natural and fragile areas identified in this Plan should receive protection from harmful uses.	Located in Granville and Roxbury.

Wetlands		
53. Roxbury Flat - Lake-	RESOURCE LAND USE PLANNING POLICIES:	Located in
wetland complex analysis	<b>Policies: 1.</b> Conservation of the natural landscape and careful management of lands is sought for	Roxbury.
Purpose: Based on aerial imagery and recharge rates some lakes and ponds may function more as wetlands. Understanding which of these waterbodies are more wetlands will streamline monitoring and assessment.	these areas. Development in these areas should be subject to extensive planning, review, and conditions that ensure its protection.  GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES: GOAL 1: To promote sound management, conservation and use of the Region's natural resources. Policies: 1. Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources. Policies: 2. Encourage the improved identification and mapping of surface and groundwater resources.  Strategy 2b. Support towns in identifying wetlands and vernal pools that are not already mapped by the State of Vermont.  Policies: 3. Support the betterment of surface water quality in the Region. Policies: 4. Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.  Policies: 5. Avoid or limit development and investment in identified flood hazard areas. Where established economic and institutional centers exist, development in these centers shall adhere to strict floodplain management standards to minimize flood damage and public safety risk.  Strategy 5d. Wetlands that provide a flood storage function as determined by the VT Wetlands Program should be left undisturbed or development should be required to provide compensatory storage or restoration on-site or in the immediate vicinity, if disturbed.  Strategy 5e. Assist municipalities in identifying and limiting development on lands adjacent to waterways that provide flood storage or other beneficial function through acquisition, easement, deed restriction or zoning that encourages cluster design, particularly for those upstream floodplains that provide flood protection functions for the Region's downtowns and village centers.  GOAL 4: To protect environmentally sensitive or unique areas.  Policies: 8. It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and	See also strategy #47 above.

The 2018 White River Basin - Basin 9, Tactical Basin Plan Draft (WRTBP) and the 2016 Central Vermont Regional Plan, amended 2018 (CVRP) contain overarching conforming Goals and Objectives. The outline below provides a detail of those sections of the CVRPC Regional Plan goals, policies, strategies, and actions which are mutually supportive.

#### **FUTURE LAND USE PLANNING AREAS POLICIES:**

**Policies: 1.** In order to maintain the existing settlement patterns, higher density residential, commercial, and industrial development should be located in Regional Centers and Town Centers.

**Policies: 3.** Encourage infill, redevelopment, adaptive reuse of existing buildings and reuse of "brownfield" sites in Regional and Town Centers. Encourage the revitalization and reuse of viable historic structures whenever possible.

**Policies: 5**....Priority for the use of public funding for the maintenance or improvement of infrastructure shall be for those that support concentrated development in regional and Town Centers.

**Strategy 5a.** Support identification of corridors for new roads or road segments in and around Regional and Town Centers as part of a local planning process, and support for construction of those roads and utility infrastructure to help drive growth in a way that supports compact center development.

**Policies: 10.** Identify key areas with flood storage capacity and encourage floodplain protection measures such as land acquisition or restrictive land use regulation in areas upstream of Regional and Town Centers.

#### **INDUSTRIAL LAND USE PLANNING AREA POLICIES:**

**Policies: 1.** Industrial uses are encouraged to locate first in existing industrial areas and secondly in industrial areas assigned in municipal plans which are in accordance with the goals and policies included in this plan.

#### MIXED-USE COMMERCIAL LAND USE PLANNING POLICIES:

**Policies: 1.** Encourage the transformation of existing commercial areas into areas serving a mix of uses, including residential, and offering diversified transportation options, while also conforming to traditional historic development patterns.

#### **RURAL AND HAMLET LAND USE PLANNING POLICIES:**

**Policies: 1.** Development should be designed to minimize its impact on the viability of agricultural operations or its contribution to fragmentation of forest Blocks.

**Strategy 1a**. Provide guidance and training on regulatory and non-regulatory tools for open space and resource protection available to towns for use in town plans and regulations.

#### **RESOURCE LAND USE PLANNING POLICIES:**

**Policies: 1.** 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.

**Policies: 2.** 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.

Policies: 3. The extension of permanent roads, energy transmission facilities, and utilities into Resource areas is discouraged.

Policies: 4. Development on wetlands, steep slopes of 25% or more, and ridge lines should be avoided.

Policies: 5. Avoid or limit development and investment in identified flood hazard areas, where feasible.

#### **GENERAL LAND USE GOALS, POLICIES, AND STRATEGIES:**

GOAL 1: To promote sound management, conservation and use of the Region's natural resources.

**Policies: 1.** Municipalities are encouraged to establish conservation commissions (under V.S.A. 24, Chapter 118) to assist in the identification, study, maintenance and protection of important natural resources.

**Policies: 2.** Encourage the improved identification and mapping of surface and groundwater resources.

**Strategy 2b.** Support towns in identifying wetlands and vernal pools that are not already mapped by the State of Vermont.

**Policies: 3**. Support the betterment of surface water quality in the Region.

**Strategy 3a.** Storage and utilization of fertilizers, pesticides, petro-chemicals, herbicides, sludge, or other potentially harmful industrial, agricultural, commercial or residential materials, must be accomplished in a manner compatible with existing regulations.

**Strategy 3b.** CVRPC opposes the downgrading of surface water classification unless such action is required to accommodate treated effluent from new or expanded municipal sewage treatment facilities. The Commission also opposes the upgrading of surface waters classifications where such upgrading might be misleading or dangerous to users.

**Strategy 3d.** Native vegetated strips in riparian zones and shoreland areas should be protected and maintained according to Best Management Practices outlined in the Vermont Handbook for Shoreland Development and VT ANR Guidance Regarding Riparian Buffers to protect functional habitat and improve water quality.

**Strategy 3e.** Encourage and assist with the acquisition of conservation easements along waterways according to priorities identified in River Corridor Plans.

**Strategy 3f.** Assist with and support efforts to remove dams that are not serving a useful purpose and other artificial barriers from rivers and streams. Help identify dams that are not serving a useful purpose and that should be listed for removal in conformance with state and federal rules and regulations.

**Strategy 3g.** Assist landowners in identifying funding opportunities to support buffer-plantings on their properties that would support stream bank and shoreland restoration.

**Policies: 4.** Encourage enhanced educational opportunities on watershed functions, protection and restoration, particularly those targeted to youth.

Policies: 5. Avoid or limit development and investment in identified flood hazard areas. Where established economic and institutional

centers exist, development in these centers shall adhere to strict floodplain management standards to minimize flood damage and public safety risk.

**Strategy 5a.** Continue to conduct outreach to municipalities regarding the most recent state River Corridor maps as delineated by the Agency of Natural Resources and their implications.

**Strategy 5b.** Encourage and provide technical assistance to municipalities in enhancing the regulatory standards in their municipal flood hazard regulations, including the incorporation of River Corridor regulations.

**Strategy 5c.** Fill and new structures within mapped floodways as identified ion FEMA Flood Insurance Rate Maps shall be prohibited, except where a substantial public benefit is provided.

**Strategy 5d**. Wetlands that provide a flood storage function as determined by the VT Wetlands Program should be left undisturbed or development should be required to provide compensatory storage or restoration on-site or in the immediate vicinity, if disturbed. **Strategy 5e**. Assist municipalities in identifying and limiting development on lands adjacent to waterways that provide flood storage or other beneficial function through acquisition, easement, deed restriction or zoning that encourages cluster design, particularly for those upstream floodplains that provide flood protection functions for the Region's downtowns and village centers.

**Policies: 6.** Improve flood resilience planning, education and outreach activities to create a citizenry aware of flood risks, potential costs, and actions that can serve to reduce risk and future property loss

Policies: 7. Minimize fragmentation of forest blocks and habitat connectors.

#### GOAL 2. To enhance and support the viability of the Region's resource based industries.

**Policies: 1.** CVRPC Supports and encourages the protection and continued productivity of viable primary agricultural soils, productive forest land, and mineral resources. Sound land use planning including flexible development options, fair government pricing taxation and subsidy programs, agricultural diversity, and promotion of value- added products and industries are viewed a means to this end.

### GOAL 3. Encourage the historic settlement pattern of compact village and urban centers separated by rural country side while promoting development in economically viable locations.

**Policies: 1.** New development should be planned so as to respect the historic settlement pattern of compact villages, neighborhoods, and urban centers separated by rural countryside. Accordingly, CVRPC:

- Supports the appropriate expansion of existing settlements, particularly where excess infrastructural capacity exists. (The
  existing settlements within Central Vermont are those areas currently served by public water and/or sewer systems or
  characterized by higher densities of development. Existing settlements include, but are not limited to, the downtowns and
  cities, the villages and the myriad concentrated residential neighborhoods.)
- Encourages "in fill" development and adaptive reuse of buildings in existing settlements.
- Recognizes that some environmental and development "trade off" will be necessary to achieve desired growth patterns...

#### **GOAL 4**: To protect environmentally sensitive or unique areas.

**Policies: 1.** Natural and fragile areas identified in this Plan should receive protection from harmful uses.

**Policies: 8.** It is the policy of CVRPC to encourage the preservation of wetlands so as to protect their function and productivity. Efforts (including consideration of site design options) should be made to mitigate against the possible adverse impacts of development on the Regions wetlands.

**Policies: 9b** Encourage landscaping with native species over the use of non-native species, particularly in non-urban environments. Work with UVM Extension Master Gardner's on educating homeowners on the use of native tree and plants

### GOAL 7. To manage the quality and quantity of storm water runoff in order to avoid property damage and negative impacts on surface and groundwater.

**Policies. 1.** New development should, through design and maintenance, attempt to minimize changes in the volume and chemical composition of runoff. Methods to achieve this objective include: (several provided in plan) - avoid construction on steep slopes (>25%) and in high elevations above 2,500 feet; stabilize entrances; minimize removal of native vegetation; minimize amount of disturbed soil; provide vegetated buffers.

**Policies: 2.** Structural Best Management Practices should be used, as appropriate, to control storm water on new development sites before, during, and after construction (including plans for long term maintenance and operations). Objectives and applications are several including: storm water retention ponds, dry basins, filter strips, grass and rock swales, infiltration basins and surfaces, and erosion control measures.

**Policies: 3.** Acceptable Management Practices (AMP), as defined by the Vermont Agency of Natural Resources, should be employed on all agricultural, silvacultural, and earth extraction operations.

**Policies: 4**. Efforts should be made to minimize the extent of impervious surfaces and surface runoff associated with parking facilities.

**Policies: 5.** Municipalities' should consider adopting policies and practices to reduce the volume and impacts of storm water runoff, including:

- Encourage storm water management through the use of BMP's in local plans, zoning bylaws, and building permits;
- Protect high elevations and steep slopes from intensive development in local bylaws; properly sizing and maintaining culverts;
- Properly maintaining ditches on dirt roads to slow runoff and filter sediments as per the "Road Design and Maintenance Handbook" published by VLRP.
- Separating combined storm water/sewer systems (CSO's) which can discharge raw sewage to surface waters during big storms.

#### **ENERGY GOALS AND POLICIES**

Reducing Transportation Energy Demand....

GOAL: Support alternative transportation options and alternative fuel vehicles throughout the region.

Patterns and Densities of Land Use ...

GOAL: Land use policies support compact development in compact, mixed-use centers.

**Policy:** Strongly prioritize development in compact, mixed -use centers when feasible and appropriate; and identify ways to make compact development more feasible throughout Central Vermont.

#### TRANSPORTATION GOALS AND POLICIES

GOAL 1. To achieve a Regional transportation planning process that is comprehensive, multimodal, and public, and is integrated with Regional and local land use planning as outline in the Central Vermont Regional Plan.

**Policies: 7**. Support the planning and design of the Region's transportation system to encourage development and re-development in existing villages, cities, designated growth centers.

#### GOAL 2. To preserve and maintain the existing transportation system.

**Policies: 1.** Support the necessary steps for evaluating, prioritizing, and implementing preventative maintenance programs for all elements of the transportation system.

**Policies: 2.** Promote a funding strategy that realizes maximum use of all available resources to ensure adequate maintenance of the existing transportation system.

### GOAL 5. To establish a transportation system that minimizes consumption of resources and maximizes the protection of the environment.

**Policies: 1.** Support efforts to minimize negative environmental impacts associated with the transportation system (including air quality, noise levels, surface water, vegetation, agricultural land, fragile areas, and historical/archaeological sites)

GOAL 6. To make necessary improvements to achieve a transportation system appropriately structured and designed to safely, effectively and economically move goods and peoples.

GOAL 8. To promote a Regional transportation system that preserves and enhances residential and economic development potential in growth areas.

**Policies: 3.** Encourage transportation system improvements that renew and improve downtowns, growth areas, and neighborhoods.

#### FACILITIES, SERVICES AND UTILITIES GOALS, POLICIES AND STRATEGIES:

<u>Wastewater Treatment Goal</u>: Improvement and expansion of wastewater treatment facilities and options so as to protect public health, maximize public investment, and reinforce desired patterns of growth.

**Policies: 1.** This Plan supports efforts to improve existing wastewater collection and treatment systems.

**Policies: 3**. Encourage continued efforts to improve water quality through the separation of combined sewers or other method to ameliorate the harmful impacts of combined sewer overflows

**Policies: 4.** Support efforts to upgrade components of aging wastewater system to address depreciation, improve energy efficiency and increase flood resiliency of the Region's systems.

**Policies: 13.** CVRPC encourages the use of shoreline zoning powers (24 V.S.A., Chapter 117, and Section 4411), in compliance with the Vermont Shoreland Protection Act, to regulate the design of sanitary facilities on lands adjacent to surface waters.

<u>Electric Power Goal</u>: Improvement and expansion of electric power generation methods and infrastructure so as to provide adequate service, conserve energy, maximize benefits of public investments, minimize impacts on aesthetics, ecological and recreational resources, and protect public health.

**Policies: 9.** Resource areas, as identified by this Plan, shall be avoided wherever possible, in the location or routing of new substation or transmission facilities.

### <u>OUTDOOR RECREATION GOAL</u>: To promote adequate access to a wide range of high quality outdoor recreation experiences to all sectors of the population.

**Policies: 2.** CVRPC encourages, in particular, those recreation activities that focus on, respect, enhance, and educate, about the natural environment.

**Policies: 4.** Municipalities should develop and implement strategies to protect important recreation lands. Actions such as securing voluntary easements, fee or less than fee acquisition, subdivision or zoning regulations which contain provisions for common open space, impact fees or other contractual arrangement are encouraged as alternatives for achieving permanent or semi-permanent protection.

**Policies: 5.** Public access to rivers, streams, lakes, ponds, and recreation lands is a need in the Region. Municipalities, the State, and private groups, such as land trusts, should coordinate efforts to provide for improved access to the Region's surface waters. At the same time, significant water related natural areas should be maintained and protected.

**Policies: 6.** Priority consideration should be given to rehabilitating and update existing recreational facilities.

**Policies: 7.** CVRPC supports the maintenance or upgrading of existing surface water classifications to reflect their actual recreational uses, except where lower classifications may be needed for municipal sewage treatment projects.

### <u>HISTORICAL AND ARCHIOLOGICAL RESOURCE GOAL</u>: To promote the protection and use of the Region's historical and archeological resources.

**Policies: 4.** CVRPC encourages the restoration, rehabilitation, and adaptation of historic structures where feasible, as this minimizes the environmental impact of developing by conserving raw materials, using land already developed, employing existing services.

#### **WIRELESS COMMUNICATIONS:**

Policies: 9. Access Roads should be designed to minimize their impact on scenic, agricultural, forestry, and natural resources.

#### **EMERGENCY MANAGEMENT GOALS AND POLICIES:**

- GOAL 1. To build disaster resistant communities in Central Vermont through sound emergency planning and management.
- GOAL 2. To ensure that all communities in Central Vermont have the appropriate information, resources, and tools to

#### respond to disaster events and recover from their impacts.

**Policies: 4.** Encourage municipalities to adopt minimum standards for public roads, bridges, and culverts (using the Vermont Local Roads Program and FEMA's Standards

**Policies: 5.** Encourage municipalities to implement land use policies and development regulations that consider the potential impacts of disasters on people and property.

**Policies: 6.** Discourage residential, commercial, or residential development in floodplains.

**Policies: 7**. Maintain, wherever possible, vegetated buffer strips adjacent to all waterways to reduce the occurrence and magnitude of flooding.

**Policies: 8.** Encourage municipalities to amend flood hazard regulations so they comply with current NFIP requirements **Policies: 9.** Provide local officials with information on programs and funding available through FEMA and/or VEM emergency

management and hazard mitigation projects.

From an emergency management perspective the Regional Plan discourages development and investment in floodplains, yet it should be noted that overall the Regional Plan (as outlined within the Land Use Chapter) recognizes that our Regional and Town Centers are locations for continued investment and redevelopment. Due to the historic nature of the region, portions of these Regional and Town Centers are located in floodplains and possibly even within River Corridors. Strict conformance with the Tactical Basin Plan Objective may not be achievable unless the Basin Plan recognizes the presence of existing development in river corridors and floodplains and provides an allowance for certain or special circumstances. It should be noted that municipal regulations within some central Vermont municipalities do allow development within floodplains.

While **landslide** not explicated mentioned in a Goal or Policy, the Emergency Management section of the Facilities, Services and Utilities Chapter states that "[I]n Central Vermont, the most common types of natural disasters include: floods, winter storms, hurricanes, landslides, wildfires, earthquakes, and even tornadoes." (Page # 5-35)

#### **HOUSING GOALS, POLICIES AND ACTIONS**

Goals: 3. To promote preservation of the existing housing stock and the development of future housing in the village/town and employment centers of the Region, or those areas designated as Growth Centers.

**Policies: 5.** The majority of new housing should be constructed in town centers and designated growth centers.

**Policies: 6.** The Region's existing housing stock should be preserved and renovated. Adaptive reuse of older and historic buildings should be encouraged especially in town centers.

**Actions:** Encourage the adoption of local land use regulations and bylaws that allow concentrated development where appropriate infrastructure can be made or is available.

#### **ECONOMIC GOALS. POLICIES AND STRATEGIES**

Goal: 2. Business retention, growth and development that anticipates and meet market opportunities.

**Policy: 5.** Implement the goals and policies presented in the Utilities, Facilities, and Services and Land Use elements of this Plan that enhance and optimize quality of place to attract and retain employers and residents. These efforts to enhance and optimize quality of place include preservation of historic and cultural assets; maintaining the scenic qualities of our agricultural and forest lands, protection of natural resources and environmental quality, expansion of local food systems and healthy lifestyles, and increased access to recreational opportunities and amenities.

Policy: 6. Ensure availability of commercial and industrial space to meet employment and business expansion needs.

**D.** For uses that do not require a rural location, guide and assist commercial, industrial, and institutional uses to locate in downtowns, villages and adjacent industrial areas, or at those locations in the fringe areas that have been significantly developed and are zoned for such purposes.

**Policy: 7.** ....These efforts to maintain and plan for adequate systems to support business growth and expansion include support of: ...Water, wastewater and storm water management systems in locations that allow tor appropriately-scaled commercial and industrial expansion, higher densities and co-location of jobs, housing and services.

**Policy: 8.** Support the continued use and sustainability of our natural resources and associated industries.

**C.** Ensure that resource extraction operations follow best management practices to minimize impacts to the local and surrounding environment and other land uses, and to allow for site restoration.

#### GOAL 4. Dynamic and resilient downtowns, villages and commercial districts.

**Policy 14:** Focus infrastructure investments in downtowns, village centers and growth centers and promote use of healthy community design principles in public investments and land use regulations.

Policy 15: Increase economic resilience by mitigation of and adaptation to extreme weather events and flooding.

**B.** Develop and implement outreach strategies targeted to business and residential property owners to raise awareness of flood risk and promote strategies and resources to reduce vulnerabilities.

**C.** Work with communities to upgrade flood hazard bylaws and improve storm water mitigation strategies in order to minimize risk to homes, businesses and public infrastructure.

**D.** Encourage communities to direct new commercial or industrial development to areas not at risk from erosion and inundation flood hazards, where feasible.

**E.** Consider the benefit to local and regional economic resilience when prioritizing assistance with Hazard Mitigation Assistance grants.

#### GOAL 5. Sustainable and viable agricultural and forest lands.

**A.** Support efforts to develop and update local and region-wide inventories of natural, historic, scenic agricultural and recreational assets at the local level to support tourism and quality of life promotion.