

# TWO RIVERS – OTTAUQUECHEE REGIONAL PLAN

## Summary of Goals, Policies and Recommendations

*Adopted May 30, 2007*  
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### Definitions of “Goal”, “Policy” and “Recommendation”

**Goal:** A goal represents the state of affairs that a plan is intended to achieve.

**Policy:** A policy is an expression of how to meet a goal.

**Recommendation:** A recommendation is a means by which to implement a policy, through an action by a person or group

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# LAND USE CHAPTER

## GOALS

- (1) maintain and improve the accessibility and economic viability regional growth areas;
- (2) encourage full use of regional growth areas;
- (3) provide for intensive development only in regional growth areas where adequate public services and facilities are currently available or planned to be made available concurrently with such development;
- (4) make local and state infrastructure investments in regional growth areas;
- (5) protect the character of rural areas and their natural resources by avoiding sprawling development, and incompatible land uses;
- (6) protect the natural environment by preservation and wise use of natural resources;
- (7) maintain and enhance local comprehensive planning and regulation on issues of local concern;
- (8) maintain investments in the transportation network by assuring that development will not degrade the level of service or functionality;
- (9) reserve land at Interchange Areas for the development of services for the traveling public and transport of goods, not for the development of high traffic-generating commercial activities that are unrelated to services for the traveling public or trucking industry, or institutional uses such as governmental offices or post offices. Interchange Area development should not be promoted to the detriment of regional growth areas or the public investments made therein.

## REGIONAL CENTER

### POLICIES

- (1) Regional Centers should support a mixture of single family, two family, and multiple family structures at the highest densities in the region.
- (2) Commercial uses, services, offices, wholesale business, industry, transport facilities, and community facilities and programs that serve regional needs and markets are encouraged to locate and to provide the broadest possible range of employment in these areas.
- (3) A balance of public and private capital investment determines the economic well being of a town or region. In Regional Centers, intense growth is encouraged when a complete complement of public services such as water, sewer, and highways are available. Continued maintenance or expansion of such facilities must occur in relation to available tax revenues, at reasonable levels of public and private capital investment, and if additional development is to be accommodated.
- (4) Local capital planning programs and public investment strategies should encourage renovation of and infilling within Regional Centers or expansion areas.
- (5) Investment in public and private housing for the elderly and low or moderate income families should be most directed to Regional Centers and away from unsettled rural areas.
- (6) Retail establishments providing goods and services to a regional clientele should be located in Regional Centers to minimize the blighting effects of sprawl and strip-development along major highways and to maintain rural character.

- (7) To avoid structural obsolescence and deterioration, conversion of larger older homes to newer more economical uses, particularly for homes with historic merit, is encouraged. See Historic Resources section for more information.
- (8) In areas containing structures and buildings of architectural or engineering significance, new development must be planned to be compatible with existing development and to not unduly impact the general and special character of the area.
- (9) Major developments like large governmental, medical, commercial, industrial buildings must be located in Regional Centers where utilities, facilities, and human capital are concentrated.

## **TOWN CENTERS**

### **POLICIES**

- (1) Town Centers must support a mixture of single family, two family, and multiple family structures at high densities.
- (2) Commercial uses, services, offices, wholesale business, industry, transport facilities, and community facilities and services are encouraged to locate and to provide the broadest possible range of employment in these areas.
- (3) A balance of public and private capital investment determines the economic well being of a town or region. In Town Centers, intense growth is encouraged when a reasonable complement of public services such as water, sewer, and highways are available. Continued maintenance or expansion of such facilities must occur in relation to available tax revenues, at reasonable levels of public and private capital investment, and if additional development is to be accommodated.
- (4) Local capital planning programs and public investment strategies should encourage renovation and in-filling within Town Centers or expansion areas.
- (5) Investment in public and private housing for the elderly and low or moderate income families must be directed to Town Centers and away from unsettled rural areas.
- (6) Principal retail establishments must be located in Town Centers, Designated Downtowns, or Designated Growth Centers to minimize the blighting effects of sprawl and strip-development along major highways and maintain rural character.
- (7) Conversion of larger older homes, particularly those with historic merit, is encouraged for new, more economical use to avoid structural obsolescence and deterioration. See Historic Resources section for more information.
- (8) In areas containing structures and buildings of architectural or engineering significance, new development must be planned to be compatible with existing development and not unduly impact the general and special character of the area.
- (9) Postal facilities and similar governmental offices, should be located in Town Centers where other public services are available or planned. Development of governmental offices distant from and unrelated to community centers contributes to increased traffic, scattered development, and costly public services. Such a pattern of development is incompatible with the goals and policies of this Plan.

## **VILLAGE SETTLEMENTS**

### **POLICIES**

- (1) Village Settlements should support housing types at a densities that are lower than Town Centers but higher than the areas surrounding the Village Settlement. Village Settlements that have neither public water nor sewer should plan for densities that can be supported by the soils present, in order to avoid ground and surface water contamination. A range of densities should be available within Village Settlements.
- (2) Conversion of larger older homes and particularly those with historic merit should be permitted for new, more economical use to avoid structural obsolescence and deterioration.
- (3) Shops and services, tourist businesses, lodging, public facilities and business and industrial enterprises at a small scale with appropriate design characteristics that fit the context of the area are encouraged.
- (4) New development in Village Settlements should be coordinated with, and in close proximity to, existing structures. New development must not place undue burdens on municipal or regional facilities, utilities and services, including transportation systems. To provide for a concentration of land uses and the maintenance of open space, larger or more intense development proposals should be encouraged to locate in areas that have central water and sewer systems.
- (5) In Village Settlements containing structures and buildings of architectural or engineering significance, new development should be planned so as to be reasonably compatible with existing development and so as not to unduly impact the general and special character of the area.
- (6) Detailed soil surveys and site analysis should be used to identify appropriate densities in villages without public water and sewer and for locating new Village Settlements.
- (7) Long-range planning for the provision of public services in these areas is encouraged. Services, planned and existing, should be coordinated so that the future expansion of services can be more accurately evaluated.
- (8) Existing postal facilities, and similar governmental offices, should be retained in Village Settlements and not be relocated into Rural Areas.

## **HAMLET AREAS**

### **POLICIES**

- (1) The density of development in Hamlet Areas reflects the existing settlement patterns, physical land capability, and the availability of utilities for expansion. Particular densities for development should be designated within the town plans of each of the respective communities within the region. A range of densities should be available within Hamlet Areas.
- (2) Hamlet Areas should support primarily single and two family homes in rural areas and mixed dwelling types in the more developed areas. Business enterprises that fit the context of the immediate area are encouraged.
- (3) Major traffic thoroughfares through Hamlet Areas should be planned or enhanced with traffic calming elements.
- (4) Buildings should be clustered to encourage open space in surrounding areas. Where unusual natural features, soil limitations, or special resources including high value agriculture land are

identified, use of cluster development concepts is encouraged to protect such resources from unnecessary development.

- (5) Where adjacent subdivisions are planned, they must provide for common open space systems to link active recreation areas such as playgrounds, playfields, and natural areas.
- (6) Design features which contribute to the aesthetic value of residential and non-residential areas, including the provision of open spaces, trees and natural ground cover, and the conservation of stream valleys, historic landmarks and structures must be utilized in planning subdivisions.
- (7) Existing postal facilities, and similar governmental offices, should be retained in Hamlet Areas and not be relocated into Rural Areas.

## **RURAL AREAS**

### **POLICIES**

- (1) Rural lands should be developed only in areas where potential for agriculture, forestry or mineral extraction is relatively low. In circumstances where lands are proposed for residential or non-residential uses, development should be planned to minimize or avoid adverse impacts on these resources. Where no reasonable alternative exists but to locate such development in areas exhibiting high resource potential, the project must be planned to minimize the reduction of such potential by providing for reasonable population densities, off-site mitigation, reasonable rates of growth, the use of cluster planning and community planning designed to economize on the cost of roads, utilities, and land usage.
- (2) Maintenance or enhancement of the rural environment or setting is a primary goal for Rural Areas; the development of large undeveloped tracts should occur at a density and design that meets this goal. Rural land proximate to regional growth areas should be considered locations for uses at higher densities, but only when sprawl and strip development are avoided. Areas further away from regional growth areas should accommodate residential uses at lower densities.
- (3) New land development and subdivision should be planned and sited to promote the continued use of agricultural and forestry land for their intended purposes. To minimize the potential conflicts between agricultural and non-agricultural uses, projects must be planned and sited to substantially satisfy the following:
  - (a) residential and other non-agricultural uses or structures should be sited on the least productive soils for agricultural and forestry uses;
  - (b) if the tract or lot contains woodland, non-agricultural uses should be contained within the woodland, or be located along edges of open fields, to enable new construction to be visually absorbed or screened by natural landscape features;
  - (c) siting of proposed buildings or structures should be planned as to minimize any blocking or interruption of scenic vistas as viewed from a public highway;
  - (d) dwelling units and accessory buildings or structures, and proposed lots for development or sale, should be laid out or clustered so that they conserve the maximum feasible amount of farm, pasture land, or managed woodland; and
  - (e) roads, sewage disposal and water supply systems, curb cuts, power lines and other land improvements necessary or desirable to accommodate development of such parcels must be planned so as to minimize conflicts with agricultural and forestry operations and necessary wildlife habitat.

- (4) Use of the planned unit development design scheme, is strongly encouraged as a means of providing an environment more amenable to a higher quality of life in the region.
- (5) Planning and implementation of development or subdivisions must reflect the following principles:
  - (a) balancing of landowners' rights to use their land, with the corresponding rights of abutting and neighboring landowners to live without undue disturbances (e.g., noise, smoke, fumes, dust, odor, glare, stormwater runoff, etc.);
  - (b) convenience and safety of vehicular and pedestrian movement within the site, and in relation to adjacent areas or roads;
  - (c) adequacy of waste disposal methods and protection from pollution of surface or groundwater;
  - (d) protection of historic and natural environmental features on the site under review, and in adjacent areas;
  - (e) compact development that allows for use of shorter power lines and shorter, narrower, and interconnected roads that result in lower maintenance costs; and
  - (f) when new roads are being constructed, consideration should be given to burying power and phone lines if cost effective.
- (6) Non-residential uses, including small service businesses, small professional offices and inns are acceptable land uses for Rural Areas provided that such uses are planned as relatively small in size or scale, are not primary or dominant uses in an area, do not unduly conflict with existing or planned residential, forestry or agricultural uses, and do not unduly affect rural character.
- (7) The Regional Commission recognizes the right of a resident to use a minor portion of a dwelling unit for an occupation which is customary in Rural Areas provided it does not create a nuisance or have an undue adverse effect on the values noted in this Plan as being important to sustaining the character of Rural Areas.
- (8) Major retail enterprises or service centers which draw principally on regional market shares (including factory outlets, large grocery stores, fast food establishments, and shopping malls) are inappropriate in Rural Areas. Such uses are encouraged to locate within or in the expansion area(s) around the existing Regional Center, Town Centers, Designated Growth Centers, or Designated Downtowns. Major retail enterprises and service centers must be of a scale and intensity that fits with the existing development that is present.
- (9) As has been stated in other sections of this Plan, new development has the potential to fragment working fields or forests, detract from the scenic nature of rural landscapes, lessen mobility of traffic on roads due to increased access points, drain economic viability from villages and downtowns, and impinge on natural habitat. It is in the interest of the Regional Commission to diligently evaluate all developments to determine if it results in these impacts and if they can be mitigated through good design.

To meet this test, the development must:

- (a) Not materially decrease mobility or the functional use or safety of a highway;
- (b) Not impinge on wetlands, other natural resources, including habitat;
- (c) Be of a type or nature that is not appropriate for location within regional growth areas;
- (d) Not unnecessarily fragment large tracts of forest or agricultural lands;

- (e) Be of a design that is compatible with surrounding land uses; and
- (f) Avoid floodplains or other hazardous areas.

## **HIGH ELEVATIONS, STEEP SLOPES, AND MARGINAL SOILS**

### **POLICIES**

- (1) Land above 2,500 feet elevation should be maintained predominantly in a natural wilderness state, except in cases of wind power and/or telecommunications projects endorsed by this Plan.
- (2) Green Mountain National Forest Service (GMNFS) acquisition of lands above 2,500 feet is encouraged between willing parties. Management plans prepared by the GMNFS must recognize the concept of preservation as well as forest utilization.
- (3) Passive outdoor recreation and forestry uses are encouraged provided these uses do not unduly impact other significant resources of the site.
- (4) Permanent uses such as dwellings and other similar uses are discouraged.
- (5) Any use deemed appropriate to high elevations should be sensitive to slow vegetative recovery and severe soil limitations and should avoid erosion.
- (6) Large scale or large tract land developments or subdivision are not supported in areas where steep slopes, wet, or shallow soils are predominant, unless it can be demonstrated that such developments or subdivisions will not be unduly detrimental to the environment. Where this can be adequately proven, density of settlement should be relatively low. Passive outdoor recreational, forestry, agricultural, and low density residential uses are examples of the preferred uses for critical areas, subject to overcoming site limitations.
- (7) Development of snowmobile, hiking, and cross country ski trails and similar recreational facilities are appropriate uses subject to meeting acceptable management practices and applicable state law.
- (8) Where permitted, land development or subdivision must be planned to minimize reduction of the resource value of such areas for forestry by providing reasonable population densities, use of cluster development, and new community planning designed to economize on the costs of roads, utilities, and land usage.

## **WETLANDS AND FLOODPLAINS**

### **POLICIES**

- (1) Structural development or intensive land uses shall not occur in Class I and Class II wetlands unless there is an overriding public interest.
- (2) Developments, and their associated stormwater discharges, that are adjacent to wetlands should be planned so they do not cause undue disturbance to wetland areas. Maintenance of a naturally vegetated buffer strip between a wetland and the project site is required to prevent ground water pollution and direct discharges into a wetland.
- (3) The Agency of Natural Resources should improve wetland mapping incorporating better data from local efforts where available.
- (4) Structural development and placement of fill within the limits of the 100-year floodplain is discouraged. Where careful planning at the local level accepts development within the floodplain, the development should be designed to achieve no, net loss of hydrologic or hydraulic

- capacity, and located so they do not impede the floodwaters and endanger the health, safety, and welfare of the public.
- (5) No structural development should be located within the limits of a floodway except projects involving health, safety, or transportation.
  - (6) Natural areas, non-structural outdoor recreational and agricultural uses are the preferred land uses within floodplains. Commercial, industrial, and residential uses are strongly discouraged, except as noted above.
  - (7) Development outside of existing or planned regional growth areas, should not be located immediately adjacent to watercourses, lakes, ponds or shorelines. Such areas should principally be maintained in a natural vegetative state for environmental and aesthetic purposes.

## **WILDLIFE RESOURCES AND ENDANGERED SPECIES**

### **POLICIES**

- (1) In areas defined as exhibiting significant wildlife habitats, planning for land development or subdivision should be sensitive to the economic, social, cultural, recreational, or other benefits to the public of the habitat. Where loss of the resource is imminent due to a development or subdivision, all feasible and reasonable means to prevent significant loss or imperilment of the resource should be employed. To minimize potential conflicts between wildlife resources and land development the following principles should be considered:
  - (a) design in such a manner as to promote the most appropriate use of land for residential or non-residential uses by clustering or concentrating the density of land use within some sections of the parcel or involved lands in order to maintain or preserve significant habitats in large and undisturbed tracts;
  - (b) design projects in such a manner as to avoid fragmentation of large forest tracts to maintain natural habitats between two or more land developments or subdivision;
  - (c) and conservation of significant habitats by a grant of easement or covenant for protected areas.
- (2) Significant deer wintering areas (those identified and mapped by the State of Vermont) should be protected from residential development and other uses that threaten the ability of the habitat to support deer. Commercial, residential, and industrial developments are discouraged within deer wintering areas. Certain types of development may be permitted adjacent to deer wintering areas on finding by Vermont Department of Fish and Wildlife, or other wildlife experts, that the integrity of the area will not be unduly disturbed. Use of mitigation techniques is encouraged.
- (3) Protection of threatened or endangered species are matters of public interest. The Regional Commission supports efforts at the local, state and federal levels to inventory and, where necessary, protect these resources for educational, recreational, and other purposes. Land development or subdivision which unduly impacts these resources are discouraged and are considered incompatible activities.
- (4) In areas identified and mapped by the Vermont Department of Fish and Wildlife as containing necessary wildlife habitat, land development and subdivision planning should utilize Department guidelines for protection of threatened or endangered species.

## **INTERCHANGE AREAS**

### **POLICIES – GENERAL**

- (1) Land use activities and public or quasi-public investments planned for Interchange Areas, that have the effect of eroding the socio-economic vitality of downtowns, are incompatible with this Plan. High priority should be given to public investments benefiting infrastructure, housing, and transportation facilities within Designated Downtowns, Designated Village Centers, Designated Growth Centers, and other regional growth areas.
- (2) Land uses planned for interchange areas should be of a type, scale, and design that complement rather than compete with uses that exist in Designated Downtowns, Designated Village Centers, Designated Growth Centers, and other regional growth areas. Appropriate uses include highway-oriented lodging and service facilities, trucking terminals, truck-dependent manufacturing, and park-and-ride commuter lots. No use should impose a burden on the financial capacity of a town or the state to accommodate the growth caused by the project.
- (3) Any development planned for interchange development must be constructed to:
  - (a) complement the design principles and standards reflected in this Plan;
  - (b) promote the most appropriate land uses as determined through a locally sponsored planning process involving affected landowners, municipalities and the Regional Commission;
  - (c) maintain a high standard of scenic amenities for visually sensitive areas with due regard to impacts on neighboring land uses and highway users;
  - (d) discourage creation or establishment of uses deemed more appropriate to regional growth areas; and
  - (e) encourage planned unit developments.
- (4) Support the development of Master Plans for each of the Interchange Areas. Such Plans should be conducted locally as part of each local Planning Commission's on-going planning program in cooperation with landowners, the Regional Commission, and other affected parties. Work should focus on creating an integrated site plan and design plan that serves as a means of addressing the potential conflicts or problems noted above. Elements that the Plan should include are:
  - (a) access management controls;
  - (b) pedestrian amenities;
  - (c) parking;
  - (d) energy efficiency;
  - (e) utilities/public services;
  - (f) outdoor lighting standards;
  - (g) landscaping and screening;
  - (h) signage; and
  - (i) open space conservation.
- (5) The Master Plan should serve as the foundation for the identification of the highest and best use of these areas and should provide a framework for future development. Incremental and

uncoordinated development inconsistent with Master Plans for each of the interchange areas is discouraged.

- (6) Development concepts that should be utilized for interchange areas include:
  - (a) a circulation system that is conducive to pedestrian, bicycle, and other non-vehicular travel modes;
  - (b) a density or lot coverage area that is higher than surrounding rural settlement areas;
  - (c) use of planned unit development concepts such as compact development that is offset by open space;
  - (d) a design that incorporates public spaces and promotes social interactions;
  - (e) a mixture of uses including non-residential and community facilities, and possibly residential;
  - (f) central focal points or public spaces serving the entire area;
  - (g) a pattern and scale of development that complements traditional patterns and uses in regional growth areas; and
  - (h) provision for park-and-ride commuter parking lots and travel information services.
- (7) Any new development at or near interchange areas should promote a nodal development pattern where buildings are clustered, off-street parking screened in the rear of the parcel and interconnected to adjoining parcels where practical.
- (8) Municipalities with Interchange Areas are encouraged to promote creation and adoption of an Official Map per 24 VSA §4421 to provide a legal means of creating an interconnected network of streets, walkways, and other public facilities or amenities on land designated as interchange development areas. Concepts employed in Master Plans and the Official Map should employ traditional streetscape patterns and designs deemed compatible with existing regional growth areas.

## **CNT**

### **GOALS**

- (1) To promote and endorse voluntary efforts between landowners and conservation trusts to conserve properties that have exceptional aesthetic, historic, recreational, and natural resource values.
- (2) To maintain or enhance use of land for forestry which provides wildlife habitat as well as recreational opportunities.
- (3) To support local, regional, and state efforts to foster voluntary conservation of the Area through planning, land acquisition, conservation easements, and tax incentives.
- (4) To limit public investments by the involved communities, the State of Vermont, and other governmental agencies when these investments unnecessarily or unreasonably endanger the long-term use of the Area for forestry, wildlife, and recreational purposes.
- (5) To discourage public or private development of major access roads or through roads connecting with public highways in neighboring towns.

- (6) To advocate against public utility upgrades or extensions unless the public is clearly benefited thereby and where it is determined not to compromise the land use goals and policies for this Area.
- (7) To ensure the protection and management of surface waters in upland watersheds comprising the Area, and to ensure that they remain in their pristine or natural state and are appropriately classified and typed.

## **POLICIES**

- (1) Given the combination of factors that make conservation of this Area a high public priority, large development projects, including major residential subdivisions and tract development, in the Area are inconsistent with this Plan. Development of non-commercial seasonal camps serving hunters, snowmobilers, and other outdoor recreational users are appropriate uses and are encouraged. Construction of conventional homes intended for permanent or seasonal occupancy with all modern amenities is not the intended use for the Area. In situations where developments of this type are being proposed, they should only be at extremely low densities. Where a landowner is proposing to undertake such a development, permanent conservation of the remaining land is encouraged as a means to ensure that future residential development will be limited on this tract.
- (2) Timber production should be the primary or dominant use in this Area. Logging operations are encouraged provided that they are in accordance with best management practices. Woodlots should be managed and harvested in ways to keep soil erosion and sedimentation of streams to a minimum.
- (3) Insofar as is reasonable, all future development should be planned and sited to promote the continued use of forestland for its intended purposes. To minimize conflicts between forestry, wildlife habitats, and recreational uses, projects should be designed with the following principles in mind:
  - (a) be relatively small in scale, not be the dominant land use on the parcel or in the immediate area;
  - (b) include or reserve a major portion of the land base for conservation or open space;
  - (c) avoid improvements or development in areas exhibiting highly scenic or sensitive landscapes and design structures to minimize disruption of the natural condition of the Area.
- (4) Ensuring continued public access into the Area for snowmobilers, hunters, hikers, and others is critical to the future use and enjoyment of this Area for sporting and recreational purposes. Town roads, legal trails, and some private roads open to the public serve as primary access routes into the Area. Loggers, sportsmen, hikers, and snowmobilers, benefit from this, as they are able access woodlots and trails readily. Public policy decisions or actions need to reflect these values.
- (5) Retention of snowmobile trails, many which go over private land and are part of the statewide VAST trail network, is a priority. Where private lands are involved, owners should be encouraged to keep their land open for these purposes. Local sports groups and snowmobile clubs should continue to have the support and cooperation of the Towns in these efforts. Conservation plans developed for landowners in this Area should reflect, where practicable, the desire to retain this network of trails and not close or cut-off important trail routes. Where appropriate, tax or financial incentives should be employed by the Town, State, and conservation organizations to ensure that this policy objective is attainable.

- (6) Town highways and legal trails are the primary means of public access to land in the Area. Principal users of these roads are local residents, seasonal camp owners, hikers, hunters, snowmobilers, and loggers. These roads accommodate relatively few vehicles ranging from light ATVs and snowmobiles to heavy logging trucks. Town Selectboards retain jurisdiction over these roads and trails, including their maintenance, upgrading, reclassification, and discontinuance. Present and future programs or actions involving roads or trails for this area should be compatible and complement the long-term land use goals and policies of this Plan. Decisions that have the potential effect of altering the stated land use goals of the Area are discouraged.
- (7) New developments that necessitate improvements to existing transportation facilities, particularly on heavily traveled arterial and collector roads, must be designed to avoid disruption or loss of major, identified wildlife corridor crossings. Transportation enhancements projects should be pursued to mitigate driver conflicts with wildlife, including education and awareness programs along road corridors that host significant numbers of crossings. In addition, initiatives should provide for improvements to the transportation infrastructure to reduce vehicle collisions and wildlife fatalities.

## **RECOMMENDATIONS**

- (1) Within five years of adoption, the Regional Commission will, in consultation with member municipalities, neighboring regional commissions, the State of Vermont, public interest groups and property owners, re-evaluate the Land Use section of this Plan. The Regional Commission should give consideration to existing land use settlement patterns, municipal plan goals and policies, agency plans, and projected trends and needs for the region's citizens and businesses. Following completion of the study, the Regional Commission should offer amendments to this section for adoption.
- (2) The Regional Commission should continue its efforts to provide professional planning services to its member municipalities and advise public officials on the various options available to manage growth and development at the local level.
- (3) The Regional Commission will work with member towns to determine appropriate location and size for growth centers within the region.

## **TRANSPORTATION CHAPTER**

### **TOWN OFFICIALS AND CITIZEN INVOLVEMENT**

#### **GOALS**

- (1) Broaden citizen and town official involvement in regional transportation planning.
- (2) Provide educational opportunities for those interested in transportation planning.

#### **POLICIES**

- (1) Emphasize public involvement in all transportation work tasks. Continue to work with citizen and town official advisory groups. Strengthen citizen and town official involvement in local and state planning, policy development, and construction projects.
- (2) Sponsor educational workshops and classes for citizen volunteers and town officials. Provide elected officials with informational materials regarding transportation issues.

### **SAFETY PLANNING AND ENFORCEMENT**

#### **GOALS**

- (1) Improve safety for all transportation modes using known and effective methods in transportation planning.
- (2) Educate and promote safety conscious planning for town officials and staff.

#### **POLICIES**

- (1) Evaluate speed limits and monitor traffic speeds along town and state roads. Assist Towns in setting appropriate speed limits on local roads. Maintain a traffic counting program to inventory and assess traffic speeds on local roads.
- (2) Continue to conduct road safety audit projects. Focus safety audits on roads that have development proposals and/or are expected to support increased development. If the state declares a road or intersection a high accident location, then conduct a road safety audit and advocate for those improvements to be implemented.
- (3) Emphasize safety related projects in all transportation planning work tasks. Educate local and state transportation officials about safety related issues and concerns impacting the region. Focus on reviewing speeds on state controlled roads and providing that information to Towns and the Vermont Agency of Transportation. Work with Towns and the Vermont Agency of Transportation to review speed limits on state controlled roads that pass through regional growth areas.
- (4) Encourage transportation projects that preserve or even reduce traffic speeds on all collectors and local roads. Discourage the use of transportation facility designs that may increase traffic speeds.

### **LOCAL TRANSPORTATION**

#### **GOALS**

- (1) Promote contemporary transportation planning practices in all local planning and project programming activities. Encourage consistency and coordination in local land use and transportation planning activities.

- (2) Support asset management and capital planning practices for all local transportation infrastructure.

## **POLICIES**

- (1) Inventory transportation assets, prioritize project improvements, and develop capital plans for all towns within the region. Begin to develop a regional assessment of road, bridges, and culvert conditions.
- (2) Local transportation investments should be centered on infrastructure maintenance and repair. State transportation programs should fund proactive road maintenance practices such as crack sealing recently reconstructed roadways. Towns should maintain or reconstruct roads along their existing alignments. In cases where high traffic volume roads are re-surfaced, State policy should promote full-depth reconstruction and resist temporary improvement measures that would fail to yield long term solutions. Gravel roads should remain gravel unless marked increases in daily traffic clearly warrant a paved road upgrade. The narrow and twisting alignments of our rural backroads should be maintained as is unless extenuating safety and mobility concerns warrant upgrading.
- (3) New infrastructure capacity should be considered only when allowed by the combined local and regional land use and environmental policies and regulations. Local road connections should help preserve and enhance greater transportation system connectivity as opposed to increasing traffic onto a few arterials and major collectors.
- (4) Coordinate town plans with neighboring communities that share the same transportation corridor so land use development and transportation planning policies are mutually supportive. Promote land use planning regulations that incorporate contemporary transportation planning standards into all Town Plans, Zoning and Subdivision regulations.
- (5) If transportation projects are proposed, work with towns to identify project priorities and help pursue state and federal transportation funding for project design and construction.

## **STATE TRANSPORTATION**

### **GOALS**

- (1) Support the ongoing maintenance and upkeep of the region's existing transportation system.
- (2) Promote transportation project improvements that preserve and enhance the region's historically rural landscape while promoting economic development.
- (3) Support transportation projects that enhance regional growth areas as destinations and not as mobility corridors.

### **POLICIES**

- (1) Planned maintenance that prolongs the life of the existing road and bridges is the region's lead transportation priority. When needed transportation improvements go beyond maintenance, efforts should be on rehabilitation and replacement without any major modifications or improvements that could alter traffic operations.
- (2) On all new construction, transportation design speeds should be maintained or reduced with both roads and bridges maintaining their existing alignments. Geometric constraints that if removed could encourage greater volumes of traffic and/or truck traffic, should be left in place. All improvements should be made to context sensitive designs that enhance the surrounding natural and built rural landscape.
- (3) Projects that involve on-street parking, pedestrian and bicycling facilities, lighting systems, traffic calming, and landscaping are actively encouraged. Projects that are designed to remove on-street parking and crosswalks are strongly discouraged. Regional growth areas that have sufficient

population concentrations (e.g., Bradford and Norwich) are encouraged to request the state re-designate state controlled roads to the locally controlled legal designation of Class 1 road status.

- (4) The region supports the state's policy of investing greater resources for roads identified in the state's tractor truck network.<sup>1</sup>

## **PUBLIC TRANSPORTATION**

### **GOALS**

- (1) Increase the availability and diversity of public transportation options for the entire region.
- (2) Support the public transportation and human service agencies charged with providing public transportation in the region by advocating for funding, presenting the societal benefits, and identifying undue regulatory burdens.

### **POLICIES**

- (1) Support town, human service agencies, and the regional public transportation agencies in providing more public transportation services for a greater percentage of the region. Continue assisting public transportation agencies with planning, marketing, and general coordination.
- (2) Encourage and facilitate coordination between public transportation agencies and the Vermont Agency of Transportation in the construction of park and rides. Give higher priority to park and ride projects occurring along interstate interchanges and existing bus routes.
- (3) Advocate for increased capital investments in public transportation services and facilities. Support the start of the Royalton to Montpelier I-89 north commuter bus service. Support the start of the Bridgewater to the Upper Valley U.S. Route 4 commuter bus service.
- (4) Support funding increases to meet demand in Elderly and Disabled transportation services.

## **ACCESS MANAGEMENT**

### **GOALS**

- (1) Enhance the use of access management in local, regional, and state development permitting activities.
- (2) Promote access management for all local and state transportation projects.

### **POLICIES**

- (1) On town roads, access design standards should be implemented for all driveways without distinction if the access is temporary or permanent. The access permitting process should encourage the use of shared driveways and/or permitting an access that may result in a future shared driveway. And the permitting of access for commercial or industrial land uses should be purposely guided towards existing development nodes in order to preserve or create road segments that possess fewer access points. Continue to develop access management standards with Towns using the Regional Commission driveway access model ordinance. Continue working with towns to improve town plan, zoning and subdivision regulations to better promote access management. Continue working with towns to update highway and public work ordinances that more effectively emphasize access management principles.
- (2) In Act 250 developments, require connections to adjacent roads and between existing and future developments and minimize access points outside of village and town centers. On regionally managed transportation enhancement projects, ensure existing accesses are more effectively designed and managed.

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<sup>1</sup> Vermont's Highway System Policy Plan (June 2004) provided at [www.aot.state.vt.us](http://www.aot.state.vt.us), VTrans search word HSPP.

- (3) On state controlled highways, cooperate with VTrans in implementing the state's access management program. Private development should have permanent landscaping and roadside enhancements to visually define access points and contribute to the road's aesthetic character. Access locations should be clustered together to promote development nodes with slower speed limits and multiple accesses along with road segments that have higher speed limits and fewer driveways. Sight distance standards will be based on actual travel speeds and not the posted speed limits. Land owners will utilize a local road access or acquire an access easement to avoid direct access to a state or national highway – particularly on the region's tractor truck highway network. Work with VTrans staff to clarify the state's administrative process so access permits follow state law and are "compatible with any regional plan, state agency plan or approved municipal plan." (VSA Title 19, Chapter 11).

## **CLASS 4 ROADS**

### **GOALS**

- (1) Promote opportunities for towns to evaluate their Class 4 road system.
- (2) Encourage towns to utilize Class 4 roads for transportation and recreation and to guide local land use decisions.

### **POLICIES**

- (1) Continue to actively support Class 4 road mapping and survey projects. Work with towns to secure grant funding and technical expertise to properly inventory and map Class 4 roads.
- (2) Work with towns to develop Class 4 road use policies and to better utilize Class 4 roads and road re-designations to define and support land use development policies.

## **PARKING MANAGEMENT**

### **GOAL**

- (1) Encourage contemporary parking management standards in all land use development regulations and transportation project designs.

### **POLICIES**

- (1) Develop contemporary parking standards for inclusion in Town Plans, zoning and subdivision regulations. Discourage parking standards that connect land uses and square footage limits to parking space requirements. Encourage greater flexibility in design review. Support parking standards to preserve rural character outside development nodes. Support parking standards that maximize land uses within regional growth areas. Seek opportunities to promote shared parking, rear lot parking access, covered parking, and other techniques that minimize land disturbances.
- (2) Support these same parking standards when reviewing Act 250 developments.

## **WALKING AND BICYCLING**

### **GOALS**

- (1) Expand opportunities for walking and bicycling in the region.
- (2) Promote walking and bicycling as a viable means of transportation and recreation.

## **POLICIES**

- (1) Work with towns and VTrans to institutionalize pedestrian and bicycle accommodations in all of its planning, engineering, and construction related activities. In addition to the existing local land use regulations, develop free-standing Bicycle and Pedestrian Plans for interested towns.
- (2) Work with towns to support land use regulations that increase the density and mixed use development pattern that improves walking and bicycling conditions by shortening trips between where people live, work, and recreate.
- (3) Cooperate with private and public initiatives that seek to market walking and bicycling in towns and the region. Participate in state and local initiatives that promote bicycling and walking.
- (4) On all Act 250 developments, consider the pedestrian and bicycle traffic impacts to preserve mobility and safety. Facilities and land use controls shall be incorporated where walking and bicycling are both anticipated and desired travel options. Accommodations will involve constructing the actual facility, developing the site to accommodate the facility, participating in federal grant programs to provide the local match requirement, and/or deeding the public the rights of way to secure the land needed for facility construction. Encourage developers to develop internal walking and bicycling circulation plans as well as accommodating connections to adjacent parcels – whether developed or not.
- (5) Continue to support the Safe Routes to School program. Encourage more schools to participate in the program – especially those schools within densely settled villages or town centers.

## **TRAFFIC CALMING**

### **GOAL**

- (1) Mitigate motor vehicle impacts on the region's transportation system and adjacent communities.

### **POLICIES**

- (1) Promote local traffic calming projects for town roads that are located within regional growth areas and/or have speeding related safety concerns. Work with towns to develop road standards that promote traffic calming in private development.
- (2) Work to ensure state transportation policies accommodate traffic calming principles. Require that transportation projects follow the Vermont Agency of Transportation traffic calming guidelines. Ensure that greater amounts of traffic calming related projects are selected by the Vermont Agency of Transportation. Discourage the elimination of on-street parking for the benefit of increased traffic capacities within all regional growth areas. Develop transportation enhancement projects that advance traffic calming and landscaping techniques within areas where walking and bicycling occurs or is desirable.
- (3) Advocate state transportation agencies more actively apply pavement center line markings on state-controlled and Class 2 roadways. Support fog line markings for all Class 1 and 2 paved roads.

## **SCENIC PRESERVATION**

### **GOALS**

- (1) Preserve the aesthetic character of the region's roads and surrounding landscapes.

### **POLICIES**

- (1) Support the designation, corridor planning, and promotion of scenic byways as identified by interested communities and local citizens.
- (2) Continue to promote the Connecticut River Scenic Byway and Route 125 Middlebury Gap.

- (3) Work with towns to ensure planning regulations accommodate development buffers and/or tree screenings along scenic roads.

## **DEVELOPMENT IMPACTS**

### **GOALS**

- (1) Develop the region while preserving the safety, efficiency, and character of the region's transportation system.
- (2) Prevent development from defining a built environment that would create great cost and conflict should the public's transportation system require improvements.

### **POLICIES**

- (1) Guide development to mitigate impacts to the transportation system with improvements that fit the region's rural context. Development that carries significant traffic related impacts can be situated within regional growth areas where the necessary infrastructure exists. The priority is to support the land use and economic development objectives recommended in the Regional Plan and the Town Plans. Development that exceeds the capacity of the rural road transportation system is inconsistent with the policies of this Plan even if urban-scale infrastructure improvements could be made to mitigate impacts. This is particularly relevant for rural residential developments that could increase traffic volumes beyond what gravel roads can sustain necessitating undesirable and costly paving projects.
- (2) Encourage development that promotes safe and efficient multimodal accessibility for residential, commercial, and industrial uses. Develop a transportation system based on anticipated and desired multimodal demand. Road expansion projects will be considered necessary, only after all other transportation demand management and multimodal solutions have been explored and deemed insufficient to address transportation impacts.
- (3) Developers must demonstrate they have considered their plans within the context of the local and regional transportation system. Developments should provide connections to adjacent developments and other local roads, not just a single collector or arterial road. If connections to adjacent parcels are not yet possible, then the appropriate easement or development permit conditions will be required so connections can be accommodated in the future.
- (4) Regionally significant development, that shall require greater involvement from the Regional Commission, will be defined by the Act 250 development process.

## **TRUCK TRAFFIC**

### **GOAL**

- (1) Encourage towns to address truck traffic impacts to the region's transportation system.

### **POLICY**

- (1) Seasonal and year round weight restrictions are a responsible method to mitigate truck traffic impacts. Work with Towns to advocate greater consistency in posting roads and enforcing weight restrictions.
- (2) Promote personnel time and equipment sharing (e.g., truck scales) between towns. Allocate Transportation Planning Initiative funds to better measure tractor truck volumes on state and local roads.

## **ROADS AND ECOLOGY**

### **GOALS**

- (1) Actively mitigate all transportation caused impacts to soil, water, and air quality.
- (2) Encourage towns and the state to address roadway ecology in all their planning, maintenance, and construction related activities.

### **POLICIES**

- (1) Continue to inventory culverts and bridges and create capital plans that give greater priority to replacement projects along important natural resource corridors. Cooperate with Vermont Better Backroads and the Vermont Agency of Natural Resources to advocate for improved culvert and bridge designs that are environmentally sensitive and less likely to be damaged by storm events.
- (2) Promote education and outreach activities that educate and advocate stormwater management practices.
- (3) Continue to promote the use of biodiesel and other alternative fueled vehicles through educational workshops and meetings.

## **PROJECT PRIORITIZATION PROCESS**

### **GOAL**

- (1) Support the region's role in project prioritization for all state and federally funded projects.

### **POLICIES**

- (1) The Regional Commissions must be given sufficient autonomy to emphasize the goals, policies, and recommendations articulated within its regional plan if rankings become standardized across the state.
- (2) There is an initiative to standardize regional rankings across the state and that can be addressed insofar as Regional Commissions are given sufficient autonomy to emphasize the goals, policies, and recommendations articulated within their regional plans.

## **TRANSPORTATION FUNDING**

### **GOAL**

- (1) Sufficient revenues to pay for transportation system investments, including maintenance.

### **POLICIES**

- (1) Support creating a series of tax strategies that secure dedicated revenue levels needed to maintain the existing transportation system. Stress that Vermont fuel taxes remain consistent with other New England states and that those taxes are indexed to annual cost of living rates. Continue working with the State legislators to develop and implement taxation strategies that provide sufficient revenues to maintain the transportation system.
- (2) Transportation revenues should be used for transportation and funds allocated for general governmental services shall be actively discouraged.
- (3) Sponsor educational opportunities that help continue a local and regional dialogue for addressing anticipated shortfalls in federal funding.

## **PERFORMANCE MEASURES**

### **GOALS**

- (1) Guarantee that Regional Plan transportation topics provide guidance that is meaningful and useful to citizens and town officials in the region.
- (2) Sets Plan standards that are achievable by the staff at the Regional Commission.

### **POLICY**

- (1) After each revision of the Regional Commission's transportation element, evaluate the policies and recommendations for action to assess Plan implementation. Subsequent Plan updates shall report on the progress of transportation policies.

# AGRICULTURE AND FORESTRY

## GOALS

- (1) Encourage the conservation, wise use and management of the region's agricultural and forestry resources, to maintain its environmental integrity, and to protect its unique and fragile natural features.
- (2) Protect the region's rural agricultural character, scenic landscape, and recreational resources.
- (3) Create and maintain an environment (physical, social, regulatory, and fiscal) that encourages entrepreneurship in agricultural and forestry activities, including those which add value to the region's agricultural and forestry products.
- (4) Sustain agriculture and forestry in those areas of the region where they are predominant land uses, and where soils, and other conditions enable them to remain economically viable.
- (5) Support programs which educate citizens on principles of sustainability.
- (6) Reduce fragmentation of forest and agricultural lands.

## POLICIES

- (1) Where important natural features, soil conditions, or special resources including, but not limited to, agricultural and forested land are identified, clustered or peripheral development is required to protect such resources and prevent fragmentation and sprawling settlement patterns.
- (2) Agricultural and forestry practices shall maintain or enhance the diversity of ecosystems existing in the region.
- (3) Appropriately sited and designed businesses promoting the local processing, sale and distribution of native raw materials and products is encouraged. Planning and regulatory review at the state and local level should not unduly restrict the development of "home cottage" industries which complement farm and forestry.
- (4) Agricultural land and forested land form the separations between town centers, villages, and hamlets in the traditional regional settlement pattern. Tangible efforts shall be made to preserve this patchworked balance of open and forested space, to promote compact settlements through creative regional planning, municipal planning, private initiatives, purchases, leases and transfers of development rights and efficient site designs. Contiguous forest and significant agricultural areas shall remain largely in non-intensive uses unless no reasonable alternative exists to provide essential residential, commercial and industrial activities for the region's inhabitants.
- (5) The Regional Commission recognizes the serious limitations of the local fair market value tax system for farm and forest land and supports implementation of a more effective taxation method that is based on current use rather than potential use. The Regional Commission strongly supports property tax reform efforts at the local and state levels that would reduce the costs of land ownership for farming and forestry, while protecting against the Program's use as a low-cost vehicle for speculative holding of property for future development.
- (6) The construction of utilities, roads or other physical modifications should skirt tracts of productive agricultural and forest land rather than divide them. Infrastructure improvements should be planned with attention to directing future residential, commercial and/or industrial growth.

- (7) The use of public or private funds for purchase of development rights, or fee purchase of agricultural and forest land for conservation purposes from willing landowners, is supported and should be promoted. Town officials and landowners are encouraged to work with private non-profit conservation organizations to identify options. Factors to be utilized in determining the relative conservation value of land should include:
- evaluation of an active farm operation, a sound financial plan for returning as a viable farm unit, or an active forest management plan with history of planned harvesting;
  - the project must conform to duly adopted regional and/or municipal plans;
  - the resource value of the site incorporating such factors as parcel size, soil productivity values, and accessibility;
  - threat of loss or conversion to non-farm or forestry use;
  - adequacy of existing infrastructure and public investments to serve the use;
  - location of the use relative to similar uses; and
  - adequacy of past resources management practices.
- (8) Septage, sewage sludge and any other product of municipal waste processing shall not be applied or injected upon agricultural and forest lands without consistent chemical component testing of both disposal material and receiving medium for potentially harmful substance concentrations. Applications or injections of such products should only occur according to the protocols established and agreed upon by the State of Vermont and the affected municipality for public health and environmental protection.
- (9) Farmers, loggers, and foresters must use Accepted Management Practices (AMP) and are encouraged to implement Best Management Practices (BMP) in their operations and to minimize point and non-point source pollution.
- (10) Use of streambank and shoreline buffer strips are necessary for forestry and farming activities. To reduce erosion, buffer strips can consist of certain types of cover crops as well as woody vegetation. The Natural Resource Conservation Service, Conservation Districts, Resource Conservation and Development Council and others should continue efforts to educate landowners as to the benefits of maintaining and improving streambank vegetation and to implement river-long coordinated stabilization programs. Efforts to revegetate streambanks eroded from natural or human activities are supported. Erosion control methods which use vegetation and other natural materials and which protect wildlife habitat are favored over other methods. Rip-rapping of shorelands can be used in appropriate circumstances to protect farmlands from erosion.
- (11) The Regional Commission recognizes that certain local land development or subdivisions may conflict with policies to minimize the loss of existing or potential agricultural or forest resources. Furthermore, the Regional Commission acknowledges that in certain areas agricultural or forestry uses may no longer be viable due to a variety of factors including;
- (a) the existence of or planning for roads or sewers in the immediate area which dictate that involved land should be converted to more intensive uses; and
  - (b) the presence of parcel sizes or site conditions which affirm that conservation efforts to minimize loss of the resource result in marginal public benefit.
- (12) It is the policy of the Regional Commission to minimize or mitigate the loss of these resources to development. As an alternative to conventional methods, the Regional Commission endorses use of off-site mitigation techniques to offset the loss of these resources. However, endorsement of off-site mitigation should be conditioned on finding that the project proposal is:
- (a) consistent with this Plan and the plans of affected municipalities; and

- (b) provides an equal or greater public benefit than conservation of the development site itself.

## RECOMMENDATIONS FOR ACTION

- (1) The Regional Commission, as part of its on-going Technical Assistance Program, will provide planning advice and support to town Planning Commissions, Conservation Commissions, non-profit conservation organizations, and other groups interested in sustaining agriculture and forestry.
- (2) The Regional Commission will evaluate proposed developments involving primary agricultural and forest lands, and their related industries. Where appropriate, it will provide information to federal and state agencies, town boards and commissions, and other parties regarding the probable impacts these resources have on the welfare of the region.
- (3) Local land use planning activities and programs affecting agriculture and forestry should consider the following as ways to promote these industries:
  - (a) development of local plan components, including an inventory, and assessment of farm and forest lands. Although far from satisfactory, past use of the Land Evaluating and Site Assessment (LESA) method for identification of priority lands has been referenced;
  - (b) as part of local bylaws, creation of farm and forest land conservation programs, including:
    - agricultural zoning;
    - area based allocation;
    - cluster development;
    - impact fees;
    - overlay districts;
    - performance standards;
    - purchase of development rights;
    - transfer of development rights.
  - (c) utilization of the Vermont Housing and Conservation Board program (VHCB) to acquire interests or easements on significant farm and forest lands. Such easements are perpetual voluntary agreements between landowners, the State, the Town, or a conservation trust, such as the Vermont Land Trust or Upper Valley Land Trust;
  - (d) setting up a town fund for conservation purposes to leverage other public funds or donations for conservation purposes. Note that farm and forest conservation may be a wise move for the long-term fiscal health of the community;
  - (e) stabilization of property taxes for farmers and timberland owners enrolled in the Current Use Program by agreeing to pay the difference that the State does not fully fund under the Program;
  - (f) purchase of lands outright by governmental agencies or conservation organizations; and
  - (g) support for local and regional marketing and value added industries to improve the economies of farm and forest operations;
  - (h) support of educational and community programs.
- (4) To promote a better understanding of the farming and forestry practices, and natural resource management in general; the industry, conservation organizations, public schools and the tourism and recreation industries should sponsor continuing educational opportunities to the public.

- (5) As a way of sustaining resources, a way of life and a landscape, the Regional Commission should monitor developments in the market for carbon credits and look for applications to benefit the region.

# NATURAL RESOURCES CHAPTER

## GROUNDWATER

### GOAL

- (1) Maintain or enhance the quality and quantity of ground water resources.

### POLICIES

- (1) Towns are encouraged to identify, monitor, and protect important local groundwater resources as part of their planning programs. Aquifers, public water supplies, and recharge areas should be mapped wherever possible in order to determine critical areas for protection of drinking water supplies.
- (2) Water withdrawal from underground sources should be carefully monitored to insure that aquifers and surface waters are not significantly depleted and that water is properly allocated. Promulgation of specific laws and regulations to control water withdrawal and to ensure minimum flows are strongly encouraged.
- (3) Land use activities which potentially threaten ground water quality and should be carefully reviewed include the following:
  - (a) Underground storage tanks for petroleum or other hazardous substances. Permits are required from the State for most underground storage tanks containing gasoline or heating oil; however, exceptions are made for fuel oil storage tanks used for on-premises heating purposes and residential tanks storing motor fuel;
  - (b) Pesticide and herbicide applications on agricultural land, golf courses, resorts, residential properties, and railroad and utility rights-of-way. Such activities may require permits from the State; and
  - (c) Junk yards and solid waste disposal sites.
- (4) Groundwater contamination from commercial/industrial uses should be remedied by the parties causing such contamination when feasible, and by assistance from regional, state, and federal sources when responsible and viable parties cannot be found.
- (5) It is the policy of the Regional Commission to permanently protect Class I groundwater. These are high quality resource areas mapped by the Agency of Natural Resources and so classified by the Secretary as currently being used or suitable for a public water supply source. In undertaking the above, regional land use policy and decision-making should limit human activities in these areas.

### RECOMMENDATIONS FOR ACTION

- (1) The Regional Commission should work with the Agency of Natural Resources and with towns to identify and map aquifers and aquifer protection areas.
- (2) Towns are encouraged to develop Source Protection Plans for public water supplies or aquifers that have been identified. Such programs may include limiting or prohibiting development and other land uses within Wellhead or Aquifer Protection Areas.
- (3) The Legislature must keep the Petroleum Cleanup Fund at a level sufficient to meet all cleanup needs.

- (4) The Regional Commission should work with the Agency of Natural Resources, town officials, and others on educational outreach about the proper use of floor drains, local spill response capacity, and proper administration of septic regulations.
- (5) The Regional Commission will coordinate with the Agency of Natural Resources, other state agencies, and local officials in the assessment, cleanup and redevelopment of contaminated (brownfield) sites.

## **SURFACE WATER**

### **GOALS**

- (1) Improve surface water quality and quantity for the purposes of recreation, aquatic habitat, and drinking water (where designated).
- (2) Promote a coordinated monitoring program for surface water quality and quantity that is supported at municipal, basin and regional levels as a network of natural resources.
- (3) Support and promote the use of multi-stage wastewater treatment and disposal systems; encouraging off-stream disposal of treated effluent, where possible.
- (4) Protect from risk and preserve in their natural state certain high quality waters including fragile high-altitude waters, and the ecosystems they sustain.
- (5) Encourage watershed based cooperation of towns and people that live, work, and play in the watershed in the protection and enhancement of surface water quality.

### **POLICIES**

- (1) Maintenance or enhancement of recreation, fisheries, wildlife habitats and quality aesthetics are high priorities. Water use decisions at all levels of government and the private sector should protect these resources and serve to protect their existing and desired uses and conditions.
- (2) Within each of the basins in the region (see map 9), state, regional and local decisions relating to surface water must reflect:
  - (a) the public's high interest in the use and enjoyment of rivers and streams for recreation, fishing, and aesthetics;
  - (b) existing and projected growth rates for towns in each watershed including towns within the region, towns bordering the region and towns within each basin as a whole;
  - (c) present state water quality management plans and relevant portions of municipal and state plans;
  - (d) established environmental, social and economic goals and policies of the region as expressed in local plans and bylaws and this Regional Plan;
  - (e) status of existing and proposed municipal and community wastewater treatment facilities, plans and needs; and
  - (f) existing water quality conditions and known public and private pollution sources.

- (3) Efforts of public and private sectors to abate pollution in the region's rivers, streams, lakes and ponds are required. Existing water pollution problems, as identified in State of Vermont - Agency of Natural Resources Basin Plans, Water Quality Assessment (305(b) report), and the Clean Water Strategy shall be considered high priority for abatement. These problems include:
  - (a) agricultural runoff;
  - (b) erosion, sedimentation, and water crossings from construction sites and other land disturbance, road and ditch runoff, streambank destabilization, impoundments, and logging;
  - (c) infestation of nuisance weeds such as Eurasian water milfoil and animals such as zebra mussels;
  - (d) failing or inadequate community and individual onsite wastewater disposal systems;
  - (e) drainage of metals from abandoned copper mines; and
  - (f) elevated temperatures, low dissolved oxygen, and physical habitat degradation from poor flow regimes.
- (4) Effluent discharges to any water in the region shall be based upon assimilative capacity studies. Allocation and use of limited assimilative capacity shall be based on the following priorities from highest to the lowest:
  - (a) to abate pollution from existing and possible future sources;
  - (b) to hold in reserve some capacity to account for any uncertainties in mathematical assimilative capacity estimates; and
  - (c) to accommodate new growth and development which is part of a detailed and publicly reviewed and accepted growth management plan or designated growth center.
- (5) Pristine waters (Class A) are waters which are a) generally pure in nature with significant ecological value or b) are of high quality and used for public water supply. Pristine waters shall be protected from development and other activities which diminish their purity, natural flow or condition.
- (6) Vegetated buffer strips should be maintained in riparian zones and shoreland areas surrounding streams, lakes and ponds. Rock rip-rap and retaining walls should only be used to the extent necessary and when bioengineering techniques may not be adequate to prevent significant loss of land or property.
- (7) Commercial water withdrawal must be carefully monitored by the State and localities to insure that aquifers and surface waters are not significantly depleted.
- (8) The location, sizing and density of onsite sewage disposal facilities should be determined by the capacity of the soil and by the natural limitations of the site and underlying substrata conditions, such as depth to bedrock and seasonal high water tables.
- (9) Indirect discharges, such as off-stream disposal of treated effluents in spray fields, sand fields, or other alternative systems are encouraged over direct discharges where soil and site conditions permit.

- (10) Upland watersheds should be maintained predominantly in forest and low impact recreation use to ensure high quality of valley streams and their tributaries.
- (11) Preservation of the natural state of streams should be encouraged by the:
  - (a) protection of adjacent wetlands and natural areas;
  - (b) protection of natural scenic qualities; and
  - (c) maintenance of existing stream bank vegetation, together with wildlife habitat.
  - (d) proper classification and typing that reflects the condition of high quality waters in areas with little development
- (12) Given the statewide recreational resource value of the free flowing White River, new hydropower development on that river should not be permitted, and is discouraged elsewhere except where it can be done in a “run of the river” manner that does not create any significant impounding or dewatering of bypass reaches.
- (13) Activities that are potential sources of non-point pollution, including but not limited to agriculture and silviculture, should be conducted as follows:
  - (a) Logging practices shall follow at least the Acceptable Management Practices (AMPs) developed by the Vermont Agency of Natural Resources or other practices recognized by public agencies or professional associations. Prior to commencement of a logging operation, landowners and loggers should consult the Water Quality Handbook for logging jobs published by the Vermont Department of Forests, Parks, and Recreation or contract the County Forester for advice on erosion control.
  - (b) Agricultural activities shall follow Acceptable Agricultural Practices (AAPs) for Agriculture. When feasible, farms are encouraged to follow Best Management Practices (BMPs), site-specific practices for farm management developed by the Natural Resource Conservation Service (formerly the Soil Conservation Service). They include guidelines for storage and spreading of manure, fertilizers, and pesticides; buffer strips, diversion of surface water runoff, and milkhouse waste management, among others.
- (14) All wastewater and stormwater run-off discharges into surface waters shall comply with water quality standards as administered by the Vermont Agency of Natural Resources. (24 VSA Chapter 47 and related Rules)
- (15) Graveled backroads by nature of their topography and design, if not properly maintained can contribute heavily to water pollution. Surface water run-off and sedimentation to streams and ponds from backroads has been identified as a major threat to water quality in the region. Municipalities should employ road maintenance techniques to prevent soil erosion and road surface deterioration. Towns are encouraged to utilize the procedures contained in the *Vermont Better Backroads Manual* (1995).
- (16) Land use planning and decisions should protect streamside and lakeshore soils and vegetation from physical damage by restricting access to livestock and excluding dumping, filling, and operation of construction machinery in these areas.

## RECOMMENDATIONS FOR ACTION

- (1) Municipalities should review existing and proposed water quality classifications of surface waters within town boundaries, or within basins, to determine if classifications meet the uses and needs.

Both the Regional Commission and the Agency of Natural Resources are available to provide support.

- (2) Municipalities are encouraged to play an active role in the basin planning process and to prepare water resources elements in municipal plans that are in compliance with state and federal laws.
  - (a) The Vermont Department of Environmental Conservation's listing of threatened and impaired waters should be targeted for immediate attention.
- (3) Towns in the region are encouraged to cooperate on a watershed-wide basis when planning for surface water quality and use.
- (4) The Regional Commission, in cooperation with the Agency of Natural Resources - Water Quality Division, Vermont Local Roads Program, and Agency of Transportation, should advise town officials on cost-effective backroad erosion and sediment control.
- (5) The Regional Commission should be involved in watershed and basin planning efforts and encourage municipal involvement.
- (6) Unless there are overriding concerns in the local and regional plans, the Agency of Natural Resources shall adopt the highest possible classification and type for water bodies based on their actual condition and use.
- (7) Public and private sectors should refrain from activities that spread invasive plants such as: ill-timed roadside mowing, transporting invasive plants in ditch spoil, and the cleaning of mowing and earthmoving equipment after working in an infested area. Road maintenance personnel should be trained to recognize the invasive plants on the Vermont Noxious Weed Quarantine List and Watchlist.
- (8) The Agency of Natural Resources and local groups are encouraged to monitor water quality, and when monitoring indicates a water quality violation, to promptly locate the source of degradation when possible.
- (9) In preparation for writing any basin plans, the Agency of Natural Resources should conduct a comprehensive assessment of water quality in such basins and identify the source of any known water quality problems.

## **FISHERIES AND AQUATIC RESOURCES**

### **GOALS**

- (1) Assure the maintenance of water quality and quantity necessary to sustain existing aquatic communities.
- (2) Maintain or improve the natural diversity, population and migratory routes of fish.

### **POLICIES**

- (1) Intermittent and diverted flows should be enabled only upon finding that these actions assure the downstream protection of water quality and quantity for aquatic communities and stream functions, based on an analysis of need and consideration of alternatives, and compatible with local and regional planning goals and policies.
- (2) The design and construction of dams on rivers and streams is discouraged except when the public interest is clearly benefited and the following criteria are met:

- (a) Projects operate as “run of the river”, ensuring that the natural flow regime is largely left intact;
  - (b) Fish passage (where it historically occurred) and canoe portages are provided at dams. Also, recreational opportunities at hydropower facilities should be explored and developed, where appropriate; and
  - (c) Water quality and minimum flows should be maintained.
- (3) Because of threats to the natural ecosystem, the construction of ponds is discouraged, unless fed by groundwater and/or overland drainage. Discharges from ponds, if any, shall be designed to withstand a 100-year storm event and operate in a “run of the river” mode.
  - (4) In-stream ponds are discouraged on all stream segments that support fish life.
  - (5) Naturally vegetated streamside buffer strips of at least fifty (50) feet should be preserved especially in those areas that are planned for dense development in connection with existing similar development such as adjacent to, or infill of, existing downtowns or village centers.
  - (6) Proper erosion control procedures shall be applied for all construction activities and all stormwater shall be treated through natural or mechanical systems to remove nutrient and sediments and to attenuate flood flows to natural levels before any stormwater reaches streams.
  - (7) The State and towns are strongly encouraged to adopt shoreland setback regulations in accordance with the state buffer policy.
  - (8) New or replacement bridges and culverts should be adequately designed and constructed to handle stormwater, provide sediment transport, and accommodate fish and wildlife passage.

## **WETLANDS**

### **GOALS**

- (1) Identify and protect all wetlands which provide significant functions and values in such a manner as to achieve no net loss of such wetlands and their functions. In the long term, restoration and enhancement of wetlands should be pursued in order to improve the region’s wetland resource.
- (2) Identify and protect critical natural communities such as vernal pools, fens, and bogs through petitioning the Water Resources Panel of the Natural Resources Board (formerly Water Resources Board) or through local zoning legislation.

### **POLICIES**

- (1) Significant wetlands should be protected from development by maintaining an undisturbed buffer strip of naturally vegetated upland, at least fifty (50 to 100 feet in width<sup>2</sup> (or wider according to the type of development and the wildlife species to be protected), around the edge and by preventing runoff and direct discharge into wetlands.
- (2) Vernal pools should be protected from development by establishing an overlay district that identifies vernal pools and their surrounding terrestrial amphibian habitat.

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<sup>2</sup> 100 feet is a standard width recommended by the Vermont Department of Fish and Wildlife to preserve wildlife habitat. Vermont Department of Fish and Wildlife, “How to Include Fish and Wildlife Resources Into Town and Regional Planning,” 1992, page 6.

## **RECOMMENDATIONS FOR ACTION**

- (1) The State of Vermont should identify and map significant wetland areas not currently classified as Class 1 or 2 wetlands and petition the Water Resources Panel of the Natural Resources Board (formerly Water Resources Board) to have such areas reclassified at a higher level.
- (2) Encourage municipalities in the region to enhance zoning bylaws to protect wetlands that may not be protected under state or federal law.
- (3) Work with towns to establish a priority list of wetlands for protection and/or acquisition.
- (4) Encourage more accurate and thorough identification of wetlands areas through the use of best available data and the adoption of local wetlands regulations and updated maps by the municipalities in the region.
- (5) Encourage property tax relief to provide an incentive for the protection of designated wetlands.

## **WILDLIFE RESOURCES**

### **GOALS**

- (1) Maintain or enhance the biodiversity and population of wildlife, including natural predators.
- (2) Restore stable populations of state and federally designated threatened or endangered wildlife and their associated habitat areas.
- (3) Allow sport and subsistence hunting in an ecologically sound manner to provide continued success of the species.

### **POLICIES**

- (1) Development should be designed and sited in a manner to preserve contiguous areas of active or potential wildlife habitat. Corridors connecting habitat areas for large mammals must be incorporated in plans for management and conservation of forested areas. Fragmentation of significant and necessary wildlife habitat should not be approved.
- (2) Conserve large tracts of bear habitat when possible and to adopt cluster land use concepts in zoning bylaws as a mechanism for maintaining contiguous areas of forest cover.
- (3) Large contiguous tracts of forest should be managed so as to maintain the diversity of ages and species of tree cover necessary for shelter and food supply for deer, black bear, and other large mammals, and birds.
- (4) Along waterways, developers, municipalities or private land owners must preserve or create vegetated riparian buffer zones that are consistent with state riparian buffer guidelines.
- (5) The rate of harvest of wildlife for sport or subsistence should not exceed the capacity of an area to replenish the species.
- (6) Wildlife populations and natural diversity should be maintained or enhanced.
- (7) Development, including roads and power line corridors within designated bear habitat areas should be minimized to avoid fragmentation of forest blocks and to maintain the connecting links between such blocks.
- (8) Preference should be given to developments that utilize existing road and field lines.

- (9) Large tracts of land with deer wintering areas should be protected from developments and other uses that threaten the ability of this habitat to support deer when necessary to support stable deer populations.
- (10) Critical habitat types in the region that shall be considered during development planning include, but are not limited, to the following:
  - (a) forested corridors or “greenways” used by songbirds during migration;
  - (b) grassland regions;
  - (c) cliff areas identified as potential or active nesting places for peregrine falcons;
  - (d) areas over 2,500 feet in elevation; and
  - (e) large tracts of contiguous forest land.
- (11) Landowners, foresters and developers must be sensitive to critical bear habitat areas in their management plans.
- (12) Widespread clear cutting is discouraged.
- (13) Development should not occur in wetland areas.

#### **RECOMMENDATIONS FOR ACTION**

- (1) With the help of specialists from the Department of Fish and Wildlife or the Vermont Institute of Natural Science, towns in the region should work to inventory wildlife species; sensitive areas including wetland, vernal pools, bogs and fens, mature oak trees; and critical habitats for birds, deer, bear, bobcat, heron, and threatened or endangered plant species.
- (2) Towns are encouraged to use mechanisms such as cluster zoning, conservation districts, transferring or purchasing of development rights, or purchasing of land containing critical habitat areas in order to maintain the integrity of large forest blocks and preserve critical habitat.
- (3) Towns should work cooperatively and seek assistance from land trusts to maintain large tracts of undeveloped habitat that cross political boundaries.
- (4) Town plans and zoning regulations should protect significant natural features and sensitive habitat areas by using setbacks and buffers, particularly for wetlands and vernal pools, before threats to these areas develop. Local officials are encouraged to work with staff from regional offices of the Vermont Department of Fish and Wildlife and wildlife biologists from VINS to assist in identifying and creating inventories of the critical habitat areas and significant natural communities in their municipalities.
- (5) Towns should attempt to identify critical bear habitat areas within the broader areas identified on Vermont bear habitat maps.
- (6) Towns should adopt zoning regulations that would discourage development near wetlands and vernal pools, and prevent development within 300 feet in conservation districts, in order to protect their functions and native biological diversity and to prevent additional loss of habitat.
- (7) Protection of wetlands, riparian areas, vernal pools, the most critical deer wintering areas, and natural grasslands should be considered in revisions to local subdivision regulations.
- (8) To protect high-quality forested riparian (river bank, stream bank or lake shore) habitat, towns should prohibit development near these areas and regulate the disturbance of vegetation in riparian zones through general, conditional use, and/or site plan standards.

## **AIR QUALITY**

### **GOALS**

- (1) Maintain or improve air quality in local and regional airsheds.
- (2) Install and maintain a regional air quality monitoring network in cooperation with the Vermont Agency of Natural Resources.
- (3) Reduce dependence upon fossil-fueled and single-occupancy automobiles for transportation.
- (4) Reduce the transfer of pollution into the region from sites outside it.
- (5) Promote the development and use of more energy efficient devices and renewable energy resources.
- (6) Eliminate open burning of garbage by homeowners and renters.
- (7) Increase the number and size of the region's park-and-ride facilities.

### **POLICIES**

- (1) Proposed developments must be reviewed for their direct and indirect impact upon air quality and acceptability by local and regional airshed users.
- (2) Wood burning, as a method of disposal, should be reduced; as a source of heat, wood burning should be continued.
- (3) Air pollution impact review should include visual quality in addition to contaminant concentrations over time and distance.
- (4) Options for mitigation of air pollution effects will offer timing/scheduling of emissions based on time-of-day and/or weather conditions as well as technology-based solutions of Best Practicable Technology (BPT) and Best Available Technology (BAT).
- (5) Any emissions of hazardous or toxic air pollutants by commercial operations shall be controlled and monitored for public health and safety so that concentrations of hazardous or toxic air contaminants in local and regional airsheds are below those listed for human health protection by federal and state regulations.
- (6) Backyard burning of trash is illegal and local education and enforcement activities are strongly encouraged to eliminate this practice.

### **RECOMMENDATIONS FOR ACTION**

- (1) Air quality should be monitored in the region as part of broader statewide effort so as to determine current and potential threats to air quality. Potential impact areas include village centers or other areas of traffic congestion and high elevations, where pollutants and acidic levels are potentially greater and more harmful to fragile vegetation.
- (2) Municipalities and state agencies should educate communities about the impacts of trash burning and develop more effective mechanisms to enforce laws prohibiting backyard burning of trash, including the adoption of civil ordinances.
- (3) Woody debris from site clearing or forestry operations should be chipped, landfilled in acceptable areas, or left on site instead of being burned in order to reduce pollution and to enable this material to contribute to soil formation.

- (4) The Regional Commission should be prepared to comment upon projects outside the region which may potentially impact upon air quality within the region.

## **MINERAL RESOURCES**

### **GOALS**

- (1) To enable wise utilization of mineral resources to accommodate growth and development of the region and adequate maintenance of transportation infrastructure.
- (2) To encourage extraction and processing of the resource where such activities are appropriately managed and the public interest is clearly benefited.
- (3) To encourage remediation of extraction and mining sites in the region that threaten human health or natural resources.

### **POLICIES**

- (1) Mineral extraction and processing facilities shall be planned, constructed, and managed:
  - (a) to not unduly, adversely impact existing or planned uses within the vicinity of the project site;
  - (b) to provide direct access to Class 3, or better, highways;
  - (c) to not cause a burden to the function and safety of existing roads and bridges serving the project site. Factors to be considered in determining impacts are:
    - i. extent of increase in heavy vehicular traffic;
    - ii. effects of weight loads on roadbeds and bridges;
    - iii. conflicts with pedestrians or bike users; and
    - iv. numbers and frequency of heavy vehicles traveling through dense residential areas.
  - (d) to minimize loss of significant prime agricultural land; and
  - (e) to minimize any adverse affects on water quality, fish and wildlife habitats, and adjacent land uses.
- (2) All sites must plan for their eventual rehabilitation so that slopes are stable and the surface is revegetated. To that end, topsoil shall not be removed from sites and excavations shall stop early enough so that stable slopes can be established on the property.
- (3) Extraction sites must be screened to the extent practical if topography and vegetation allow.
- (4) Commercial extraction of gravel from streams is prohibited by law, and private extraction is strongly discouraged due to the destabilizing effects it can have. All streambed extraction should only be done after careful consideration of the site by qualified professionals and in consultation with the Vermont Department of Environmental Conservation's River Management Section.
- (5) Mineral extraction and processing facilities should be planned and developed so they do not place an excessive or uneconomic burden on local and state highways and bridges.

# HISTORIC, CULTURAL, ARCHEOLOGICAL, AND SCENIC RESOURCES CHAPTER

## HISTORIC RESOURCES

### GOALS

- (1) To preserve and to enhance the unique characteristics of historic sites or areas, where the public interest is clearly benefited thereby.
- (2) To enable and support the renovation of existing or construction of new structures when they are found to be consistent and compatible with historic character of the site or area.
- (3) To promote sensitive economic development in areas of historic value such as in town centers, villages, and hamlets.
- (4) To promote improvements to historical transportation facilities, instead of replacement.

### POLICIES

- (1) Land development or subdivision within or immediately adjacent to areas or sites of historic significance should be permitted provided that efforts are taken to insure that the design of the project fits the context of the dominate character of the immediate area or environment.
- (2) Restoration or rehabilitation of historic structures, buildings, neighborhoods, or sites should be encouraged where the design does not destroy or significantly alter its distinguishing qualities, integrity or character and immediate environment.
- (3) Unnecessary destruction or removal of historic structures, buildings, or sites is discouraged.
- (4) When new buildings or structures within historic areas are proposed, they should have a design that is compatible with and sensitive to the character of the neighborhood.
- (5) Public improvements or structures such as bridge rehabilitation or replacement, street widening, roadway reconstruction, signage, utility distribution systems, and lighting should be designed to avoid unnecessary degradation of recognized historic sites or areas. Public investments of regional or statewide significance should be planned in consultation with local and state officials, as well as the Division For Historic Preservation, to encourage compatibility and consistency with their planning objectives.

### RECOMMENDATIONS FOR ACTION

- (1) The Regional Commission should continue to support efforts to designate National Historic Register Districts and Sites. In so doing, the Regional Commission should coordinate with the State and affected municipalities. In accordance with Section 106 of the National Historic Preservation Act, the Regional Commission must review all federally funded projects in the region which affect register properties or places to assure that such publicly assisted projects are planned with due consideration to the resource.
- (2) The Regional Commission, as part of its Transportation Planning Program, should continue its work with the Agency of Transportation, town officials, its Transportation Advisory Committee and other groups and organizations to ensure that design standards and plans for proposed transportation projects are reasonably compatible with historic resource needs and values. (See Transportation chapter.)

- (3) Towns are encouraged to clearly outline in their plans those resources deemed worthy of protection. Town officials can participate in the Act 250 process, thus influencing decisions affecting historic sites in their community.

## **ARCHEOLOGICAL RESOURCES**

### **GOALS**

- (1) To preserve archeological resources within the region, and to promote an appreciation of their value as a vital aspect of the region's historic and cultural past.
- (2) To better integrate comprehensive planning and land use development with archeological resource protection at the federal, state, regional and local levels.

### **POLICIES**

- (1) Archeological resources are recognized as important links to the region's prehistoric and historic record, and are important components of our landscape. Such known and potential resources must be protected where the public interest is clearly benefited. No land development should be permitted when it results in unnecessary loss of an archeological resource of state or federal significance.
- (2) Within archeologically sensitive areas, planning should consider the impacts a project may have on the resource. If warranted, a site inventory should be conducted as part of project planning. Projects that unduly impact these resources should be discouraged or redesigned so as to mitigate the impact. Project planners are encouraged to contact the State Archeologist for further information.
- (3) To preserve significant archeological sites, purchase of land or development rights is encouraged when such actions are compatible with local plans and this Plan. Because these sites are often farmland, floodplains, wetland margins, and other similar low-lying land, priority should be given to projects which serve multiple conservation purposes.

### **RECOMMENDATIONS FOR ACTION**

- (1) To increase public awareness of archeological resources, the Regional Commission encourages archeologists, local and regional groups, towns, and landowners to organize educational programs focused on Vermont. Such a program could be made a part of an overall cultural heritage program through public schools.
- (2) Local planning commissions, conservation commissions, historical societies, and other interest groups are encouraged to develop an archeological plan for their community as part of the overall master planning program. Such a plan could contribute to an important step in planning for future development in identified areas or areas most likely to contain sites. Assistance and guidance are available from the State Archeologist within the Division for Historic Preservation.

## **SCENIC RESOURCES**

### **POLICIES**

- (1) Where development is proposed in areas of scenic value - because they possess scenic views, contain land with historic or scenic significance, or are highly visible within a scenic context, design plans must:

- (a) Maintain the prominent natural feature of the developed area;
  - (b) Work toward enhancing or retaining views;
  - (c) Minimize adverse impact on views and areas of historic significance;
  - (d) Minimize contrasts with areas of historic significance;
  - (e) Reflect traditional settlement patterns.
- (1) Certain areas immediately adjacent to major highways are examples of development sprawl. They adversely affect scenic resource values of the traveler. Generally referred to as strip development, buildings, parking lots, and signage are oriented to the automobile rather than the pedestrian. Because strip development lacks focus or orientation, it is generally considered confusing and inhospitable. Such forms of development are generally considered contrary to the preferred development pattern of this region.

In spite of the general policy that strip developments are to be discouraged and contrary to the spirit of this Plan, it is recognized that certain areas have been or will be developed or redeveloped principally for commercial or industrial uses.

To the extent feasible, project planners are encouraged to minimize the adverse effects of strip development on existing visual resources by consideration of the following design principles:

- (a) provide pedestrian and vehicular links between projects;
  - (b) reduce impacts of parking areas by breaking the lots into small groups with integrated landscaping;
  - (c) encourage compact and densely developed projects which utilize land efficiently;
  - (d) preservation of open space, if appropriate, be of a distinct area of visual or functional importance rather than useless bits of greenery between buildings, etc.;
  - (e) placement of street trees which act as buffers between traffic arteries and internal drives;
  - (f) use of signage and other structures that effectively communicate the desired message or use of the site without being garish;
  - (g) layout of the project site to allow for coordinated future use of the entire parcel;
  - (h) reduction of apparent scale of excessively large buildings by varying the pattern, number, size, and location of structures within the site;
  - (i) employ screening plans for visually objectionable features on the site, including dumps, refuse disposal sites, and building equipment; and
  - (j) minimize access roads or curb cuts onto public highways and use of common access drives.
- (3) An integral scenic element of the rural countryside is the extensive network of roads which comprise town and state highway systems. These roads are often characterized by relatively narrow roadways of diverse and contrasting features in close proximity. These characteristics combined provide an unique visual experience and awareness of the landscape. With some exception for principal arterials, it is in the public interest to retain these special features. Given their unique visual experience, roads exhibiting exceptionally high scenic and cultural values, and determined to be of local or state significance should be constructed or improved with due concern for the special scenic qualities inherent to the roadway and roadway fringe. Substantial modifications or off-alignment options which unnecessarily destroy the special characteristics of

such roadways are not consistent with this Plan. Use of appropriate design standards is encouraged and should be related to highway functional classification.

## **SCENIC VALUES AND TELECOMMUNICATIONS FACILITIES**

### **GOAL**

- (1) To improve telecommunication coverage in the region.
- (2) To support the enhancement of telecommunications network when such facilities do not have significant adverse environmental, health, or aesthetic impacts.

### **POLICIES**

- (1) In order to minimize tower proliferation, it is the policy of the Regional Commission to encourage applicants to exhaust all reasonable options for sharing space on existing towers or tower sites prior to proposing new towers sites and related facilities. The principle of co-location is the favored alternative. In making such a determination on the feasibility of co-location, proposers should evaluate space available on existing towers, the tower owners ability to lease space, geographic service area requirements, mechanical or electrical incompatibilities, the comparative costs of co-location and new construction, and regulatory limitations.
- (2) One of the region's principal scenic qualities are its ridgelines and mountainsides. These areas are significant contributors to the rural character of the region. The ridges are predominately undeveloped and provide an unbroken skyline viewed from the valley floor. The use of the region's ridges for telecommunication towers and related facilities needs to be undertaken in a manner that will not unduly detract nor adversely affect these scenic values. Protection of these areas from insensitive developments are matters of public good. To minimize conflict with scenic values, co-location is the first choice, followed by an analysis that provides the least impact for the desired coverage. Facility design and construction should employ the following principles:
  - (a) use the minimal height necessary, and where feasible, be sited in areas not highly visible to the traveling public, or from residential areas, historic districts, and public use areas or outdoor recreation areas such as hiking trails and beaches;
  - (b) be located in forested areas or be sufficiently landscaped to screen the lower sections of towers and related ground fixtures from public vantage points, such as trails, roads, or water bodies;
  - (c) utilize materials, architectural styles, color schemes, lighting fixtures, mass and other design elements to promote aesthetic compatibility with surrounding uses and to avoid adverse visual impacts;
  - (d) where prominent views of a site exist, be located downgrade of the ridge so as not to exceed the elevation of the immediate ridge;
  - (e) where construction of access roads, power or phone lines are involved, minimize their visibility by constructing them along the contour of the land and avoiding any open fields or meadows. This is also intended to reduce their ability to encourage secondary development;
  - (f) avoid peaks and ridges which function as regional focal points.
- (3) In planning for telecommunication facilities, consideration should be given to the environmental limitations of any given site. Impacts of the use on wildlife habitats, soil erosion, forestry and

agricultural lands, and similar resources should be carefully addressed. Projects which materially impact these resources are discouraged.

- (4) For telecommunication projects situated on lands owned by the State, design plans should be compatible with current Management Plans for Public Lands adopted by the Agency of Natural Resources.
- (5) Towers, antennae, and related fixtures that fall into disuse, or are discontinued should be removed to retain the values set forth above. Local and state land use permits should incorporate such as an approval condition.
- (6) When facilities and tower configurations are dependent upon others being constructed along a corridor, then the entire string of facilities should be considered as a whole so that piece-meal permits do not preclude more amenable options.
- (7) The clearing of land associated with site development for tower and facility construction should not negatively impact the scenic views present.
- (8) Towers or facilities that are designed to resemble trees or natural features should not be placed conspicuously higher than the tree line.

## **OUTDOOR LIGHTING DESIGN AND MANAGEMENT**

### **GOALS**

- (1) To preserve the nighttime ambiance and aesthetic qualities of village centers and other places by illuminating them for safety and convenience in ways that enhance the best qualities of streets, architecture, and public spaces.
- (2) To enable outdoor lighting systems that conserve energy and minimize life cycle costs.
- (3) To encourage lighting design that is creative and functional consistent with these lighting goals and policies.
- (4) To provide technical guidance and support to municipalities and others on lighting trends, needs, and opportunities.

### **POLICIES**

- (1) In developing lighting plans, observance of good design light levels and distribution should be appropriate for the proposed use of the site and compatible with the character of the neighborhood. New lighting installations should be designed to minimize glare, to not directly light beyond the boundaries of the area to be illuminated or onto adjacent properties, and to not result in excessive lighting levels.
- (2) For larger projects, lighting professionals should follow lighting design guidelines and other technical information established by the Illuminating Engineering Society of North America (IESNA). Such information will be useful in evaluating and developing lighting schemes for particular uses and settings, but not necessarily in all situations. Additionally, project planners should give due consideration to the guidelines set forth in the "Outdoor Lighting Manual for Vermont Municipalities". Design criteria that exceeds IESNA recommendations for outdoor lighting should be evaluated for conformity with this Plan, particularly as they may relate to the effects on the character of the area and aesthetics.
- (3) Project designers are encouraged to utilize fixtures to reduce glare. Where a light source is particularly bright compared to its background, use of cut-off or shielded fixtures to direct light downward or a reduction on the amount of light being generated is encouraged. Such a practice

should utilize lighting more efficiently, minimize the amount of wasted light, and reduce energy costs.

- (4) Excessively high lighting levels for uses in rural or very low residential areas are inappropriate. Where neighborhoods are characterized by heavy traffic, larger facilities (i.e. schools, and industrial plants), or high parking turnover rates, higher lighting levels may be appropriate. Where high ambient or background lighting levels are adjacent to planned uses, such levels should be considered when evaluating light levels for new installations.
- (5) The lighting of gasoline stations and convenience stores, and some types of commercial establishments (e.g., automobile sales) have or may become lighting problems in the region. Such facilities are typically far more brightly illuminated than neighboring properties to attract attention and business. Glare is produced which hinders visibility for pedestrians and drivers on nearby highways. Lighting levels for these uses and similar uses should only be sufficient to the facilitate the activities taking place in such locations. Lighting schemes that serve as advertising or to attract attention to these uses should be discouraged. Signs or other forms of advertising should be used for these purposes. Excessive pole height and bright lighting fixtures should be prohibited.
- (6) Illuminated signs that are excessively bright, causing glare and illuminating surrounding areas are inappropriate. Large illuminated signs can be disruptive to rural areas or historic villages and should be carefully evaluated and discouraged.
- (7) Lighting designs should address the negative effects of sky-glow. Project designers should advocate for lighting plans that minimize light pollution without unduly compromising safety, security, or utility. Methods to be considered for minimizing sky-glow are:
  - directing luminaries downward toward the ground;
  - using low pressure sodium lamps;
  - turning lights off after hours;
  - reducing illumination levels; and
  - prohibiting rays of light from being emitted above 90 degrees from luminaries.
- (8) Outdoor lighting schemes should employ generally available mitigating steps to improve its harmony with its surroundings taking into consideration, among other things, the type and density of land use presently in existence, the type of topography, and whether the area has scenic value.

## **RECOMMENDATIONS FOR ACTION**

- (1) Public interest in outdoor lighting issues and opportunities is growing. The Regional Commission should assist local and state policymakers in evaluating lighting options. The Regional Commission should consider sponsorship of educational workshops for planning commissions, design professionals, and others to acquaint them to the principles of good lighting design.
- (2) Towns interested in planning for outdoor lighting in their communities should consider using their Municipal Plans to establish goals and objectives for lighting. Additionally, consideration should be given to incorporating a lighting section into a town's Zoning Ordinance to cover lighting installations in all or parts of the Town.
- (3) Regional Commission staff should continue to work with the Vermont's public utilities and design professionals to evaluate lighting technologies and efficiencies.

## HOUSING RESOURCES

### GOALS

- (1) To promote sufficient availability of decent and affordable primary housing for residents of the region, thus complying with Vermont state legislative mandates and the directives of existing legal trends.
- (2) To encourage innovative planning, design, and construction of primary housing which minimizes its costs, energy consumption, and environmental impacts.
- (3) To promote preservation of the existing housing stock, particularly in the regional growth areas of the region.
- (4) To stimulate the coordination between public and private agencies involved with planning, financing, and development of affordable housing.

### POLICIES

- (1) Given the high costs of replacement for housing units which are lost to demolition, conversion to commercial uses, or market rate rentals, high priority should be given to preservation of affordable housing already in existence. Development projects that result in substantial losses of subsidized or below market rentals, or loss of supply of affordable single family homes should be discouraged.
- (2) Mobile homes serve as a source of lower cost housing for the region. Mobile home parks are being eliminated from the affordable housing stock in some cases due to resale values which reflect the development potential of the land rather than the property as a mobile home park. Perpetuation and development of mobile home parks to meet the need for housing in communities are encouraged, subject to equitable town planning requirements. The Regional Commission accepts use of public funds, in the form of loans or grants, to enable mobile home parks to remain affordable over the long-term.
- (3) Use of public funds (in the form of grants, loans, or subsidies) is necessary to preserve or maintain access to affordable housing. Use of public funds should be encouraged when these investments result in developments which are affordable on a permanent basis or at a minimum period of thirty years. Publicly assisted projects that are short-term should be discouraged and given the lowest priority for public funding.
- (4) The Regional Commission encourages all municipalities to evaluate their role in the region's housing stock, assessing their capacity to grow, and identifying suitable locations for growth. Municipalities are encouraged to work with neighboring towns, the Regional Commission, and the Twin Pines Housing Trust to develop regional solutions to the demand for affordable housing.
- (5) Concentration of affordable housing exclusively into selected areas, or the establishment of unreasonably low densities in rural areas leading to an undue concentration of affordable housing in village or hamlet centers, is discouraged. Mixed income housing projects are the highest priority for location within the region provided such an arrangement furthers a public purpose. Affirmative strategies or incentives to promote mixed income housing are endorsed by this Plan.
- (6) Housing assistance funds should be allocated on the basis of local housing or fair share needs as determined by town plans. Where local plans have not adequately addressed current and prospective needs, regional needs assessments (when available and current) should be the basis on which agencies allocate such funds.

- (7) Innovative and technical improvements in housing design, construction, and rehabilitation are encouraged. Publicly assisted housing projects must be designed with sensitivity toward the predominant characteristics of the site or area. New home construction and uses should be reasonably compatible with adjacent or adjoining uses. Architectural styles and patterns of new construction or rehabilitation that are responsive to traditional building characteristics and land use are endorsed by this Plan.
- (8) The location of housing should be planned to complement existing or planned growth centers, and to complement the housing goals and policies of towns and the region.
- (9) Multi-unit housing that is within or adjacent to regional growth areas with adequate public sewer and water service, or in areas of soils suited for onsite wastewater technology, is endorsed by this Plan.
- (10) The location of vacation housing, related amenities, and land uses should be planned with due respect to the physical limitations of the site, distance to existing or planned commercial and service centers, and land use goals and policies as expressed in town or regional plans. Housing that is scattered and not related to such plans is discouraged.
- (11) The development of accessory apartments, or the conversion of larger homes into multiple family structures for congregate housing for the elderly or other special needs groups is endorsed by this Plan.
- (12) Because a lack of sewer and water services is a major constraint to the development of affordable housing, sewer and water allocation formulas or ordinances administered by utilities or like entities must give due consideration to balancing the need for affordable housing with other land uses.
- (13) Inclusion of provisions for planned unit development (PUD), cluster development, and other innovative concepts in municipal plans, zoning, and subdivision regulations is endorsed by this Plan.
- (14) New housing projects must be designed and located to minimize the additional financial burden on municipalities and taxpayers. Housing development with access from Class 4 roads, on steep slopes, or in remote areas that place a financial burden on municipalities are not endorsed by this Plan.

## **RECOMMENDATIONS FOR ACTION**

- (1) The Regional Commission will continue to assist non-profit housing organizations in the development of affordable housing projects when such efforts are consistent with the policies of the Plan.
- (2) The Regional Commission will continue to provide professional assistance to member municipalities in the identification of need and implementation of local housing assistance programs.
- (3) Community leaders within the Regional Commission should work with state housing agencies, non-profit organizations, and lending institutions to insure the availability of loan or grant funds for Vermonters to purchase, acquire, or improve their primary homes.
- (4) Towns within the region should actively cooperate with local and regional non-profit housing trusts to develop and preserve new and existing housing with mechanisms to assure the perpetual affordability of that housing.
- (5) Community leaders, housing advocates and the Regional Commission must work to retain Vermont's innovative publicly financed home mortgage lending and housing assistance

programs. The region's low and moderate income families, disabled individuals, and the elderly are enabled to secure affordable housing through these programs.

## **UTILITIES, FACILITIES AND TECHNOLOGY**

### **GOALS**

- (1) To encourage public investments in governmental and public utility facilities, services, and lands which support existing and future development within the regional center, town centers, village settlements, and hamlet areas, or other designated and planned regional growth areas.
- (2) To avoid unnecessary or unreasonable disruption or endangerment of agricultural and other conservation areas, by discouraging the location of principal public utilities and facilities in rural areas.
- (3) To foster a partnership between public investment planning and implementation activities and the private sector, in a manner which advances the goals and policies set forth in this Plan.
- (4) To ensure that the expansion or construction of new facilities and utilities do not impose an undue financial burden on governmental resources and taxpayers.
- (5) To promote effective, efficient, and accessible public services, including schools, health care facilities and libraries.
- (6) To support innovative and stable sources of public facility funding to supplement traditional funding resources which have become limited or are no longer available.

## **RECREATION**

### **GOALS**

- (1) To ensure that access, management, and information regarding outdoor recreational opportunities are available to meet the needs of residents, tourists, and the natural environment.
- (2) To develop greenways that provide corridors for wildlife habitat as well as recreational areas for hiking, biking, and cross-country skiing.
- (3) To maintain the tradition of public access with permission to private land that is important to the quality of life, the economy, and sense of community in the region.
- (4) To ensure that the roadways and town centers are safe for bicycle and pedestrian traffic.
- (5) To promote recreation and a healthy natural environment as regional assets, and to plan development in a way that will ensure that those assets are sustainable.

## **SOLID WASTE**

### **GOALS**

- (1) Continue to reduce the amount to solid waste generated.
- (2) Support the reuse and recycling of materials taken from the waste stream.
- (3) Maintain a program to process waste or reduce volumes before disposal, including household hazardous wastes.
- (4) Ensure that remaining waste is disposed of in lined landfills in an environmentally sound manner.
- (5) Support the concept that waste generators bear the full cost of proper waste disposal.

- (6) Recognize that the private sector serves as the primary vendor for waste management services while recognizing that local governments and the District bear the responsibility to provide such services when it is in the public interest to do so.
- (7) Work to ensure that the public has full opportunities to comment on public solid waste planning and implementation decisions.

## **INFORMATION TECHNOLOGY**

### **GOALS**

- (1) To enable new economic opportunities through the use of landline telecommunications technology and maximize existing infrastructure.
- (2) To support the State of Vermont in its maintenance of a Statewide Telecommunications Plan.
- (3) To enable new economic opportunities through the use of wireless telecommunications technology.
- (4) To support the enhancement of the wireless telecommunications network when such facilities do not have significant adverse environmental, health, or aesthetic impacts.
- (5) To make high-speed internet access available to all areas in the region.
- (6) To support the enhancement of the broadband internet network when such facilities do not have significant adverse environmental, health, or aesthetic impacts.

### **POLICIES**

- (1) The scale, type, and design of major public utilities and facilities should be undertaken so as to complement the future land use settlement patterns recommended in this Plan and relevant municipal plans. Public investments in municipal, regional, and state facilities should be located within existing or planned regional growth areas.
- (2) Controversial public facilities, such as solid waste disposal facilities, correctional facilities and wastewater treatment facilities, should be situated in an area where they best serve their purpose and have the fewest negative impacts.
- (3) The Regional Commission supports proposals to upgrade and improve existing public water supplies and wastewater treatment facilities. Water and sewer lines should be extended only to those areas where future development is being encouraged as identified by growth center designations in local plans and in this Plan. Proposals which promote sprawl and strip development and scattered land uses are not compatible with this Plan.
- (4) The Regional Commission encourages the location of community water supplies and wastewater treatment facilities in regional growth areas, and cluster housing projects in rural areas.
- (5) Land development within existing or planned wellhead protection areas which pose reasonable threat of contamination to public water supplies is not compatible with this Plan.
- (6) The Regional Commission supports water conservation measures to reduce demand for water and to promote the life and efficiency of water and sewer facilities.
- (7) The Regional Commission encourages installation of community wastewater treatment facilities or water supply systems in areas of concentrated settlement where conventional onsite septic systems have failed or are marginally inadequate.

- (8) The Regional Commission supports the acquisition of future public and quasi-public utility sites, properties, or interests, when public actions advance the goals and policies of this Plan and relevant local plans.
- (9) New land development shall be prohibited where it is found that the necessary supportive governmental facilities and public utility services are unavailable or have not been planned for as part of a capital budget program to be available concurrently with impacts, or when new development places an excessive or uneconomic demand on such services. To mitigate or prevent any such unreasonable burdens, the use of permit conditions, impact fees, exactions, and similar methods can be used.
- (10) The construction of primary educational facilities, health care facilities, emergency facilities, post offices, libraries, and other public facilities shall occur in or within close proximity to existing or planned regional growth areas, so as to maximize their convenience and accessibility to people, infrastructure, and to contribute to the vitality of communities.

## **RECREATION**

### **POLICIES**

- (1) The maintenance and development of recreation trail networks (e.g. Appalachian and Long Trails, regional and state snowmobile networks, and cross-country ski trails) are encouraged. In planning for development within or immediately adjacent to these recreational amenities, design plans must work toward separation of these alternative travel modes from vehicular traffic and other competing or incompatible land uses. New development and land subdivisions which are insensitive or materially diminish the enjoyment or continued use of these recreational uses shall be discouraged.
- (2) Consistent with property rights, ownership and management practices which maintain or enhance public access to and uses of recreational amenities on privately held land are encouraged.
- (3) Where development interacts with the Appalachian or Long Trails and other related side trails, design plans and construction must maintain the predominant scenic character and the primitive qualities of the trail corridor.
- (4) The Regional Commission encourages planning and construction of recreational opportunities on sites of public utilities or public works facilities (e.g. incorporation of trail networks into public utility corridor planning) to achieve more efficient and productive use of these lands.
- (5) Roadways and village centers that are heavily used by bicycles and pedestrians must incorporate planning for sidewalks, bike lanes, or separate bike paths to promote safety and enjoyment of such activities and provide for alternative modes.
- (6) The Regional Commission supports the development of multi-purpose trails using abandoned railroad beds, Class 4 roads, and other public rights-of-way.
- (7) The Regional Commission encourages federal, state, and local acquisition of land and facilities well-suited for outdoor recreation, provided that adequate financial and management arrangements are made with involved local governments.

## **INFORMATION TECHNOLOGY**

### **POLICIES**

- (1) Actively participate in the Act 250 review process on wireless telecommunications facilities proposed for the region to promote additional coverage in an acceptable manner.
- (2) Continue to assist towns in the creation of Telecommunications Bylaws that allow for the siting of cell towers without having a significant adverse environmental, health, or aesthetic impact.
- (3) To actively support public and private initiatives to expand or improve high-speed internet access throughout the region including the Vermont Public Service Board's requiring deployment from private telecomm firms.
- (4) To seek opportunities and programs that will help fund the expansion of wireless internet access in the region.

### **RECOMMENDATIONS FOR ACTION**

- (1) On invitation of member municipalities, sewer, and water districts, the Regional Commission will assist communities to identify wastewater and water supply needs, plans for upgrading, and funding sources, all intended to increase capacity, reliability, and affordability of systems.
- (2) The Regional Commission shall continue to assist member towns, alliances, and the Greater Upper Valley Solid Waste Management District in the update and implementation of municipal and regional solid waste plans.
- (3) The Regional Commission shall assist communities with capital improvement plans and budgets that complement local plans and this Plan.
- (4) The Regional Commission will work with economic development agencies to increase broadband access in the region.
- (5) ATV enthusiasts should look to the Vermont Association of Snow Travelers (VAST) for examples of management of members and development of trail systems.
- (6) Municipalities should adopt ATV policies.

## **RECREATION**

### **RECOMMENDATIONS**

- (1) The state, towns, region, and non-profit groups are encouraged to:
  - (a) develop mechanisms for allowing public use of private property with appropriate maintenance support;
  - (b) develop educational materials for landowners regarding liability issues involved in recreational use of private land, work for legislative reform on landowner liability;
  - (c) inventory and map trails on public and private lands according to use, i.e. hiking, Nordic skiing, mountain biking, horseback riding, snowmobiles. Provide educational materials for users regarding proper use of trails and access areas; and
  - (d) promote feasibility study of amending the Current Use Program to include a "recreational" or "open space" category which could include protection of wetlands and wildlife areas.
- (1) The Regional Commission encourages towns that have not already established Conservation Commissions to do so. According to state law, a conservation commission can assist the planning

commission with natural resources issues, inventory the town's natural, historic, and cultural resources; receive gifts of land for conservation purposes, and encourage public understanding of local natural resources. The following towns in the region have active conservation commissions: Barnard, Bethel, Bradford, Hartford, Hartland, Newbury, Norwich, Pomfret, Randolph, Royalton, Sharon, Strafford, Thetford, Vershire, West Fairlee, and Woodstock.

- (2) The Regional Commission should help towns develop highway policies that address recreation needs.

# EMERGENCY MANAGEMENT

## GOALS

- (1) To reduce the loss of life and injury resulting from all hazards.
- (2) To lessen financial losses and property damage incurred by municipalities, businesses and private citizens due to disasters.

## RECOMMENDATIONS FOR ACTION

- (1) Emergency responders in the region should be properly trained and equipped to respond to anticipated disasters.
- (2) Critical local and regional emergency and governmental facilities should be built and located to be disaster resistant and able to continue to function during disasters.
- (3) Response plans should reflect an all-hazards approach and be coordinated between towns, the state and federal levels.
- (4) Exercises should be conducted to ensure that response plans are workable.
- (5) Emergency communications systems should be able to collocate on planned telecommunications facilities in order to increase radio or other coverage while lessening the need for more towers.
- (6) New development should incorporate disaster resistant design in its infrastructure. Development that would be at risk, or puts others at increased risk, of flooding, fire, or other hazards should mitigate this risk as much as practical. Mitigation actions should:
  - (a) seek to avoid impacts of a hazard first, then reduce impacts that cannot be reasonably avoided;
  - (b) recognize the connections between land use, development siting, drainage systems, building standards, and road design and maintenance and the effects of disasters on the region;
  - (c) be sympathetic to the natural and human resources of the area;
  - (d) be part of a larger systematic effort at disaster reduction; and
  - (e) seek to permanently avoid damages when feasible.
- (7) Efforts to educate individuals and families to prepare disaster kit and disaster plans are encouraged.
- (8) Warning systems, including more precise and widespread use of the National Weather Service's Emergency Alert System, are encouraged at the state and federal levels.
- (9) Individuals should have disaster kits ready in their homes and vehicles. They should have a plan as to what to do and where to go during foreseeable emergencies, and they should stay alert to bulletins during times of heightened danger, such as a flood warning.
- (10) All communities should have an up-to-date Rapid Response Plan on file with Vermont Emergency Management.
- (11) The Regional Commission should continue to work cooperatively with local emergency response organizations and LEPCs to help improve emergency planning
- (12) The federal and state governments should increase funding for preparedness and mitigation planning and actions at the local level in order to reduce escalating response and recovery costs.

- (13) Agencies or organizations expected to respond in a unified manner should train together.

# ENERGY

## GOALS

- (1) To promote the construction of energy efficient homes and buildings to lessen or postpone the need for costly sources of additional energy.
- (2) To increase the opportunities for using public transportation facilities where they exist and to increase ridership in areas already serviced by public transportation.
- (3) To increase awareness and use of energy conservation practices through educational efforts.
- (4) To encourage patterns of land use and development that use energy most efficiently.

## POLICIES

- (1) Prior to the construction of additional or upgraded transmission or distribution lines or related facilities, utilities should demonstrate that such public investments are justified to improve efficiency and to promote energy conservation for the consumer. In the consideration of the public benefit resulting from such investments, full consideration of the associated external costs should be reflected in any decision. Prior to the acceptance or acknowledgment of any new energy source or facility development affecting the region, full community and technical review is required to enable objective analysis of the positive and negative economic, social, aesthetic, and environmental impacts associated with the project.
- (2) Properly planned and constructed expansions and efficiency improvements to existing hydropower generators and transmission facilities are encouraged where such investments clearly benefit the residents of the region and are in accord with goals and policies of this Plan.
- (3) Where development and construction of wind-power and electric power generation facilities are proposed for public use, design plans must consider placement of such facilities in locations where aesthetic impact is minimal or reasonable measures have been employed to mitigate adverse impacts.
- (4) The Plan endorses contemporary transportation practices that promote energy efficiency. This includes the following initiatives:
  - (a) Invest in bicycling and walking facilities within settlement and commercial growth centers, and invest in bicycle and walking facilities that connect settlement and commercial growth centers.
  - (b) Continue investment in public transportation and rideshare programs to reduce the region's dependency on single-occupancy vehicle trips.
  - (c) Construct more park-and-ride commuter parking lots at Interstate interchanges and within our settlement and commercial growth centers.
  - (d) Support transportation facility design enhancements that better accommodate multimodalism on the region's existing roads and bridges.
  - (e) Require private land use development to invest in transportation infrastructure and services that promote multimodalism or provide the necessary right-of-way to allow public investment in those facilities.
- (5) Capital investments of public utilities and services are encouraged within built-up centers to support the high intensities of use.

- (6) Where it is demonstrated that the costs of providing energy services and facilities clearly is outweighed by a public benefit to the areas or region and the land use settlement patterns resulting from the development or subdivisions are in conformance with this Plan and relevant local plans, such services and facilities should be permitted.
- (7) Where land development or subdivision is proposed within areas remote from employment or residential centers, full consideration should be given to enabling cost effective and energy efficient use of public transportation services or alternatives to the private automobile.
- (8) No new dams or major improvements to existing dams should be encouraged, or permitted, without full consideration of its social, economic, and environmental impacts, the appropriate local plan, and this Plan. Future hydroelectric power development must occur within these guidelines:
  - (a) run-of-the river projects are preferred over projects which require impoundments with low or minimum flows;
  - (b) recreation and fisheries are top priorities for river uses and should not be significantly diminished by hydropower development. Provisions should be made for fish passage and canoe portages. Also, recreational opportunities at hydropower facilities should be explored and developed where appropriate; and
  - (c) water quality and minimum flows must be maintained.
- (9) It is in the region's interest to promote meaningful and equitable standards regarding the visual impacts of transmission and distribution facilities associated with electric generation.
- (10) Design plans must consider visual impacts and work toward the following principles:
  - (a) avoid locating rights-of-way which divide land uses and work toward location of corridors along edges of land units (i.e. agricultural land and forests);
  - (b) alignment of corridors and lines with due consideration of topography, location of corridors along the edges of valleys as compared to the center, in the prevailing direction or pattern of topographic features, and avoid placement along ridgelines;
  - (c) in forested areas, placement or maintenance of lines which result in minimizing removal of vegetation and disruption of views from scenic highways and trails; and
  - (d) location of corridors and lines sufficient distances from highways that enable intervening elements such as trees to interrupt the view of the line.

## **RECOMMENDATIONS FOR ACTION**

- (1) Local planning commissions, Selectboards, citizens, and members of the energy industry should work cooperatively to identify ways to reduce the cost of energy to consumers, and to promote efficiency in energy use and conservation.
- (2) Local planning commissions should employ, as part of the review and approval process, all practical energy conservation measures to maximize energy efficiency in siting, design, and construction. Standards recommended by the Department of Public Service may serve as a basis for the development of such conservation measures.
- (3) Continuing support should be given to wind and solar energy research and development in the region, as sustainable and emission-free sources of energy.

## ECONOMIC PLANNING

### GOALS

- (1) To foster job growth which attains full employment in all sectors of the region's working population;
- (2) To improve incomes of the region's residents so as to attain an average wage or a per capita earning level greater than the national average;
- (3) To attract a diverse and sustainable business environment while maintaining the region's unique quality of life;
- (4) A regional network of child care providers and facilities that fulfills the needs of families, employers, and home-based businesses in the region;
- (5) A well trained, educated, paid and benefited child care workforce.

### POLICIES

- (1) Residential or economic developments of significant regional impact must include an analysis of their impact and then include commensurate space for child care facilities in their development, or pay an in lieu fee to regional child care centers.
- (2) Support initiatives to strengthen and expand the child care workforce through increased training and education, higher pay, and better benefits.
- (3) Support initiatives to develop child care facilities where a need has been proven and the location conforms with this Regional Plan.
- (4) Encourage partnerships between public and private sector interests that will yield increased child care facilities/services.

### RECOMMENDATIONS FOR ACTION

- (1) Streamline the regulatory system; coordinate permitting;
- (2) Reduce "barriers" to home-based businesses enabling them to be a part of the home setting (change current law);
- (3) Advocate for reform to the use value appraisal program;
- (4) Continue advocating for overall property tax reform to promote equity and to make business investment in the state and towns competitive;
- (5) Develop a stronger financing/funding mechanism for business entrepreneurship (VEDA, SIB, CDBG, Revolving Loans);
- (6) Promote tourism through a stronger marketing program with Travel and Tourism, Chambers of Commerce and others;
- (7) Promote the economic importance of historic preservation, downtown development and cultural/heritage tourism;
- (8) Investigate revision of Vermont's Off-Premise Sign Law and prevent the proliferation of off-premise signs along roadways;
- (9) Work with industry leaders and educators to advance employment training for businesses;

- (10) Advocate for energy rate structure reform if it does not unduly shift burdens to residential rate payers;
- (11) Ensure that transportation and other capital investment projects are located in areas most appropriate for economic development (downtowns and villages, growth centers, office parks, etc.);
- (12) Work with the Vermont state agencies, regional and local development groups, trade associations, Chamber of Commerce organizations, and other groups to integrate land use planning with economic planning and development programs;
- (13) Work with member towns to address identified needs for child care facilities or services.
- (14) Identify publicly owned buildings throughout the region; evaluate and prioritize their suitability to serve as child care facilities after considering Vermont regulations.