

MORGAN

TOWN PLAN

Adopted by the Morgan Selectboard on December 17, 2012

Prepared by the Morgan Planning Commission

With the Assistance of the

Northeastern Vermont Development Association

MORGAN TOWN PLAN

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MORGAN TOWN PLAN

I) GOALS & OBJECTIVES

In the Spring and Summer of 1995 the Morgan Planning Commission conducted a public opinion survey. The Planning Commission believes that many of goals that follow in large part continue to reflect the results of that survey.

A. Encourage and provide for the development of more professional home based businesses. *(Economic Goal)*

B. Encourage and provide for the development of more restaurants, and tourist/recreational attractions. Widen the shoulders along Route 111 to provide cyclists with safe access to the beach in Morgan Center. *(Economic Goal)*

C. Maintain the Town's and the Lake's beautiful and pristine state.

D. Promote development that will strengthen the Town's tax base, while protecting the Town's natural, scenic, and historic resources. *(Economic Goal)*

E. Reduce or eliminate the pollution of Lake Seymour and other surface waters by regulating shoreland development, logging operations, boating, surface run-off, and/or ice fishing operations.

F. Prevent the development of junk yards.

G. Continue appropriating funds to neighboring fire departments that service the Town of Morgan.

H. Provide for orderly growth to prevent or reduce negative impacts on the Town.

I. Keep the public beach in Morgan Center clean, safe and attractive.

J. Protect Morgan's forests, wildlife and other natural resources, to include the development of a land use plan for all Town properties.

K. Town officials should continue to maintain an awareness of the Town's residents' needs, both full and part time.

L. Maintain open farm land for agricultural purposes and support local food production initiatives. *(Economic Goal)*

M. To maintain the existing roads and bridges to handle all vehicular traffic as needed.

II) LAND USE PLAN

A) Existing Land Use

1) Forests

There are several large land holdings which are held for forestry purposes, usually by paper companies. These large land holdings are located mostly in the eastern portion of town. Forestry is an important economic activity in Morgan.

2) Recreation

Morgan has become very popular for recreational (seasonal or vacation) homes. Two types of locations have developed. The first, development on shore front lots, has been in existence for many years. This development has been mainly on, but not limited to, Seymour Lake. The second, more recent development, has been that of lots in the higher elevations with scenic views. Unfortunately in some instances, these scenic views have been marred by the recreational homes themselves. This has been caused by poor siting, marginal second homes, or by utilizing second hand mobile homes for recreational homes.

While the Town of Morgan does not have an organized recreation program, the recreational opportunities abound for those who enjoy the outdoors. Seymour Lake offers fishing, boating, swimming, and water skiing in the summer and ice skating, snowmobiling, cross-country skiing and ice fishing in the winter. For those who like the outdoors and prefer non-water related activities there is hiking, bicycling, snowmobiling, snow-shoeing, down hill skiing at nearby ski areas, cross-country skiing, the play ground at the elementary school, and upland game, deer and moose hunting.

For those who enjoy indoor activities, other opportunities are available in the nearby communities of Derby and Newport City.

3) Agriculture

There are approximately 6 active dairy farms in Morgan. These farms are scattered throughout the Town. These dairy farms are very important to the community and the surrounding area as good agricultural land is becoming increasingly scarce due to the demand for undeveloped land for new homes and other uses. Working agricultural lands also help to preserve open space and enhance the scenic beauty of the community.

4) Residences

Presently, Morgan is experiencing the conversion of summer homes to year round homes. This trend is expected to continue and may even increase in the future. Careful consideration should be given to this type of growth and the effects it may have on the Town and the provision of town services.

5) Commerce

As may be expected, in a rural-type community such as Morgan, there are a limited number of commercial activities. Existing commercial uses, many of which are carried on as home occupations, include:

- | | |
|-----------------------------|-----------------------|
| 2 Stores | 2 day cares |
| Contractors | Kennel |
| 2 Commercial Accommodations | Bed & breakfast |
| Pottery | Machine shop |
| Antique Shops | Equipment repair shop |
| Bakery | Small engine repair |
| Horse Farms | |

6) Industry

Morgan is a bedroom community with most of its residents either working out of their homes or in other communities. At present, Morgan has little or no industry.

7) Public & Semi Public Uses

Semi-public uses are limited to a non-denominational church in Morgan in which services are held year round. Public uses are limited to 1) the parking lot in Morgan Center for users of the beach, 2) the elementary school, 3) the town office building, 4) the community house, and 5) the newly opened solid waste transfer station, 6) the church in Morgan Center which is now used by the Morgan Historical Society.

8) Conservation Lands and Flood Hazard Areas

The former Morgan Town Plan adopted on May 21, 1990, this plan, and the Morgan Zoning Bylaw, adopted on December 17, 2012, contains wording to limit development in the most rural portions of the Town. These areas are described in Table 204.05 (rural lands three) of the Morgan Zoning Bylaw as being hilly, swampy, having poor access and/or shallow soils. Most of the areas that were zoned rural lands three at the time this plan was drafted were located in the area of Toad Pond and the eastern most portion of the Town.

Also, the Federal Insurance Administration map in the Town Office identifies *Special Flood Hazard Areas* (SFHA) in the Town. These areas are primarily located around Lake Seymour, and some residential properties are within the SFHA boundary which means that they may be subjected to occasional flooding.

9) Land Use Map

The official existing land use/land cover map is on file in the Morgan Town Clerk's office and can be viewed there.

B) Proposed Land Use

10) Forests

Much of the land area in Morgan is remote; having either wetlands or steep slopes with shallow soils and should have a very low intensity of development. This land is generally suitable only for forest purposes, some agricultural uses, and, at a very low density, recreational homes and year-round dwellings. Year-round dwellings should be permitted only if the site can support a well and septic system, or any other approved disposal system, and there is adequate public access to the site. The minimum density for the forestry districts should be one family per ten (10) acres.

11) Recreation

As outdoor recreational opportunities abound in Morgan the Planning Commission does not see the need at this time to recommend any kind of an organized recreation program. However, it is necessary to protect and maintain Morgan's wonderful natural resources, i.e. the forests and the lake, from development. Recreational homes in both forested areas and on lakeshore properties should be carefully sited to reduce negative visual impacts and on lots large enough to provide adequate water supply and sewage disposal.

12) Agriculture

By far, the single most important industry and economic base for the community are its farms. Areas with good agricultural soils should be given prime consideration to encourage the continued operations of farms in these areas. Therefore, areas with good agricultural soils should be zoned for agricultural purposes and agriculture should be the principal use in these districts. A secondary land use on large lots zoned for rural residential use should also be allowed. These residential uses, as indicated, should be on large lots such that a sufficient buffer exists between residential and agricultural uses. Related uses should be allowed in this district as conditional uses so as to assure public review before such uses are instituted.

The Planning Commission is very concerned about agricultural runoff and the negative impacts it can have on water quality. It appears that Morgan's farmers are also concerned about agricultural runoff as all of the farms in Morgan have agriculturally approved manure storage systems. In addition, none of the land that is adjacent to the lake is used for agricultural purposes.

13) Residences

Residential land use is by far the most predominant land use in Morgan. As such, dwellings should be permitted in most areas of town. However, the density of development should be dependent upon the availability of access and the ability of the soil to handle on site water and sewer systems without creating water quality problems. Denser residential development should occur in and near village areas. Residential developments in more rural areas should be clustered to preserve open space.

14) Commerce

The two settlements of Morgan and Morgan Center should be allowed to continue to function similarly as they do today with some moderate growth in the sections of these two villages that can support growth. The types of land use found in the two village areas are residential homes, usually of year round residents; public and semi-public buildings such as the school, town office and churches; and commercial operations that are needed to serve the people of Morgan. These include stores and some commercial-recreational type facilities. Generally, the new residential growth should be allowed to continue as long as it meets minimum requirements without any special consideration. Other types of growth in the two settlements should be allowed only as conditional uses. This would allow a decision to be made by the Board of Zoning Adjustment concerning the desirability of a particular use. Guidelines set forth for the review of conditional uses would allow the Board to place conditions on a zoning permit that would reduce or eliminate any negative impacts a particular use might have on the area. (*Economic Recommendations*)

15) Industry

Light, non-polluting industries can significantly add to a town's tax and employment base, and, in most cases, could do so without placing an undue burden on the Town's services or natural resources. While there are no uses of this nature in Morgan at the present time, the Town may want to provide for this type of use to offset Morgan's present nature as a bedroom community. Limited industrial development may provide the revenue necessary to provide the services required by a growing population. That area to be set aside for industrial uses should have good access to Route 111. The minimum lot size in this district should be sufficient to allow for industrial structures, parking, and on-site water and sewer systems. (*Economic Recommendations*)

16) Public & Semi Public Uses

Generally, sufficient land area exists for public purposes. Sites for existing public buildings are adequate and, at Morgan Center, approximately one thousand (1,000) feet of lakeshore frontage on Seymour Lake is available for public use. It would be desirable to obtain additional property to expand the Town Forest at some point in the future to assure a sizable public holding of undeveloped land within the community.

17) Open Spaces to be conserved and Special Flood Hazard Areas

Much of the land area in Morgan is remote with steep slopes and shallow soils. These areas should have a very low density of development. In addition, this plan discourages the filling of wetlands for development. Therefore, major wetlands in the community should be recognized and protected from filling and development.

As noted earlier, Special Flood Hazard Areas (SFHA) exist in the Town of Morgan, primarily around Lake Seymour. The Town should consider enacting Flood Hazard Area regulations to better control developments proposed in the SFHA areas and thereby avoid creating situations that may lead to a loss of property and/or life. Enacting flood hazard regulations would also

allow the Town of Morgan to participate in the National Flood Insurance Program, thereby making flood hazard insurance available to residents of Morgan.

18) Land Use Map

The official land use map is on file in the Morgan Town Clerk's office and can be viewed there.

III. TRANSPORTATION

A) Present Transportation

1) Highways & Streets

Morgan, as a rural community, depends almost entirely on its highway system and private vehicles for transportation purposes. Thus, the highway system is of the utmost importance to the Town of Morgan. Table 1 shows the highway mileage in Morgan broken down by classification and who is responsible for maintenance.

Route 114 which passes through the eastern end of Town is classified as a major collector. This route runs from Lyndonville via Island Pond and Norton to Canaan.

Morgan also has several miles of roads that have been classified as minor collectors. These include Route 111 (which connects Routes 5 and 114 thereby connecting Morgan and Morgan Center with Derby and Island Pond), the route from Morgan to Holland, and also the routes from Morgan to Charleston.

2) Parking Facilities

There are two public parking facilities in Morgan. At the Town Clerk's office there is enough parking for approximately 5 or 6 cars. Then, at the public beach in Morgan Center, the Town has a parking area for the convenience of those individuals wishing to use the beach. While parking is not permitted on Route 111 at the beach, parking is permitted along the west side of the Oxbow Road (town highway #27). However, parking does occur on both sides of this road and this sometimes creates a problem.

| Road class | Mileage |
|------------|---------|
| One | 0.000 |
| Two | 5.700 |
| Three | 19.460 |
| Four | 2.980 |
| State | 14.169 |
| Total | 42.309 |

3) Transit Routes

The primary travel routes in Morgan are Routes 111 and 114. These routes, as has been stated already, connect Morgan with the surrounding towns, other parts of the state, and areas outside of the state. These routes are of primary importance to those who work outside of Morgan as well as those who own summer homes in Morgan. Rural Community Transportation operates a shopping shuttle bus that travels along Rt. 111 between Island Pond and Derby-Newport.

4) Terminals

At the present time, the nearest bus stop is in Newport City where one can catch a public bus. Rural Community Transportation (RCT) has established and continues to operate a shuttle service between Newport and Derby.

5) Bicycle Routes & Trails

At the present time there are no local bicycle trails or routes in Morgan. However, there are

regionally designated bicycle routes running through Morgan along Routes 111 and 114 (www.nvda.net/transportation). Bicycles, combined with the increase in automobile traffic during the summer months, could cause traffic flow and safety problems for both cyclists and motorists.

6) Scenic Roads

Because of Morgan's rural setting, many if not all of the roads are considered scenic. However, the following roads need to have special mention as they are particularly scenic: Sunset Drive, Valley Rd., Champaigny Rd., and Rt. 111 between Morgan four corners and Derby. Also, the areas of Elon, Beechnut, and Bear Mountains are also scenic.

7) Airports

In the area surrounding Morgan there are three small airports. One of these airports is a seaplane base on Lake Memphremagog.

The Newport State Airport, located in Coventry, was constructed in 1941 and has two paved runways that are 3,998 feet long. The runways are designed for aircraft weighing less than 12,500 pounds and with wingspans less than 79 feet. Visual and navigational aides are available which allow for non-precision approaches for aircraft equipped with electronic navigational instruments. Runway extensions are planned and should accommodate larger aircraft in the next few years.

The other publicly owned airport in the area is the John H. Boylan State airport in Brighton. This airport, which is more commonly known as the Island Pond Airport, has a single turf runway that can be used only during clear weather conditions. This runway is designed for aircraft with wingspans less than 49 feet.

For traditional commercial service one must travel to Burlington, Manchester, NH, Boston, Portland, ME, or Montreal.

8) Railroads

The nearest freight points for rail service are either in Newport or Island Pond. Passenger service is not available at either of these two points.

9) Transportation Map

The official transportation and circulation facilities map is on file in the Morgan Town Clerk's office and can be viewed there.

B) Proposed Transportation

1) Highways & Streets

In small towns like Morgan, problems with roads perhaps revolve more around maintenance of

existing roads than the need for new or better roads. In particular, the Planning Commission would like to encourage the Town to use more sand and less salt on the roads during the winter months. This will, in the long run, improve the water quality in Morgan. The Planning Commission suggests evaluating the size / condition of bridges and culverts – replace and repair substandard structures; making the maintenance of existing roads a priority; discouraging the creation of new town (and private) roads, particularly in remote areas of towns.

2) Parking Facilities

On some days during the summer months, parking at the beach in Morgan Center is a problem. While this may be somewhat related to the size of the parking lot at the beach, the real problem is caused by people who insist on parking beside the road which is presently posted with no parking signs. Route 111 in Morgan Center is not wide enough to accommodate road side parking. Road side parking in this area creates a bottleneck which makes it more difficult for through traffic to pass. While the enlargement of the existing parking lot, or the addition of another parking lot, may alleviate this problem, increased enforcement is seen as the primary solution to this problem.

3) Transit Routes

Residents of the Town of Morgan, as well as non-residents who own land in Morgan, are most dependent on Routes 111 and 114 as these two routes are Morgan's main connection with the rest of the world. Therefore, the Morgan Planning Commission would like to stress to the Vermont Agency of Transportation how important it is that these roads are well maintained and/or improved when appropriate.

4) Terminals

The Morgan Planning Commission is very much in favor of the availability of public transit in the area. The Planning Commission supports Rural Community Transportation's efforts to establish the shuttle services that serve the community.

5) Bicycle Routes & Trails

During the summer months there is a considerable amount of bicycle traffic on Routes 111 and 114. The combined bicycle and automobile traffic creates a situation that is hazardous for all concerned. The ideal solution to this problem would be the building of bicycle trails that run parallel to these highways. Such trails would totally separate automobile and bicycle traffic. However, the Morgan Planning Commission realizes that the addition of bicycle lanes on both sides of Routes 111 and 114 would be a more practical solution. Therefore, the Planning Commission would like to encourage the State to consider the addition of bicycle lanes in any future improvements of Routes 111 and 114. Equally important for bicycle traffic are turn outs located at scenic spots to give bicyclists the room they need to stop and enjoy the view without causing hazards by blocking vehicular traffic.

6) Scenic Roads

Scenic roadways contribute greatly to the beauty of Morgan. Therefore the Planning Commission

would like to see these scenic corridors maintained for all to enjoy. These include: Sunset Drive, Valley Rd., Champaign Rd., and Rt. 111 between Morgan four corners and Derby. Also, the areas of Elon, Beechnut, and Bear Mountains are also scenic.

7) Airports

The Morgan Planning Commission favors, and encourages, the improvement and expansion of the existing airports in the region. More specially, the Morgan Planning Commission would like to encourage the lengthening of the runways at the Newport State Airport in Coventry to allow small jets to land at and take off from this airport.

8) Railroads

While the Morgan Planning Commission realizes that rail service in and near Morgan has little or no benefit for most of the residents of Morgan, the Planning Commission does realize that such service may benefit the region. Therefore, the Planning Commission encourages the continuation of freight service in the area.

9) Transportation Map

The transportation and circulation facilities map is on file in the Morgan Town Clerk's office and can be viewed there.

IV. UTILITIES & FACILITIES

A) Present Utilities & Facilities

1) Educational

For further information regarding educational facilities/opportunities in Morgan, please turn to the Educational Facilities Plan.

2) Recreational

While the Town of Morgan does not offer any kind of an organized recreation program there is plenty to do in the area for those who enjoy the outdoors. Many of the recreational opportunities in Morgan are centered around Lake Seymour. There is a public beach in Morgan Center and one can enjoy swimming, boating, water skiing and fishing during the summer months. During the winter months when the lake is frozen over and snow covered one can enjoy skating, cross country skiing, snowmobiling, and ice fishing. Snowmobile trails passing through Morgan are linked to a statewide system of trails that are maintained by the Vermont Association of Snow Travelers (VAST).

Surrounding towns also offer recreational opportunities. Jay Peak Ski Area, to the west, has become a four-season destination for Northern New England and Quebec, offering golf, skiing, ice skating, and an indoor water park. Burke Mountain Ski Area, to the south, offers both downhill and cross country skiing in winter and cycling in the summer. Cultural forms of entertainment are available in Newport and St. Johnsbury. Many other opportunities exist as well but are too numerous to list here.

3) Hospitals

Due to Morgan's rural nature, residents of Morgan must travel to surrounding towns for health care. The nearest hospital, North Country Hospital (NCH), is located in Newport City. The Island Pond Health Center is also located in Brighton. Other hospitals available to the residents of Morgan include the Northeastern Vermont Regional Hospital in St. Johnsbury, Dartmouth-Hitchcock in Lebanon, NH, and Fletcher Allen Health Care in Burlington.

Ambulance service is provided in Morgan by the Derby Ambulance Service and the Brighton Ambulance (Lyndon Rescue) Service. The Town of Morgan makes efforts to support these services with financial donations.

4) Libraries

The Town of Morgan does not have a library. However, Morgan does support the Dailey Memorial Library in Derby. The resources of this library are available to the residents of Morgan. Programs include story hours for children, summer reading programs, and field trips.

5) Electrical Utilities

The Vermont Electric Cooperative (VEC) owns and maintains 43.8 miles of transmission line in Morgan. At this time there are no commercial power generating plants located in Morgan nor is the Planning Commission aware of any plans to build one.

6) Water Supply

Due to the rural nature of Morgan and the fact that development is dispersed throughout the town, there are no publicly owned water supply systems. In addition, the Town of Morgan does not anticipate the need to establish such a system.

7) Sewage Disposal

Due to the rural nature of Morgan and the fact that development is dispersed throughout the town, there are no publicly owned sewage disposal systems. Therefore, sewage disposal in Morgan is taken care of by on-site sewage disposal systems. All on-site potable water and wastewater disposal (septic) systems are regulated by Vermont's Department of Environmental Conservation.

Morgan has very definite limitations for rural-types of development except at a low density. The Soil Classification Study, done by the U.S. Department of Agriculture Soil Conservation Service, indicates that most of the soils in Morgan may have severe limitations for septic tanks. Only in the northwest point of the community and a small area southeast of Seymour Lake are found soils that have moderate limitations for septic tanks. There are very few areas in the community, according to this generalized soils grouping that have slight limitations for septic tanks.

8) Refuse Disposal

Refuse disposal is handled at a transfer and recycling station that is located just off Route 111 between Morgan Center and Island Pond. As the operating funds for the transfer station come from property tax receipts, there is little or no cost to the residents at the time they leave off their refuse. The only exception is for larger items. Refuse left at the Morgan transfer station is then transported to the landfill in Coventry. Recyclables, on the other hand, are transported to the aggregation center operated by the NEK Solid Waste Management District. Then, the Town receives a rebate of a portion of the District's membership fees. The amount of the rebate is based upon the amount of materials being recycled. Morgan is a member of the Northeast Kingdom Waste Management District (NEKWMD), and the district maintains the Solid Waste Implementation Plan for the town.

9) Storm Drainage

Storm drainage in Morgan consists of ditching along all town roads, and where necessary, culverts that allow water to pass under the roads. Rip-rap has been installed at the ends of culverts to prevent wash-outs of the roads.

10) Other Facilities & Activities

The Town Clerk's Office is a 24 X 36 foot modular building that was built in St. Johnsbury and erected on the present site in January of 1974. The northern half of this building includes an 8 X 10 foot vault, office space and a rest room. The southern half is used as a conference room. This building is in excellent condition and serves the needs of the Town very well.

Located next to the Town Clerk's office is the Community House. This building, which is used only during the warmer months, as the water is shut off during the winter, is used primarily for parties and receptions. As the fees that are charged for the use of this building support this building there is little or no cost to the Town for its upkeep

Fire and police services are provided by a variety of contracted sources as the Town of Morgan does not, at this time, provide these services. For fire services, Morgan depends on the Derby Line, Brighton, and East Charleston fire departments. Likewise, Morgan depends upon other authorities for police service. In this case, the Vermont State Police and the Orleans County Sheriff's department.

11) Utilities & Facilities Map

The official utilities and facilities map is on file in the Morgan Town Clerk's office and can be viewed there.

B) Proposed Utilities & Facilities

1) Educational

For further information regarding education in Morgan, please turn to the Educational Facilities Plan.

2) Recreational

As the Town of Morgan is not in a position to establish a formal recreation program, the Planning Commission encourages residents to take advantage of the many recreational opportunities available in the Northeast Kingdom and Vermont. The Town should promote and protect recreational opportunities to attract visitors and help local businesses. (*Economic recommendation*)

As with the Hatton Memorial Park, the Town should develop a recreational plan for its town forest.

3) Hospitals

Due to Morgan's small size, Morgan's residents will have to continue to use the hospitals and clinics located in surrounding areas. Therefore, the Morgan Planning Commission encourages the governing bodies of these health care facilities to maintain and, when appropriate, increase the quality of service provided by these facilities. The Planning Commission would also encourage the town to continue its support of those health care facilities for which support has been provided in the past.

4) Libraries

The Planning Commission would like to encourage the town to continue its support of the Dailey Memorial Library in Derby.

5) Electrical Utilities

The Morgan Planning Commission would like to encourage the Vermont Electric Cooperative to maintain, and when and where necessary, to upgrade the transmission/distribution lines in Morgan to ensure adequate service to Morgan's households.

6) Water Supply

At this time there is no need for nor is it feasible to build a municipal water supply system.

7) Sewage Disposal

At this time there is no need for nor is it feasible to build a municipal sewage disposal system. However, due to the soil conditions in Morgan the Planning Commission is concerned about on-site sewage disposal and therefore recommends that the site be carefully examined and tested before a septic system is installed. The Planning Commission also recommends that any new septic systems be installed in compliance with the isolation distances set forth in accordance with Vermont state regulations.

The shores of Seymour Lake are heavily developed with many summer homes, many of which are located on small lots and all of which have on-site sewage systems. While some of these summer homes have been converted into year round homes, this trend has not yet created any problems. However, as this trend continues, the increased demand placed on the sewage systems by clothes washers, dish washers, and increased usage of bathrooms could have a severe impact on the Lake. Therefore, the Morgan Planning Commission is particularly concerned about maintaining the water quality of the Lake and the impacts that could be caused by on-site systems that may fail due to age or usage in excess of design capacity. The Planning Commission supports the Vermont Department of Environmental Conservation's enforcement of the State's Wastewater System and Potable Water Supply Rules.

8) Refuse Disposal

The Planning Commission recommends that the transfer station be monitored closely to insure it

is meeting the needs of the residents. When it becomes necessary, corrective actions should be taken to avoid problems. The Town should continue its participation in the Northeast Kingdom Waste Management District. Participation in the district meets the town's Solid Waste Implementation Plan requirement.

9) Storm Drainage

Good drainage is important to prevent property damage from excessive runoff. Therefore, the Planning Commission would like to encourage the Selectboard and the Road Commissioner to carefully maintain the culverts, ditches and rip-rap, and where necessary, install new drainage facilities. The town should review the bridge and culvert inventory data regularly provided by NVDA and plan for maintenance, repair or replacement of substandard structures.

10) Other Facilities & Activities

The Morgan Planning Commission would like the town to consider the establishment of a volunteer fire department. Having a volunteer fire department would reduce the amount of money residents pay each year for a home owner's insurance policy. In addition, it seems likely that the presence of a fire department in Morgan will reduce the response time to a fire.

11) Telecommunication Facilities

Towers and related infrastructure require careful consideration. These structures tend to be located on highly visible locations on mountaintops, ridgelines and in residential areas. The need for additional facilities is projected to increase in the coming years. The Federal Telecommunications Act of 1996 placed certain limitations over municipal control of these structures; however, within those confines, Morgan must act to protect the Town's historic character, rural nature, and aesthetic beauty.

Toward that end, the Zoning Bylaws incorporate appropriate guidelines and regulations governing at least the following areas: aesthetics, integrity of residential zones, ridgeline protection, preferred locations (general and specific), and collocation or clustering of tower facilities.

The Town of Morgan is quite concerned about the aesthetic and environmental impacts of tower facilities. When planning new infrastructure or upgrades to existing systems, special consideration shall be given to any primary or secondary impacts that would reduce resource values (including but not limited to aesthetics and streetscape design, agricultural land, timber resources, natural areas, wildlife habitat, and historic sites). In addition, when a new facility is planned, there must be clear evidence that the proposed location is necessary based upon service needs, economic considerations, potential impacts on resource values, and the resulting public benefits. In all cases, appropriate and suitable techniques shall be used to minimize or prevent any adverse impacts from the placement of telecommunication facilities and related infrastructure. The following list includes goals and policies regarding telecommunication facilities:

- All such facilities shall be located in appropriate areas, respecting the integrity of residential

areas, aesthetic concerns, and natural resource issues. Through the Zoning Bylaw, the Town may specify reasonable areas where these facilities may be located. This is important on a macro scale (general areas in Town) as well as a micro scale (specific desirable placement or location: for example, below ridgelines, tucked into groves of trees, and the like).

- Towers and related infrastructure shall only be as tall as absolutely necessary. Where towers are located within the tree lines, they should be made to be extendable, so they can “grow” with the trees, and remain the minimum height needed above the treetops.
- Structures of a height that require lighting to meet FAA requirements are discouraged. However, when lights are required, the lights shall be shielded in a manner that minimizes visibility and aesthetic impacts, and so that light is cast only where needed.
- Structures shall be designed in order to minimize aesthetic impacts. Equipment sheds can be hidden in the trees; depending on site-specific circumstances, tower structures may be monopole or lattice, of appropriate colors and minimal reflectivity, or even disguised as trees or steeples. Towers and related infrastructure shall be screened from view to the greatest extent possible.
- Electric or transmission lines shall be installed so as to minimize aesthetic and ecological impacts. For example: clear-cut swaths, created for power lines or access roads which go straight up the mountainside, often create far more adverse impacts than the towers they serve, and are not acceptable.
- The Town reserves the right to hire independent consultants to evaluate the application and facility as well as to monitor the facility over time. The applicant shall pay for the reasonable costs of these services.
- All equipment shall be downsized as technology advances and removed when no longer used or needed. These requirements can minimize aesthetic intrusion, while maximizing the potential to serve a greater number of users in the same physical area. A bond may be required to ensure that funds are available to accomplish these purposes.

The above notwithstanding, telecommunications providers now have the option to bypass local permitting by applying for a Certificate of Public Good (CPG) from the Vermont Public Service Board. The Town is notified of any CPG applications within its boundaries and given the opportunity to participate in the proceedings. The Planning Commission will review and participate in the PSB Section 248 process as necessary.

12) Proposed Utilities & Facilities Map

The official utilities and facilities map is on file in the Morgan Town Clerk's office and can be viewed there.

V. PRESERVATION PLAN

A) Rare & Irreplaceable Natural Areas

Lake Seymour (1,777 acres) is the largest lake in Vermont that lies totally within the boundaries of the State. It is also known as one of the cleanest lakes in the State and possibly even in the Country. As such, Lake Seymour is a wonderful and beautiful natural resource that draws a large number of people to Morgan every summer. Because of the demands placed on Lake Seymour, the Planning Commission feels that development on the Lake should be very carefully monitored to prevent the destruction of this beautiful lake.

B) Scenic Features

As one approaches Lake Seymour on Route 111 from the west there is a parcel of land on which stands a sign indicating the upcoming Lake Seymour. In addition, from this parcel are some wonderful views of the Lake. Since the adoption of the last town plan in 1997 this parcel of land has been preserved and has been named the Hatton Memorial Park. It is the feeling of the Planning Commission that this parcel of land and its views of the Lake must be maintained for all future generations to enjoy.

C) Historic Features

Historic features in the Town of Morgan include the two churches (one of which is being used by the historical society) and the community house. The community house in particular has played a significant role in both town government and the town's social life. The Planning Commission recommends the continued maintenance and upkeep of these three buildings.

VI. EDUCATIONAL FACILITIES

D) Present

During their school age years, children and teenagers in Morgan attend three different schools. For many years, children in grades K through 6 attended the Elizabeth Taylor Hatton School in Morgan. At the Town Meeting on March 5, 2012 the town voted to close the Elizabeth Taylor Hatton School and tuition the 33 K-6 students to Derby Elementary School. Seventh and eighth graders attend the North Country Union Junior High School in Derby. Finally, Morgan's high school students attend the North Country Union High School in Newport City.

1) Elizabeth Taylor Hatton School

The Elizabeth Taylor Hatton School is located in Morgan on town road 12 just a short distance north of the Town Clerk's office. The original part of this building was built in 1962 or 1963 and has an addition that was built about five or six years ago.

The Elizabeth Taylor Hatton School is used by the Town of Morgan for the Town's annual town meeting.

2) North County Union Junior High School

The Junior High is located in Derby on the east side of Route 105 just north of the intersection of Routes 105 and 111. The site on which this building sits is approximately 10-11 acres in area.

This building is approximately 35 years old and includes a 1989 addition which approximately doubled the school's floor area. Within the older part of the building are 17 classrooms, the computer room, a gymnasium with a stage, the living arts room, and the industrial arts room. The addition includes 4 more classrooms, 2 science labs, the band and chorus rooms, the library, and the cafeteria.

The Junior High was designed for a maximum of 450 students, however as the present enrollment is only 333 (22 from Morgan), overcrowding is not a problem. At this time, there are no plans for the enlargement of this building. However, it should be noted that the 1989 addition was designed to easily accommodate future expansions. In addition, the size of the school's site allows ample space for future expansions of the building, parking and sports fields at such time these improvements become necessary.

Aside from the normal day to day problems relating to regular building and materials maintenance there does not seem at this time to be any serious problems. The building is adequately staffed and text books are updated on a regular basis.

Computers play an important role in the education that is provided to the students at NCUJHS and efforts are made to keep them up to date.

The Junior High's building and grounds are used on a regular basis by the Community as well. Recreation activities, sports, meetings, craft fairs are just a few of the activities that take place on

the school grounds after school hours. The Town of Derby also uses the school for voting and finally, it should be noted that adult education classes are offered at the Junior High via satellite from the University of Vermont.

3) North Country Union High School

The 35 high school age (grades 9-12) students living in Morgan attend school at the North Country Union High School in Newport City. This building was erected in 1967 and was designed for about 1,000 students. With a present enrollment of 1,000 to 1,100 students, the building is not considered overcrowded, however, the administration is aware of the fact that enrollment is above design capacity.

The course of study at North Country has been designed to meet the needs of both the college bound student and those who desire to enter a career right out of high school. The college preparatory course of study includes the usual high school courses in english, social studies, mathematics, science, foreign languages along with options in art, music, business, and extracurricular activities. For those seeking to enter a career right out of high school, NCUHS offers the North Country Career Center. This program prepares students for careers in automotive technology, building trades, commercial art, office technology, computer aided design and drafting, culinary arts, graphic arts/photography, the medical field, marketing, and metal fabrication. The North Country Career Center is also available to adults who are seeking new career skills.

In addition to the regular use of the building as a high school, the community also uses the building for other things as well. Both the Community College of Vermont and North Country offer adult education classes. A local church holds its weekly worship services at North Country. Finally, local sports teams use the gymnasium and grounds for their games.

E) Proposed

1) K – 6 Students

The Town will continue to tuition all Kindergarten through Sixth Grade students to the Derby Elementary School for the near future. The Town should monitor the ongoing cost of this arrangement and overall student performance to ensure that this is the best and most affordable option for students and taxpayers.

2) North County Union Junior High School

To ensure that Morgan's junior high age students are getting a good education, the Morgan Planning Commission urges the School Board and Staff to continue to keep text books, materials, equipment, and facilities up to date.

3) North Country Union High School

To ensure that Morgan's high school age students are getting a good education, the Morgan

Planning Commission urges the School Board and Staff to continue to keep text books, materials, equipment, and facilities up to date.

VII. IMPLEMENTATION

Many of the sections of this plan contain a subsection that presents proposed projects which the Planning Commission suggests are carried out during the five year period this plan is effective. This section of the Plan is a summary of these proposed goals and projects.

A. Proposed Land Use

1. Forests

Areas in Morgan which are remote, having wetlands, steep slopes and/or shallow soils should have a very low density of development.

2. Recreation

Due to present demand and given the recreational opportunities available, a formal municipal recreation program seems unnecessary. However, the Town needs to protect the natural resources that provide the recreational opportunities. A recreational plan for the town forest is recommended.

3. Agriculture

Areas with good (prime) agricultural soils should be given priority consideration with regard to conservation to encourage the continued operations of farms in these areas.

4. Residences

Residential land uses should be allowed in most areas of town. The density of development should be dependent upon the availability of access via existing roads and the ability of the soil to handle on site water and sewer systems.

5. Commerce

Commercial uses should be encouraged in the villages of Morgan and Morgan Center. The Planning Commission will consider telecommunications towers and renewable energy facilities in other zones and participate in the Public Service Board process as applicable. To do this the Morgan Zoning Bylaw were amended to include the appropriate regulations for telecommunications and renewable energy facilities. The town is supportive of home-based businesses. (*Economic recommendations*)

6. Industry

Non-polluting, light industrial uses are encouraged in the Town's Industrial/Residential District to strengthen the Town's tax base and provide employment opportunities for Morgan residents. Value-added agricultural production initiatives are encouraged. (*Economic recommendations*)

7. Public & Semi Public Uses

It would be desirable to obtain additional property to expand the Town Forest at some point in the future. As previously suggested, a recreational plan is recommended for the Town forest as the Town's residents are encouraged to make use of the Town forest for recreational purposes.

8. Conservation of Open Spaces

Major wetlands in the community should be recognized and protected from filling and development. The Morgan Planning Commission would like to encourage farmers in Morgan to maintain buffer strips between bodies of water and agricultural uses.

B. Proposed Transportation

1. Highways & Streets

The Planning Commission would like to encourage the Town to use more sand and less salt on the roads during the winter months. The Planning Commission supports the maintenance of existing roads and related infrastructure rather over creating new roads.

2. Parking Facilities

Road side parking at the beach in Morgan Center is a problem. While the enlargement of the existing parking lot, or the addition of another parking lot, may alleviate this problem. However, increased enforcement to stop parking along the highway is seen as the primary solution to this problem.

3. Transit Routes

The Planning Commission would like to emphasize to the Vermont Agency of Transportation how important it is that Routes 111 and 114 are well maintained and/or improved when appropriate.

4. Terminals

The Planning Commission encourages the establishment and/or continuation of regular public transit (i.e. van or bus routes). The Commission also supports the development of park & ride facilities for carpooling.

5. Bicycle Routes & Trails

The Planning Commission would like to encourage the State to consider the addition of bicycle lanes or widening of road shoulders in any future improvements of Routes 111 and 114.

6. Scenic Roads

The Planning Commission would like to see scenic corridors maintained for all to enjoy. These

include Sunset Drive, Valley Rd., Champaigny Rd., and Rt. 111 between Morgan four corners and Derby. Also, the areas of Elon, Beechnut, and Bear Mountains add to the scenic beauty of the town. These roads were selected because of the broad, scenic vistas and the complimentary landscapes.

7. Airports

The Morgan Planning Commission supports the expansion and upgrading of the Newport Airport as outlined in the Airport Master Plan for the Newport State Airport.

8. Railroads

The Morgan Planning Commission encourages the continuation of rail freight service in the area.

C. Proposed Utilities & Facilities

1. Recreational

At this time the Planning Commission would recommend that the residents of Morgan develop their own recreational opportunities by taking advantage of the many indoor and outdoor activities available in Morgan and the surrounding area. The Town provides recreational opportunities at the Hatton Memorial Park and the Town Forest.

2. Hospitals

The Morgan Planning Commission encourages the governing bodies of those health care facilities in the surrounding communities to maintain and, when appropriate, improve the quality of service and expand services provided by these facilities. The Planning Commission would also encourage the town to continue its support of those health care facilities for which support has been provided in the past.

3. Libraries

The Planning Commission encourages the town to continue its support of the Dailey Memorial Library in Derby.

4. Electrical Utilities

The Morgan Planning Commission would like to encourage Vermont Electric Cooperative to maintain, and when and where necessary, to upgrade the power lines in Morgan to insure adequate service to Morgan's households.

5. Water Supply

At this time there is no need for, nor is it feasible to build a municipal water supply system.

6. Sewage Disposal

At this time there is no need for, nor is it feasible to build a municipal sewage disposal system. However, due to Morgan's soil conditions, the Planning Commission recommends that any proposed sewage disposal site be carefully examined and tested before a septic system is installed. The Planning Commission also recommends that septic systems be installed or upgraded in compliance with the isolation distances set forth in the Vermont Department of Environmental Conservation regulations.

7. Refuse Disposal

The Planning Commission recommends that the new transfer station be monitored closely to insure it is meeting the needs of the residents. When it becomes necessary corrective actions should be taken to avoid problems. The Town should continue its participation in the Northeast Kingdom Waste Management District.

8. Storm Drainage

The Planning Commission would like to encourage the Selectboard and the Road Commissioner to carefully maintain bridges, culverts, and ditches, and where necessary, upgrade/install new drainage facilities.

9. Other Facilities & Activities

The Morgan Planning Commission strongly recommends that the town establish a volunteer fire department. Such an action will reduce the cost of property insurance and may reduce the response time to a fire.

10. Telecommunication Facilities

All such facilities shall be located in appropriate areas, respecting the integrity of residential areas, aesthetic concerns, and natural resource issues. Through the Zoning Bylaws, the Town may specify reasonable areas where these facilities may be located. This is important on a macro scale (general areas in Town) as well as a micro scale (specific desirable placement or location: for example, below ridgelines, tucked into groves of trees, and the like).

Towers and related infrastructure shall only be as tall as absolutely necessary. Where towers are located within the tree lines, they should be made to be extendable, so they can “grow” with the trees, and remain the minimum height needed above the treetops.

Unless required by the FAA, towers shall not be illuminated. Where required, lights shall be shielded in order to minimize aesthetic impacts, and so that light is cast only where needed.

Structures shall be designed in order to minimize aesthetic impacts. Equipment sheds can be hidden in the trees; depending on site-specific circumstances, tower structures may be monopole or lattice, of appropriate colors and minimal reflectivity, or even disguised as trees or steeples. Towers and related infrastructure shall be screened from view to the greatest extent possible.

Electric or transmission lines shall be installed so as to minimize aesthetic and ecological impacts. For example: clear-cut swaths, created for power lines or access roads which go straight up the mountainside, often create far more adverse impacts than the towers they serve, and are not acceptable.

The Town reserves the right to hire independent consultants to evaluate the application and facility as well as to monitor the facility over time. The applicant shall pay for the reasonable costs of these services.

All equipment shall be downsized as technology advances and removed when no longer used or needed. These requirements can minimize aesthetic intrusion, while maximizing the potential to serve a greater number of users in the same physical area. A bond may be required to ensure that funds are available to accomplish these purposes.

However, since telecommunications providers now have the option to bypass local permitting by applying for a Certificate of Public Good (CPG) from the Vermont Public Service Board. The Town is notified of any CPG applications within its boundaries and given the opportunity to participate in the proceedings. The Planning Commission shall review and participate in the PSB process as necessary.

11. Energy Facilities

Both the Town Clerk's Office and the Community Center received thermal energy efficiency audits in 2011. The audit reports recommended efficiency improvements and provided estimated costs and payback periods for those improvements. The Planning Commission recommends that the necessary improvements should be made to these buildings to make them more energy efficient, thereby reducing costs and saving taxpayer dollars.

The Planning Commission recommends the development of renewable energy resources. These would include the use of wood, solar, and wind energy. Wind energy conversion systems (WECS), are specifically addressed in the Morgan Zoning Bylaw to address safety and design requirements. It is the Town's goal that all WECS meet these recommendations. The Planning Commission supports the development of small-scale renewable energy technologies for residents, farms, and businesses.

There are no commercial energy generation facilities within the Town at present. The town supports the development of renewable energy resources in general, but the Town will only offer its support for individual projects on a case by case basis. The Planning Commission has developed specific energy policy guidelines which are contained in the Energy section of this plan.

D. Preservation Plan

1. Rare & Irreplaceable Natural Areas

Because of the demands placed on Lake Seymour, the Planning Commission feels that

development on the Lake should be very carefully monitored to prevent the destruction of this beautiful lake. The Planning Commission should consider working with the Seymour Lake Association to protect this resource.

2. Scenic Features

The Planning Commission would like to see the Town's scenic features maintained for all to enjoy. The Planning Commission should consider conducting a survey of Town residents and landowners to identify scenic resources worthy of protection. Scenic roads have been identified and are included in the Transportation recommendations.

3. Historic Features

The Planning Commission recommends the continued maintenance and upkeep of Morgan's historic buildings, the two churches and the community house.

E. Educational Facilities

1. Derby Elementary School

The Town should continue to tuition K – 6th Grade students to the Derby Elementary School. Overall student academic progress and school costs should be monitored to ensure that this option is best for Morgan's students and taxpayers.

2. North County Union Junior High School

To insure that Morgan's junior high age students are getting a good education, the Morgan Planning Commission urges the School Board and Staff to continue to keep text books, materials, equipment, and facilities in up to date and in good condition.

3. North Country Union High School

Upgrade science and computer labs to what is presently considered to be state of the art.

VIII. ADJACENT TOWNS & THE REGION

Morgan abuts four organized municipalities and two of the six unorganized towns. The organized towns include Derby, Holland, Brighton, and Charleston. The unorganized towns are Warner's Grant and Warren Gore (part of the UTG). At this time Derby, Holland, Brighton, and the UTG (Unified Towns & Gores) are the only municipalities abutting Morgan that have town plans in effect. Holland's town plan will expire in February 2017, Derby's town plan will expire in March 2014, and Brighton's town plan is set to expire in July 2013. The development plan for the Unified Towns & Gores will expire in September 2016.

A. Brighton

For the area of Brighton that abuts Morgan, the Brighton Town Plan is suggesting 2 acre lots along Route 114 and 25 acre lots in that area of Brighton that abuts Morgan. This should encourage a continuation of the existing patterns of land use in this area. This density of development is not incompatible with that which is proposed by this town plan.

B. Charleston

As mentioned above, Charleston does not have a town plan at this time, nor is one proposed. However, because of the long-time, rural nature of the land use along the boundary between Morgan and Charleston, the Planning Commission does not anticipate any major impact as a result of development on either side of this boundary.

C. Derby

Of all of the towns surrounding Morgan, it is likely that Derby will have the greatest impact on Morgan. This impact will be due to Derby's economic growth which could affect the entire Town of Morgan, not just that area along the Derby/Morgan town line. This impact can best be reduced by making sure that development in Morgan is limited to those areas best suited for it.

D. Holland

The Town of Holland does have a town plan and it suggests that most of the land in Holland along the Holland/Morgan boundary be set aside for conservation purposes. Therefore, the Morgan Planning Commission does not anticipate any adverse impacts along this boundary.

E. Warner's Grant & Warren Gore

Development in Warner's Grant and Warren Gore is very limited and most of the lands in these two areas are forested. Residential development is non-existent in Warner's Grant and only four

| Area | % Change |
|--|----------|
| Brighton | -21.8 |
| Charleston | +21.2 |
| Derby | +3.2 |
| Holland | +48.7 |
| Morgan | +50.7* |
| Warner's Grant | --- |
| Warren Gore | +100.0 |
| Orleans County | +13.2 |
| Northeast Kingdom | +11.1 |
| * Population of Morgan increased from 497 persons to 749 persons during this period. | |

people reside in Warren Gore. While Warren Gore has a number of summer camps, most of these are located around Norton Pond which lies in the northern half of the Gore. With regard to future development, the town plan for the Unified Towns and Gores advocates a continuation of the forested land use that already exists in these two areas. Likewise, this Plan also advocates limited development for those areas in Morgan which abut Warner's Grant and Warren Gore. Therefore, future development on either side of the boundary lines should not have much of an impact on Morgan or Warner's Grant or Warren Gore.

F. Regional Context

Table 3 indicates the percentage change in population for Morgan, the surrounding towns, Orleans County and the Region between the 1990 and 2010 Censuses. These numbers show that Morgan's rate of growth during the 20-year period exceeded the rates of growth for most of the other geographic areas listed. Most of this growth is due to residential and second home development. It seems that Morgan's appeal may be due to Lakes Seymour and Salem, and the Town's proximity to the growing areas of Derby and Newport City. The Morgan Zoning Bylaw currently has an industrial district to allow light industry and broaden the Town's tax base. Because there has been no industrial development in this district, the Planning Commission does not anticipate any adverse impacts on the neighboring towns of Charleston, Derby and Holland. Any adverse impacts can be dealt with by placing conditions on the industrial permits that are issued.

IX. ENERGY PLAN

A. Energy and renewable energy resources

Energy for the heating, lighting, and hot water needs are available from a variety of sources. Heating oil and LP Gas is available from several local distributors and dealers. Electricity is provided in Morgan by the Vermont Electric Cooperative. Finally, gasoline for moving automobiles is available in Morgan and some of the surrounding communities. There are no commercial energy generation facilities within the Town at present. The town supports the development of renewable energy resources in general, but the Town will only offer its support for individual projects that meet the needs of the community on a case by case basis.

B. Needs

The electric and heating needs of Morgan's residents for energy products are presently being met by fuel dealers and electric utilities in the local area.

C. Scarcities

At this time the Planning Commission does not know of any scarcities or reliability issues with energy products.

D. Costs

At one time, the electricity costs for Morgan residents were among the lowest in the State. This is no longer true as electricity prices have been on the increase.

E. Problems

While there does not seem to be any problem with regard to the supply of energy, rising energy costs could be a very real problem for some of Morgan's families. Therefore, the Morgan Planning Commission would like to encourage energy suppliers to do as much as is possible to either keep costs down or, to reduce the rate at which costs are increasing. Also, the Planning Commission encourages the Town, residents, and businesses to make energy efficiency investments to reduce the amount of energy that they consume, thereby reducing costs.

F. Conservation and energy efficiency

The Planning Commission strongly advocates the conservation of energy and energy efficiency. This plan recommends the use of energy saving products such as insulation, efficient appliances, and, when necessary the use of winter weatherization products such as weather stripping, window plastic, and water heater wraps. New construction and the replacement of old appliances, doors, and/or windows should always be done with energy efficient products. In addition, energy efficient behavior (shutting lights off when leaving the room, turning the thermostat down at night, etc.) should be taught and used, at school, home and in the workplace.

Both the Town Clerk's Office and the Community Center received thermal energy efficiency audits in 2011. The audit reports recommended efficiency improvements and provided estimated costs and payback periods for those improvements. The Planning Commission recommends that the necessary improvements should be made to these buildings to make them more energy efficient, thereby reducing costs and saving taxpayer dollars.

G. Renewable Energy Resources

The Planning Commission recommends the development of renewable energy resources. These would include the use of wood, solar, and wind energy. Wind energy conversion systems (WECS), are specifically addressed in the Morgan Zoning Bylaw to address safety and design requirements. It is the Town's goal that all WECS meet these recommendations. The Planning Commission supports the development of small-scale renewable energy technologies for residents, farms, and businesses.

The policy stated above defines the Town of Morgan's historical stance on this matter.

However, because the State of VT has taken away the rights of municipalities to control renewable energy resources within their boundaries, the citizens of Morgan feel compelled to add the following guidelines to which we expect the Public Service Board to adhere to in its decision making should any commercial venture in the area be considered.

ENERGY FACILITY SITING AND DEVELOPMENT

Energy generation and transmission systems that are linked to the electrical grid are preempted from local land use regulation. They are instead regulated by the Public Service Board (PSB) under 30 V.S.A. Section 248 (Section 248 review). These include net metered distributed energy installations, as well more commercial, utility-scale generation, transmission and distribution facilities. The PSB must consider project conformance with municipal and regional plans prior to issuing a Certificate of Public Good.

Municipal Participation. The town does not have statutory party status in PSB (Section 248) proceedings, but does receive notice of most applications (petitions) before the board. The town may participate informally by providing comments on a proposed project, or request more formal status as an intervener with rights to participate and appeal. Town participation in the state's review process, based on adopted community standards under this plan, is the best way to ensure that local conservation and development objectives are considered and weighed by the Public Service Board. The Planning Commission has developed specific community standards for energy facility siting and development in Morgan that are to be considered in the municipal review of applications before the Public Service Board, in crafting local regulations for off-grid facilities, and in the siting and development of municipal

and community-supported generation facilities.

MORGAN COMMUNITY STANDARDS: POWER GENERATION, TRANSMISSION, NET-METERED, AND OFF-GRID ENERGY FACILITIES

Purpose. The purpose of these municipal energy policies is to promote the development of renewable energy resources and energy facilities in the Town of Morgan, while limiting the adverse impacts of such development on public health, safety and welfare, the town's historic and planned pattern of development, environmentally sensitive areas, and our most highly-valued natural, cultural and scenic resources - consistent with related development, resource protection and land conservation policies included elsewhere in this plan. These policies are to be considered in undertaking municipal energy projects and programs, in updating the town's bylaws to address renewable energy development, and in the review of new or upgraded energy facilities and systems by the town and the Public Service Board under 30 V.S.A. § 248.

General Standards. The following forms of energy development will be considered for support by the Town of Morgan, in order of priority:

1. Improved/increased system capacity by utilizing state, utility and municipally-supported energy efficiency and conservation programs.
2. In-place upgrades of existing facilities, including existing transmission lines, distribution lines and substations as needed to serve the town and region. To the extent physically and functionally feasible, existing utility systems, including transmission lines, distribution lines and substations, shall be upgraded or expanded on site or within existing utility corridors before new facilities or corridors are considered.
3. Individual and group net-metered renewable energy projects, community-based projects, and other small-scale distributed renewable energy systems serving individual users, in appropriate, context-sensitive locations
4. New community-scale energy facilities, including new transmission and distribution lines, substations, hydro dams, wind and solar farms, co-generation facilities and biomass plants that are designed to meet the expected needs of the Town of Morgan and its adjacent communities.

5. A demonstrated public need that outweighs adverse impacts to town residents and resources must be documented for municipal support of proposed larger projects - including new transmission and distribution lines, and facilities with a generation capacity greater than 500kW - located in or which may otherwise affect the Town of Morgan. Energy facility development must benefit the Town of Morgan and its adjacent communities (residents and businesses) in direct relation and proportion to the documented impacts of the proposed development on community facilities, services, economy and resources. In this instance *benefit* means that such development must improve energy availability and distribution locally and lower costs locally before any energy is transmitted out of the area.

6. The Town of Morgan will endorse or permit the development and installation of energy facilities that conform to community energy facility development and siting standards through participation in Public Service Board (Section 248) proceedings or, where applicable, through local financing and incentive programs and regulations.

Public Health and Safety Standards:

Use Classification. A small net-metered or off-grid renewable energy facility, including a solar array, small wind facility or combined system intended solely to serve an individual residence or business, will be considered an accessory structure allowed in all zoning districts in which structures are allowed.

Height for these: Zoning district height limitations under local bylaws, where applicable, should be waived for renewable energy facilities, as enabled under 24 V.S.A. § 4414.

* The maximum tower height for net-metered, or similar off-grid wind energy facility shall not (a) exceed 120 feet in total height, as measured vertically from the ground to the rotor blade tip at its highest point, or (b) extend in total height more than 30 feet above the existing tree canopy or other obstructions within 300 feet of the tower, whichever is greater.

Setbacks for all: Except for transmission and distribution lines and utility connections, all energy facilities - including substations, commercial, utility and net-metered generation facilities and accessory structures - must meet minimum setback requirements for the zoning district(s) in which they are located. In addition:

All ground-mounted wind energy facilities must be setback at least 1.5 times the total facility height, as measured vertically from the ground to the rotor blade tip at its highest point, from all property lines, occupied buildings on

adjoining properties, overhead utility lines, public and private rights-of-way and established trail corridors, unless easements are secured from adjoining property owners.

* Guy wires used to support wind towers are exempt from minimum district setback requirements, but shall be set back at least 20 feet from all property lines.

* A building-mounted wind turbine or solar panel must meet minimum setback requirements for the building on which it is mounted. The installation of a net-metered or similar off-grid energy system on a nonconforming structure will not constitute an increase in the degree or amount of nonconformance under local regulations.

* Setback requirements for renewable energy facilities may be reduced in exceptional circumstances by the town, as allowed under 24 VSA § 4414 as necessary to access a renewable energy resource, if the reduction in the setback distance is functionally necessary for system operation, represents the minimum necessary to allow for facility siting, and adverse impacts to adjoining properties, structures, facilities, and uses can be avoided through structural design and orientation, landscaping and screening, the use of glare and noise reduction techniques, or other accepted mitigation measures, or an easement is secured from the adjoining property owner.

* Facility setback distances from property lines, or from occupied structures in existence at the time of application, should be increased as necessary to mitigate identified public health and safety hazards or nuisances to adjoining property owners (e.g., noise, vibration, glare, shadowing and shadow flicker, ice throw).

Ground Clearance. The blade tip of any wind turbine shall, at its lowest point, have a ground clearance of no less than 30 feet, as measured vertically from the ground to the tip of the rotor blade at its lowest point.

Access. New generation facilities shall be sited in a manner that avoids or, to the greatest extent physically feasible, minimizes the need for new and extended access roads and utility corridors.

* Facility access should be provided from existing access roads where physically feasible, and access roads and utility corridors should be shared, to minimize site disturbance, resource fragmentation, the creation of additional edge habitat, and the introduction and spread of invasive exotic species.

* Identified impacts to public highways from facility construction, operation and maintenance, including highway

improvements required to accommodate the facility, shall be mitigated by the developer.

* Public access to generation and transmission facilities, including substations, must be restricted as necessary to protect public health and safety.

Noise. Noise generated by any energy facility, including wind energy systems, shall not exceed the lesser of (a) 45dB(A) as measured at any property line, or (b) 5 dB(A) above the ambient sound level, except during a short-term event such as a utility outage or a severe wind storm.

Shadow Flicker. Wind energy facilities shall be sited or screened so that shadows cast by rotor blades will not result in shadow flicker on occupied buildings located in the vicinity of the project.

Burial. Utility controls and onsite line connections shall be wireless or buried, except at the point of connection with distribution lines.

Signs. Energy facilities and structures shall not be used for display or advertising purposes. Signs, except for owner and manufacturer identifications and safety warnings that do not exceed one square foot, are prohibited on all structures.

Lighting. Energy facilities, including wind and transmission towers, are not to be artificially lighted except as necessary to meet Federal Aviation Administration requirements.

* An Obstacle Collision Avoidance System (OCAR) as approved by the FAA shall be used to avoid visual lighting impacts. If an OCAR cannot be approved, the FAA lighting alternative that results in the least amount of visual disturbance, and minimizes project visibility from public roads and vantage points, shall be incorporated in system design.

* Substation lighting should be the minimum necessary for site monitoring and security, should be cast downward, and must not result in light trespass or glare on adjoining properties.

Codes. Energy facilities must comply with all manufacturer specifications, state or industry safety and electric codes, and utility connection requirements. Documentation of code compliance may be required for facilities subject to municipal review.

Interference. Facility operation shall not reduce or interfere with television, radio, telemetry, or other telecommunications signals, including public safety communications systems.

Decommissioning and Abandonment. Generation facility permits or certificates must include provisions for system abandonment, decommissioning and site restoration including, for larger systems (e.g., >100 kW), required sureties for facility removal and site restoration.

Facility Siting Standards:

Site Designation. Sites planned for or intended to accommodate planned energy facility development, including the location of existing and planned commercial and net-metered generation facilities and utility corridors, are to be shown on site development and subdivision plans reviewed by the town.

* Incentives (e.g., waivers, density bonuses) should be provided under local regulations for energy efficient development, and for the incorporation of net-metered renewable energy facilities in new development.

Upland Exclusion Areas. All new energy facilities - including wind towers, transmission and distribution lines, accessory structures and access roads - are specifically prohibited in town-owned lands, above 1,700 feet elevation, in conformance with longstanding town policies to limit all high elevation and ridgeline development due to its undue adverse scenic and environmental impacts. Any energy development over 1,500 feet in elevation shall not result in undue adverse impacts to surface waters, ground water and mapped source protection areas, core forest areas, inventoried wildlife habitat and travel corridors, and mapped scenic resources.

Hazard Areas. With the exception of transmission and distribution lines, new energy facilities that are not attached to existing or permitted structures shall not be located in:

* Special Flood Hazard Areas (SFHAs), including floodways and floodway fringes identified on Flood Insurance Rate Maps (FIRMs) for the town.

* Fluvial erosion hazard areas identified on Morgan FEHA maps. The town does not have FEH maps at present, but mapped flood hazard areas are on file in the Town Office..

* Very steep slopes, with natural (pre-development) grades in excess of 25%.

Conservation Areas. Energy facilities are to be sited to avoid where physically feasible, or to otherwise minimize encroachment and mitigate the adverse impacts of facility development on:

* Surface waters, wetlands and associated setback and buffer areas, as specified for all development under town

bylaws.

* Primary agricultural soils as mapped by the USDA Natural Resource Conservation Service for the state.

* Significant wildlife habitat, including core habitat areas, and travel and migratory corridors, as identified from state inventories and datasets, local inventories, and site investigations associated with facility development.

* Onsite mitigation - e.g., through facility clustering, relocation, buffering and permanent conservation easements - is preferred. Off-site mitigation measures should be required where on-site mitigation is not physically feasible.

Agricultural Land and Open Space. Energy facilities, including solar arrays and other generation facilities, transmission and distribution lines, accessory structures and access roads are to be located on nonagricultural land or along field edges to avoid fragmentation of, and to minimize and mitigate adverse impacts to agricultural land and open fields.

Forestland. Energy facilities, including wind towers and other generation facilities, transmission and distribution lines, accessory structures and access roads are to be located along existing tree lines, or on otherwise disturbed forestland, as necessary to avoid the fragmentation of, and to minimize and mitigate adverse impacts to productive timber stands and critical forest habitat.

* Forestland intended for commercial biomass production must be sustainably managed and harvested in a manner that preserves critical forest habitat and long-term forest health.

Visual Impacts. Applicants must demonstrate through site planning, facility siting and proposed mitigation that the visual impacts of new and upgraded energy facilities will be minimized as outlined in the standards set forth below:

* All energy facilities and accessory structures are to be designed and constructed of materials, colors, and textures that blend into the surrounding natural or built environment. Wind towers, turbines and blades shall be of a neutral, non-reflective and unobtrusive color (e.g., white, off-white or gray).

* Facilities are to be sited to outside of, or to the edge of scenic views or viewsheds so that they are not a prominent focal point.

* The apparent scale or size of the facility should

be reduced by locating it as far from the vantage point as possible.

* The facility should not extend above the background horizon line.

* The facility should be screened from view though the use of existing topography, structures, vegetation or strategically placed tree, shrub and ground cover plantings that do not block distant views.

Designated Scenic Areas. The documented historic, rural and scenic character of the following areas in the Town of Morgan shall be preserved under any form of new energy development. New energy facilities sited within or as viewed from these areas shall not create a significant physical, visual, audible, or historically incongruous or incompatible intrusion into these areas. New facilities, including generation facilities greater than 20 kW, substations and transmission lines, are specifically prohibited within or as viewed from these areas unless associated impacts can be avoided, for example through facility siting, screening or line burial.

* Significant views within the Seymour Watershed area (Routes 111, 114, and 105); and

* Views from locally designated scenic roads, as listed or as subsequently designated by the Morgan Select Board.

* Ground installations are preferred to roof-mounted installations on historic structures. Ground installations, to the extent functionally-feasible, shall be installed in locations that minimize their visibility, such as a side or rear yard, and be screened from view of public rights-of-way and adjoining properties.

* Roof-mounted systems may be placed on new construction, non-historic buildings and additions.

* Solar panels and other roof- or wall-mounted structures shall not be placed on primary building facades, including street-facing walls or roofs, unless there is no other suitable location on the site or structure.

* Roof- or building-mounted systems on an historic structure shall not physically damage the structure, alter its character-defining features, including existing roof lines or dormers, nor obstruct significant architectural features such as overlaying windows or architectural detailing. Attachment points must be minimized and allow for future system removal.

* Roof-mounted Installations are to be placed below and behind parapet walls and dormers, on rear-facing roofs, where

feasible. Panels are to be mounted flush with and at the same angle as the existing roof surface and, on flat roofs, set back from the roof edge to minimize visibility. They should not be visible above the roofline of the primary facade. Panels and mounting systems must be compatible in color to established roofing materials to minimize their visibility.

H. Land Use & Energy Conservation

There are several siting techniques for development that are likely to result in the conservation of energy. Building on south facing slopes will generally make a house less expensive to heat. Earth sheltered homes may also be less expensive to heat. Shade trees can also be planted to reduce cooling costs on warm days, just as evergreen trees can be planted to lessen the effect of winter's freezing winds.

X. HOUSING ELEMENT

This section of the Plan looks at housing in Morgan. Data concerning occupancy, persons in occupied units, numbers of bedrooms and bathrooms, rent paid, and mortgage and monthly costs will be presented and discussed. This section will also attempt to determine future housing needs in Morgan. The data used in this section was taken from 2010 Vermont Housing Data (www.housingdata.org). Some of the data presented in this part of the plan will be medians. The median of a group of data is that point where half of the data fall below that point and half are above that point. For example, with median value of houses, half of the houses are valued less than the median and half are valued more than the median.

| Status | Units | | |
|---|-------|-----|-----|
| Occupied | | 809 | |
| Owner | 273 | | |
| Renter | 48 | | |
| Total occupied | | 321 | |
| Vacant | | | |
| For rent | 4 | | |
| For sale only | 6 | | |
| Seasonal / recreational | 469 | | |
| All other vacant | 9 | | |
| Total vacant | | 488 | |
| Total units | | | 809 |
| VT Housing Data 2010 (www.housingdata.org) | | | |

A. Present Housing Data

As of April 1, 2010, there were a total of 809 dwelling units in Morgan. Of these 809 units, 321 were occupied and the remaining 488 were vacant. All but 19 of the 488 vacant units were held for seasonal, recreational, or occasional use.

Occupied units in Morgan seemed to have ample room for the occupants. The 321 occupied units housed a total of 749 persons - for an average of 2.3 persons per unit

Morgan's housing stock is relatively young. One half of the Town's 732 structures have been built since 1978. The two decades from 1980-99 saw the greatest amount of building. In addition, 80.6% of Morgan's housing has been built since 1940. Table 2 has more details.

| | 732 Structures |
|-------------------|----------------|
| 2000 - 2010 | 67 |
| 1990 - 1999 | 138 |
| 1980 - 1989 | 136 |
| 1970 - 1979 | 82 |
| 1960 - 1969 | 69 |
| 1950 - 1959 | 52 |
| 1940 - 1949 | 46 |
| 1939 - earlier | 142 |
| Median year built | 1978 |

B. Affordability

The objective of this section is to demonstrate housing affordability in Morgan. For housing to be affordable, mortgage or rental payments should not exceed 30% of the occupant's gross income. The data for the owner occupied units includes the costs of taxes, insurance and utilities as well as the cost of the mortgage if one exists.

For the period 2005-2009, the median household income in Morgan was \$48,500. This was higher than median income in Orleans County (\$40,605). The median family income in Morgan for the same period was \$57,143 (in Orleans County, the figure was \$49,432). The average annual wage (VT Dept. of Labor) in 2010 was \$29,628 – a figure that was lower than the \$31,666 for Orleans County.

| Year | Population |
|---|------------|
| 1990 | 497 |
| 2000 | 669 |
| 2010 | 749 |
| 2020 projected | 875 |
| www.housingdata.org & NVDA | |

In 2012 the total residential population was 791.

According to the VT Dept. of Employment and Training, in 2010 the total labor force for Morgan was 440 persons. 400 persons were employed and 40 persons were unemployed, making the unemployment rate approximately 9%.

In 2010, there were 7 primary residences sold with an average home price of \$155,500. There were 8 vacation residences sold in the same year with an average price of \$264,250.

For 146 owner-occupied housing units over the period 2005-2009, 28.1% of these households were spending at or above 30% of their income on housing. There were 9.6% of households spending more than 50% of their income on housing. These figures are lower than the figures for Orleans County, but they are still surprising.

Similarly, for 13 rental units over the 2005-2009 period, 30.8% of households were spending more than 50% of their gross household income on housing costs. Affordability is an issue for renters in the community.

Projected Housing Needs

By examining recent population growth, it may be possible to estimate future growth in the community. The population in Morgan increased from 497 persons in 1990 to 749 persons in 2010 (an increase of 252 persons). The average increase per year over the 20 year period was 12.6 persons. Looking ahead to 2020, it can be estimated that another 126 people will reside in Morgan in 2020. If we assume that the average household size remains at just over 2 persons per household, we can estimate that approximately 60 additional units of housing will be needed to house the growing population. This helps to determine where growth would best be situated.

Morgan has a high percentage of vacant homes, which might play a role in providing housing for the Town's projected population. As of April 1, 2010 there were 469. However, due to the fact that many of these structures may be situated on private roads that are not maintained in the winter, accessibility can be a very real problem. In addition, some of these units may also be located on lots with questionable soils for on-site sewage disposal and/or sewage disposal systems. In the event that any of Morgan's vacant units are suitable for year round occupancy, Morgan's need for new year- round housing units can be greatly reduced or, in some cases, even eliminated.

The reader should note that the Town of Morgan is not and will not be in the business of

providing housing for the residents of Morgan. The purpose of this housing element is only to help the Town understand the existing housing situation and plan for the Town's future growth.

XI. ECONOMIC DEVELOPMENT

The Town of Morgan is a rural community with an economy based primarily upon agriculture, forestry, and outdoor recreation.

According to the VT Dept. of Employment and Training, in 2010, the total labor force for Morgan was 440 persons. Forty (40) persons were unemployed, making the unemployment rate approximately 9%.

In 2010 there were a total of 10 business establishments in Morgan employing between up to 76 persons. The majority of business establishments were smaller, employing between 1 -4 persons, and two establishments employed between 10 – 19 persons (2010 Business Patterns, U.S. Census Bureau).

The town has a high percentage (57%) of second homeownership. Of the 809 housing units in town, 469 of these were considered vacant (for seasonal or vacation use). The majority of seasonal units are located around the lakes in the town. Recreation is important to second homeowners.

The Town of Morgan recommends the following:

- Encourage the continuation of agriculture, forestry, and outdoor recreation in the community. These uses have helped to shape the landscape that exists today.
- Encourage and provide for the development of more professional home based businesses.
- Encourage and provide for the development of more restaurants, and tourist/recreational attractions. Widen the shoulders along Route 111 to provide cyclists with safe access to the beach in Morgan Center.
- Other recommendations related to economic development are contained in other sections of this plan and are identified as an “Economic Goal” or “Economic Recommendation”.