



# Sustainable Development

## Assessment Worksheet



# Community Environmental Management

## **Acknowledgements**

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***Community Environmental Management***



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- Assessment Worksheet -

### How This Worksheet Can Be Used To Assist A Community

This sustainable development worksheet can be used to help a community:

- 1) More fully understand sustainable development concepts and options
- 2) Assess where they are relative to implementing an effective sustainable development program
- 3) Identify sustainable development needs
- 4) Begin to map out a sustainable development strategy for the community based on where they are today

The worksheet includes:

#### Part 1 - Community Risk Assessment Factors

The more factors the community checks, the more prepared they will be to address sustainable development issues.

#### Part 2 - Community Problems & Needs Assessment

This section assists communities in focusing on specific problems associated with development, the causes of the problems and the impacts. This part also enables a community to evaluate its capacity to address sustainable development through the identification of barriers it faces in implementing one option or another, and it allows for identification of assistance needed to overcome a specific barrier or obstacle.

### Additional Resources

#### Technical References:

The following reference materials are also available to assist communities in New York State with their sustainable development efforts:

- 1) *Community Culture and the Environment: A Guide to Understanding a Sense of Place*, Environmental Protection Agency, Washington, DC – 2002
- 2) *Growing Greener: Putting Conservation into Local Plans and Ordinances*, Natural Lands Trust, Washington, DC – 1999

- 3) *Tools and Strategies: Protecting the Landscape and Shaping the Growth*, Regional Plan Association, New York, NY – 1990
- 4) *Preserving Natural Resources Through Local Environmental Laws: A Guidebook for Local Governments*, Land Use Law Center, Pace University School of Law, White Plains, NY – 2001
- 5) *Implementing Creative Land Use Planning Techniques in your Town*, Debra Mason and the George D. Aiken Resource Conservation & Development Council, Randolph, VT – 1995
- 6) *Introduction to Environmental Planning for Local Decision-Makers*, Department of Environmental Resources, Harrisburg, PA – 1977
- 7) *Planning for Natural Resources: A Guide to Including Natural Resources in Local Comprehensive Planning*, Department of Urban & Regional Planning, University of Wisconsin-Madison/Extension, Wisconsin Department of Natural Resources, 2002
- 8) *Environmental Planning for Small Communities: A Guide for Local Decision-Makers*, Environmental Protection Agency, Washington, DC, 1994
- 9) *Greenway Connections: Greenway Compact Program and Guides for Dutchess County Communities*, Dutchess County Planning and Development, Poughkeepsie, NY, 2000

Funding Assistance:

- NYS Department of Environmental Conservation
  - Water Quality Improvement Projects

Websites:

- Environmental Protection Agency  
[www.epa.gov/smartgrowth/openspace.html](http://www.epa.gov/smartgrowth/openspace.html)
- [www.greeninfrastructure.net](http://www.greeninfrastructure.net)
- [www.sustainable.org](http://www.sustainable.org)



# Community Environmental Management

## Sustainable Development

### Part 1- Community Risk Assessment Factors

The following is a list of strategies that are available to protect the environmental resources within a watershed, metropolitan region, or municipal assessment area. The more factors that apply to the assessment area, the greater the likelihood of achieving sustainability and not compromising the ability of future generations to meet their own needs.

**Please check all those that apply to the assessment area:**

- A Conservation Advisory Committee or Conservation Advisory Board is established and active.
- Primary and Secondary Conservation Areas (including critical habitat, prime farmland, drinking water sources, etc.) have been delineated in the community.
- A map of Primary and Secondary Conservation Areas is included in the town's comprehensive plan.
- Water and sewer infrastructure is precluded in Primary and Secondary Conservation Areas in the community.
- The community has delineated primary growth areas outside of Primary and Secondary Conservation Areas.
- The SEQR process is used effectively to protect Conservation Areas.
- Regulations have been adopted requiring conservation design in subdivisions in Secondary Growth Areas.
- Soil survey information is used to guide development.
- A tree canopy conservation policy is established.
- Impervious area restrictions are in place for new developments.
- Rural development guidelines are established to protect open space and the character of the rural countryside.
- The community is making a transition from the sprawl pattern of development to compact, mixed-use development.
- New development contiguous to urban boundaries is organized as neighborhoods with the existing urban pattern.
- Noncontiguous development is organized as towns and villages with their own urban edges, and planned for a jobs/housing balance, not as bedroom suburbs.

- \_\_\_ The community plans for a range of parks distributed within neighborhoods.
- \_\_\_ The community is becoming less car dependent and is encouraging and facilitating alternative transportation systems including walking, bicycling, and mass transit.
- \_\_\_ The community is establishing pedestrian friendly streets.
- \_\_\_ Infill development is encouraged and facilitated as an alternative to further outward expansion at the urban fringe.
- \_\_\_ Public buildings are sited within the village center.
- \_\_\_ The development and redevelopment of the community respects historical patterns, precedents, boundaries and cultural resources.





# Sustainable Development Worksheet

## Part 2 – Problem & Needs Assessment

This assessment will help determine how unsustainable development could be impacting your community and your community’s capacity for addressing these impacts.

Problems Associated with Whole Town	Causes	Impacts	Remedial & Preventative Strategies
<p>___ Growth is occurring without planning for environmental sustainability</p>	<ol style="list-style-type: none"> <li>1. Land use decisions made in response to development proposals rather than by proactively looking at the town’s overall landscape and natural resource conservation needs</li> <li>2. Zoning put in place without provisions to protect soils, tree canopy, critical watersheds, drinking water supplies and natural resources</li> <li>3. Traditional single-use, low-density zoning encourages commercial strip development and residential subdivisions rather than clustering development as neighborhoods and village centers</li> </ol>	<p><b>Check those impacts that apply:</b></p> <ul style="list-style-type: none"> <li>___ Habitat fragmentation, loss of wildlife corridors</li> <li>___ Fragmentation of farmland</li> <li>___ Irreversible loss of prime soils</li> <li>___ Loss of ecological functionality – e.g. wetlands</li> <li>___ Disruption of natural cycles – e.g. flooding, fires</li> <li>___ Loss of recreational opportunities</li> <li>___ Loss of open space and scenic vistas</li> <li>___ Loss of farmland</li> <li>___ Water quality degradation</li> <li>___ Drinking water quality threatened</li> <li>___ Paved parking lots contribute to flooding and water quality degradation</li> <li>___ Reduced quality of life due to increased traffic and reduced opportunities to walk or bike</li> <li>___ Increased cost of new roads and water and sewer infrastructure, etc.</li> </ul>	<p><b>Strategy:</b> Make use of community’s sense of identity and place to inspire environmental protection solutions and actions</p> <p><b>Strategy:</b> Protect important conservation areas</p> <p><i>(Another strategy can be found on the next page.)</i></p>

<p style="text-align: center;"><b>Management Options</b></p> <p style="text-align: center;">Indicate with a “✓” if community has implemented or use a “?” if community is interested</p>	<p style="text-align: center;"><b>Barriers to Implementation</b></p>	<p style="text-align: center;"><b>Community Assistance Needs</b></p>
<p><b>Options:</b></p> <p>___ Define community characteristics, including governance, demographics, values, capacity for change, and local identity</p> <p>___ Identify community goals and vision of the future</p> <p>___ Identify cultural resources, historic buildings, scenic views, recreation areas and other areas significant to community culture or sense of place</p> <p>___ Understand that the health and vibrancy of the natural environment affects the health and vibrancy of the community and vice versa</p> <p><b>Options:</b></p> <p>___ Identify and map primary and secondary conservation areas:</p> <ul style="list-style-type: none"> <li>• Floodplains (see also: Aquatic Habitat and Flooding worksheets)</li> <li>• Wetlands (see also: Aquatic Habitat worksheet)</li> <li>• Stream corridors/buffers (see also: Aquatic Habitat worksheet)</li> <li>• Steep slopes and ridges</li> <li>• Aquifer recharge areas (see also: Source Water Protection worksheet)</li> <li>• Critical wildlife habitat (see also: Aquatic Habitat and Terrestrial Habitat worksheets)</li> <li>• Prime agricultural land (see also: Farmland Protection worksheet)</li> </ul> <p>___ Incorporate map of conservation areas into comprehensive plan</p> <p>___ Make more effective use of SEQR process to protect conservation areas from effects of siting and operation of new development</p> <p>___ Increase effective use of (or establish) town Conservation Advisory Committee and work toward recognition as a Conservation Advisory Board</p>		

Problems Associated with Whole Town	Causes	Impacts	Remedial & Preventative Strategies
			<p><b>Strategy:</b> Utilize soil survey information when planning development</p>

<p style="text-align: center;"><b>Management Options</b></p> <p style="text-align: center;">Indicate with a “✓” if community has implemented or use a “?” if community is interested</p>	<p style="text-align: center;"><b>Barriers to Implementation</b></p>	<p style="text-align: center;"><b>Community Assistance Needs</b></p>
<p><b>Options:</b></p> <p>___ Utilize soil survey to map areas with potential concern in the following areas:</p> <ul style="list-style-type: none"> <li>• Erosion potential</li> <li>• Drainage (wetness, permeability)</li> <li>• Depth to bedrock</li> <li>• Soil bearing and shear strength</li> <li>• Seasonal high water</li> <li>• Flood-prone areas</li> <li>• Shrink and swell potential</li> <li>• Corrosion potential</li> </ul> <p>___ Conduct soil capability analysis to identify areas where different land uses can be accommodated and refine broad land use categories</p> <p>___ Use soil information to predict areas where development is likely to be proposed in the future and where land use conflict is likely to occur</p> <p>___ Implement soil-based zoning</p> <p>___ Use soil surveys to guide municipal operations (planning pipeline construction, roadways, green belts, parks, etc.)</p>		

Problems Associated with Village Centers	Causes	Impacts	Remedial & Preventative Strategy
<p>___ Village centers abandoned in favor of strip development</p>	<ol style="list-style-type: none"> <li>1. Consumption of land outside the village center for residential subdivisions and commercial strip development or shopping centers</li> <li>2. Increased paved surface</li> <li>3. Traffic congestion</li> <li>4. Village center being abandoned rather than revitalized</li> </ol>	<p><b>Check those impacts that apply:</b></p> <ul style="list-style-type: none"> <li>___ Loss of farmland</li> <li>___ Fragmentation of forested lands</li> <li>___ Encroachment into stream corridors and critical wildlife habitat</li> <li>___ Erosion and sedimentation</li> <li>___ Degradation of outdoor recreation based economy</li> <li>___ Increased cost of new roads and water and sewer infrastructure, etc.</li> <li>___ Increased flooding</li> <li>___ Water quality degradation</li> <li>___ Air quality impacts</li> <li>___ Loss of unique village character</li> </ul>	<p><b>Strategy:</b></p> <p>Strengthen and protect community centers to reduce the spread of development into rural areas</p>

<p style="text-align: center;"><b>Management Options</b></p> <p style="text-align: center;">Indicate with a "√" if community has implemented or use a "?" if community is interested</p>	<p style="text-align: center;"><b>Barriers to Implementation</b></p>	<p style="text-align: center;"><b>Community Assistance Needs</b></p>
<p><b>Options:</b></p> <ul style="list-style-type: none"> <li>___ Encourage and facilitate infill development in urban priority areas</li> <li>___ Identify priority expansion areas at the edges of town centers to strengthen and not detract from the center</li> <li>___ Organize non-contiguous development as village centers with a jobs/housing balance</li> <li>___ Look for opportunities to site new public buildings within the village center</li> <li>___ Ensure village centers are desirable places to live by promoting walk able communities and building in the context of existing architecture</li> <li>___ Implement an urban/community forestry program</li> </ul>		

Problems Associated with Village Centers	Causes	Impacts	Remedial & Preventative Strategy
<p>___ Subdivisions designed and built without consideration of natural resources of the site</p>	<ol style="list-style-type: none"> <li>1. Typical subdivisions divide up available land into home sites</li> <li>2. Trees removed from home sites</li> <li>3. Wetlands destruction</li> <li>4. Insufficient erosion control</li> </ol>	<p><b>Check those impacts that apply:</b></p> <p>___ Loss of open space</p> <p>___ Wildlife habitat destroyed or fragmented</p> <p>___ Reduced passive outdoor recreation opportunities</p> <p>___ Degradation of air quality</p> <p>___ Degradation of water quality</p> <p>___ Increased flooding</p> <p>___ Water quality degradation due to loss of nature filtration</p> <p>___ Sedimentation fills in reservoirs and road ditches</p>	<p><b>Strategy:</b></p> <p>Guide development in suburbs to promote livable and environmentally-sensitive neighborhoods</p>

<p style="text-align: center;"><b>Management Options</b></p> <p style="text-align: center;">Indicate with a "√" if community has implemented or use a "?" if community is interested</p>	<p style="text-align: center;"><b>Barriers to Implementation</b></p>	<p style="text-align: center;"><b>Community Assistance Needs</b></p>
<p><b>Options:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Re-evaluate zoning to provide for mixed-use development, where neighborhoods contain residences and businesses</li> <li><input type="checkbox"/> Where commercial strip development exists, identify boundaries for strips and examine opportunities for filling in and diversifying strips</li> <li><input type="checkbox"/> Update or adopt subdivision regulations and site plan review procedure to ensure complete natural resource assessment</li> <li><input type="checkbox"/> Implement conservation subdivision design</li> <li><input type="checkbox"/> Implement tree canopy conservation policy</li> <li><input type="checkbox"/> Implement impervious area restrictions</li> </ul>		

Problems Associated with Village Centers	Causes	Impacts	Remedial & Preventative Strategy
<p>___ Rural countryside left vulnerable to future development which could threaten natural amenities that are valued by the town</p>	<ol style="list-style-type: none"> <li>1. Farms going out of business and farmland being sold to developers because soils are amenable to building</li> <li>2. Open space and forested land being sold to developers</li> <li>3. Zoning allows traditional subdivisions in rural areas or development along rural highways</li> </ol>	<p><b>Check those impacts that apply:</b></p> <p>___ Permanent loss of prime farmland</p> <p>___ Loss of rural character</p> <p>___ Loss of scenic vistas</p> <p>___ Loss of recreational opportunities</p> <p>___ Water quality threatened</p>	<p><b>Strategy:</b></p> <p>Encourage preferred patterns of growth in the rural countryside</p>

<p style="text-align: center;"><b>Management Options</b></p> <p style="text-align: center;">Indicate with a "√" if community has implemented or use a "?" if community is interested</p>	<p style="text-align: center;"><b>Barriers to Implementation</b></p>	<p style="text-align: center;"><b>Community Assistance Needs</b></p>
<p><b>Options:</b></p> <ul style="list-style-type: none"> <li>___ Identify areas where development would not be desirable/acceptable, including community priority areas, prime farmland, conservation areas and areas where soil qualities are not suitable</li> <li>___ Examine cumulative impacts of development on watershed or aquifer recharge areas</li> <li>___ Conduct fiscal analysis of current zoning</li> <li>___ Guide development to ensure harmony with natural surroundings and community priorities</li> <li>___ Require developers to identify open space system components before planning a subdivision</li> <li>___ Adopt rural development guidelines that: minimize clearing of vegetation; retain stone walls and hedgerows; place buildings and access roads in tree lines, on mildly sloping ground or along the edges of fields; locate structures and septic systems more than 100 feet from streams or ponds to protect water quality; re-use farm roads or country lands; maintain or enhance scenic views</li> <li>___ Adopt a local law that provides for conservation subdivisions with smaller lot sizes, shared utilities and preservation of open space</li> <li>___ Discourage strip development along roads in favor of constructing along side roads</li> <li>___ Consider an urban growth boundary</li> </ul>		

## DRAFT

### Community Environmental Management

#### SUSTAINABLE DEVELOPMENT

Strategy: **Make use of community's sense of identity and place to inspire environmental protection solutions and actions**

- Define community characteristics, including governance, demographics, values, capacity for change, and local identity
- Identify community goals and vision of the future
- Identify cultural resources, historic buildings, scenic views, recreation areas and other areas significant to community culture or sense of place
- Understand that the health and vibrancy of the natural environment affects the health and vibrancy of the community and vice versa

Strategy: **Protect important conservation areas**

- Identify and map primary and secondary conservation areas
  - Floodplains see also: Aquatic Habitat and Flooding worksheets
  - Wetlands see also: Aquatic Habitat worksheet
  - Stream corridors/buffers see also: Aquatic Habitat worksheet
  - Steep slopes and ridges
  - Aquifer recharge areas see also: Source Water Protection worksheet
  - Critical wildlife habitat see also: Aquatic Habitat and Terrestrial Habitat worksheet
  - Prime agricultural land see also: Farmland Protection worksheet
- Incorporate map of conservation areas into comprehensive plan
- Make more effective use of SEQR process to protect conservation areas from effects of siting and operation of new development
- Increase effective use of (or establish) town Conservation Advisory Committee and work toward recognition as a Conservation Advisory Board

Strategy: **Utilize soil survey information when planning development**

- Utilize soil survey to map areas with potential concern in the following areas
  - Erosion potential
  - Drainage (wetness, permeability)
  - Depth to bedrock
  - Soil bearing and shear strength
  - Seasonal high water
  - Flood-prone areas
  - Shrink and swell potential
  - Corrosion potential
- Conduct soil capability analysis to identify areas where different land uses can be accommodated and refine broad land use categories
- Use soil information to predict areas where development is likely to be proposed in the future and where land use conflict is likely to occur
- Implement soil-based zoning
- Use soil surveys to guide municipal operations (planning pipeline construction, roadways, green belts, parks, etc.)

Strategy: **Encourage preferred patterns of growth in the rural countryside**

- Identify areas where development would not be desirable, including community priority areas, prime farmland, conservation areas and areas where soil qualities are not suitable
- Identify areas where development would be desirable/acceptable
- Examine cumulative impacts of development on watershed or aquifer recharge areas
- Conduct fiscal analysis of current zoning

- Guide development to ensure harmony with natural surroundings and community priorities
  - Require developers to identify open space system components before planning a subdivision
  - Adopt rural development guidelines that: minimize clearing of vegetation; retain stone walls and hedgerows; place buildings and access roads in treelines, on mildly sloping ground or along the edges of fields; locate structures and septic systems more than 100 feet from streams or ponds to protect water quality; re-use farm roads or country lands; maintain or enhance scenic views
  - Adopt a local law that provides for conservation subdivisions with smaller lot sizes, shared utilities and preservation of open space
  - Discourage strip development along roads in favor of constructing along side roads
  - Consider an urban growth boundary

Strategy:

**Guide development in suburbs to promote livable and environmentally-sensitive neighborhoods**

- Re-evaluate zoning to provide for mixed-use development, where neighborhoods contain residences and businesses
- Where commercial strip development exists, identify boundaries for strips and examine opportunities for filling in and diversifying strips
- Update or adopt subdivision regulations and site plan review procedure to ensure complete natural resource assessment
- Implement conservation subdivision design
- Implement tree canopy conservation policy
- Implement impervious area restrictions

Strategy:

**Strengthen and protect community centers to reduce the spread of development into rural areas**

- Encourage and facilitate infill development in urban priority areas
- Identify priority expansion areas at the edges of town centers to strengthen and not detract from the center
- Organize non-contiguous development as village centers with a jobs/housing balance
- Look for opportunities to site new public buildings within the village center
- Ensure village centers are desirable places to live by promoting walkable communities and building in the context of existing architecture
- Implement an urban/community forestry program

