

SUSTAINABLE COMMUNITY ASSESSMENT TECHNICAL BULLETIN

Effective sustainability planning preserves community character, protects resources, improves public health, cuts costs, and boosts the local economy.

The Brandywine Conservancy's Sustainable Community Assessment helps municipalities tackle sustainability challenges and plan for the future. The assessment takes one to two months and provides practical, commonsense solutions to current municipal issues.

WHAT IS REVIEWED

The Brandywine Conservancy's Sustainable Community Assessment involves a comprehensive review of municipal planning documents and regulations, including:

- Comprehensive Plans
- Zoning Ordinances
- Subdivision and Land Development Ordinances
- Open Space and Recreation Plans
- Act 537 Plans
- Other relevant master plans or feasibility studies



EVALUATION

The results of the rapid assessment of municipal plans, policies, and regulations are organized around specific issues and sustainable practices (listed below). These charts are organized according to the issues evaluated (e.g., natural resources, community health and safety, etc.), while the symbols “+” and “x” are used to indicate the strengths and weaknesses, respectively, of the Township's current plans and regulations. For the same criteria, the letter “n” is used to note an adequate or neutral evaluation, i.e., the Township's efforts are neither significantly strong nor notably weak. If a box in the chart is blank and only marked with a -, this is because no relevant information was discovered from the municipal documents that were reviewed. (Note that when a symbol is followed by successive sentences separated with a “;”, the symbol is meant to also apply to those sentences.) To consider improvements to noted gaps, each chart is followed by a list of recommendations. Some recommendations may address more than one gap.





RECOMMENDATIONS

Each recommendation is characterized in two ways:

1. According to its implementation priority as determined by Conservancy and Municipal input
 - Near-term (NT – within the next 6 months)
 - Short-term (ST – within the next year)
 - Medium-term (MT—within the next two to three years)
 - Long-term (LT – beyond three years)
 - Ongoing (recommendations currently underway and should continue as such).

This is not to say that the continuation of the Township's many other current, notable, and successful contributions to sustainability are in any way discouraged.

2. Second is whether the recommendation removes obstacles to, creates incentives for, or sets standards for achieving sustainability.

If the SCA is being used in conjunction with the update of a Comprehensive Plan, or other policy, plans and regulations, recommendations relevant to any specific updates can be noted separately.

SUSTAINABLE PRACTICES AND ISSUES EVALUATED

During the review of municipal policies, plans and regulations, the inclusion or promotion of the following issues and sustainable practices within documents are recorded and evaluated.

Natural Resource Protection

- Floodplain Regulations
- Riparian Buffer Regulations
- Woodland Protections
- Prime Agricultural Soil Protections
- Wetlands Regulations
- Steep Slopes Regulations
- Rare Species Protection

Water Quality and Quantity *Water Conservation*

- Prevent depletion of groundwater and surface water supplies
- Permit/promote harvested/recycled water (e.g., greywater systems, rain barrels) use
- Identify native and climate resilient plants for use in required landscaping plans
- Promote community gardens, edible gardens, multi-functional riparian buffers, or landscaping that doesn't require watering as a landscaping option for required landscaping plans
- Encourage the use of low-flow or water efficient fixtures (i.e. Energy star or Watersense labeled) beyond what is required in the building code
- Encourage the use of recycled rainwater and graywater for exterior and other non-potable uses

Water and sewer infrastructure

- Utilize existing public water/sewer lines before expanding or increasing capacity
- Use the future land use plan to guide expansion of water, sewer, stormwater capacities
- Maintain comprehensive plan and sewage facilities plan (Act 537) consistency
- Encourage spray/drip irrigation rather than stream discharge for non-sewered areas

Stormwater management

- Include green stormwater infrastructure practices in Subdivision and Land Development and Stormwater Management ordinances
- Include low impact development techniques in municipal ordinances
- Require routine maintenance of stormwater management facilities
- Consider stormwater impact fees to fund municipal stormwater management/BMPS and retrofits
- Require new development to provide innovative stormwater/BMPS including green roofs, islands within cul-de-sacs, or vegetated bioswales
- Incorporate best practices for stormwater management on municipal lands

Land Use and Community Character



Land Use Planning

- Steer growth and new development to the most appropriate (i.e. away from flood-prone areas, where public infrastructure exists) places within community/region
- Participate in multi-municipal/regional land use planning
- Ensure planning policies, documents, regs. Are consistent with county and regional plans
- Increase density and mix of uses in urban and village areas where appropriate
- Encourage and/or incentivize infill development and redevelopment of previously disturbed lands
- Allow for traditional neighborhood development
- Consider use of transferable development rights
- Update comprehensive plan to promote sustainability and resiliency

Character and Aesthetics

- Protect through zoning the community's significant historical resources
- Permit through zoning the adaptive reuse of historic buildings
- Protect through ordinance incentives significant cultural and scenic resources
- Enact ordinances limiting both noise and light pollution



Climate Resiliency

Greenhouse Gas Reduction/ Mitigation

- Enact ordinances to allow live-work units, home-based businesses, and mixed-use dwellings
- Establish energy efficiency targets for new developments and redevelopment projects beyond the 2015 IECC (international energy conservation code)
- Promote and incentivize reforestation and natural resource restoration on open space
- Encourage use of alternative transportation (public transit, bikes, walking)
- Develop, adopt and implement a climate action plan to reduce greenhouse gas emissions
- Set a municipal greenhouse gas emission reduction goal
- Encourage the use of recycled and local building materials

Climate adaptation/resiliency

- Conduct a community vulnerability assessment (i.e., extreme flooding, extreme heat, etc.)
- Adopt the Chester County hazard mitigation plan
- Utilize the comprehensive plan to address the vulnerability assessment





Alternative Energy and Energy Conservation

Renewable Energy

- Allow solar installations by-right when accessory to a principal use
- Establish energy efficiency targets for new developments and redevelopment projects beyond the 2015 IECC (international energy conservation code)
- Plan for areas for commercial or utility-scale solar farms and provide for through zoning
- Establish a minimum percentage of solar-oriented lots or buildings in new developments
- Permit small wind energy conversion systems in all zoning districts
- Include an energy element in the comprehensive plan
- Adopt the most recent international energy conservation code
- Permit methane generators within agricultural areas and provide for through zoning
- Allow for electric vehicle charging stations within the zoning ordinance and at municipal buildings and facilities

Energy Efficiency and Conservation

- Encourage new residential/commercial buildings to be designed to achieve or follow LEED certified or energy star standards
- Incentivize new buildings to meet the standards of the 2018 IECC (international energy conservation code)



Mobility And Transportation

Bicycle And Pedestrian Transportation

- Establish sidewalks in residential, village, downtown areas
- Establish a pedestrian circulation plan that links neighborhoods with schools, parks, commercial centers, etc. Through sidewalks and trails
- Require bike racks at appropriate locations in new/infill developments
- Promote the use of trails as a transportation alternative
- Adopt an official map that includes desired sidewalk and trail rights-of-way
- Promote the use of trails as a transportation alternative
- Require the establishment and maintenance of pedestrian/bike trails that connect to public facilities, parks, open space, schools, business/shopping

Roads And Streets

- Use future land use plans to direct expansion of road capacities
- Maximize existing road capacity (e.g., traffic calming, transportation demand management, etc.) Before constructing new roads
- Plan road improvements to prioritize safety and pedestrian/bike uses
- Adopt an official map that includes desired street and road rights-of-way to provide through-connections

Parking

- Ordinances should incorporate GSI practices including porous pavement, shade trees, landscaped buffers in parking lots
- Permit on-street parking wherever possible and appropriate
- Permit shared parking in non-residential zoning districts



Community Health and Safety

Public Health and Safety

- Require street trees and sidewalks in residential areas and village/downtown areas
- Develop policies and actions that improve regional air quality standards
- Plan for cooling stations and other climate adaptation needs, potentially in partnership with neighboring municipalities

Solid waste and Recycling

- Set goals for solid waste reduction, beginning at the municipal level
- Offer community composting including food waste and vegetative debris such as Christmas trees, potentially in partnership with neighboring municipalities
- Educate the community about composting and recycling
- Adopt a construction debris demolition ordinance or require construction waste management plan

Housing Diversity and Accessibility

- Create incentives to achieve a diverse housing supply that includes affordable housing
- Accommodate higher-density housing within walking distance of businesses, services, employment centers, and public transportation
- Permit smaller lot sizes in appropriate residential districts to maximize land efficiency
- Permit accessory dwelling units, “granny flats” and other multi-generational housing in residential districts
- Permit residential uses on upper floors of commercial uses within villages and town centers

The Sustainable Community Assessment serves as a valuable starting point for pursuing the Sustainable Pennsylvania Certification. While it may not cover all aspects of the certification, it provides an excellent foundation for initiating meaningful conversations about sustainability within the community.



Food Production and Security

- Incentivize through ordinances the permanent preservation of agricultural lands
- Permit a broad range of agricultural uses by right in rural and semi-rural areas
- Permit farmer’s markets, farm stands, community gardens in public/open spaces, and residential vegetable gardens
- Permit the raising and keeping of small animals (i.e. chickens, rabbits, etc.) with complementary structures in appropriate residential districts
- Permit small-scale manufacture of food products within appropriate districts
- Require or encourage fruit and nut trees as part of landscaping requirements

