4.1 Integrate Sustainability into Plan of Conservation and Development and Zoning

20 – 85 Points

Objective

Integrate sustainability principles into land use planning rules.

Complementary action:

- Adapt Permitting Process to Promote Sustainable Development

What to Do

The more you do, the more points you can earn.

1. Review your POCD and adopt a revised POCD that includes the Hazard Mitigation Plan goals* (provided below) and at least 3 additional sustainability concepts** from the list provided below, plus a meaningful preface and index highlighting the integration of sustainability concepts. **(20 points)**

   Submit: A copy of the adopted, amended POCD, noting which updates required in this action were made and site where they are located in the document.

   AND/OR
2. Review your zoning regulations and, after a meaningful process of community engagement (See the Sustainable CT Equity Toolkit), adopt revisions to incorporate at least 3 sustainability concepts**. (Concepts drawn from American Planning Association, "Policy Guide on Planning for Sustainability") **(20 points)**

   Submit: A copy of the adopted, amended zoning regulations, noting where updates required in this action were made.
3. Revise your POCD or zoning regulations to integrate additional sustainability concepts**. **(5 points for each additional sustainability concept included)**

   Submit: A copy of the adopted, amended POCD or zoning regulations, noting where updates required in this action were made.
4. Create an implementation guidance document for your revised POCD that integrates sustainability concepts**. The implementation guide should include the following information for each action item in the POCD: lead department(s); anticipated cost (low-high); possible funding source; and priority level (low-high). **(5 points)**

   Submit: A copy of your adopted, amended POCD that includes the implementation guidance document.

***Hazard Mitigation Goals**:

1. Clearly identify up-to-date natural hazard areas and map them on the future land use map.
2. Adopt land use policies in the POCD that encourage land protection within natural hazard areas and discourage development or redevelopment within natural hazard areas.
3. Provide adequate space for expected future growth in areas outside of natural hazard areas.

4. Adopt an evacuation and shelter plan to deal with emergencies from natural hazards.
5. Adopt transportation policies that limit access to natural hazard areas.
6. Adopt economic development or redevelopment strategies that include provisions for mitigating natural hazards.
7. Institute infrastructure policies that limit extension of existing facilities that would encourage development in areas vulnerable to natural hazards. Limit extension of existing facilities and services that would encourage development in areas vulnerable to natural hazards.

Sustainability Concepts (Note: include all subparts listed below each concept):

CONCEPT I. LAND USE ACTIONS TOWARD SUSTAINABILITY:

A. Reduce dependence on fossil fuels, underground metals, and minerals by promoting:

1. Compact development that minimizes the need to drive.
2. A mix of integrated community uses — housing, shops, workplaces, schools, parks, civic facilities — within walking or bicycling distance.
3. Human-scaled development that is pedestrian-friendly.
4. Public transit-oriented development.
5. Home-based occupations and work that reduce the need to commute.
6. Local food production and agriculture that reduce the need for long-range shipping.

B. Reduce activities that encroach upon nature

1. Guide development to existing developed areas and minimize development in outlying, undeveloped areas.
2. Maintain a well-defined "edge" around each community that is permanently protected from development.
3. Remediate and redevelop brownfield sites and other developed lands that suffer from environmental or other constraints. 4. Promote regional and local designs that respect the regional ecosystems, biotic corridors and natural functions which adequately support and protect people and native plants/wildlife.
4. Create financial and regulatory incentives to infill development; and eliminate of disincentives.

C. Meet human needs fairly and efficiently by

1. Identify the communities impacted by environmental burdens and pollution.
2. Evaluate which communities are disproportionally impacted.
3. Engage in outreach/conversation with those communities. (See the Sustainable CT Equity Toolkit).
4. Co-design, with input or in collaboration, with those communities, a plan to eliminate such burdens and pollution.

CONCEPT II. TRANSPORTATION ACTIONS TOWARD SUSTAINABILITY:

A. Reduce dependence on fossil fuels:

1. Reduce vehicle trips and miles traveled through compact, infill, and mixed-use development.
2. Increase access to, and use of, alternatives to the drive-alone automobile, including walking, bicycling, public transportation, and in the case of communities without adequate population densities to support conventional public transit, strategic implementation steps toward generally broadening mobility options for municipal residents.
3. Calculate the municipality's transit propensity score (a measure of how likely the use of public transportation is), especially as it compares to the current regional and state scores.
4. Develop and use vehicles powered by renewable fuel sources.
5. Design local streets that encourage pedestrian and bicycle use and discourage high-speed traffic.

6. Design streets that support/enhance access between neighborhoods and to neighborhood-based commercial developments.

B. Meet human needs fairly and efficiently, by:

1. Providing access to affordable, efficient transportation alternatives for multiple populations, especially low-income households, elders, and others that cannot or do not own cars (for current and future residents).

CONCEPT III. HOUSING AND BUILDING ACTIONS TOWARD SUSTAINABILITY:

A. Reduce dependence on fossil fuels, extracted underground metals, and minerals:

1. Design and develop solar-oriented housing & buildings.
2. Use regenerative heating and cooling energy alternatives.
3. Provide housing near places of employment.
4. Select building materials with low "embodied energy," which require less energy-intensive production methods and long-distance transport.

B. Reduce dependence on chemicals and unnatural substances:

1. Use chemical-free and toxin-free building materials.
2. Use eco-friendly, non-toxic cleaners in municipal buildings and encourage residents and business owners to use such cleansers.
3. Reduce waste, recycle building waste materials, and promote recycling by residents.
4. Create a community standard for landscape design that minimizes the use of pesticides and herbicides and promotes native/naturalized landscapes.

C. Reduce activities that negatively impact nature:

1. Reuse existing buildings and sites for development.
2. Develop compact and clustered residential areas with reduced minimum lot sizes.
3. Adopt water conservation measures, to minimize environmentally destructive side effects of developing new water sources.
4. Manage stormwater responsibly by reusing and restoring the quality of on-site runoff (for example, constructed marsh or wetlands systems).
5. Reduce or eliminate impervious paving materials.
6. Use recycled building materials, thus helping to minimize the mining of virgin materials.
7. Use "cradle-to-cradle" (life cycle) analysis when choosing materials and construction techniques.
8. Recycle building construction waste materials and use appropriate deconstruction techniques.

D. Meet human needs fairly and efficiently, by providing for:

1. Communities and housing developments that are socially cohesive, in order to reduce isolation, foster community spirit, and enhance resource sharing (for example, cohousing).
2. Housing within the same community that residents in many levels of income can afford.
3. Diverse occupancy in terms of age, social, and cultural groups.
4. Housing located near employment centers.

CONCEPT IV. ECONOMIC DEVELOPMENT ACTIONS TOWARD SUSTAINABILITY

A. Encourage businesses that reduce dependence upon fossil fuels, extracted underground metals, and minerals; for example, businesses that:

1. Reduce employee and product transport vehicle trips.
2. Use regenerative energy alternatives to replace fossil fuels, or reduce dependence on fossil fuels.
3. Do not use or reduce the use of cadmium, lead, and other potentially toxic metals and minerals

that can accumulate in the biosphere.
4. Are locally-based or home-based, reducing or eliminating the need to commute.

B. Encourage businesses that reduce dependence upon chemicals and unnatural substances; for example, enterprises that:

1. Actively seek ways to minimize the use of toxic manufactured substances.
2. Meet or exceed clean air standards.
3. Minimize or reduce use of chemicals and employ proper disposal and recycling mechanisms for these.
4. Use agricultural methods that reduce or minimize use of pesticides, herbicides, and manufactured fertilizers.
5. Use byproducts of other processes or whose wastes can be used as the raw materials for other industrial processes.

C. Encourage businesses that reduce activities that negatively impact nature; for example, enterprises that:

1. Use recycled or by-products of other businesses, minimizing the use of virgin raw materials.
2. Prevent activities that emit waste or pollutants into the environment.
3. Use agricultural approaches that build up rather than deplete topsoil, and conserve or minimize water use.
4. Maintain natural terrain, drainage, and vegetation, minimizing disruption of natural systems.
5. Re-use processed water.

D. Encourage businesses that meet human needs fairly and efficiently; for example, enterprises that:

1. Fulfill local employment and consumer needs without degrading the environment.
2. Promote financial and social equity in the workplace.
3. Create vibrant community-based economies with employment opportunities that allow people economic self-determination and environmental health.
4. Encourage local agriculture, providing a nearby source of fresh, healthy food for urban and rural populations (for example, farmers' markets, community supported agriculture (CSA), independent health-food stores).

CONCEPT V. OPEN SPACE/RECREATION ACTIONS TOWARD SUSTAINABILITY

A. Reduce dependence upon fossil fuels, extracted underground metals, minerals:

1. Provide recreational facilities within walking and bicycling distance.
2. Use local materials and native plants in facility design to reduce transport distances and reduce maintenance.
3. Maintain landscapes and parks with minimal fossil-fuel-powered equipment.

B. Reduce dependence upon chemicals and synthetic substances:

1. Use alternatives to chemical pesticides and herbicides in park and facility maintenance (for example, integrated pest management, planting natives that require fewer inputs).

C. Activities that reduce negative impacts upon nature:

1. Fund open space acquisition.
2. Preserve wilderness areas.
3. Create urban gardens and community gardens.
4. Preserve wildlife habitats and biological diversity in area ecosystems.
5. Establish on-site composting of organic waste.
6. Restore damaged natural systems through regenerative design approaches.
7. Create systems of green spaces and biotic corridors within and among communities.

8. Develop responsible alternatives to solid waste landfills.
9. Use regionally native plants for landscaping.
10. Encourage landscape and park maintenance that reduces the use of mowers, edgers, and leaf blowers.

CONCEPT VI. INFRASTRUCTURE ACTIONS TOWARD SUSTAINABILITY:

A. Reduce dependence upon fossil fuels, extracted underground metals, minerals, by promoting:

1. Facilities that employ renewable energy sources, or reduce fossil fuel use for operations and transport needs.

B. Reduce dependence upon chemicals and synthetic substances, by promoting:

1. Treatment facilities that remove or destroy pathogens without creating chemically-contaminated by-products.
2. Design approaches and regulatory systems that focus on pollution prevention, re-use and recycling.

C. Reduce activities that negatively impact nature:

1. Promote innovative treatment for sewage and effluent to meet or exceed federal drinking water standards while minimizing or eliminating the use of chemicals (for example, greenhouse sewage treatment facilities).
2. Recognize the "cradle-to-grave" and “cradle-to-cradle” costs of waste generation and disposal.
3. Promote composting and gray-water reuse systems, and remove regulatory barriers to those systems.

D. Meet human needs fairly and efficiently, by:

1. Cleaning, conserving, and reusing wastewater at the site, neighborhood or community level, reducing the need for large, expensive collection systems and regional processing facilities.

CONCEPT VII. GROWTH MANAGEMENT ACTIONS TOWARD SUSTAINABILITY:

A. Reduce dependence upon fossil fuels, extracted underground metals, minerals, by promoting:

1. Development near existing transport systems; minimizing need for new road and highway construction.

B. Reduce activities that negatively impact nature, by promoting:

1. Appropriate development and population growth policies linked to carrying capacity of natural systems and community facilities.
2. Development patterns that respect natural systems such as watersheds and wildlife corridors.

C. Meet human needs fairly and efficiently, by promoting:

1. Understanding current demographics and projected demographics for the community.
2. Planning and promoting growth management policies that recognize the values of a diverse local population and economy. (See the Sustainable CT Equity Toolkit).

CONCEPT VIII. FLOODPLAIN MANAGEMENT ACTIONS TOWARD SUSTAINABILITY

A. Promote activities that provide protection for the community from flooding and other damages:

1. Guide development away from floodplains.
2. Guide development away from barrier beaches.
3. Preserve or restore wetland areas along rivers for natural flood control.

CONCEPT IX. WATERSHED PLANNING/MANAGEMENT ACTIONS TOWARD SUSTAINABILITY

A. Reduce activities that negatively impact nature:

1. Preserve and enhance water quality.
2. Reduce water use.
3. Recharge groundwater basins.
4. Use flood control and stormwater techniques that enhance and restore natural habitats.
5. Prevent wetlands destruction; restore degraded wetlands.

CONCEPT X. RESOURCE CONSERVATION ACTIONS TOWARD SUSTAINABILITY:

A. Reduce dependence upon fossil fuels, extracted underground metals, and minerals:

1. Minimize energy use.
2. Encourage the development and local siting of renewable energy generation.
3. Discourage the use of products that utilize packaging derived from non-renewable, non-degradable resources.
4. Promote recycling, especially of waste materials derived from non-renewable, non-degradable resources.
5. Develop community gardens that reduce the need for long-range transport of food and associated consumption of fossil fuels.

B. Promote activities that have multiple benefits to the community:

1. Preserve and plant trees and other vegetation that absorb carbon dioxide and air pollutants.

CONCEPT XI. PLANNING PROCESSES/EDUCATION ACTIONS TOWARD SUSTAINABILITY:

A. Reduce dependence upon fossil fuels, extracted underground metals, and minerals; for example, by:

1. Encouraging and enabling residents to use transport other than diesel- and gasoline-powered vehicles.

B. Reduce dependence upon chemicals and unnatural substances; for example, by:

1. Educating citizens and public servants about both short- and long-term risks associated with the use and disposal of hazardous materials.

C. Reduce activities that negatively impact nature; for example, through:

1. Educational efforts to reduce levels of consumption and waste generation at the household and community levels.

D. Meet human needs fairly and efficiently by:

1. Integrally involving local residents in setting the vision for and developing plans for the community and region.
2. Establish avenues for meaningful participation in decision-making for all residents and in particular for historically disadvantaged people.
3. Provide for equitable educational opportunities for all members of society.
4. Promote retraining of those workers displaced in the short-term by a shift of industries and businesses to a more sustainable economy.

Potential Municipal and Community Collaborators

Staff from the planning and zoning, engineering, emergency management, public works, town council, and fire departments and representatives from the planning and zoning, inland wetlands, conservation, and energy commissions could be helpful in implementing this action.

Funding

For a complete listing of potential funding opportunities to assist with implementing Sustainable CT Actions, please visit the Sustainable CT Grants Portal, which is searchable by Action. Please also visit the Sustainable CT Resources for Certification page for opportunities for technical assistance and other supports.

Resources

Toolkits, Calculators, Guidance Documents

- American Planning Association, "Policy Guide on Planning for Sustainability"
- State of CT, Office of Policy and Management, "Conservation & Development Policies: the Plan for Connecticut 2013-2018"
- American Planning Association, "The Sustainability Policy Framework."
- American Planning Association, "Service Report Number 560 Hazard Mitigation: Integrating Best Practices into Planning,"
- Capitol Region Council of Governments, Sustainable Land Use Regulation Project
- Land Use Law Center, Pace University & US Green Building Council, "Technical Guidance Manual for Sustainable Neighborhood Development Rating System to Evaluate and Amend Local Plans, Codes, and Policies"
- Acadia Center, "Community Energy Vision, Action Guide for Connecticut"
- Sustainable CT Equity Toolkit)

Organizations and Relevant Programs

- American Planning Association
- Connecticut Conservation Districts

Why This Matters

Chapter 126 Section 8-23 of the Connecticut General Statutes requires each municipality to update a Plan of Conservation & Development (POCD) at least once every ten years through its designated land use commission. Although this statute prescribes several elements to be included in the document to guide growth, development, and preservation, your community can address its unique context and initiatives by identifying overarching strategies and incorporating specialized analyses or studies.

Your POCD is your community's guide and policy document and should be the basis for infrastructure and development related decisions, particularly in capital budgeting and project reviews. Integrate the principles of sustainability into the plan to ensure that they become part of your community's development.

Historically, planning and zoning separated commercial and residential uses. This practice promoted car-dependent sprawl. Increasingly, communities around the country are pursuing Smart Growth, transit-oriented development (TOD) and other sustainable, supportive planning and zoning strategies that promote more compact, walkable, mixed-use, environmentally sensitive communities with a range of transportation and housing choices. Demand for such communities comes from individuals at all points in their life.

Benefits

The POCD provides a framework for consistent decision-making. It establishes a long-range vision for the community and provides guidance and recommendations on future land use. As a vehicle for strategic planning, your land use commission may also identify implementation actions through which it achieves its intended goals. These implementation actions often stipulate either the creation of, or edits to, legally-enforceable zoning regulations, and mechanisms to guide development and protect resources. Including sustainability practices provides breadth and depth to multiple areas such as hazard mitigation, site design, transportation, economic development, infrastructure, and housing.

Results include reduced greenhouse gas emissions, enhanced sustainable economic development, reduced

transportation costs, increased active transportation, and community cohesion, and more types of housing and more availability of affordable housing.

CT Success Stories

Integration of sustainability into POCD:

- Mansfield, CT: Mansfield Tomorrow: Plan of Conservation and Development

Integration of sustainability into zoning regulations:

- Hartford, CT: Hartford Zoning Regulations and Zoning Map

Credit for Past Action

- This action must be completed within 10 years prior to application submission.