General Development Policies: Phase II

Draft Guiding Principles and Policy Statements for Air, Land and Water



Below is a compilation of the most recent draft of each of the guiding principles and policies for air, land and water that have been drafted over the last several months of GDP stakeholder meetings. Revisions reflect the discussion at the 1-18-06 Stakeholder meeting.

PURPOSE OF ENVIRONMENTAL GDP: Minimize negative environmental impacts of land use and land development.

GUIDING PRINCIPLE 1: Make the protection of our natural environment a priority in land use and development decisions.

POLICY 1.a: Support local and regional efforts to inventory natural features to enable identification and protection of environmentally sensitive areas.

The intent of this policy is to <u>support</u> proactively identifyication of environmentally sensitive areas to provide better guidance for acquisition and protection, and to determine where more environmentally sensitive land use and development practices are especially warranted. Identifying environmentally sensitive areas will be important to do at a regional scale, especially to facilitate linking these areas across jurisdictional boundaries. But, it will also be important that this information is available and utilized at a local level.

Data from the *Open Space Framework Plan* and City/County GIS information can be used as the foundation for a local and regional inventory of natural resources. However, the data should be enhanced with additional information and continually updated. The intent is to present the most accurate information possible to provide the foundation <u>foref</u> sound decision making. Implementation of this policy will likely require additional funding/resources to enhance current data and to delineate areas of highest environmental sensitivity.

POLICY 1.b: Identify environmentally sensitive areas in land use plans and development proposals and address how they will be protected or mitigated.

Environmentally sensitive areas are characterized by the presence of natural features such as significant wetlands, streams and floodplains; tree canopy; and/or topography and are not limited to those addressed by existing ordinances and regulations. The following guidance should be used to determine if the natural feature is of a significance to protect and/or mitigate:

- 1. Could it link to existing or future protected sites or undisturbed areas?
- 2. Does it have rare or unique habitat or features?
- 3. <u>IsAre</u>-there a diversity of species present?
- 4. Is it identified on an adopted plan as an area of environmental concern?
- 5. Does it have multiple environmental benefits?

A "yes" to all of these questions is not needed for a feature to be environmentally significant. However, the more "yes" answers certainly heightens the probability of significance.

In addition to the five guidelines listed above for determining the significance of natural features, when considering topography, the concern is especially with naturally occurring slopes, particularly near water, that are of sufficient height and steepness to cause problems such as accelerated erosion or increased flooding when disturbed.

The intent of this policy is to better understand the existing environmental conditions and to ensure that plans for future development can minimize potential impacts to the natural environment. This includes protection/ mitigation of the natural feature and, even more importantly, the characteristics that make it environmentally significant. Further, the intent is to allow the potential impacts to the various aspects of the natural environment to be evaluated concurrently to better understand any potential trade-offs.

Identification and protection of environmentally sensitive areas in land use plans (i.e., small area plans) will typically be at a broader scale, providing less detail than can be achieved in a specific development plan. Additionally, while both the land use plans and development proposals may propose various alternatives for protecting or mitigating environmentally sensitive areas, the land use plans typically will not "choose" among the alternatives. Thus the land use plans will provide flexibility for when the property is actually proposed for development or redevelopment. A development plan, on the other hand, will identify which of the various alternatives will be utilized to address the impacts.

The implementation of this policy should recognize that, when feasible, protection is typically preferred over mitigation. The protection and/or mitigation of an environmentally sensitive area may be influenced by the conditions of the watershed in which it is located. Implementation should include additional research on ways to protect the natural environment (such as incorporating environmentally sensitive areas into required open space; providing undisturbed buffers for natural features; public purchase for parks/nature preserves; conservation easements; and dedication to home owner's associations or parks), as well as on developing innovative techniques for mitigating impacts. Additionally, implementation of this policy will require that our current environmental data be continuously refined and updated.

POLICY 1.c: Consider environmental opportunities and constraints, including watershed conditions, when identifying appropriate future land uses in area plans.

Although Policy 1.b provides guidance for addressing environmentally sensitive areas in land use plans, Policy 1.c seeks to better integrate consideration of environmental conditions when determining future land uses in the area planning process. For example, if greater emphasis is placed on these conditions in the area planning process, it is more likely that areas with constraints (such as significant topography and hydrology, groundwater contamination, or voluntary deed restrictions) would be recognized and the most compatible type of future land use could be identified.

Additionally, land use plans should recognize that within Charlotte's sphere of influence there are several watersheds (Yadkin, Central Catawba, etc), at varying stages of development, that provide a variety of uses (endangered species habitat, recreation, drinking water). These differences may require distinctive development patterns and land uses. Land use plans should identify a development vision appropriate for the watershed and guide future development recognizing the cumulative impacts on water quality.

POLICY 1.d: Provide the education, information and outreach to facilitate the successful implementation of environmental policies.

The intent is to raise the awareness and understanding of the importance of our natural environment (including air, land and water) and how it can be protected, and to provide a broader context for communicating the GDP.

Part of implementing this policy should be providing a better understanding of how various policies and regulations can work together, rather than at cross-purposes to ensure environmental protection. Also part of this policy should be to seek out partnerships to provide information and assistance to ensure the ongoing management of natural areas within developments. While protected and restored natural areas generally require much less maintenance than conventional landscapes, basic maintenance functions may not be familiar to many property owners. Additionally, property owners may not understand the value of protecting the natural areas. Therefore ensuring that ongoing management is successful could include such things as partnering with the private sector to provide property owners with educational material or

assisting in establishing an institutional structure for long-term permanent management of the site.

POLICY 1.e: Target environmentally sensitive areas when acquiring land for public protection.

Land acquisition for public purposes that provide an opportunity for protection of environmentally sensitive areas should focus on such areas. Examples of such public purposes could include passive parks; nature preserves; greenways; and cultural heritage, natural heritage or historic sites.

GUIDING PRINCIPLE 2: Facilitate a land use pattern that accommodates growth while respecting the natural environment.

POLICY 2.a: Pursue strategies to encourage and facilitate redevelopment of abandoned/underutilized sites and development of vacant sites in built up areas (infill).

A greater emphasis on infill and redevelopment that is designed to be environmentally sensitive and is located appropriately will help to: 1) accommodate some growth that might otherwise spread out to undeveloped areas; 2) reduce the growth in vehicle miles traveled (VMT) per capita; and, 3) improve onsite environmental conditions.

It is particularly important that infill and redevelopment be located where it can be served by existing and/or planned infrastructure and services and that it be designed to be integrated with and connected to the surrounding area. Additionally, improving the existing site conditions (e.g., removing hazardous materials, adding trees and vegetation, removing impervious areas like large surface parking lots) should be emphasized in redevelopment projects. One way to make sure sites with groundwater contamination are safe for redevelopment is to utilize the Brownfields program if the project is eligible.

While infill and redevelopment are both valuable strategies for ensuring efficient use of land, redevelopment can be even more desirable when the project improves existing conditions. This distinction should be made in prioritizing redevelopment strategies, particularly in providing any incentives.

POLICY 2.b: Facilitate the incremental development of well-designed and well-connected mixed/multi-use development in appropriate locations

Existing policies and regulations already provide direction for achieving a complementary mix of land uses within the same building and/or on the same site, which has been identified as a strategy to help reduce both VMT per capita and land consumption per capita. However, while achieving such a mix within the same building and/or on the same site is often ideal, a similar outcome can be achieved incrementally as single uses are developed if they are: 1) located so they are consistent with adopted land use plans and can be served by a variety of transportation modes; 2) complement existing and/or planned land uses to create a compatible mixture in the immediate area; and 3) are designed to be integrated with and connected to each other and the surrounding area.

Enhancing the guidance provided in area plans for mixed/multi-use development and non-residential development will be a key tool to help facilitate this type of "incremental mixed-use." This type of development can help to reduce the length, and possibly the number of automobile trips that people make to work, shop and recreate. It may sometimes also help to reduce the amount of land and/or impervious area needed to provide supporting infrastructure and services.

POLICY 2.c: Encourage more of our new development to be located where transportation facilities, public utilities and services already exist, or are planned, to minimize impacts to undeveloped areas.

Focusing development where it can best be supported by existing and planned infrastructure and services

can help to make the most efficient use of infrastructure and land. On a per capita basis, this can help to reduce VMT, land consumption, impervious surface and land disturbance, resulting in less impact on the natural environment.

POLICY 2.d: Encourage partnerships (e.g., joint use) to enable the sharing of both public and private facilities.

Sharing of facilities has the potential to reduce land consumption and impervious area by making more efficient use of land, buildings and parking. An example of such a joint use might be a church and an abutting office building sharing some parking. Since the two uses have different periods of peak usage, the needs of each could be accommodated together, with less overall impervious surface.

POLICY 2.e: Integrate plans for existing and future bus routes/service improvements and expansions with adopted future land use plans.

The ability to serve future land uses with CATS bus service has become a key consideration in the development of land use plans. However, adopted future land uses have yet to be given similar importance in the development of future bus routes/service improvements.

The intent is to provide CATS bus service to areas planned for higher density development and other land uses particularly supportive of transit. In addition, the intent is to make sure the development and surrounding area are designed to support air quality goals and to make it easy for people to use the bus service (i.e., conveniently located bus stops/shelters, safe walkways and crosswalks, direct connections).

POLICY 2.f: Ensure that public facilities (including schools, parks, libraries, recreation facilities, etc.) are well connected to the surrounding area and to each other and take advantage of joint use opportunities.

The intent is not only to make it easy for people to walk or bicycle to nearby public facilities, but also to shorten automobile trips to these facilities and to connect them to each other and to transit when possible. Although students often do not live near the schools they attend, these facilities still need to be well connected to the surrounding area as they serve other functions (e.g., meeting rooms, events, playgrounds, tracks, voting) for area residents. If public facilities are located together (joint use), they may be able to make more efficient use of the site as well as reduce the need for people to make multiple trips to various facilities.

In addition to making sure public facilities are well connected, it will also be important from a VMT perspective to ensure that there are a sufficient number of such facilities and that they are located appropriately to serve the population without necessitating long automobile trips.

GUIDING PRINCIPLE 3: Promote and enable environmentally sensitive site designs.

POLICY 3.a: Enable site designs and construction practices that: 1) facilitate the use of alternative modes of transportation and the reduction of ground level temperatures; 2) minimize impacts to natural features; 3) reduce the amount and improve the quality of stormwater run-off; and 4) use water efficiently.

The intent of this policy is to consider and minimize onsite environmental impacts from development during the site design process. Identifying the characteristics of environmentally sensitive site design takes the "guess work" out of the site design by specifying what should be addressed up front, while allowing flexibility on how it will be addressed.

Below is a list of <u>some</u> characteristics of environmentally sensitive site design. Not all <u>of the</u> characteristics are applicable in every development.; the <u>aApplicability of the characteristics</u> is dependent on the type, intensity and location of the development.

- Preserves and/or restores environmentally sensitive areas and connects them to other significant natural features as much as possible and integrates them into the development when appropriate,
- Minimizes impervious surfaces, including building footprint and parking area.
- Uses low maintenance native vegetation as much as possible.
- Shades constructed/impervious surfaces (e,g, with landscaping) and/or considers replacing them with vegetated surfaces.
- Emphasizes pedestrian mobility, comfort and safety.
- Facilitates conservation of water, energy and other natural resources
- Seeks to minimize the amount and improve the quality of storm water run-off
- Minimizes site disturbance and related erosion and sedimentation.

Part of implementing this policy will be to ensure that existing ordinances and regulations result in environmentally sensitive site design and construction practices; that staff, citizens and elected/appointed officials understand the importance/purpose of the various regulations; and that the ordinances and regulations have enough flexibility to ensure that unique circumstances and/or specific site constraints can be addressed in the most appropriate manner. Encouraging the use of innovative design solutions, materials and construction practices should also be part of implementing this policy.

POLICY 3.b: Minimize impacts to the City's tree canopy to allow it to flourish and to be a healthy and viable part of our environment. Promote the protection of the City's tree canopy.

Although protection/mitigation of the tree canopy is addressed in Policy 1.b in regards to environmentally sensitive areas, the intent of this policy is to ensure tree regulations are adequate to achieve desired results including: 1) making sure trees in parking lots, urban districts and other "hostile" environments can grow to their full potential; 2) ensuring that tree save requirements not only preserve our tree canopy, but also minimize impervious surface; and, 3) promoting opportunities to "revegetate" areas that were previously developed.

GUIDING PRINCIPLE 4: Consider the environmental impacts of land use and development comprehensively and strive to reconcile the various environmental concerns with each other and balance them with the other land development considerations.

POLICY 4.a: Raise awareness and understanding of the environmental costs and benefits of land development and better incorporate this information into the decision making process.

The intent is to better understand how land use and development negatively impact the natural environment and to determine what can be done to mitigate these impacts. The focus should include awareness of costs and benefits including: tangible and intangible; site specific and overall; public and private; and, short and long term. Health-related impacts should be included in the discussion.

POLICY 4.b: Ensure that implementation of the City's various land development - related policies and regulations minimize the overall environmental impacts that result from the need to accommodate future growth.

The aim is to ensure that when policies and regulations are implemented that the results minimize the environmental impacts of land use and development. In particular, this policy is meant to address the issue of competing interests between various policies and regulations recognizing that area and site conditions may influence how land can be developed. Implementation of this policy will likely require a review of, and changes to existing and proposed policies, regulations and practices.

POLICY 4.c: Ensure that public projects are designed and constructed to minimize environmental impacts.

Recognizing that public projects <u>may beare typically</u> subject to state and federal regulations, <u>in addition</u> to/or instead of rather than local regulations, the intent is to make sure that local public projects also follow or exceed the guidance provided in these GDP. Part of ensuring that the GDP are being followed is to understand that location and site conditions may influence implementation. For example, an infrastructure project in a critical watershed area might need to be designed differently than one in a transit station area.