

RE: OFFICE OF ZONING

2009 JUN -4 AM 8:33

IN REPLY REFER TO:  
NCPC File No. ZC #08-06-9

June 3, 2009



401 9th Street, NW  
North Lobby, Suite 500  
Washington, DC 20004  
Tel 202 482-7200  
Fax 202 482-7272  
[www.ncpc.gov](http://www.ncpc.gov)

Chairman Anthony Hood  
Zoning Commission for the District of Columbia  
441 4<sup>th</sup> Street NW, Suite 210 South  
Washington, DC 20001

RE: Comments on Proposed Amendments to Zoning Regulations – Sustainability

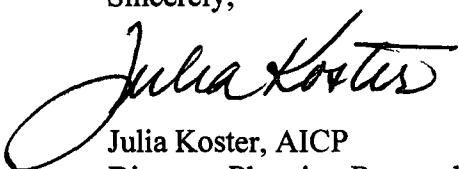
Dear Mr. Hood:

NCPC staff appreciates the opportunity to comment on the District of Columbia Office of Planning's general recommendations for changes to the zoning regulations in relation to sustainability. This is a timely and important issue, and we have appreciated the detailed studies and work products from the consultants and staff team on this issue.

The attached comments are provided by NCPC staff for your consideration. These comments are based on the public hearing report for ZC 08-06-9, Proposed Amendments to Zoning Regulations – Sustainability, dated May 11, 2009. NCPC staff's comments reflect both general planning perspectives and specific federal interest issues. These comments have not been approved by official Commission action, and additional comments may be provided in the future, particularly as staff and our Commission has the opportunity to review updates.

If you have any questions, please call me at 202-482-7211 or Amy Tarce at 202-482-7241.

Sincerely,

A handwritten signature in black ink that reads "Julia Koster".

Julia Koster, AICP  
Director, Planning Research and Policy Division

Attachments

cc: District of Columbia Zoning Review Taskforce,  
Travis Parker, District of Columbia Office of Planning  
Mike McGill, General Services Administration  
Ralph Newton, Department of Defense  
Peter May, National Park Service

ZONING COMMISSION  
District of Columbia  
CASE NO. 08-06-9  
EXHIBIT NO. 23 (ORIG)

## **NCPC Comments on the Proposed Amendments to Zoning Regulations - Sustainability**

NCPC staff commends the Government of the District of Columbia in its efforts to develop sustainable development standards in a comprehensive manner in its Zoning Regulations. NCPC's policies and the policies of the federal government strongly support moving towards sustainable practices and ensuring a sustainable capital city, and we look forward to continuing to coordinate closely with you on this topic.

DCOP's recommended text and policy changes within the District of Columbia zoning regulations do not represent a change in zoning and land use for federally-owned property and federally-owned property within the District is not subject to local zoning regulations. However, the *Comprehensive Plan for the Nation's Capital: Federal Elements* (Federal Elements) contain many policies that align with the intent of the proposed zoning revisions to address sustainability in the District's development review process. Distinct sections of the Federal Elements include policies that encourage the federal government to protect environmental and historic resources, prioritize transit-oriented development in locating its federal workplaces, implement energy efficiency and conservation in buildings and transportation programs, and support local economic development of underserved areas. We have appended many of the relevant policies to this comment letter to assist your review.

Last month, NCPC adopted the Monumental Core Framework Plan (Framework Plan) which includes sustainable strategies to address the integration of green infrastructure into highly-urbanized sections of the city, investment in high-performance buildings and renewable energy production, flood prevention through stormwater management, and the restoration of natural habitats in parkland along streams and rivers. Pages 28 to 31 of the Framework Plan, which contains the specific strategies, are attached as Appendix A to this letter.

In addition to Federal Elements policies supporting sustainable development, there are several federal directives that promote the development of high-performance buildings and sustainable sites for federal projects. The 2007 Energy Independence and Security Act requires federal buildings to be carbon-neutral by 2030. Executive Order 12902, Energy Efficiency and Water Conservation in Federal Facilities and the Energy Policy Act of 1992 (EPAct) (42 U.S.C. 13211-13219) requires federal agencies to reduce energy consumption of their facilities and install energy and water conservation measures. Executive Order 12902, Energy Efficiency and Water Conservation in Federal Facilities, and Executive Order 13123, Greening the Government through Energy Efficient Management, were designed to meet and exceed the energy efficiency and water conservation provisions contained in EPAct and increase investments in solar and other renewable energy. One with a direct impact to private development in the District is Executive Order 13123, which mandates federal agencies entering into leases, including the renegotiation or extension of existing leases, to incorporate provisions that encourage energy and water efficiency and for build-to-suit lease solicitations to include criteria encouraging sustainable design and development, energy efficiency and verification of building performance. Other federal regulations that support environmental protection and sustainable development

practices include the National Environmental Policy Act, as amended, (42 U.S.C. § 4321) and the Energy Policy and Conservation Act (42 U.S.C. § 6201 et seq.).

### ***Integrating Land Use and Mobility***

#### **Recommendation 1: Transportation Demand Management**

This recommends identifying and requiring Transportation Demand Management (TDM) features in large new buildings to address trip generation and encourage alternate transportation. As many large private sector buildings in the District lease to federal tenants, these measures will affect some federal agencies and employees.

Consistent with Federal Element policies encouraging steps to address trip generation and encourage alternate transportation options, we support this proposal to require TDM measures in large new buildings. This proposal should also cover campus and institutional settings.

NCPC requires TDM strategies as part of a transportation management plan for all federal project applications that will increase the employment level at a worksite to 500 or more. Our understanding is that the District Department of Transportation (DDOT) is currently preparing a list of proposed TDM measures. We encourage DDOT to consider the TDM policies in the Federal Elements (refer to Appendix B.1, attached) as a model for the District's TDM strategies. As DDOT develops drafts of proposed TDM measures, we look forward to reviewing this list and identifying areas of potential coordination.

#### **Recommendation 2: Accessory Dwelling Units**

This recommends allowing both internal and external (free-standing) accessory dwelling units (ADUs) for single-family dwellings as a matter-of-right subject to impact and design conditions. The Federal Elements Federal Workplace Chapter, under the Development of Workplaces with Communities section, Working Environment subsection directs the federal government to: "Support local agency efforts to create new housing options where federal workplaces are located or are planned to be located or expanded." (Policy 10, page 53). Furthermore, the recommendations for ADUs would support policies 9 and 11 in this section of the Federal Elements (see Appendix B.3, attached) that direct the federal government to consider the availability of a variety of housing close to federal employment to encourage convenient commuting of federal employees by non-single occupant vehicle.

As noted in our comments on low to moderate residential zoning, NCPC supports local agency efforts to create new housing options where federal workplaces are located or are planned to be expanded. This recommendation and those for Transit-Oriented Development below support Executive Order 12072, Federal Space Management, requiring federal agencies to consider the availability of adequate low- and moderate-income housing for federal employees and their families on a nondiscriminatory basis; and the availability of adequate public transportation and parking at federal employment sites; as well as the impact on local economic development and compatibility with state, regional and local development, redevelopment, or conservation objectives. As such, this proposal is an appropriate measure to add to the ways that the District

can accommodate future growth, and provide housing options that may be more affordable and/or address diverse needs, including those of the federal workforce.

### **Recommendation 3: Transit Oriented Development (TOD)**

The recommended Transit Oriented Development (TOD) strategies propose to apply TOD concepts for properties adjacent to Metro stations, streetcar lines and high service bus corridors, except in low and moderate density zone districts. The proposed strategies seek to first define transit accessible areas; identify desired and appropriate land use regulations for all transit accessible areas; and finally, to determine densities and use mixes for individual transit accessible areas.

In general, TOD strategies encouraging compact, mixed use development around transit locations will further federal policies addressing the criteria for locating federal facilities in the Monumental Core (see Appendix B.2, attached) and considerations for the health, safety, welfare, convenience, and productivity of federal employees in the region found in the Federal Workplace chapter, Working Environment subsection of the Federal Elements (see Appendix B.3 attached). As many federal properties and facilities, as well as federally leased spaces, are located around transit stations, NCPC requests continuing coordination on this topic with the District so that we can work effectively towards our mutually-held TOD goals. As an example, NCPC is currently looking at opportunities to activate the ground floor spaces of federal facilities, especially in commercial and mixed-use areas of the city.

Encouraging transit-supporting densities and uses is a critical component for transit-oriented strategies to achieve the optimum environmental and economic benefits noted in the Zoning Commission report. While the approach described is an important first step, over the long-term we encourage the District to consider allowing TOD strategies for all zones. More tailored applications that account for the unique qualities of various neighborhoods may be appropriate in low and low-moderate zones if supported by other public objectives and evaluated through a public process. Locating *new* transit service in an already developed area will require ongoing coordination to balance multiple public objectives; however, it is important to encourage over the long term compact, mixed use development around transit lines and stations that ensures transit-supporting densities and opportunities to direct future growth towards these areas.

In regards to defining transit-accessible areas, it is important to look at the whole transit system in the District, to ensure that transit investments are maximized and efficiently provided, and to ensure that multiple public objectives are considered and addressed. As noted in the District's 2001 TOD Task Force Report, "One of the most important decisions in developing TOD strategies will be geographically defining where it should be applied." For *new* transit service, and particularly for the referenced street car lines, it is critical that the line locations and overall system be identified and reviewed through a public process prior to designating or mapping TOD areas for this transit service.

An issue of federal interest involved in this alignment discussion is the technology used for the streetcar system. The District has expressed a preference for streetcar technologies that use

overhead wires, which may have negative impacts on protected view-sheds and historic landscapes. Overhead wires are prohibited by federal law in the L'Enfant City and Georgetown. Installing overhead wires in these areas would also be inconsistent with goals in both the District and Federal Elements that includes policies intended to prevent obstruction of views and vistas along the rights of way of L'Enfant Streets. Finally, the original L'Enfant Plan is listed in the National Register of Historic Places and the District of Columbia Inventory of Historic Sites, reflecting a shared commitment to protect this valuable resource. NCPC has a central role in the coordinated efforts of the federal government to protect the legacy of the L'Enfant Plan. (See the Federal Elements policies in the following sections: National Capital Image, Stewardship of Historic Properties, and the Historic Plan of Washington, D.C.; Appendices B.5, B.6, and B.7; attached). NCPC staff is committed to continue to work with the District to explore alternative streetcar technologies that could meet environmental, transportation and urban design goals.

### ***Energy Conservation and Renewable Energy Production***

**Recommendation 4: Increased Energy Efficiency**

**Recommendation 6: Sustainable Energy Features**

**Recommendation 7: Renewable Energy Generation**

**Recommendation 9: District Energy Systems**

As mentioned in our overall comments, there are several federal laws and regulations that benefit from the recommended Zoning Regulations revisions for Energy Conservation and Renewable Energy Production. These include:

- the 2007 Energy Independence and Security Act;
- Executive Order 12902, Energy Efficiency and Water Conservation in Federal Facilities, the Energy Policy Act of 1992 (EPAct);
- Executive Order 12902, Energy Efficiency and Water Conservation in Federal Facilities, Executive Order 13123, Greening the Government through Energy Efficient Management;
- the National Environmental Policy Act, as amended; and
- the Energy Policy and Conservation Act.

The Federal Workplace chapter of the Federal Elements also provides policies promoting energy efficiency in federal buildings. Under the Development of Workplaces with Communities section (page 52), it states that the federal government should:

1. Use innovative energy conserving techniques in the design and construction, operation, location, and orientation of federal workplaces.
2. Implement methods to reduce consumption of nonrenewable energy resources and to reduce the consumption of energy through energy efficient techniques as soon as practicable at all federal workplaces or when planning these facilities.

While federal laws mandate and the Federal Elements policies support increased energy efficiency and the use of alternative energy, the potential adverse impacts of renewable energy production equipment and other sustainable energy features on historic, cultural and natural resources through the District remain of federal concern, including those resources protected through the Heights of Building Act of 1910 (DC ST § 6-601), (Height Act) and rights-of-way

and setback policies and regulations. Further, we believe that technologies are rapidly advancing to produce more compact designs and allow more flexibility in the installation locations of alternative energy and energy efficiency technologies. We believe these technological advances will also provide opportunities to ensure that these multiple public objectives noted here can be met.

In addition to protecting the views and the physical character of historic districts and national monuments, the Federal Elements' National Capital Image policies emphasize the importance of protecting the physical features of Washington that contribute to its symbolic preeminence as the nation's capital. In particular, Policy 4 directs the federal government to "Protect the skyline formed by the region's natural features, particularly the topographic bowl around central Washington, as well as historically significant built features, from intrusions such as antenna towers, water towers, and rooftop equipment." (see Appendix B.4, attached).

In prior comments for zoning code amendments related to building height, we noted that sustainability and energy efficiency features would be considered comparable to other mechanical equipment for the purposes of regulation under the Height Act. In general, rooftop mechanical equipment is allowed above the Height Act limit provided that a 1:1 setback to height ratio is maintained, with no allowances for intrusions, and other regulations limit mechanical equipment to a height of 18 feet 6 inches. Below the limits established by the Height Act, setbacks and height for these features would be established by District requirements. In general, we note that while the requirements of the Height Act will apply, local zoning, historic preservation and other requirements constrain height throughout most of the District, not the 1910 Height of Buildings Act. Consequently, using height incentives is a strategy that could be effectively employed in many areas of the city.

Recommendation 6, Sustainable Energy Features appears to allow rooftop installations of energy-related sustainability features to project beyond current required setbacks, which is not allowable above Height Act limits. Recommendation 7, Renewable Energy Generation, recognizes that installation of solar and wind generation accessories should protect historic districts and national monuments from visual and other negative impacts; however, it is silent on how the Height Act will be considered. NCPC is currently considering how to ensure that these technologies can be appropriately allowed while protecting view-sheds, vistas and public space qualities in and around iconic national buildings, landscapes and commemorative works, historic structures and districts (including the L'Enfant Plan area streets and reservations), national parks and along the escarpment. NCPC requests continued coordination with the District on this topic as more specific recommendations are developed.

#### **Recommendation 5: Outdoor Lighting**

NCPC encourages the District to propose regulations and standards that limit adverse impacts of outdoor lighting on the historic, cultural and natural resources within the District. In particular, District standards for lighting should ensure natural areas within the federal park system are not negatively impacted by adjacent development. The outdoor lighting standards should also apply

to District facilities and properties, with special considerations for athletic fields and other community facilities that require nighttime illumination.

#### **Recommendation 8: Solar Access Protection**

While protecting solar access is a laudatory goal, this provision could conflict with the goals of encouraging compact development and increased density noted in other sections of this proposal. Given the generally horizontal character of the city and its many broad streets, solar access is likely to be generally available.

#### ***Water and Sensitive Resource Conservation***

The recommendations for Water and Sensitive Resource Conservation can support policies found in the Federal Elements' Federal Environment chapter. These recommendations are generally consistent with Water Quality policies 1 through 9 of the Federal Elements (see Appendix B.7, attached). The following comments offer ways to coordinate federal policies with the District's recommended strategies.

#### **Recommendation 10: Water Conservation Features**

#### **Recommendation 14: Vegetated "Green" Roofs**

Similar to renewable energy production equipment, green roofs and water conservation appurtenances installed on roofs would be considered comparable to other mechanical equipment for the purposes of regulation under the Height Act. In general, rooftop mechanical equipment above the Height Act limit is allowed up to a height of 18 feet 6 inches provided a 1:1 setback to height ratio is maintained. *Below* the limits established by the Height Act, setbacks and height for these features would be established by District requirements.

#### **Recommendation 11: Environmentally Sensitive Area Buffers**

Recommendation 11 proposes the establishment of environmental protection zones to create buffer requirements for steep slopes, streams, and wetlands. The Federal Elements' Federal Environment chapter includes several policies related to the protection and proper stewardship of steep slopes, streams and wetlands. These policy subsections include Water Quality (page 138), Water Supply (page 140) and Land Resources: Floodplains, Wetlands, Soils, Vegetation, Wildlife Habitats (pages 141 - 146). Creating and mapping buffer areas effectively carry out these Federal Element policies.

Policy 4 in the Wildlife Habitats subsection of the Federal Elements Land Resources section (see Appendix B.8, attached, for a complete list of the policies) directs federal actions to encourage the restoration of degraded water and land habitats, in coordination with federal and local agencies. For buffers to perform their ecological functions effectively, we encourage the District to consider ways to promote the restoration and enhancement of these buffers through the zoning review process.

Policy 1 of the same subsection (see Appendix B.8 attached) also discourages federal actions from locating intensive land uses within or adjacent to designated and important wildlife habitats. Therefore, it would be helpful to identify how existing development located in any

designated buffer areas would be treated. Similarly, as the District looks at allowable uses in and adjacent to these buffers, we encourage looking at how active and passive recreational uses would be addressed in this regulation. The CapitalSpace Initiative, to which the District of Columbia is a partner, has developed a set of draft recommendations for incorporating educational, recreational and ecological stewardship uses appropriately in the natural areas of existing parks.

According to analyses conducted through the CapitalSpace initiative, 72 percent of the steep slopes within the city and 75 percent of streams, floodplains and wetlands are located within designated federal and District parkland. Because these highly-sensitive ecological resources cross jurisdictional boundaries of federal and local agencies, any regulations proposed will only be effective if all parties work to create a coordinated set of strategies. We encourage District staff working on the zoning regulations revision to consult the CapitalSpace findings and draft recommendations as a model of coordinated planning among the affected agencies. NCPC would welcome coordination with the District on this issue as more detailed language and maps are developed identifying potential buffers.

In the same Land Resources subsection of the Federal Elements are policies for federal actions related to wetlands that further reinforce the noted policies. While these policies apply only to federal activities, given the cross-jurisdictional nature of wetland functions, NCPC encourages the District to reflect the federal policies already in place (see Appendix B.9, attached), as part of its development of buffer regulations.

We encourage the District to also refer to the Federal Elements Soil policies which addresses protection of steep slopes from activities that could result in erosion (see Appendix B.9).

#### **Recommendation 12: Floodplain Protection**

The recommendation notes that floodplain protection standards will be developed by the District Department of the Environment (DDOE) instead of the Office of Planning. We request DDOE staff to coordinate with NCPC in the development of these floodplain protection standards and offer the following comments for their consideration.

Local floodplain regulations should be coordinated with the following regulations and policies. Federal agencies are required to avoid impacts to floodplains when siting federal facilities to the extent possible, by Executive Order 11988, Floodplain Management. This Executive Order's directive extends to the transfer of federal properties for non-federal use and the conduct of Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities.

We recommend the District coordinate its floodplain regulations with the federal regulations adopted by NCPC (see Appendix C, attached) and policies found in the Federal Element chapter on Federal Environment, section Land Resources, subsection Floodplains (see Appendix B.9, attached)

We also encourage the District to consider appropriate uses in the floodplain to protect the city from river overbank flooding. The *Monumental Core Framework Plan* offers several strategies that are relevant to the District, such as: building and integrating adequate, innovative infrastructure into the city fabric; working in concert with natural systems; using operational and physical strategies to address risks to existing and proposed development; and promoting the type of development that does not exacerbate—or even reduces—area-wide flood risks. (see Appendix A, *Monumental Core Framework Plan*, Ecological Strategies, item 6).

NCPC has previously offered comments on floodplain protection measures through the zoning update. A copy of these comments and the materials referenced above are attached (Appendix D).

**Recommendation 13: Existing Tree Cover Protection**

**Recommendation 15: Water Conserving Landscaping**

**Recommendation 16: Pavement Runoff and Soil Erosion Control (standards for parking lots)**

**Recommendation 17: Pavement Runoff Reduction**

Recommendations 13, 15, 16 and 17 reinforces Federal Element policies for natural resource use and protection generally, and specifically, the Water Quality policies in Appendix B.6 noted above.

**Recommendation 18: Green Area Ratio (GAR)**

The recommendation notes that GAR requirements would be limited to neighborhood-serving commercial areas and low and moderate density residential areas. Larger commercial sites would not be subject to a GAR as they are already subject to similar environmental regulations. As such, there is limited direct impact on federal interests, such as federally-leased space. This recommendation is not inconsistent with Federal Element policies for natural resource use and protection.

***Food Security***

Recommendations 19, 20, and 21 do not have a direct impact on federal interests; therefore, we provide no substantive comments for them.

***Green Jobs***

Recommendation 22, *Incubator Space for Sustainable Businesses*, proposes small scale start-up green businesses including those that are manufacturing in nature to locate in moderate to high-density commercial zones. The development of green jobs is one of the current Administration's priorities, and NCPC supports the District's efforts to align with this federal government priority.

The federal government will rely on suppliers and contractors of green mechanical equipment, architectural materials and building commissioning services to achieve its mandated 2030 goals for achieving a carbon-neutral federal government. Locating sustainable businesses in proximity

to federal buildings clearly supports policy 5 in the Federal Workplaces chapter, Existing Facilities and Resource subsection of the Federal Elements (see Appendix B.2, attached)

While NCPC staff encourages activities that could promote green job development, their impacts to federal facilities and properties and to surrounding neighborhoods, particularly those that involve manufacturing activities, should be clearly identified and addressed so that any negative impacts can be mitigated and any benefits from their proximity to federal facilities can be used to further other related federal policies, laws and regulations. Noise, vibration and visual impacts to federal facilities, parkland, viewsheds, and historic resources, as well as conflicts with federal operations are federal concerns. Similar to our comments for Recommendations 4, 6, 7 and 9 pertaining to renewable energy production, the District should be mindful of the impacts of industrial facilities to protected viewsheds and historic resources and consider the policies in the Preservation and Historic Features chapter of the Federal Elements, already mentioned earlier and found in Appendices B.4 and B.5 attached to this letter, in developing the District's zoning regulations. NCPC expects to provide more specific comments to the District when the draft regulations for sustainable business incubators become available.

### *Large Area Development*

#### **Recommendation 23: LEED-ND for Large Areas**

This recommendation would require new development of large tracts of land to meet environmental standards compatible with the LEED-ND program. Commenting on the LEED-ND standards in their entirety is beyond the scope of this comment letter; however, the standards generally support one of the main principles of the Federal Elements – Reinforce “Smart Growth” and Sustainable Development Planning Principles (see Appendix E, attached). The approach of using LEED-ND for large tract development is comparable to the approach of using LEED standards for individual buildings, a practice currently supported in the Framework Plan and by several federal agencies.

### *Additional Issues to Address:*

#### **Enforcement**

Many of the proposed zoning revisions to encourage sustainable development practices require significant changes to existing regulations and standards. These may add complexity to the operation and maintenance of sites and structures. Prior to promulgation of these changes, the District should consider how it will effectively and routinely enforce its land use standards related to sustainability issues.

## ADVANCE SUSTAINABILITY IN THE URBAN ENVIRONMENT

Cities around the world are faced with interrelated challenges and opportunities associated with growth, development, and resource management. The density, compactness, and scale of cities provide for efficient use of land, infrastructure, and services; however, urban areas also consume a large share of the world's resources. Urban challenges are further complicated by the effects of global climate change, such as sea-level rise, drought, and heat waves. The Framework Plan seeks to ensure that Washington does not merely grow, but develops sustainably, in a manner that meets the current generation's needs without compromising those of future generations.

Fortunately, Washington possesses the critical components of a sustainable city: a compact urban form served by a multi-modal transit system; a diverse and stable economy anchored by the federal government and tourism; an expansive public park system comprised of diverse ecosystems; and perhaps most important, federal and local leadership committed to a more sustainable capital

city. Washington has one of the highest levels of green building practices and regulations in the country. The U.S. General Services Administration, which oversees new construction and renovation of federal properties, seeks to incorporate sustainable design principles and energy efficiency measures into all of its building projects, and recently, Congress mandated that new and existing federal buildings must achieve zero fossil fuel use by 2030. Non-federal buildings in Washington are also going green. In 2006, Washington became the first major U.S. city to require compliance with the U.S. Green Building Council's LEED programs for public construction, with phase-in requirements for private construction by 2012. These efforts are driving a new industry of green collar jobs centered on the research, installation, and maintenance of green infrastructure, high performance building systems, and sustainable landscapes.

Washington, like other cities, must solve complex local challenges to be truly sustainable. As an older city, much of Washington's infrastructure is antiquated, and some of it is insufficient to meet the service demands of

the city. Specifically, Washington's water and sewer system requires major investment to comply with federal water pollution control regulations, eliminate combined sewer overflow events, and control the risk of large-scale flooding, as experienced in 2006. The internal flooding risk is compounded by the low-lying elevation and high water table of the monumental core and its proximity to the confluence of two rivers, making it susceptible to overbank flooding and placing a portion of the monumental core within the 100-year flood plain.

As a consequence, groundwater is continuously pumped from the Federal Triangle's basements directly into the sewer. This water not only reduces the capacity of the sewer system, but it also is a lost opportunity to reuse the water for non-potable uses. With innovative techniques, pumped groundwater and captured stormwater could be directed to the National Mall for irrigation and possibly to fill pools and fountains. Thus, smarter, more sustainable practices can help reduce the risk of flooding, while also adding environmental benefits.



Employing sustainable practices will increase green jobs and help to conserve natural resources.



Green roofs will minimize stormwater runoff, help reduce the heat island effect, and provide urban amenities.



Washington's center city is characterized by compact development and walkable streets.

Source: ***Re-imagining Washington's Monumental Core*** (NCPC, 2009)

There are other hurdles to achieving a sustainable city. The city's transportation system requires significant investment in maintenance and upgrades to meet demand, reduce dependence on automobiles, and improve air quality. Washington's parks, while abundant, are not ideally distributed to adequately serve all users. Some parks, therefore, suffer from overuse; others from lack of maintenance or declining conditions, which can cause safety risks and severe ecological damage. For example, the seawalls that surround much of Potomac Park have deteriorated and are a public hazard. Finally, the loss of Washington's urban tree canopy and the reduction of pervious surfaces exacerbate the city's urban heat island and poor air quality, increase the potential for flooding, and reduce wildlife habitat and ecological diversity.

These challenges are not always contained within geographic or political boundaries. Solutions will require an interdisciplinary effort of connected and interdependent strategies across multiple jurisdictions. Therefore, it will be essential for federal, state, and local authorities to work together as stewards

to solve these complex environmental issues and achieve a common set of sustainability goals. Together, federal and local partners can develop new technologies and strategies to improve the design and function of Washington. Innovations will help improve the quality of the built and natural environment by using resources more effectively. The challenge to integrate these new technologies into Washington's historic form will require creative technological advancements. For example, new streetcars without overhead power lines can protect the city's historic and cultural resources while also meeting transportation goals.

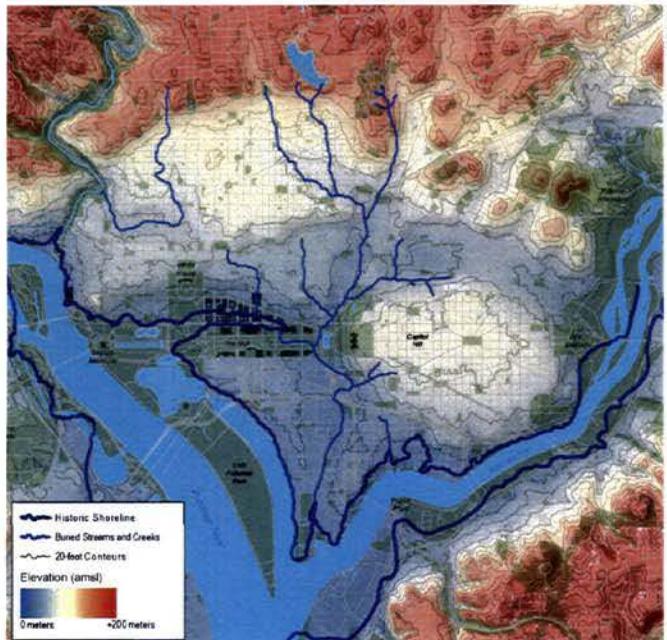
The *Framework Plan* seeks to promote strategies that combine urban design principles with sound environmental practices. Although the planning area is much smaller than the environmental systems that shape the Washington metropolitan region, there is an opportunity for each new project to be developed to the highest environmental standards and to promote sustainable interconnectivity between the monumental core and its surroundings.



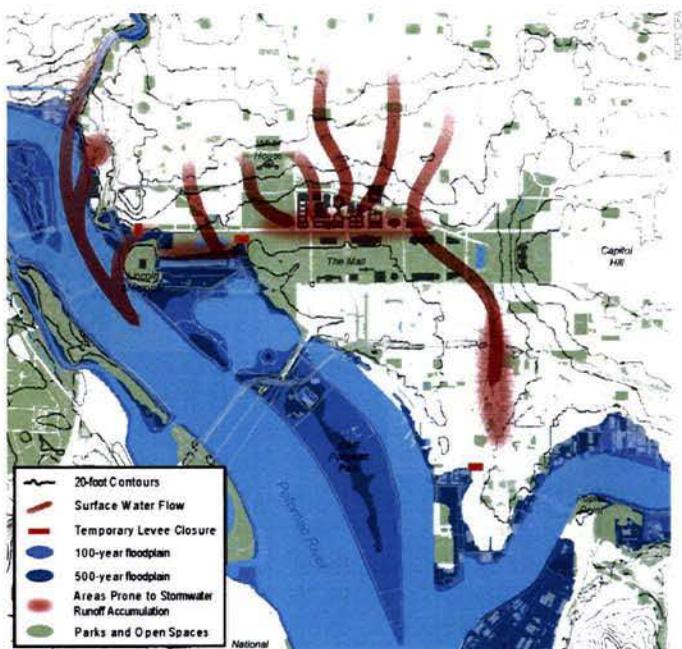
Flooding in Potomac Park, 1932.



Flooding in the Federal Triangle, 2006.



Washington's monumental core lies at the low point of a natural topographic bowl; changes to the river basin have altered its hydrology.



Alterations to Washington's natural conditions now require interventions to address river bank flooding and interior stormwater flooding within the monumental core.

## ADVANCE SUSTAINABILITY IN THE URBAN ENVIRONMENT

The Framework Plan includes a comprehensive and forward-looking approach to urban sustainability. As a result, the Framework Plan includes strategies that address the built environment, green technologies, and energy efficiency, as well as strategies that improve urban ecology, enhance connections to the natural environment, and protect against natural hazards. Taken collectively, these proposed local and site-specific strategies will ultimately contribute to the long-term health of the broader environmental systems in the monumental core, Washington, and the metropolitan region.

Although sustainability is an ever-evolving science, there is greater understanding of how building in greener and more sustainable ways can maximize both economic and environmental performance and provide health and community benefits far beyond the envelope of a specific building or neighborhood. A more sustainable approach would help cities evolve toward a more circular metabolism that mimicks natural systems by reducing resource consumption, minimizing waste disposal, managing resources efficiently, and producing renewable energy on site.

As a planned city with a long tradition of innovative ideas, Washington presents a unique opportunity to showcase new possibilities in sustainable building design, ecological protection, and energy management. The Framework Plan strongly supports strategies that result in buildings that have minimal impacts on the environment. Furthermore, the Framework Plan envisions a city of green, high performance buildings set within a sustainable urban form that is designed and works in harmony with the city's natural systems and open space network.



### Building & Infrastructure Strategies

1. **INVEST IN HIGH-PERFORMANCE BUILDINGS** to reduce energy consumption and generate renewable energy; recycle wastewater, reduce stormwater runoff, and conserve potable water; reduce light pollution; and promote healthier working environments. All new construction and modernization projects should incorporate principles of sustainable design and energy efficiency that meet or exceed existing standards. Green roofs can also be installed to help reduce stormwater runoff, reduce energy consumption, and help reduce the heat island effect.
2. **PROMOTE THE DEVELOPMENT OF RENEWABLE ENERGY TECHNOLOGY** within Washington's federal districts to help accelerate the availability and use of alternative fuels. Federal agencies within central Washington can support regional renewable energy production through shared long-term power purchasing agreements for clean renewable energy resources, and local renewable energy production by installing on-site renewable projects. Given the close proximity of federal facilities within Washington, agencies should collaborate to develop interagency renewable energy production.
3. **UPGRADE AGING INFRASTRUCTURE WITH AN EMPHASIS ON GREEN TECHNOLOGY** to modernize water and sewer systems, and develop systems that combine gray and green infrastructure to improve effective and efficient use of resources. Gray infrastructure includes water and sewer pipes and basins; green technology and other low impact development (LID) techniques include green roofs, rain gardens, bioswales, retention basins, pervious paving, planted medians, and restored wetlands. Combined, these infrastructure systems will help to improve stormwater management and water quality, control flooding, and recharge groundwater supplies; reduce ambient air temperature and cool urban heat islands; reduce energy consumption and improve air quality; create wildlife habitat; and improve the federal workplace.
4. **IMPROVE STORMWATER MANAGEMENT** to promote a more integrated natural system, one that addresses collection, conveyance, detention, treatment, and reuse. Creating green corridors by incorporating LID techniques along streets and alleys and within parks and plazas can help reduce reliance on sewer infrastructure. The monumental core and the National Mall should be considered as one integrated green stormwater management system so that runoff from the impervious buildings and streets can be captured and directed toward the National Mall, Potomac Park and other public spaces for productive use rather than discharged into the sewer system. In addition to collecting and cleansing stormwater, these techniques can also help recharge groundwater supplies, create attractive water features, reduce non-potable water needs for irrigation and fountains, and serve as perimeter security barriers.
5. **PROMOTE ENERGY EFFICIENT TRANSPORTATION** to reduce energy consumption and improve air quality. Examples include promoting the use of alternative fuels and accommodating alternative vehicle refueling and battery recharge or plug-ins for hybrid electric cars.

- Thomas Jefferson, 1789

Washington's physical setting and farsighted planning have provided the city with extraordinary assets, including rivers, parks, and open spaces, but many of our past development practices have been at the expense of the natural environment. As the city continues to grow and change, it should move in a direction that seamlessly weaves the natural and built environment together. In the future, we must ensure that urban environments have clean air, clean water and clean land; that connected, healthy ecosystems are an integral part of the city; and that people have access to natural green spaces.



Green medians can channel and treat stormwater and provide a public amenity.

## Ecological Strategies

1. **INTEGRATE NATURAL ELEMENTS INTO EVERY SCALE OF DESIGN** to promote human connections to the natural environment, increase the environmental benefits derived from these elements, and soften the built environment. This would include incorporating green space into new development, planting trees, and educating the public about the importance of the environment.
2. **CONNECT AND ENHANCE OPEN SPACES** to be safe, highly functional, and accessible to all residents, workers, and visitors. Improve the connected system of parks and open space throughout residential and office districts, and identify opportunities for active and passive recreation to improve the health and quality of life of inhabitants. Where there are limited opportunities to create new parks in densely built areas, create innovative new outdoor recreation opportunities on existing open space and integrate green space into new development.
3. **PROTECT AND RESTORE URBAN NATIVE HABITATS** to support plant and animal wildlife, including species living on land and in rivers. Protect the large open spaces of the National Mall and Potomac Park, which are green havens for wildlife and plants. Plant native vegetation in parks and open spaces, including along wide tree-lined streets, to provide shelter and food sources for native animal and bird species. Discourage invasive, exotic, or nuisance species of plants and animals on both public and private property.
4. **REESTABLISH THE URBAN TREE CANOPY** along streetscapes and on development sites to reduce the urban heat island effect, improve local air quality, and provide shade. Tree cover is directly related to environmental quality. Urban streets are not only more aesthetically appealing when tree-lined, but maintaining a robust tree cover can help filter airborne pollutants and manage stormwater. The urban forest can also help create a sense of place in Washington's city center and provide a more pleasant pedestrian experience. Recent research demonstrates that people visit tree-lined districts more frequently, linger longer, and spend more money than in streets devoid of trees.
5. **RESTORE THE NATURAL SHORELINE AND RIPARIAN HABITATS** along select riverfront areas to improve water quality, moderate flooding, and create new habitat for plants and wildlife. Natural shoreline areas should be accessible to users and should balance more active waterfronts.
6. **PROGRAM AND DESIGN FOR APPROPRIATE USES IN THE FLOOD PLAIN** to protect the city from river overbank flooding. This can be achieved by building and integrating adequate, innovative infrastructure into the city fabric; by working in concert with natural systems; by using operational and physical strategies to address risks to existing and proposed development; and by promoting the type of development that does not exacerbate—or even reduces—area-wide flood risks.

## Environmental Opportunities

The *Framework Plan* contributes to a more sustainable urban ecology by:

- Reusing existing structures
- Creating additional development capacity through the efficient use of land and resources
- Reducing combined sewer overflow events
- Increasing the urban tree canopy
- Minimizing demand for potable water
- Creating riparian habitat
- Providing opportunities to develop local renewable energy sources and reduce energy consumption

**APPENDIX B**  
**NCPC letter to the DC Zoning Commission**  
**DC Zoning Revisions: Sustainability**

**Appendix B.1            Federal Transportation: Transportation Demand Management (page 88)**

The federal government should:

1. Encourage ridesharing, biking, walking, and other non-single-occupant vehicle modes of transportation for federal commuters.
2. Maximize telecommuting strategies for employees in accordance with federal law.
3. Employ compressed and variable work schedules for employees, consistent with agency missions.
4. Support pedestrian and transit commuting through Live-Near-Work programs.
5. Steadily increase transit subsidy rates, and consider applying subsidies and incentives to other modes, such as biking, walking, carpooling, and vanpooling.

**Appendix B.2            Federal Workplace: Locating Federal Workplaces – Existing Facilities and Resources (page 39)**

The federal government should:

1. Give preference to established urban areas, or areas that are under redevelopment with infrastructure and services in place, when locating federal workplaces.
2. Support regional and local agency objectives that encourage compact forms of growth and development when locating federal workplaces.
3. Support regional and local agency efforts to coordinate land use with the availability or development of transportation alternatives to the private automobile, including walking, bicycle riding, and public transit, particularly Metrorail, the Virginia Railway Express (VRE), or the MARC train system, when locating federal workplaces.
4. Locate federal facilities within walking distance of existing or planned fixed guideway transit services, such as Metrorail, MARC, and VRE; light rail transit (LRT); or bus rapid transit (BRT). Priority should be given to locations within walking distance to Metrorail due to its extensive reach into the region's residential areas.
5. Locate federal workplaces in areas where efficiencies are gained through proximity to a market of private suppliers of goods and services.
6. Utilize available federally owned land or space before purchasing or leasing additional land or building space. Agencies should continuously monitor utilization rates of land and building space to ensure their efficient use.

**Appendix B.3            Federal Workplace: Development of Workplaces with Communities – Working Environment (page 52 - 53)**

The federal government should:

1. Site federal employment in areas that would contribute to the health, safety, welfare, and productivity of federal employees.
2. Ensure that safe and healthy working conditions continue to be provided and maintained at all sites and in all buildings occupied by the federal government.
3. Provide a variety of services for employees or have these services available within a reasonable travel time or walking distance. Services should include restaurants, retail

outlets, financial services (including ATMs), day-care centers, and health and fitness centers.

- Where these services cannot be accommodated within a federal workplace, preference should be given to locations where these services are within walking distance from the facility.

4. Ensure, in the relocation of federal employees, similar or improved availability of public transportation, employee services, and affordable housing for the employees and their families within a convenient commuting distance.
  - Preference should be given to new locations where opportunities for employees to use public transportation, walk or bike on their home/work commute are increased.
5. Strive to create federal workplaces that engender a sense of pride, purpose, and dedication for employees.
6. Encourage federal employees to rideshare, including the use of carpools, vanpools, privately leased buses, public transportation, and other multi-occupant modes of travel.
7. Permit and encourage telework by federal employees where it will benefit the federal government and the public.
8. Permit and encourage variable work schedules for federal employees where it will benefit the federal government and the public.
9. Consider locating federal workplaces near a variety of housing options to benefit employees. Priority should be given to locations that are easily accessible for employees to walk, bike, or take public transportation to commute between home and work.
10. Support local agency efforts to create new housing options where federal workplaces are located or are planned to be located or expanded.
11. Promote housing initiatives for a variety of housing options close to public transit or federal facilities. These initiatives should provide housing that makes the commute of the federal employees more convenient.

#### Appendix B.4              Preservation and Historic Features – National Capital Image (p.161)

The federal government should:

1. Express the dignity befitting the image of the federal government in the national capital. Federal development should adhere to the high aesthetic standards already established by the planning and design legacy of the nation's capital. This legacy encompasses both the old and the new—the capital's rich architectural heritage, continually augmented by the design contributions of each generation.
2. Plan carefully for appropriate uses and compatible design in and near the monumental core to reinforce and enhance its special role in the image of the nation's capital.
3. Preserve the horizontal character of the national capital through enforcement of the 1910 Height of Buildings Act (36 Stat. 452; D.C. Code, sec. 5-401 et seq.).
4. Protect the skyline formed by the region's natural features, particularly the topographic bowl around central Washington, as well as historically significant built features, from intrusions such as antenna towers, water towers, and rooftop equipment.
5. Protect and enhance the vistas and views, both natural and designed, that are an integral part of the national capital's image.
6. Create transportation infrastructure that is consistent with the pedestrian character of the L'Enfant City and other historic settings. Bridges across the Potomac and Anacostia

Rivers should be integrated with the design character of historic contexts. Highway structures should be removed and replaced with at-grade streets where possible.

7. Encourage the practice of good design principles throughout the region to continually strengthen the image of the nation's capital.
8. Design exterior lighting to contribute to the capital's nighttime image and suggest an appropriate hierarchy among the symbols and features of the nation's capital.

**Appendix B.5      Preservation and Historic Features – Stewardship of Historic Properties**  
 (The list below is a selection of policies pertinent to the NCPC comments on the Zoning Revision recommendations on Sustainability by DCOP. For the complete list of policies, please refer to p.164 of the Comprehensive Plan: Federal Elements)

The federal government should:

- Identify and protect both the significant historic design integrity and the use of historic landscapes and open space. (Policy 5)
- Protect the settings of historic properties, including views to and from the sites where significant, as integral parts of the historic character of the property. (Policy 6)
- Ensure that new construction is compatible with the qualities and character of historic buildings and their settings, in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties and the Guidelines for Rehabilitating Historic Buildings. (Policy 11)
- Work cooperatively with local agencies to ensure that development adjacent to historic properties do not detract from their historic character. (Policy 13)
- Recognize that historic federal properties are sometimes important for local history and ensure that locally significant characteristics or qualities are maintained. (Policy 14)

**Appendix B.6      Preservation and Historic Features – The Historic Plan of Washington, D.C.**

(The list below is a selection of policies pertinent to the NCPC comments on the Zoning Revision recommendations on Sustainability by DCOP. For the complete list of policies, please refer to pp.166 - 168 of the Comprehensive Plan: Federal Elements)

The federal government should:

- Protect the reservations that contain historic landscapes and features from incompatible changes or incursions (Policy 5)
- Protect views outward from the L'Enfant City and views inward from vantage points along the rim of the topographic bowl from inappropriate intrusions. Open space should be preserved to allow for public use and enjoyment of these views. (Examples include the west campus of St. Elizabeths Hospital and other parts of the Anacostia ridge, the Arlington ridge, and the escarpment north of Florida Avenue, NW.) (Policy 7)
- Protect and control the visual and functional qualities of L'Enfant rights-of-way. (Policy 8)
- Protect the open space of the L'Enfant streets. The exceptional width and openness of the street rights-of-way constitutes public space that helps to define the character of the city. (Policy 9)
- Protect the reciprocal views along the rights-of-way, as well as to and from squares, circles, and reservations. (Policy 10)

- Protect the integrity, form, and design of the L'Enfant Plan's system of streets and reservations from inappropriate new buildings and physical incursions. (Policy 11)
- Protect the historic importance and function of the streets as vehicular thoroughfares and avoid inappropriate traffic channelization that obscures the character of the right-of-way. (Policy 12)
- Protect the character of the historic parkways in the region through the careful planning of public and private development within their viewsheds. (Policy 13)

#### Appendix B.7        Federal Environment: Land Resources – Water Quality (page 138)

Federal actions in the region should conform to the following policies:

1. Upgrade water supply and sewage treatment systems, and separate storm and sanitary sewers, to avoid the discharge of pollutants into waterways.
2. Avoid thermal pollution of waterways, and provide and maintain adequate vegetated buffers adjacent to bodies of water, to protect fish and other aquatic life and to reduce sedimentation and pollutants.
3. Minimize tree cutting and other vegetation removal to reduce soil disturbance and erosion, particularly in the vicinity of waterways. When tree removal is necessary, trees should be replaced to prevent a net tree loss.
4. Control the use of pesticides, herbicides, fertilizers, chemicals, oil, salts, and other threats to prevent the pollution of groundwater and waterways.
5. Use pervious surfaces and retention ponds to reduce stormwater runoff and impacts on off-site water quality.
6. Avoid actions that could have significant long-term adverse effects on aquatic habitats. Such actions include dredging and filling operations that disrupt and destroy aquatic organisms.
7. Encourage the use of innovative and environmentally friendly “Best Management Practices” in site and building design and construction practice, such as green roofs, rain gardens, and permeable surface walkways, to reduce erosion and avoid pollution of surface waters.
8. Require wastewater reduction through conservation and reuse in all new federal buildings and major federal renovation projects.
9. Encourage participation in regional agreements and programs that improve water quality and address watershed issues.

#### Appendix B.8        Federal Environment: Land Resources – Wildlife Habitats (page 146)

Federal actions in the region should conform to the following policies:

1. Discourage locating intensive land uses within or adjacent to designated and important wildlife habitats.
2. Encourage facility design and landscaping practices that provide cover and food for native wildlife.
3. Discourage development or significant alteration of areas used by migratory wildlife.
4. Encourage the restoration of degraded water and land habitats, in coordination with federal and local agencies.
5. Consider the impacts, including cumulative impacts, of environmental changes on wildlife habitats and the biodiversity of an ecosystem. Consideration should extend to

non-protected areas, as well as areas protected by designations such as parks and wetlands.

**Appendix B.9            Federal Environment: Land Resources – Wetlands (page 143)**

Federal actions in the region should conform to the following policies:

1. Avoid destruction of or damage to wetlands.
2. Encourage only compatible land uses adjacent to wetlands.
3. Coordinate wetland activities with federal, state, and local government programs and regulations, and with special programs such as the Chesapeake Bay 2000 Agreement.
4. Utilize the best engineering practices available to minimize adverse impacts when project construction in a wetland is deemed to be the only practical alternative.

**Appendix B.10            Federal Environment: Land Resources – Soils (page 144)**

Federal actions in the region should conform to the following policies:

5. Discourage development in areas of identified high erosion potential, on slopes with a gradient of 15 percent and above, and on severely eroded soils. Excessive slopes (25 percent and above) should remain undeveloped.
6. Employ “Best Management Practices” to reduce the potential for soil erosion and the transport of sediment, consistent with state and local requirements.
7. Limit uses on highly unstable soils to passive recreation and open space.
8. Locate and design buildings to be sensitive to the natural groundwater flows. Avoid development in areas where useful mineral resources, such as diabase clay and shale, are located.

**Appendix B.11            Federal Environment: Land Resources – Floodplains (page 142)**

Federal actions in the region should conform to the following policies:

1. Prohibit highly flood-sensitive activities (e.g., archival storage, or activities that generate potential pathogenic and toxic substances) in floodplain areas.
2. Encourage modification of existing developments to correct flood hazards and to restore floodplain values. If the necessary modifications cannot be accomplished, the buildings should be removed when feasible to allow restoration of the natural values of the floodplain.
3. Discourage investment in floodplain areas unless related to correcting flood hazards, restoring floodplain values, or supporting appropriate recreational or memorial uses.
4. Adhere to the following if construction in a floodplain is necessary: (a) return the site as closely as possible to its natural contours; (b) preserve natural drainage; and (c) floodproof the proposed development.

Westlaw.

46 FR 51327-02  
46 FR 51327-02, 1981 WL 123561 (F.R.)  
(Cite as: 46 FR 51327)

Page 1

NOTICES

NATIONAL CAPITAL PLANNING COMMISSION

Floodplain Management and Wetlands Protection

Monday, October 19, 1981

\*51327 AGENCY: National Capital Planning Commission.

ACTION: Notice of adopted procedures.

SUMMARY: This notice sets forth (1) procedures for implementing Executive Order 11988, "Floodplain Management", and Executive Order 11990, "Protection of Wetlands", and (2) an amendment to the Commission's Site and Building Plans requirements, both of which were adopted by the Commission on September 17, 1981. Notice of proposed procedures and of the proposed amendment were published in the Federal Register on July 23, 1981 (46 FR 37999) with a deadline for comments of August 24, 1981. No comments were received.

FOR FURTHER INFORMATION CONTACT:

Patricia J. Crawford, Chief, Environmental/Energy Branch, National Capital Planning Commission, Room 1028, 1325 G Street, N.W., Washington, D.C. 20576, (202) 724-0182 or 724-0180.

Procedures for Floodplain Management and Wetlands Protection

Sec.

1. Purpose.
2. Definition.
3. Objectives of Procedures.
4. Scope and Responsibilities.
5. Decisionmaking Process.

Sec. 1. Purpose.

The Commission will, to the fullest extent possible, develop policies, plans, and programs to protect and maintain the environment quality of Floodplains and Wet-

lands.

Sec. 2. Definitions.

The following definitions shall apply throughout these procedures:

- (a) Action means any Commission activity including: (1) acquiring, managing and disposing of Federal lands and facilities;
- (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including, but not limited to, water and related land resources planning, regulating, and licensing activities.
- (b) Base Flood means the flood which has a one percent chance of being equalled in any given year (also known as a 100-year flood).
- (c) Commission means the National Capital Planning Commission created by the National Capital Planning Act of 1952, as amended (40 U.S.C. 71-711, 72, 73, 74; D.C. Code, secs. 1-1001 to 1-1013).
- (d) Direct Impacts means changes in Floodplain or Wetland values and functions caused or induced by an Action or related activity. Direct Impacts are caused whenever Natural Values are affected as a direct result of an Action.
- (e) Executive Director means the director employed by the Commission.
- (f) Floodplain means the lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, those areas subject to a one percent or greater chance of flooding in any given year.
- (g) Indirect Impacts means an indirect result of an Action whenever the Action induces or makes possible related activities which affect the Natural Values of Floodplains or Wetlands. Such impacts occur whenever these values are potentially affected, either in the short- or long-term, as a result of undertaking an Action..
- (h) Natural Values means the qualities of or functions served by Floodplains and Wetlands which include, but are not limited to: (1) water resource values (natural moderation of floods, water quality maintenance, groundwater recharge); (2) living resource values (fish, wildlife, plant resources and habitats); and (3) cultural resource values (open space, \*51328 natural beauty, scientific study, agriculture, aquaculture, forestry).
- (i) New Construction means the construction of a new structure or facility or the reconstruction of a structure or facility which has been totally destroyed.
- (j) Non-structural Flood Protection Methods means techniques designed to achieve desired future Floodplain conditions which may include such things as changes in flood regulations and flood insurance, and the development of educational and protection programs.

(k) Statement of Findings is a written public explanation which includes a description of (1) why the proposed action must be located in the Floodplain or Wetland; (2) all significant facts considered in making the determination including alternative sites and Actions; and (3) a statement indicating whether the Actions conform to applicable State or local Floodplain protection standards.

(l) Structure means anything constructed, including a building, mobile homes, and gas and liquid storage tanks, which requires permanent location on the ground.

(m) Wetlands means those areas which are inundated or saturated by surface or ground water with a frequency sufficient to support, or that under normal hydrologic conditions does or would support, a prevalence of vegetation or aquatic life typically adapted for life in saturated or seasonally saturated soil conditions. Wetlands include, but are not limited to, swamps, fresh and salt water marshes, estuaries (for purposes of these procedures, estuaries refer to non-major river estuaries), bogs, beaches, wet meadows, sloughs, potholes, mud flats, river overflows and other similar areas. This definition includes those Wetland areas separated from their natural supply of water as a result of such activities as the construction of structural flood protection methods or solid-fill road beds, mineral extraction, and navigation improvements. This definition is intended to be consistent with the definition utilized by the U.S. Fish and Wildlife Service.

Sec. 3. Objectives of Procedures.

The objectives of these procedures are to avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of Floodplains and Wetlands and to avoid direct or indirect support of development in Floodplains and Wetlands wherever there is a practicable alternative. Where Floodplain or Wetland impacts cannot be avoided, these procedures will focus on mitigation of the adverse effects of any action. In implementing these procedures the Commission will:

(a) encourage the wise use and conservation of Floodplains and Wetlands to preserve their natural and beneficial values;

(b) avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of Floodplains and the destruction or modification of Wetlands;

(c) avoid the direct or indirect support of development and New Construction in Floodplains and Wetlands whenever there is a practicable alternative;

(d) minimize the potential harm to people and property and to Natural Values when an Action must be located in the Floodplain;

(e) promote the use of Non-structural Flood Protection Methods to reduce the risk of flood loss; and

(f) attempt to achieve a suitable balance between the protection of Floodplains

and Wetlands and development.

Sec. 4. Scope and Responsibilities.

(a) Applicability. These procedures apply to all Actions initiated by the Commission which have the potential for adversely impacting Floodplains or Wetlands or their occupants, or which are subject to potential harm by location in Floodplains or Wetlands. An Action has the potential to affect Floodplains or Wetlands if the probability for adverse effects is associated with:

- (1) The occupancy or modification of Floodplains both direct and indirect; or
- (2) The destruction or modification of Wetlands both direct and indirect.

(b) Scope. If the Commission finds that the Floodplain and/or Wetlands would be impacted, the Commission shall:

(1) Identify and evaluate practicable alternatives to locating in a Floodplain or Wetland, including practicable alternative sites outside the Floodplain or Wetland; alternative Actions which serve essentially the same purpose as the proposed Action but which have less potential to adversely affect the Floodplain or Wetland, and the "no action" alternative. The following factors should be analyzed in determining the practicability of alternatives.

- (i) Natural environment (topography, habitat, hazards);
- (ii) Social concerns (aesthetics, historical and cultural values, land use patterns);
- (iii) Economic aspects (costs of space, construction, services and relocation); and
- (iv) Legal constraints.

(2) Identify the full range of potential direct or indirect adverse impacts associated with the occupancy and modification of Floodplains and Wetlands. The following factors should be analyzed:

(i) Flood hazard-related factors, such as (A) depth, velocity and rate of rise of flood water; (B) duration of flooding; (C) high hazard riverine areas (areas subject to high velocity waters); (D) available warning and evacuation time and routes; and (E) effects of special problems, e.g., levees and other protection works, erosion, subsidence, sink holes, ice jams, combinations of flood sources debris load and pollutants.

(ii) Natural Values, such as (A) water values (natural moderation of floods, water quality maintenance, and ground water recharge); (B) living resource values (fish and wildlife and biological productivity);

(C) cultural resource values (archeological and historic sites, and open space for

recreation and green belts); and (D) agricultural, aquacultural and forestry resource values.

(c) Responsible Official.

The Executive Director shall be the responsible official for ensuring Commission compliance with Executive Orders 11988 and 11990 and for preparing or reviewing an applicable Statement of Findings.

Sec. 5. Decisionmaking Process.

Prior to taking any Action subject to these procedures, the Commission shall:

(a) Notify the public at the earliest possible time that consideration is being given to carrying out an Action potentially affecting or affected by a Floodplain or Wetland, and involve the broadest affected and interested public in the decisionmaking process.

(b) For actions subject to the Office of Management and Budget Circular A-95, the Commission shall send a notice, not to exceed three pages in length, including a location map, to the state and areawide A-95, clearing-houses for the geographic areas affected. The notice shall include: (1) the reasons why the Action is proposed to be located in a Floodplain or Wetland; and (2) a list of the practicable alternatives considered. A brief comment period of 30 days will be allowed prior to taking any Action.

(c) If a Statement of Findings is required, it shall include the following:

(1) reasons why the Action is proposed to be located in the Floodplain or Wetland;

(2) a statement indicating whether the Action conforms to applicable state or local Floodplain management standards;

**\*51329** (3) a list of the alternatives considered;

(4) A list of the mitigation measures and/or revisions made to the proposed Action so as to minimize harm to or within the Floodplain, and to minimize the destruction, loss, or degradation of Wetlands; and

(5) a map of the general area clearly delineating the proposal's locale and its relationship to its environs.

Site and Building Plans Requirements: Proposed amendment

Subsection C of section 3 of the Commission's Site and Building Plans Requirements, 37 FR 3011-3013 (February 10, 1972), as amended, 37 FR 10330-10331 (March 19, 1974), is further amended by adding at the end thereof the following:

"(7) Floodplain Management and Wetlands Protection. The initial submission by a

Federal agency for a project to be located in a Floodplain or Wetland, as defined in the Commission's Floodplain Management and Wetlands Protection Procedures (46 FR p. -----, Oct. 19, 1981), shall include a copy of the agency's statement of findings, evaluation of impacts, and proposed mitigation measures prepared pursuant to Executive Order 11988 or Executive Order 11990."

Daniel H. Shear,

Secretary to the Commission.

October 9, 1981.

[FR Doc. 81-30178 Filed 10-16-81; 8:45 am]

BILLING CODE 7520-01-M

46 FR 51327-02, 1981 WL 123561 (F.R.)

END OF DOCUMENT



MEMORANDUM

ZC 6815

Date: April 21, 2008

To: DCOP Staff and Zoning Review Taskforce

From: Julia Koster *Julia Koster*

Subject: Floodplain Draft Proposed Policies and Language

Thank you for the opportunity to comment on DCOP's draft policies and sample floodplain regulation. The following comments are provided by NCPC staff for your consideration. These comments reflect federal interest issues. These comments have not been approved by official Commission action, and additional comments may be provided in the future, particularly as staff and our Commission have the opportunity to review draft updates.

This memorandum provides comments on the Floodplain draft policies and sample flood plain regulation language. If you have any questions, please call Michelle Desiderio at 202-482-7287, or Marjorie Marcus at 202-482-7274.

### Floodplain

We understand that maps sanctioned by the District of Columbia Department of the Environment identifying the locations of existing and potential flood plains, wetland and stream valley areas, riparian streams, steep slopes, and other fragile areas under its protection are needed to implement final regulations. When these maps become available, NCPC would like to receive copies in order to remain informed about them.

NCPC staff generally endorses the policies outlined thus far in the document, with the exceptions noted below.

- We request that the policy and sample regulation articulate the rationale for referring two topics to the sustainability working group rather than tackling them here under floodplain regulations, since they appear to be related and potentially to impact the floodplain, ground water table levels, and perhaps even interior flooding. Those issues are:
  - Management of underground water, and
  - Prohibition of/standards for below-grade parking garages in floodplain areas.

Along with other federal agencies, NCPC uses Executive Order 11988 on Floodplain Management, as the main tool to address development within a floodplain. Further, we have coordinated with the General Services Administration and the U.S. Department of State (DOS)

and have provided both with the link to the draft recommendations posted by DCOP on the Zoning Review website currently available for public review.

- NCPC staff recommends that “embassies” as referenced in FP2.2 (c), be removed. Draft language already proposes a prohibition on “one-family dwellings,” therefore, a specific prohibition on ambassadors’ residences would be redundant. Furthermore, in consultation with the DOS, we believe that imposing specific limitations on ambassadors’ residence could have the potential to cause difficulties with respect to the locations of U.S. diplomatic facilities abroad.

Again, thank you for the opportunity to comment on DCOP’s draft recommendations.



## **PRINCIPLE 2**

### **Reinforce “Smart Growth” and Sustainable Development Planning Principles**

The Federal Elements of the Comprehensive Plan encourage “Smart Growth” and sustainable development principles. The plan supports strategies that orient development to public transit; protect environmental and natural resources; organize new development in compact land use patterns; promote opportunities for infill development to take advantage of existing public infrastructure; and adapt and reuse existing historic and underutilized buildings to preserve the unique identities of local neighborhoods. The concept of sustainable development recognizes the interrelationship between economic growth, environmental quality, and livability, and the responsibility that citizens have to preserve their communities and quality-of-life for future generations. These principles benefit the federal government and the region as a whole.

A critical theme within this guiding principle is transportation mobility and accessibility. To facilitate the movement of federal employees to and from their places of employment, federal agencies in the region are leading the way with a variety of creative commuting programs. The federal government provides a monthly transit benefit for employees, and many agencies have established highly effective transportation management plans to help reduce the number of drive-alone commuters, encourage carpooling and vanpooling, and offer staggered work hours and telecommuting. Considering the National Capital Region’s status as one of the most congested regions in the country, federal agencies must continue to find new and effective transportation strategies at their work sites, including incentives for alternative travel modes such as walking and biking.

Another fundamental theme that emerges within the guiding principle is the stewardship of the region’s natural and cultural resources. For more than two centuries, the federal government has actively acquired, developed, and maintained parks and open space, and protected and enhanced natural resources in the region. The importance of this mission has not diminished over time. In fact, with natural resources continually threatened by growth and development and declining budgets, it is imperative to develop and seek unified approaches and implement innovative solutions to ensure that these resources will be preserved and enjoyed by all citizens now and in the future.