

# William & Mary Environmental Law and Policy Review

---

Volume 37 (2012-2013)  
Issue 1

Article 2

---

November 2012

## Red, White, and Green: A Federal Sustainability Vision for the National Capital

L. Preston Bryant Jr.

Follow this and additional works at: <https://scholarship.law.wm.edu/wmelpr>



Part of the [Environmental Law Commons](#), and the [Sustainability Commons](#)

---

### Repository Citation

L. Preston Bryant Jr., *Red, White, and Green: A Federal Sustainability Vision for the National Capital*, 37 Wm. & Mary Envtl. L. & Pol'y Rev. 1 (2012), <https://scholarship.law.wm.edu/wmelpr/vol37/iss1/2>

Copyright c 2012 by the authors. This article is brought to you by the William & Mary Law School Scholarship Repository.

<https://scholarship.law.wm.edu/wmelpr>

# RED, WHITE AND GREEN: A FEDERAL SUSTAINABILITY VISION FOR THE NATIONAL CAPITAL

L. PRESTON BRYANT, JR.\*

## INTRODUCTION

Many major cities across the country are going green. City governments in San Francisco, Portland, Austin, Chicago and New York are adopting sustainability plans that require more efficient use of energy and water, reductions in waste, and integrated transportation systems.<sup>1</sup>

In the nation's capital, there is also a growing focus on sustainability by both the federal and District of Columbia ("District of Columbia" or "District") governments,<sup>2</sup> which share city planning responsibilities.<sup>3</sup> In a collaborative effort led by the National Capital Planning Commission ("NCPC" or "Commission"), the two governments have focused their attention on a portion of the city's southwestern quadrant, envisioning a

---

\* L. Preston Bryant, Jr. serves as Chairman of the National Capital Planning Commission. He is a Senior Vice-President for Economic and Infrastructure Development in the Richmond office of McGuireWoods Consulting where he advises on water and wastewater facilities, conventional and renewable energy, and commercial and industrial development. Mr. Bryant previously served as Secretary of Natural Resources in the cabinet of former Virginia Governor Timothy M. Kaine. Mr. Bryant received his BA in English from Randolph-Macon College, a Masters of Humanities from the University of Richmond, and an MA in Modern British Literature from the University of London. The author would like to thank National Capital Planning Commission colleagues Anne Schuyler, Elizabeth Miller, Diane Sullivan, and Cecelia Hagan for their assistance.

<sup>1</sup> See, e.g., *Energy Solutions that Generate Real Results*, NYSERDA, [http://www.nyserda.solutions.org/?source\\_code=C35791\\_BU21362\\_CL11353\\_072011](http://www.nyserda.solutions.org/?source_code=C35791_BU21362_CL11353_072011) (last visited Oct. 26, 2012); *Office of Sustainability*, THE OFFICIAL WEBSITE OF THE CITY OF AUSTIN, <http://www.austintexas.gov/department/austin-climate-protection-program> (last visited Oct. 26, 2012); *Planning and Sustainability*, PORTLAND ONLINE: OFFICIAL WEBSITE FOR THE CITY OF PORTLAND, OREGON, <http://www.portlandoregon.gov/bps/> (last visited Oct. 26, 2012); *Sustainable City: Working Toward a Sustainable Future for San Francisco*, SUSTAINABLE CITY, <http://www.sustainable-city.org> (last visited Oct. 26, 2012); *Sustainable Development*, CITY OF CHICAGO OFFICIAL SITE, [http://www.cityofchicago.org/city/en/depts/dcd/supp\\_info/sustainable\\_development.html](http://www.cityofchicago.org/city/en/depts/dcd/supp_info/sustainable_development.html) (last visited Oct. 26, 2012).

<sup>2</sup> *What Is Sustainable DC?*, DISTRICT OF COLUMBIA, <http://sustainable.dc.gov/page/what-sustainable-dc> (last visited Oct. 26, 2012); *Federal Leadership in Environmental, Energy and Economic Performance—EXECUTIVE ORDER 13514*, COUNCIL ON ENVTL. QUALITY, <http://www.whitehouse.gov/administration/eop/ceq/sustainability> (last visited Oct. 26, 2012).

<sup>3</sup> See *Commission*, NAT'L CAP. PLANNING COMM'N, [http://www.ncpc.gov/ncpc/Main\(T2\)/About\\_Us\(tr2\)/About\\_Us\(tr3\)/Commission.html](http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/Commission.html) (last visited Oct. 26, 2012) [hereinafter *NCPC Commission*].

substantial change in the character, infrastructure, and use of resources.<sup>4</sup> What today is an area defined by superblocks of large federal office buildings, no residential uses, a disjointed street grid, uninviting pedestrian ways, minimal after-work destinations, and no resource conservation, could be, according to federal and city planners, a vibrant, livable community where highly energy-efficient buildings predominate, water is recycled, waste is minimal, and transportation is easy. This federal enclave would become a primary destination for DC residents and visitors alike.

Planners hope the area of focus will become the Southwest Ecodistrict (“SW Ecodistrict” or “Ecodistrict”).<sup>5</sup> The SW Ecodistrict will be the first federal urban sustainability plan for the nation’s capital.<sup>6</sup> If implemented as currently envisioned, the SW Ecodistrict may set a new standard for urban sustainability at home and serve as a case study for national capitals abroad.

Realizing the SW Ecodistrict vision, however, requires a commitment by the federal agencies and private landowners who call the future SW Ecodistrict home. Also central will be the DC government, which through policies, planning, and funding commitments will help ensure the Ecodistrict’s success.

The NCPC has led the effort to plan the SW Ecodistrict.<sup>7</sup> The NCPC assembled a broadly represented task force to guide planning staff, assess existing infrastructure and resource conditions in the study area, develop the characteristics and efficiency aims to define the SW Ecodistrict, design strategies to achieve its ambitious green goals, conduct cost-benefit analyses, set accountability measures, and recommend a governance structure to implement the SW Ecodistrict vision.<sup>8</sup>

The NCPC’s unique purpose, authority, expertise, and established partnerships rendered it appropriate to undertake the SW Ecodistrict planning initiative and achieve broad support for the plan.<sup>9</sup> Ideally, the SW Ecodistrict will become a reality, and implementation of the

---

<sup>4</sup> *SW Ecodistrict*, NAT’L CAP. PLANNING COMM’N, <http://www.ncpc.gov/swecodistrict/> (last visited Oct. 26, 2012) [hereinafter *NCPC SW Ecodistrict*].

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> *SW Ecodistrict Plan Summary*, NAT’L CAP. PLANNING COMM’N 3 (July 2012) [hereinafter *NCPC SW Ecodistrict Plan Summary*], <http://www.ncpc.gov/sites/default/files/SWEcodistrict%20Plan%20Summary.pdf>.

<sup>8</sup> *See Public Review Draft: The SW Ecodistrict*, NAT’L CAP. PLANNING COMM’N I (July 2012) [hereinafter *NCPC SW Ecodistrict Draft Plan*], <http://www.ncpc.gov/plans/swecodistrict/swecodistrict-draft-plan.pdf>.

<sup>9</sup> *See About Us*, NAT’L CAP. PLANNING COMM’N, [http://www.ncpc.gov/ncpc/Main\(T2\)/About\\_Us\(tr2\)/AboutUs.html](http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/AboutUs.html) (last visited Oct. 26, 2012).

Ecodistrict plan will transform a historically important section of the nation's capital.

This paper presents an overview of the NCPC—its structure and how its work is accomplished. The paper also discusses the proposed SW Ecodistrict's energy and other resource goals that, if met, will demonstrate urban ideals in a city founded on idealism.

## I. NATIONAL CAPITAL PLANNING COMMISSION

The NCPC is the central planning agency for the federal government, with planning oversight for all federally owned land and buildings in the National Capital Region (“NCR”).<sup>10</sup> The NCR is comprised of roughly 2,500 square miles, encompassing the District of Columbia; Prince George's and Montgomery Counties in Maryland; and Arlington, Fairfax, Loudoun, and Prince William Counties in Virginia.<sup>11</sup> The NCR also includes the Maryland and Virginia towns and cities within the referenced counties.<sup>12</sup>

The federal land and buildings in the NCR subject to NCPC oversight include the National Mall; Arlington National Cemetery; recreational open spaces, including the National Zoo and Rock Creek Park; all monuments, memorials, and statues; the White House with its grounds; all Smithsonian Institution museums; all federal office buildings and support facilities; and all U.S. Department of Defense (“DOD”) facilities, including the Pentagon and military installations.<sup>13</sup>

NCPC oversight also extends to the District's public buildings, streets, parks, and other infrastructure.<sup>14</sup> However, the NCPC works in

---

<sup>10</sup> 40 U.S.C. § 8711(a), (e) (2006).

<sup>11</sup> § 8702(3)(a)–(c); *National Capital Planning Commission: History*, ALLGOV, <http://www.allgov.com/departments/independent-agencies/national-capital-planning-commission?agencyid=7336#historycont> (last visited Oct. 26, 2012).

<sup>12</sup> 40 U.S.C. § 8702(3)(d) (2006).

<sup>13</sup> *See Map of Key Locations*, NAT'L CAP. PLANNING COMM'N, [http://www.ncpc.gov/DocumentDepot/Publications/Legacy/Legacy\\_Map\\_of\\_Key\\_Locations.pdf](http://www.ncpc.gov/DocumentDepot/Publications/Legacy/Legacy_Map_of_Key_Locations.pdf).

<sup>14</sup> *Legislative Authorities*, NAT'L CAP. PLANNING COMM'N, [http://www.ncpc.gov/ncpc/Main\(T2\)/About\\_Us\(tr2\)/About\\_Us\(tr3\)/LegislativeAuthorities.html](http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/LegislativeAuthorities.html) (last visited Oct. 26, 2012) [hereinafter *NCDC Legislative Authorities*]. The District of Columbia was constitutionally created as the seat of the federal government. U.S. CONST. art. 1, § 8, cl. 17 (authorizing Congress to select and exercise legislative control over the seat of the federal government). Until 1973, the federal government controlled all aspects of the District's municipal affairs. *See DC Home Rule*, COUNCIL OF THE DISTRICT OF COLUMBIA, <http://www.dccouncil.washington.dc.us/pages/dc-home-rule> (last visited Oct. 26, 2012). This included the exercise of zoning authority over District buildings and projects. *See DC Zoning History*, DISTRICT OF COLUMBIA OFFICIAL SITE, <http://dcoz.dc.gov/about/history2.shtm> (last visited Oct. 26, 2012). The National Capital Planning Act conferred this zoning authority for certain areas

partnership with the DC government to ensure that municipal planning does not conflict with—and hopefully is complementary to—federal land and infrastructure interests.<sup>15</sup> This planning partnership is carried out through the regularly updated Comprehensive Plan for the National Capital (“Comprehensive Plan”) of which there are “District Elements” prepared by the DC Mayor and reviewed and approved by the NCPC and “Federal Elements” prepared and approved by the NCPC.<sup>16</sup>

It also should be noted that while the NCPC has approval authority over both federal and DC government land and building improvements within the District,<sup>17</sup> the Commission’s recommendations are advisory for improvements to federal land and buildings in the NCR portions of Maryland and Virginia.<sup>18</sup> However, the Commission’s advisory recommendations are almost always followed by federal agencies with project oversight.<sup>19</sup>

#### A. *NCPC Mission*

The NCPC’s mission is to ensure the orderly growth and development of the federal government’s physical assets in the NCR.<sup>20</sup> This mission is accomplished through preparation, adoption and implementation of the Comprehensive Plan; review and approval or advice, depending upon the geographic location within the NCR, of federal agency plans and projects; and preparation and adoption of an annual, five-year Federal Capital Improvement Plan (“FCIP”) that documents and prioritizes proposed federal capital improvements projects throughout the NCR.<sup>21</sup>

Working closely with local governments in the NCR, who serve as hosts to the many federal facilities and employees, is essential to achieving

---

of the city upon the NCPC, where it remains today. 40 U.S.C. § 8722 (conferring the NCPC’s approval authority over District buildings in the Central Area).

<sup>15</sup> See 40 U.S.C. § 8721(a)–(c) (2006).

<sup>16</sup> § 8721(b); see also *Commission Actions Archive*, NAT’L CAP. PLANNING COMM’N, [http://www.ncpc.gov/ncpc/Main\(T2\)/ProjectReview\(Tr2\)/CommissionArchive/CommissionArchives.html](http://www.ncpc.gov/ncpc/Main(T2)/ProjectReview(Tr2)/CommissionArchive/CommissionArchives.html) (last visited Oct. 26, 2012).

<sup>17</sup> 40 U.S.C. § 8722(e) (2006). The Central Area is “defined by concurrent action of the Commission and the Council of the District of Columbia,” and it is currently comprised of the Downtown and Shaw Urban Renewal Areas. *Id.*

<sup>18</sup> § 8731(b)(3), (c).

<sup>19</sup> See, e.g., Dep’t of the Army, *Fort Belvoir—North Post, Final Building Plans*, NAT’L CAP. PLANNING COMM’N, 15, 25 (May 3, 2012), [http://www.ncpc.gov/files/projects/7094\\_Fort\\_Belvoir\\_Museum\\_of\\_the\\_Army\\_final\\_buildings\\_plans.pdf](http://www.ncpc.gov/files/projects/7094_Fort_Belvoir_Museum_of_the_Army_final_buildings_plans.pdf).

<sup>20</sup> 40 U.S.C. § 8711(a) (2006).

<sup>21</sup> *Id.* §§ 8711(e)(1), 8721(a), 8722(d)–(e).

the NCPC's mission. The importance of collaboration with local governments is underscored by the fact that the federal workforce in the NCR numbers nearly 400,000, twelve percent of regional employment.<sup>22</sup> These federal employees impact transportation, housing, public safety, and other important local government responsibilities in the NCR. In the District itself, the federal government holds nearly a third of the property, making it the largest landowner,<sup>23</sup> and it owns or leases approximately eighty-eight million square feet of office space.<sup>24</sup> Moreover, one-third of the regional economy is attributed to direct and indirect federal spending.<sup>25</sup>

Because of this federal presence, the NCPC conducts numerous planning, transportation, housing, and other studies that often influence the orderly growth and development of the nation's capital and its environs.<sup>26</sup> The NCPC's partners in many of these studies include the General Services Administration ("GSA"), the National Park Service ("NPS"), the U.S. Commission on Fine Arts ("CFA"), the DOD, the U.S. Department of Homeland Security ("DHS"), the District government, the Metropolitan Washington Council of Governments, and others.<sup>27</sup>

Inherent in the NCPC's mission is protection of the "federal interest."<sup>28</sup> It is incumbent upon the NCPC to ensure that the federal

---

<sup>22</sup> *Comprehensive Plan for the National Capital—Federal Workplace: Location, Impact, and the Community*, NAT'L CAP. PLANNING COMM'N 21 (2004), [http://www.ncpc.gov/DocumentDepot/Publications/CompPlan/CompPlanPartTwo\\_FedWorkplace.pdf](http://www.ncpc.gov/DocumentDepot/Publications/CompPlan/CompPlanPartTwo_FedWorkplace.pdf).

<sup>23</sup> *Id.* at 21–22; see Louis Peck, *The Doormat for Congress—Washington, D.C.*, FISCAL TIMES (Apr. 25, 2011), <http://www.thefiscaltimes.com/Articles/2011/04/25/The-Doormat-for-Congress-Washington-DC.aspx>.

<sup>24</sup> *FY 2009 Federal Real Property Statistics*, U.S. GENERAL SERVICE ADMINISTRATION, OFFICE OF GOVERNMENT-WIDE POLICY 4 (2010), [http://www.gsa.gov/graphics/ogp/FY2009\\_FRPR\\_Statistics.pdf](http://www.gsa.gov/graphics/ogp/FY2009_FRPR_Statistics.pdf).

<sup>25</sup> See Stephen S. Fuller, *Address to the Metropolitan Washington Council of Governments Board of Directors Meeting, How Will Changing Federal Spending Patterns Impact the Washington Area Economy and Which Sectors Will Drive Future Economic Growth?* (Mar. 14, 2012), <http://www.mwcog.org/uploads/committee-documents/a11eWVZe20120314154000.pdf>.

<sup>26</sup> *E.g.*, *Capital Space Plan: Ideas to Achieve the Full Potential of Washington's Parks and Open Space*, NAT'L CAP. PLANNING COMM'N (2010), [http://www.ncpc.gov/DocumentDepot/Publications/CapitalSpace/CapitalSpace\\_Plan.pdf](http://www.ncpc.gov/DocumentDepot/Publications/CapitalSpace/CapitalSpace_Plan.pdf); *Memorials and Museums Master Plan*, NAT'L CAP. PLANNING COMM'N (2001), [http://www.ncpc.gov/DocumentDepot/Publications/2MPlan/MemorialsandMuseumsMasterPlan\\_PartOne.pdf](http://www.ncpc.gov/DocumentDepot/Publications/2MPlan/MemorialsandMuseumsMasterPlan_PartOne.pdf); *Monumental Core Framework Plan: Connecting New Destinations with the National Mall*, NAT'L CAP. PLANNING COMM'N (2009), [http://www.ncpc.gov/DocumentDepot/Publications/Framework/FrameworkPlan1\\_Intro.pdf](http://www.ncpc.gov/DocumentDepot/Publications/Framework/FrameworkPlan1_Intro.pdf).

<sup>27</sup> *Agencies at Work*, NAT'L CAP. PLANNING COMM'N, <http://www.ncpc.gov/ncpc/Main%28T2%29/YourCapital%28Tr2%29/YourCapital%28Tr3%29/AgenicesatWork.html> (last visited Oct. 26, 2012).

<sup>28</sup> See *Executive Order 13514: Strategic Sustainability Performance Plan*, NAT'L CAP. PLANNING COMM'N 4 (June 3, 2011), [http://www.ncpc.gov/DocumentDepot/NCPC\\_Sustainability](http://www.ncpc.gov/DocumentDepot/NCPC_Sustainability)

government's investment in real property, whether land, buildings, streets, or other infrastructure it owns, is protected and, whenever possible, enhanced.<sup>29</sup> The federal interest also extends to carrying out executive branch policy. The NCPC is an executive branch agency, and the Commission and staff are ever mindful of the President's policies.<sup>30</sup> The NCPC's budget is set by the Office of Management and Budget ("OMB") before submission to Congress, and the OMB holds the agency accountable for spending and policy execution.<sup>31</sup>

### B. NCPC Composition

The twelve-member Commission is comprised of three presidential appointees, which must include one from Virginia and one from Maryland; three federal representatives, including the Secretary of Defense, the Secretary of the Interior, and the Administrator of the GSA (or their designees); four District of Columbia representatives, including the Mayor (or his designee), two mayoral appointees, and the Chairperson of the District of Columbia Council (or his designee); and one elected member each from the U.S. Senate and the U.S. House of Representatives (or their designees).<sup>32</sup>

---

\_Plan.pdf. The term "federal interest" is a broad based term, but generally refers to federal property; federal buildings and infrastructure; commemorative works as defined in 40 U.S.C. § 8902(1); congressionally mandated historic districts and historic properties as defined in the National Historic Preservation Act; and the streets, avenues, and public reservations, and vistas associated with those streets, avenues, and reservations, identified as contributing elements of the L'Enfant Plan of the City of Washington which is listed on The National Register of Historic Places maintained by the United States Department of the Interior, National Park Service pursuant to the National Historic Preservation Act of 1966, 80 Stat. 915, 16 U.S.C. § 470 et seq. as amended. *See generally Comprehensive Plan for the National Capital: Federal Elements*, NAT'L CAP. PLANNING COMM'N 15, [http://www.ncpc.gov/ncpc/Main\(T2\)/Planning\(Tr2\)/ComprehensivePlan.html](http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/ComprehensivePlan.html). Commission members also tend to add their own meaning to the term depending upon the interest they represent. For example, District representatives maintain protecting Home Rule is a federal interest since it was conferred upon the local government by Congress. *See DC Home Rule*, COUNCIL OF THE DISTRICT OF COLUMBIA, <http://www.dccouncil.washington.dc.us/pages/dc-home-rule> (last visited Oct. 26, 2012). Some Commission members include within the federal interest certain segments of the District population who are among those citizens for whom federal policies and programs are intended to help.

<sup>29</sup> *History*, NAT'L CAP. PLANNING COMM'N, [http://www.ncpc.gov/ncpc/Main\(T2\)/About\\_Us\(tr2\)/About\\_Us\(tr3\)/History.html](http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/History.html) (last visited Oct. 26, 2012) [hereinafter *NCPC History*].

<sup>30</sup> *See NCPC Commission*, *supra* note 3; *NCPC History*, *supra* note 29.

<sup>31</sup> 40 U.S.C. § 8711(g) (2006).

<sup>32</sup> *Id.* § 8711(b). The member of the U.S. Senate and the member of the U.S. House of Representatives who serve on the Commission are the chairs of committees who have review authority over the District of Columbia government—the Senate Committee on

The Commission is supported by a staff of approximately 45 architects, engineers, planners, landscape architects, historic preservation specialists, and others.<sup>33</sup> The staff performs the day to day tasks essential to the mission of the NCPC.<sup>34</sup>

### C. *Legal Authorities*

The NCPC operates under multiple legislative authorities.<sup>35</sup> Its organic statute is the National Capital Planning Act, commonly known as The Planning Act.<sup>36</sup> Others include the Height of Buildings Act of 1910,<sup>37</sup> the Commemorative Works Act,<sup>38</sup> the District of Columbia Zoning Act,<sup>39</sup> the Foreign Missions Act,<sup>40</sup> the International Center Act,<sup>41</sup> the National Historic Preservation Act,<sup>42</sup> the National Environmental Policy Act,<sup>43</sup> and the Capper-Crampton Act.<sup>44</sup>

Additionally, the NCPC must comply with Executive Orders issued by the President.<sup>45</sup> Executive Order 13514: Leadership in Environmental, Energy and Economic Performance, signed by President Obama on October 5, 2009, is particularly relevant to the proposed SW Ecodistrict.<sup>46</sup>

This Executive Order requires measurable reductions in greenhouse gas emissions by increasing buildings' energy efficiency and lessening reliance on fossil fuels; more efficient water management and usage; improved storm water management; greater promotion of pollution prevention and waste elimination; more concerted efforts on regional and local

Homeland Security and Governmental Affairs and the House Committee on Oversight and Government Reform. *Id.*

<sup>33</sup> See *Staff*, NAT'L CAP. PLANNING COMM'N, [http://www.ncpc.gov/ncpc/Main\(T2\)/About\\_Us\(tr2\)/About\\_Us\(tr3\)/Staff.html](http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/Staff.html) (last visited Oct. 26, 2012).

<sup>34</sup> See *id.*

<sup>35</sup> See *infra* notes 36–43, and accompanying text.

<sup>36</sup> National Capital Planning Act, 40 U.S.C. §§ 8701–8737 (2006).

<sup>37</sup> D.C. CODE §§ 6-601.01–6-601.09 (West 2012) (corresponding to the Act of June 1, 1910, ch. 263, § 1, 36 Stat. 452).

<sup>38</sup> Commemorative Works Act, 40 U.S.C. §§ 8901–8909 (2006).

<sup>39</sup> D.C. CODE §§ 6-641.01–6-641.15 (West 2012).

<sup>40</sup> Foreign Missions Act, 22 U.S.C. §§ 4301–4316 (2006).

<sup>41</sup> International Center Act, PUB. L. NO. 90-553, 82 Stat. 958 (1968) *amended by* PUB. L. NO. 97-186, 96 Stat. 101 (1982).

<sup>42</sup> National Historic Preservation Act, 16 U.S.C. §§ 470–470X-6 (2006).

<sup>43</sup> National Environmental Preservation Act, 42 U.S.C. §§ 4321–4370 (2006).

<sup>44</sup> Capper-Crampton Act, PUB. L. NO. 71-284, 46 Stat. 482 (1930) *amended by* PUB. L. NO. 79-919, 60 Stat. 960 (1946).

<sup>45</sup> See NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 33.

<sup>46</sup> See Exec. Order No. 13,514, 74 Fed. Reg. 52,117 (Oct. 5, 2009).

integrated transportation, energy, land use, and environmental planning; implementation of more sustainable design, construction, and operational practices for federal facilities; more economic acquisition of products, especially in the procurement, maintenance, and disposition of electronic equipment; and a more sustained, government-wide environmental management system.<sup>47</sup> Further, where feasible, the OMB reviews agency sustainability plans required by Executive Order 13514 concurrently with the OMB's review and evaluation of an agency's budget request.<sup>48</sup>

## II. NCPC'S FEDERAL AND LOCAL PARTNERS

Within the NCR, population, development, and traffic have increased substantially since the passage of the Planning Act sixty years ago.<sup>49</sup> Anticipating this regional growth, Congress created the NCPC to spearhead collaboration among the metropolitan area's "federal, state, and local governments in the interest of equity and constructive action."<sup>50</sup>

To protect and advance the federal interest, the NCPC works closely with federal agencies in the planning and development of federal land and facility improvements.<sup>51</sup> These projects are widely diverse, as can be seen in the annual FCIP.<sup>52</sup> A look at the last five FCIPs reveals that NCPC reviews more than three billion dollars in capital projects within the NCR, with at least one-third generally being DOD facilities—Army, Air Force, and Navy installations.<sup>53</sup> Many other projects involve

---

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> See generally Press Release, U.S. Census Bureau, *Texas Gains the Most in Population Since the Census* (Dec. 21, 2011), available at <http://www.census.gov/newsroom/releases/archives/population/cb11-215.html>.

<sup>50</sup> 40 U.S.C. § 8701(a)(6) (2006).

<sup>51</sup> See *NCPC Legislative Authorities*, *supra* note 14.

<sup>52</sup> See *Federal Capital Improvements Program for the National Capital Region, 2012–2017*, NAT'L CAP. PLANNING COMM'N 2, 18, 23, 31–32 (2011) [hereinafter *Federal Capital Improvements 2012–2017*], [http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIP\\_FYs2012-2017.pdf](http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIP_FYs2012-2017.pdf).

<sup>53</sup> See *id.*; see also *Federal Capital Improvements Program for the National Capital Region, 2011–2016*, NAT'L CAP. PLANNING COMM'N 19 (2010), [http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIPFY2011-2016\\_.pdf](http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIPFY2011-2016_.pdf); *Federal Capital Improvements Program for the National Capital Region, 2010–2015*, NAT'L CAP. PLANNING COMM'N 6, 21 (2009), [http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIP2010\\_2015\\_.pdf](http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIP2010_2015_.pdf); *Federal Capital Improvements Program for the National Capital Region, 2009–2014*, NAT'L CAP. PLANNING COMM'N 5, 57 (2008), [http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIP2009\\_2014.pdf](http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIP2009_2014.pdf); *Federal Capital Improvements Program, 2008–2013*, NAT'L CAP. PLANNING COMM'N 5, 52 (2007), [http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIP2008\\_2013.pdf](http://www.ncpc.gov/DocumentDepot/Publications/FCIP/FCIP2008_2013.pdf).

land and facilities under the jurisdiction of the NPS and GSA.<sup>54</sup> There is, therefore, strong justification for *ex-officio* representatives from DOD, NPS, and GSA to serve on the twelve-member Commission.<sup>55</sup>

The District of Columbia is an especially important NCPC partner given the federal government's extraordinary presence in the District. In creating the Commission, Congress recognized this fact and included four members appointed by the DC government on the Commission.<sup>56</sup> At times, the effort to protect both federal and municipal interests is challenging, especially when federal and municipal interests overlap, as in transportation and related rights-of-way matters. The federal government holds title to streets and sidewalks in certain areas of the District, while the District government maintains this critical municipal infrastructure under a congressional grant of jurisdiction.<sup>57</sup> As planning by the District government proceeds on a state-of-the-art streetcar system for the District, this overlap manifests itself in the form of a discussion over the appropriate role of, and regulatory review by, the NCPC.<sup>58</sup> As with all matters of overlapping interests, resolution lies in a collaborative work effort between the NCPC and the District government.

The NCPC also endeavors to work collaboratively with Virginia's and Maryland's local governments. Within the NCR both states play host to numerous federal facilities.<sup>59</sup> This includes the Pentagon, Fort Belvoir, Fort Meyer, Quantico Marine Base and others in the Virginia portions of the NCR and the National Institutes of Health, the Bethesda Naval Hospital, the Nuclear Regulatory Commission Complex, and others in the NCR portions of Maryland.<sup>60</sup>

The District of Columbia, however, is by far the NCPC's principal local government partner.<sup>61</sup> The NCPC and the DC government often work hand-in-hand to plan infrastructure projects that benefit the federal interest, the District, and those who live and work in the capital city.<sup>62</sup>

---

<sup>54</sup> See *Federal Capital Improvements 2012–2017*, *supra* note 52, at 35, 54, 67, 108–18.

<sup>55</sup> See *id.* at 16, 35, 41, 42, 54, 64, 76, 108–18; see also 40 U.S.C. § 8711(b)(1)(A) (2006).

<sup>56</sup> 40 U.S.C. § 8711 (b)(1)–(2) (2006).

<sup>57</sup> See D.C. CODE §§ 9-101.01–9-101.02 (West 2012) (providing the Mayor with control and jurisdiction over the streets, but not title to them); see also *Van Ness v. City of Washington*, 29 U.S. (4 Pet.) 232, 240 (1830).

<sup>58</sup> See *Federal Capital Improvements 2012–2017*, *supra* note 52, at 118.

<sup>59</sup> See *id.* at 1, 4, 7, 41, 43, 44, 84, 86.

<sup>60</sup> See *id.*

<sup>61</sup> See *Local & Regional Involvement*, NAT'L CAP. PLANNING COMM'N, [http://www.ncpc.gov/ncpc/Main\(T2\)/About\\_Us\(tr2\)/About\\_Us\(tr3\)/LocalandRegionalBoards.html](http://www.ncpc.gov/ncpc/Main(T2)/About_Us(tr2)/About_Us(tr3)/LocalandRegionalBoards.html) (last visited Oct. 26, 2012).

<sup>62</sup> See *id.*

One such extraordinary collaboration with the DC government is planning the Southwest Ecodistrict.<sup>63</sup> If this joint planning effort spurs development as envisioned, it will transform a part of the city that is currently an under-utilized, disconnected enclave in the heart of the nation's capital. It may well set a new standard for major urban energy and environmental sustainability.

### III. THE SOUTHWEST ECODISTRICT

The description of the NCPC's mission, legal authorities, partnerships, and unique relationship with the District of Columbia informs the discussion of the proposed Southwest Ecodistrict plan ("SW Ecodistrict Plan" or "Plan") that follows.<sup>64</sup> The planning initiative that produced the Plan falls within NCPC legal authority, involves more than a dozen federal agencies, and is aligned with the DC government's planning and environmental goals.<sup>65</sup>

The general goal for the proposed SW Ecodistrict is to realize a livable, walkable community in a major part of the city that will be characterized by high-level efficiencies and sustainability in land use, energy generation and consumption, transportation, water use, pollution reduction, and waste management.<sup>66</sup> The Ecodistrict planners seek to achieve and measure these goals across all buildings within the SW Ecodistrict and multiple blocks rather than building by building.<sup>67</sup>

The sustainability goals of the SW Ecodistrict Plan also are in keeping with those of "Sustainable DC," the ambitious urban sustainability initiative launched by the DC Mayor in 2011.<sup>68</sup> Like the NCPC-planned SW Ecodistrict, the DC government's sustainability initiative is centered on energy efficiency, water savings, waste reduction, and improved public transit.<sup>69</sup>

---

<sup>63</sup> *NCPC SW Ecodistrict*, *supra* note 4.

<sup>64</sup> *See infra* Part III.

<sup>65</sup> NCPC SW Ecodistrict Plan Summary, *supra* note 7, at 3.

<sup>66</sup> *Id.* at 1, 2.

<sup>67</sup> *See* NCPC SW Ecodistrict Draft Plan, *supra* note 8, at I, 1, 5, 6, 33–34, 40, 43–44, 82.

<sup>68</sup> *See What Is Sustainable DC?*, DISTRICT OF COLUMBIA, <http://sustainable.dc.gov/page/what-sustainable-dc> (last visited Oct. 26, 2012).

<sup>69</sup> *A Vision for a Sustainable DC*, DISTRICT OF COLUMBIA OFFICIAL SITE 2, 4, 10, 18, 24, 26–29 (Apr. 24, 2012), <http://sustainable.dc.gov/sites/default/files/dc/sites/sustainable/publication/attachments/sustainable%20DC%20Vision%20Plan%202.2.pdf>.

A. *Boundaries, Infrastructure, and Inhabitants*

The area envisioned as the future SW Ecodistrict consists of a 15-block, 110-acre area in the southwestern part of the city (Study Area).<sup>70</sup> The Study Area is generally bounded by Independence Avenue to its north, Maine Avenue, SW to its south, 12th Street, SW to its west, and 4th Street, SW to its east.<sup>71</sup>

Within the Study Area, the major transportation infrastructure includes Interstate 395, Metrorail stations, and CSX railroad.<sup>72</sup> There also are several parks, the largest being Benjamin Banneker Park, which overlooks the Potomac River; the Washington Channel, a major marina; and the historic fish market commercial area.<sup>73</sup>

The Study Area is home to a number of federal agencies and one quasi-federal agency, including the U.S. Department of Energy (“DOE”), the U.S. Department of Transportation (“DOT”), the U.S. Department of Education, the U.S. Department of Housing and Urban Development (“HUD”), the GSA National Capital Region Headquarters, the Federal Aviation Administration (“FAA”) and the U.S. Postal Service.<sup>74</sup> There are no District of Columbia government buildings or schools in the Study Area, and there are few commercial establishments. The most prominent large private business is the L’Enfant Plaza Hotel complex.<sup>75</sup>

Buildings in the Study Area account for approximately eleven million square feet, with almost eight million square feet federally owned and occupied by the aforementioned federal and quasi-federal agencies.<sup>76</sup> Some 32,000 daily workers commute to the area, the vast majority being federal employees.<sup>77</sup> Existing permanent residential property in the Study Area is nonexistent, though there are a few moderate-density residential neighborhoods nearby.

---

<sup>70</sup> See NCPC SW Ecodistrict Draft Plan, *supra* note 8, at ii, iii.

<sup>71</sup> See *id.*

<sup>72</sup> See *id.* at 24, 70.

<sup>73</sup> See *Monumental Core Framework Plan: Connecting New Destinations with the National Mall*, NAT’L CAP. PLANNING COMM’N 3–5 (2009), [http://www.ncpc.gov/DocumentDepot/Publications/Framework/FrameworkPlan1\\_Intro.pdf](http://www.ncpc.gov/DocumentDepot/Publications/Framework/FrameworkPlan1_Intro.pdf); see also NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 60–62, 66.

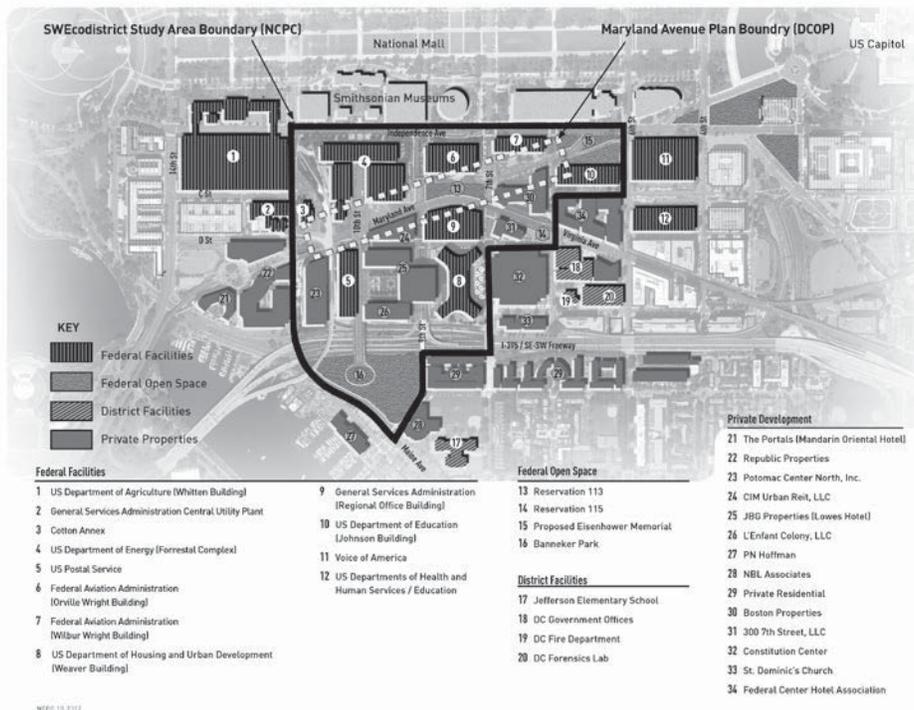
<sup>74</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at ii.

<sup>75</sup> Diane Sullivan, Public and Private Buildings in the SW Ecodistrict (unpublished data collection) (on file with NCPC).

<sup>76</sup> *Id.*

<sup>77</sup> *Id.*

The notable cultural destinations adjacent to the Study Area include the Smithsonian Castle, the Sackler and Freer Galleries, the Hirshhorn Museum, the Air and Space Museum, and the U.S. Botanic Gardens.<sup>78</sup> The location of these important institutions played a role in informing the Plan's development and recommendations. These institutions will serve as anchor tenants that will spur development of new cultural and entertainment destinations within the Study Area.<sup>79</sup>



## B. Planning the Southwest Ecodistrict

### 1. Public Sector Stakeholders

The NCPC planning for the future Southwest Ecodistrict began in 2009 with the establishment of what was then known as the 10th Street Corridor Task Force.<sup>80</sup> The Task Force's goal was to envision ways

<sup>78</sup> See *Mall Museums*, VISITINGDC, <http://www.visitingdc.com/map/national-mall-map.htm> (last visited Oct. 26, 2012).

<sup>79</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at ii.

<sup>80</sup> *10th Street Corridor Initiative*, NAT'L CAP. PLANNING COMM'N, [http://www.ncpc.gov/April2009/Main\(T2\)/Planning\(Tr2\)/TenthStCorridor.html](http://www.ncpc.gov/April2009/Main(T2)/Planning(Tr2)/TenthStCorridor.html) (last visited Oct. 26, 2012).

to breathe vibrancy into the sterile, federal building-dominated street (10th Street, SW) running from the National Mall to the waterfront (Washington Channel) which in post-workday hours offers no reason to visit.<sup>81</sup> As the Task Force's vision and scope expanded into a broader and more aggressive sustainability plan for a larger geographic area than just 10th Street, the 10th Street Corridor Task Force evolved into the current Southwest Ecodistrict Task Force ("Task Force").<sup>82</sup>

Since its earliest days, Task Force membership included major public property owners and stakeholders in and near the Study Area. Specifically, the Task Force includes representatives from numerous federal and local agencies: the DOE, HUD, the U.S. Department of Agriculture, the U.S. Department of Education, the U.S. Environmental Protection Agency, the GSA, the NPS, the FAA, the U.S. Commission on Fine Arts, the U.S. Congress (Architect of the Capitol), the Smithsonian, the DC Mayor's Office, the District Office of Planning, the District Department of Transportation, and the District Department of the Environment.<sup>83</sup>

## 2. Private Sector Stakeholders

Notwithstanding its heavy reliance on public sector representatives, from the beginning the Task Force has acknowledged the importance of existing private commercial interests within the Study Area.<sup>84</sup> The importance derives not only from their physical presence but because of the planned capital improvements envisioned for their properties. These private capital improvements are necessary to achieve the Plan's goals. Moreover, private stakeholders are important for their ability to generate capital.<sup>85</sup> If development of the Ecodistrict is to proceed as envisioned, private capital will play a critical role, especially in the implementation strategy of public-private partnerships.

The largest privately owned real property in the Ecodistrict is the L'Enfant Plaza Hotel and associated commercial office and retail complex,

---

<sup>81</sup> Memorandum from Chairman L. Preston Bryant, Jr. for NCPC Commission Members and Alternates Regarding the Establishment of the 10th Street Corridor Task Force (Oct. 26, 2009) (on file with the NCPC).

<sup>82</sup> See *10th Street Corridor Task Force Initiative: Public Scoping Meeting, Open Discussion Summary*, NAT'L CAP. PLANNING COMM'N, 1-3 (Feb. 2, 2010), [http://www.npc.gov/DocumentDepot/Planning/SWEcodistrict/findings/Public\\_Scoping\\_Meeting\\_1\\_Summary\\_Discussion\\_2\\_%202\\_%202010.pdf](http://www.npc.gov/DocumentDepot/Planning/SWEcodistrict/findings/Public_Scoping_Meeting_1_Summary_Discussion_2_%202_%202010.pdf).

<sup>83</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 92.

<sup>84</sup> *Id.* at v.

<sup>85</sup> *Id.* at 90.

which totals more than 1.7 million square feet.<sup>86</sup> Additionally, more than a decade ago, the District government launched an initiative to redevelop more than twenty acres of publicly owned land along the southwest waterfront, sitting at the base of 10th Street, where Banneker Park meets Maine Avenue, I-395, and the famed fish market and marina area.<sup>87</sup> Private developers are currently working with the District government to design a sustainable mixed-use waterfront development comprising residential, office, retail, lodging, and cultural facilities where none currently exists.<sup>88</sup>

While the Study Area is dominated by federal land and facilities, there is a significant private-sector footprint and an ambitious waterfront redevelopment plan just beyond the Study Area that puts more than two billion dollars in private capital into play.<sup>89</sup> That such aggressive public and private urban planning initiatives are simultaneously underway in the same target area is too great a coincidence to ignore, and failure to capitalize upon the many synergies would be tragic. The Task Force is going to great lengths to ensure that its SW Ecodistrict Plan and the ongoing private redevelopment initiative are complementary, and that currently contemplated public and private capital expenditures are coordinated and leveraged to the maximum extent possible.<sup>90</sup>

### C. *Energy and Environmental Goals*

The Task Force and its collaborators have spent over a year assessing the area's existing infrastructure, level of energy and water use, waste pollution, and transportation network.<sup>91</sup> This research enabled the Task Force to draft a Preliminary Plan for the SW Ecodistrict.<sup>92</sup> This Preliminary Plan was released for public comment in July

---

<sup>86</sup> L'ENFANT PLAZA, <http://www.lenfantplaza.com/> (last visited Oct. 26, 2012).

<sup>87</sup> *History of Project, THE WHARF*, <http://www.swdcwaterfront.com/about/projecthistory.htm> (last visited Oct. 26, 2012).

<sup>88</sup> *Id.*; see also Elizabeth Flock, *D.C.'s Southwest Waterfront Is Reinventing Itself Again*, WASH. POST, Aug. 15, 2011, [http://www.washingtonpost.com/local/dcs-southwest-waterfront-is-reinventing-itself-again/2011/08/08/gIQAxbyHJ\\_story.html](http://www.washingtonpost.com/local/dcs-southwest-waterfront-is-reinventing-itself-again/2011/08/08/gIQAxbyHJ_story.html); Michael Neibauer, *The Wharf on D.C.'s Southwest Waterfront, in Detail*, WASH. BUS. J., Feb. 7, 2012, <http://www.bizjournals.com/washington/blog/2012/02/the-wharf-on-dcs-southwest.html?page=all>.

<sup>89</sup> Mary Clare Glover, *Reinventing the Southwest Waterfront*, WASHINGTONIAN, Sept. 6, 2011, <http://www.washingtonian.com/articles/people/reinventing-the-southwest-waterfront>.

<sup>90</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 6, 82, 83, 90.

<sup>91</sup> See *SW Ecodistrict Initiative: Public Meetings*, NAT'L CAP. PLANNING COMM'N, <http://www.ncpc.gov/swecodistrict/meetings> (last visited Oct. 26, 2012).

<sup>92</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at v, 1.

2012.<sup>93</sup> The Task Force will revise the Plan based on public input and further deliberations.

Urban sustainability plans typically address energy, water, waste, and transportation.<sup>94</sup> These are the key sustainability components of the SW Ecodistrict Plan.<sup>95</sup>

## 1. Energy

As stipulated in Executive Order 13514, federal buildings must be classified as “zero-net-energy” by 2030.<sup>96</sup> The Plan applies this goal to the Study Area.<sup>97</sup> This means that the Ecodistrict must produce all of its own energy without producing any carbon emissions or buying carbon credits typically used to “offset” carbon emissions.<sup>98</sup> Achieving a zero-net-energy goal is very difficult in an urban area; however, energy efficient buildings, district-scale energy systems, and renewable energy sources can make this possible.<sup>99</sup>

The Plan outlines a two-part strategy to meet the goal of zero-net-energy use.<sup>100</sup> The first part of the strategy is to make the Ecodistrict as energy efficient as possible.<sup>101</sup> Today, the super-block-sized federal buildings built in the 1970s are extremely inefficient. To correct this deficiency, several of the existing buildings would have to be retrofitted.<sup>102</sup> Highly energy efficient construction would occur on infill sites and on existing federal sites where the overall benefits of new construction outweigh the costs associated with modernizing existing buildings.<sup>103</sup>

---

<sup>93</sup> Public Comment and Public Meeting on Draft Revisions to the Federal Environment Element of the Comprehensive Plan for the National Capital: Federal Elements, 77 Fed. Reg. 33,243 (June 5, 2012).

<sup>94</sup> See, e.g., *Planning and Sustainability*, THE CITY OF PORTLAND, OREGON OFFICIAL SITE, <http://www.portlandoregon.gov/bps/> (last visited Oct. 26, 2012); *Sustaining Our Environment: Urban Sustainability Program*, NEW SOUTH WALES GOVERNMENT: ENVIRONMENT & HERITAGE, <http://www.environment.nsw.gov.au/grants/urbansustainability.htm> (last visited Oct. 26, 2012).

<sup>95</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 6.

<sup>96</sup> Exec. Order No. 13,514, 74 Fed. Reg. 52,117, 52,119 (Oct. 8, 2009).

<sup>97</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 6.

<sup>98</sup> *Id.* at 38.

<sup>99</sup> See *id.* at 38, 40.

<sup>100</sup> See *id.* at 38, 40, 41.

<sup>101</sup> See *id.* at 8, 38, 40.

<sup>102</sup> *Executive Order 13514: Strategic Sustainability Performance Plan*, NAT'L CAP. PLANNING COMM'N 5, 6 (June 3, 2011), [http://www.ncpc.gov/DocumentDepot/NCPC\\_Sustainability\\_Plan.pdf](http://www.ncpc.gov/DocumentDepot/NCPC_Sustainability_Plan.pdf).

<sup>103</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 6.

One compelling redevelopment scenario is the James A. Forrestal Complex, which serves as the DOE headquarters.<sup>104</sup> The Forrestal Complex is the largest federal facility in the planned Ecodistrict.<sup>105</sup> Located at 10th Street, SW and Independence Avenue, SW, the DOE headquarters stands at the gateway to the future SW Ecodistrict.<sup>106</sup> It literally spans 10th Street, SW creating a physical, visual, and psychological barrier between the Mall and the southwest waterfront.<sup>107</sup> The site is underutilized, and the building is poorly configured to meet its mission. Task Force representatives acknowledge the building is noteworthy for its energy inefficiency.<sup>108</sup>

The opportunity inherent in the Forrestal Complex is obvious. The redesign and reconstruction of the 1.8 million square foot Forrestal Complex is a central recommendation of the Plan.<sup>109</sup> Developing a zero-net-energy building for the DOE headquarters, creating a space that meets the Agency's needs, and facilitating compliance with the Ecodistrict's goal is a compelling scenario.

The second part of the energy strategy is to change the source of the Study Area's energy from fossil fuels to an integrated, renewables-based district energy system.<sup>110</sup> However, reversing course to change the future Ecodistrict's energy source will not be cheap, easy, or quick. Currently, more than three-fourths of the energy consumed within the Study Area comes from coal-fired plants, with roughly a quarter from natural gas.<sup>111</sup> Less than one percent is from renewable sources.<sup>112</sup> In the future, the Plan envisions buildings across the SW Ecodistrict employing geothermal and solar technologies (there are acres of flat roofs) and mining heat from sewers to warm buildings.<sup>113</sup> Also envisioned is the operational improvement of an existing eighty-year-old, federal government-owned central utility plant located immediately outside the boundaries of the Study Area.<sup>114</sup> This natural gas facility produces heat and cooling to some

---

<sup>104</sup> *Id.* at 56.

<sup>105</sup> Frank Munger, *Tearing Down the Forrestal Building*, ATOMIC CITY UNDERGROUND (Aug. 5, 2011, 1:58 PM), <http://blogs.knoxnews.com/munger/2011/08/tearing-down-the-forrestal-bui.html>.

<sup>106</sup> *NCPC SW Ecodistrict*, *supra* note 4.

<sup>107</sup> *Id.*

<sup>108</sup> *See* *NCPC SW Ecodistrict Draft Plan*, *supra* note 8, at 58, 59, 85.

<sup>109</sup> *Id.* at 85.

<sup>110</sup> *See id.* at 38, 40, 41.

<sup>111</sup> *Id.* at 38.

<sup>112</sup> *Id.*

<sup>113</sup> *NCPC SW Ecodistrict Draft Plan*, *supra* note 8, at 37–41.

<sup>114</sup> *See id.* at 8, 39, 40.

fifty-five million square feet of federal buildings in the Study Area and around the National Mall, including the Smithsonian museums.<sup>115</sup> Additionally, the Plan proposes use of renewables-based microgrids in certain areas throughout the Ecodistrict.<sup>116</sup>

If the Ecodistrict evolves as envisioned, with more energy-efficient buildings, renewables-based power generation, and an enhanced integrated heating, cooling, and hot water distribution system, the Ecodistrict (while adding approximately four and a half million square feet of development) could reduce greenhouse gas emissions by fifty-one percent using a 2009 baseline.<sup>117</sup> While this is impressive by today's standards, it only brings the Ecodistrict half-way towards meeting the goal of a zero-net-energy district.<sup>118</sup> The goal will ultimately be met when technology improves and the energy source for the central utility plant is switched to a renewable source.<sup>119</sup>

## 2. Water

The Ecodistrict is characterized by big buildings with flat roofs and lots of streets and sidewalks.<sup>120</sup> It is highly impervious. In addition, potable (drinking) water is used for watering landscapes, washing sidewalks, and flushing toilets.<sup>121</sup> Reusing storm water and water that is generated from domestic activities such as laundry and dishwashing (greywater) for non-potable purposes is currently not practiced in the Ecodistrict.<sup>122</sup>

The goal is to be less wasteful, use less water overall, and make better use of storm water and greywater.<sup>123</sup> This can be accomplished by the Ecodistrict's public and private landowners incorporating storm water best management practices into redevelopment plans, characterized chiefly by constructing vegetated biofilters to pretreat runoff before it is directed to underground cisterns.<sup>124</sup> Greywater would also be treated and held in underground cisterns.<sup>125</sup> A number of large holding tanks would be built under a reconstructed 10th Street, SW, with other smaller cisterns

---

<sup>115</sup> *Id.* at 38, 40.

<sup>116</sup> *Id.* at 8.

<sup>117</sup> *Id.* at 41, 53.

<sup>118</sup> NCPD SW Ecodistrict Draft Plan, *supra* note 8, at 34, 35, 38.

<sup>119</sup> *Id.* at 38, 40.

<sup>120</sup> *Id.* at iii, 19.

<sup>121</sup> *Id.* at 34, 42.

<sup>122</sup> *Id.* at 42–45.

<sup>123</sup> *Id.* at 28.

<sup>124</sup> NCPD SW Ecodistrict Draft Plan, *supra* note 8, at 43.

<sup>125</sup> *Id.* at 43–44.

set strategically in other parts of the Ecodistrict.<sup>126</sup> The stored water would be used for non-potable water needs such as outdoor watering and cleaning purposes as well as indoor toilets and other mechanical systems in newly constructed buildings. Preliminary estimates suggest that reused storm water and greywater could account for nearly three-fourths of the Ecodistrict's water needs.<sup>127</sup> Similar District water systems are underway.<sup>128</sup> The private-sector-driven waterfront redevelopment plan also anticipates a 675,000-gallon cistern that will capture twenty-five million gallons of storm water annually for reuse in that development's cogeneration plant.<sup>129</sup>

Overall, the Plan envisions cutting potable water use in the SW Ecodistrict by one half, from its current twenty-two gallons per square foot per year to eleven gallons per square foot per year.<sup>130</sup> In addition, one hundred percent of the SW Ecodistrict's storm water (ninety-two million gallons of rain annually) would be retained and reused for non-potable water needs.<sup>131</sup>

### 3. Waste

Waste generation over a large urban area is considerable. While recycling of general office-type materials in federal facilities has become increasingly common practice over the past decade,<sup>132</sup> there is still much to be accomplished with other types of waste. More than half of all waste generated within the Ecodistrict's boundaries finds its way to the landfill.<sup>133</sup> This includes building waste (paper, plastic, food) as well as construction and landscaping debris.<sup>134</sup>

The Plan envisions aggressive construction debris recycling as the existing public and private buildings in the Ecodistrict are renovated or replaced and new ones built.<sup>135</sup> The goal is to recycle three-fourths of all

---

<sup>126</sup> *Id.*

<sup>127</sup> *Id.* at 44.

<sup>128</sup> See *A Vision for a Sustainable DC*, *supra* note 69.

<sup>129</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 45.

<sup>130</sup> *Id.* at 42.

<sup>131</sup> *Id.* at 42, 46.

<sup>132</sup> *Id.* at 46.

<sup>133</sup> *Id.*

<sup>134</sup> *Id.* at 48.

<sup>135</sup> See NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 47; Nat'l Cap. Planning Comm'n, *Southwest Ecodistrict*, PowerPoint Presentation at GreenGov Symposium, 9 (Oct. 31, 2011), <http://www.greengov2011.org/presentations/SustainablePlanning/GreenGov-2011-Sustainable-S2-DianeSullivan.pdf>.

construction debris.<sup>136</sup> Beyond construction debris, the goal is to have no more than twenty percent of all waste deposited in a landfill facility.<sup>137</sup>

#### 4. Transportation

The future SW Ecodistrict is home to major transportation facilities: urban streets, Metrorail, above-ground commuter and freight rail lines, and an interstate highway.<sup>138</sup> These infrastructure elements render it possible for the SW Ecodistrict to be a major multimodal hub.

Each day, more than 40,000 cars travel on the Study Area's street grid.<sup>139</sup> There are two Metrorail stations in the Ecodistrict—Smithsonian and L'Enfant Plaza—which account for more than 33,000 commuters daily.<sup>140</sup> The L'Enfant Plaza station's rail platform serves Virginia commuter trains, accounting for more than 7,300 daily passengers at the station.<sup>141</sup> Each day, more than 165,000 cars and trucks use the eight-lane, 3.4-mile section of Interstate 395 that runs through the area, also known as the Southwest Freeway.<sup>142</sup>

The potential for the Ecodistrict to become a more efficient DC multimodal hub lies in infrastructure improvements. The historic L'Enfant-designed street plan<sup>143</sup> in the Study Area is disjointed. Opportunities exist

---

<sup>136</sup> NCPD SW Ecodistrict Draft Plan, *supra* note 8, at 46.

<sup>137</sup> *Id.* at 46, 47.

<sup>138</sup> *Id.* at 13, 25, 26.

<sup>139</sup> See District of Columbia Dep't of Transp., *2009 Traffic Volumes*, DISTRICT OF COLUMBIA OFFICIAL SITE (Feb. 2011), available at <http://dc.gov/DC/DDOT/About+DDOT/Maps/Traffic+Volume+Map+2009>.

<sup>140</sup> See *Metrorail Passenger Surveys, Average Weekday Passenger Boardings*, WASH. METRO. AREA TRANSIT AUTH. (June 2011), [http://wmata.com/pdfs/planning/FY11\\_Rail\\_Ridership\\_By\\_Station.pdf](http://wmata.com/pdfs/planning/FY11_Rail_Ridership_By_Station.pdf).

<sup>141</sup> E-mail from Christine Hoeffner, Planning Manager, Virginia Railway Express, to Diane Sullivan, Urban Planner, NCPD (July 27, 2012, 5:17 PM) (on file with NCPD).

<sup>142</sup> *Southwest Freeway Historic Overview*, DCROADS.NET, <http://www.dcroads.net/roads/southwest/> (last visited Oct. 26, 2012).

<sup>143</sup> "The plan of the city of Washington was designed in 1791 by Pierre L'Enfant," a French artist and engineer. *The L'Enfant and McMillan Plans*, NPS.GOV, <http://www.nps.gov/nr/travel/wash/lenfant.htm> (last visited Oct. 26, 2012). The L'Enfant Plan featured "ceremonial spaces and grand radial avenues, while respecting natural contours of the land. The result was a system of intersecting diagonal avenues superimposed over a grid system. The avenues radiated from the two most significant building sites that were to be occupied by houses for Congress and the President." *Id.* Additionally, "L'Enfant specified in notes accompanying the Plan that these avenues were to be wide, grand, lined with trees, and situated in a manner that would visually connect ideal topography sites throughout the city, where important structures, monuments, and fountains were to be" placed. *Id.* L'Enfant also created and numbered 15 large open spaces or reservations at the intersections of the

for improved connector streets to fulfill the envisioned grid and to make commuting easier. The most significant near-term corridor project is, as envisioned by the Plan, the rehabilitation of the half-mile, north-south section of 10th Street, SW, between the National Mall and the waterfront.<sup>144</sup> The pavement, sidewalks, and landscaping of this prominent vehicle and pedestrian corridor have been in noticeable subpar condition for many years.<sup>145</sup> The most significant long-term roadway project is adjoining two currently disconnected sections of Maryland Avenue, SW by constructing a three-block deck over a stretch of open, heavy rail line that interrupts the Avenue.<sup>146</sup> This would restore Maryland Avenue, SW to its historic plan and allow for new real property construction on adjacent property.<sup>147</sup> The DC government has developed a Small Area Plan in conjunction with affected stakeholders to advance this design and construction project.<sup>148</sup>

A much more ambitious and long-term transportation-improvement goal for the Ecodistrict is decking a section of the Southwest Freeway to allow for expanded street grid connections and construction of new buildings on the deck.<sup>149</sup> At present, the ten-lane interstate is a major barrier to those seeking access between the National Mall and waterfront amenities.<sup>150</sup> Decking would help correct this problem.<sup>151</sup>

#### D. *Realizing the Southwest Ecodistrict*

The two-year effort to plan the Southwest Ecodistrict continues. While much labor has gone into visioning and planning the Ecodistrict, implementing it is a daunting task. Who will do it? How long will it take? How will it be funded?

---

avenues. *Id.* "Each reservation would feature statues and memorials to honor worthy citizens." *Id.* In 1987, the L'Enfant Plan was nominated and placed on the National Register of Historic Places. See The National Register of Historic Places maintained by the United States Department of the Interior, National Park Service as authorized by the National Historic Preservation Act of 1966, 80 Stat. 915, 16 U.S.C. § 470 et seq. (as amended and National Register of Historic Places Registration, April 24, 1997).

<sup>144</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 60–65.

<sup>145</sup> *Id.* at 60, 61.

<sup>146</sup> See *id.* at 68, 69, 71–73, 75–78.

<sup>147</sup> See *id.* at 68, 72–74.

<sup>148</sup> Maryland Ave. Small Area Plan, DISTRICT OF COLUMBIA OFFICIAL SITE, available at <http://planning.dc.gov/DC/Planning/In+Your+Neighborhood/Wards/Small+Area+Plans,+Studies,+and+Reports+for+All+Wards/Maryland+Ave.+Small+Area+Plan> (last visited Oct. 26, 2012).

<sup>149</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 76–78.

<sup>150</sup> *Id.* at 76.

<sup>151</sup> *Id.* at 76–78.

## 1. Governance

Realizing such a wide-scale, multifaceted urban redevelopment that involves so many public and private landowners, all of whom have their own facility improvement plans and budgets, will require extensive coordination. To achieve this coordination, the SW Ecodistrict Plan recommends the creation of a governing entity charged with guiding implementation over the decades to come.<sup>152</sup> This governing entity would be responsible for fostering buy-in among all property owners and other stakeholders; coordinating the many site, facility, and public infrastructure improvement plans; and helping to coordinate the public and private financing strategies.<sup>153</sup> The entity would be similar in structure to a special district or a business improvement district with a primary focus on sustainable infrastructure.<sup>154</sup>

In addition to the creation of a governing entity, the Plan also recommends establishing a partnership agreement between the federal and District governments.<sup>155</sup> The agreement would underscore the commitment of the two governments to the SW Ecodistrict. The agreement would outline approaches to infrastructure improvement, zoning, and other development regulatory matters.<sup>156</sup>

## 2. Project Timeline and Implementation

The SW Ecodistrict Plan is a long-range vision that provides a roadmap to coordinate infrastructure, building and site development improvements among stakeholders, including: the federal government, the District government, and the private sector.<sup>157</sup> It includes near-term and long-term recommendations.<sup>158</sup> The less expensive near-term recommendations, such as interim streetscape improvements and light rehabilitation of buildings to improve energy efficiency, could be achieved in three to five years, as funding is available. More complex and expensive long-term recommendations, such as redevelopment of the Forrestal Complex or new private air-rights development on decks, will require more detailed planning and engineering studies to identify programming, design,

---

<sup>152</sup> *Id.* at 87.

<sup>153</sup> *Id.* at 86, 87.

<sup>154</sup> *Id.* at 87.

<sup>155</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 5.

<sup>156</sup> *Id.* at 86.

<sup>157</sup> *Id.* at i.

<sup>158</sup> *Id.* at 55, 85, 91.

and construction opportunities and challenges. This will help to inform future phasing and funding needs.<sup>159</sup>

While the more complex recommendations will take longer to implement, these big ideas are not impractical. The plan can be phased as projects are economically viable and align with federal and local investment priorities “as federal space needs change, buildings are modernized, or as opportunities arise to leverage federal, local, and private funds.”<sup>160</sup>

In the current economic climate, it is not easy to predict when the SW Ecodistrict’s recommendations—DOE headquarters redevelopment, central utility plant enhancements, 10th Street corridor streetscape improvements, and Maryland Avenue reconstruction—will be realized.<sup>161</sup> However, the Task Force recognizes the importance of moving beyond visioning and planning to understanding the Plan’s costs and benefits.<sup>162</sup> As the first step, to determine if it is feasible to proceed with more detailed planning, the Task Force prepared a conceptual, overall magnitude of costs.<sup>163</sup> This involved evaluating three investment categories: building utilities, street and landscape improvements, and real estate development.<sup>164</sup>

This work also included identifying the categories of benefits, such as reduced rents, operating, maintenance, and utility costs; land sale and tax revenues; increased property values and net operating income; and economic growth.<sup>165</sup> There are also numerous intrinsic qualitative benefits that are difficult to assign a monetary value, such as improved new symbolic locations for nationally significant commemorative works or museums, a desirable live-work neighborhood, a reduced environmental footprint, cleaner rivers, and a national sustainability showcase. The Task Force’s initial assessment suggests the benefits will outweigh the costs.<sup>166</sup>

As the public and stakeholders are commenting on the SW Ecodistrict Plan, the Task Force is preparing to conduct a more detailed cost-benefit analysis that will quantify costs and benefits attributable to each major stakeholder—the federal government, the District of Columbia

---

<sup>159</sup> *Id.* at 81, 85.

<sup>160</sup> *Id.* at 6.

<sup>161</sup> NCPC SW Ecodistrict Draft Plan, *supra* note 8, at 91.

<sup>162</sup> *Id.* at 82–83.

<sup>163</sup> *Id.*

<sup>164</sup> *Id.* at 20, 82, 83.

<sup>165</sup> *Id.* at 82, 84.

<sup>166</sup> *Id.* at 8, 82, 83.

government, and private property owners. This will help to identify funding gaps and strategies to prioritize investments, and identify opportunities and challenges to monetize future benefits to pay for initial investments through a variety of potential funding mechanisms.<sup>167</sup>

The most singularly unpredictable Ecodistrict implementation variable is money, especially in a struggling economy which constrains public budgets and renders private capital difficult to obtain. However, financing strategies have been identified, the most obvious being public-private partnerships.<sup>168</sup> The private sector has already shown interest in utilizing this approach both within and around the Study Area, as exhibited by a private-sector redevelopment plan for the waterfront.<sup>169</sup> The federal government, through the GSA, can play a role in facilitating public-private partnerships through land sales and land exchanges.<sup>170</sup>

The public-private partnership is not a new model.<sup>171</sup> The GSA has engaged in public-private partnerships for other federal buildings in the District, including the redevelopment of Union Station, a pending agreement for the Old Post Office Pavilion, and the Hotel Monaco, among others.<sup>172</sup> If the DOE headquarters is redesigned and reconstructed, it is possible that it would be accomplished through a public-private partnership.

There also are other financing options available, such as tax increment financing, payments in lieu of taxes, special assessments, negotiated extractions, and impact fees.<sup>173</sup> The feasibility of tapping these mechanisms will be evaluated in the next phase of the Task Force's work to determine how to move the SW Ecodistrict toward implementation.<sup>174</sup>

---

<sup>167</sup> NCPD SW Ecodistrict Draft Plan, *supra* note 8, at 83, 90.

<sup>168</sup> *Id.* at 90.

<sup>169</sup> *About the Wharf*, THE WHARF, <http://www.swdcwaterfront.com/about/about.htm> (last visited Oct. 26, 2012).

<sup>170</sup> 40 U.S.C. § 543 (2006).

<sup>171</sup> See, e.g., John DeFerrari, *The General Post Office, aka Hotel Monaco*, STREETS OF WASHINGTON (Dec. 12, 2010), <http://www.streetsofashington.com/2010/12/general-post-office-aka-hotel-monaco.html>; Keith Laing, *Amtrak Plans \$7 Billion Upgrade of DC's Union Station*, THE HILL'S GLOBAL AFFAIRS BLOG (July 25, 2012, 2:20 PM), <http://thehill.com/blogs/transportation-report/railroads/240063-amtrak-plans-7-billion-upgrade-of-dcs-union-station>; Jonathan O'Connell, *Old Post Office to Become 250-Room Trump Hotel*, CAPITAL BUSINESS BLOG (Feb. 7, 2012, 3:55 PM), [http://www.washingtonpost.com/blogs/capital-business/post/old-post-office-to-become-250-room-trump-hotel/2012/02/07/gIQAx8s6wQ\\_blog.html](http://www.washingtonpost.com/blogs/capital-business/post/old-post-office-to-become-250-room-trump-hotel/2012/02/07/gIQAx8s6wQ_blog.html).

<sup>172</sup> *Id.*

<sup>173</sup> NCPD SW Ecodistrict Draft Plan, *supra* note 8, at 90.

<sup>174</sup> *Id.* at 91.

## CONCLUSIONS

Federal and DC government planners recognized an extraordinary opportunity at hand. They noted, when focusing on improvements to a single transportation and pedestrian corridor, that the opportunity existed to construct a wider sustainability plan for an area short on amenities but long on potential.

The 110-acre, fifteen-block Study Area that defines the SW Ecodistrict is comprised of public and private property owners.<sup>175</sup> Public landowners include both the federal and District governments.<sup>176</sup> Many of the largest buildings are approaching a half century in age and are in need of major rehabilitation or outright replacement.<sup>177</sup> Energy and water are used inefficiently, waste prevention is minimal, and much of the transportation infrastructure is unsightly, in disrepair, and entangled in an extraordinarily complex web.

Fortunately, numerous major public and private property owners in the Ecodistrict are planning significant capital improvements, and opportunities abound to coordinate these improvements to achieve a greater community and environmental good in a cost-effective manner. This is the NCPC's goal.

Moreover, if our nation's capital becomes as known for sustainability as for its democratic institutions and ideals, Americans will have once again shown the leadership others around the world have come to expect. This, too, is the NCPC's goal.

---

<sup>175</sup> *Id.* at iii.

<sup>176</sup> *Id.*

<sup>177</sup> *Id.* at 6; see also Ryan Hall, *Southwest Ecodistrict Looks to Fix '60s Planning Failure*, GREATER GREATER WASHINGTON (July 27, 2011, 10:07 AM), <http://greatergreaterwashington.org/post/11444/southwest-ecodistrict-looks-to-fix-60s-planning-failure/>.