

CHAPTER 5: CONSULTATION AND COORDINATION

NEPA regulations require an “early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action.” To determine the scope of issues to be analyzed in depth in this plan, meetings were conducted with the lead agencies and the public.

5.1. PUBLIC INVOLVEMENT

Public scoping for the proposed action was originally initiated by NPS in 2006. A meeting was held on October 26 at Peirce Mill to give the public the opportunity to share ideas on the potential rehabilitation of the trail. Based on comments received during the 2006 scoping, a project to prepare an EA commenced in 2009. During this time, federal and local agencies, as well as community stakeholders, were invited to provide comments on the scope of the EA and the proposed action. Three letters were received from the public during the scoping period. A letter from Friends of Peirce Mill was received describing the restoration efforts underway at the Mill in 2009. The Friends of Rose Park commented on their preference to see the Rose Park trail renovated in its current location and at its current width. The Beall Court Condominium Association also commented that the Rose Park trail should not be widened. Prior to the release of the EA, the project was put on hold.

In November 2010, when funding again became available, the Rock Creek Park Multi-Use Trail Rehabilitation was reinitiated. In addition to an agency scoping period, a public scoping period was opened January 28, 2011 through February 28, 2011. During this time, the public was invited to provide comments on the proposed action and scope of the EA, and issues and concerns regarding natural, socioeconomic and cultural resources. Public notices were posted on the Planning, Environment, and Public Comment website (PEPC), the DDOT website and Facebook pages, and advertised in The Washington Post and The Current Newspapers. The project team also sent email notices or posted to listservs of Advisory Neighborhood Commissioners (ANCs), community groups, and potential stakeholders, including individuals and groups who previously expressed an interest in the project.

A public scoping meeting was held on February 23, 2011, at the National Zoological Park Visitor Center Auditorium, 3001 Connecticut Avenue, NW, Washington, DC. The purpose of this meeting was to solicit public input on the purpose, need, and objectives of the project, major issues, and alternatives. A total of fifty-four (54) people signed in to the meeting. The meeting was held in an open-house format followed by an open microphone session in which attendees could sign up to speak at a microphone. The open microphone session was recorded by a court reporter. In addition, attendees could comment in writing.

About six hundred (600) comments were received during the scoping period. In general, the comments articulated support for the action alternatives. The vast majority of commenters favored Rock Creek Park Trail Alternative 3, Peirce Mill Trail Spur Option B, and Rose Park Trail Option C. Many commenters commented that the portion of the Rock Creek Trail on the National Zoo property should remain open 24 hours-a-day or improvements should be made to the trail as it runs through the Beach Drive tunnel detour. Commenters articulated concern over trail detours during construction and stated that detours should be well marked and easy to use. Many commenters expressed safety concerns due to trail deterioration, poor visibility, and road crossings. Some commenters asked that signage be added to the trail indicating trail connections and distances. Other concerns included trail maintenance, natural resource protection, and stormwater management. Comments were received from the Friends of Rose Park stating preference for the Rose Park trail to be

resurfaced, but not moved or widened. Some commenters asked that speed control measures be used in Rose Park to slow bikers.

In addition to public scoping, the project team held a meeting with the Friends of Rose Park on April 13, 2011. At the meeting, Rose Park Trail options were presented and comments were received. Comments received from the Friends of Rose Park expressed concerns regarding widening of the trail, the proximity of the trail to children's play areas, and the preservation of an oak tree adjacent to the trail at the Dumbarton Street playground area.

Following the release of the EA, DDOT held a public hearing on December 14, 2011. The meeting provided the public with an opportunity to review the Rock Creek Park Multi-Use Trail Rehabilitation EA and Section 106 Evaluation and provide formal comments. The majority of comments indicated Alternative 3 as the Preferred Alternative for the Rock Creek Park Multi-Use Trail Rehabilitation. No comments were received in support of Alternative 2. For the Rose Park Trail, the majority of hearing comments were in favor of Option B, C, or either option. However, comments were received questioning the safety of Options B and C, and the protection of vegetation in Rose Park.

5.2. CONSULTATION

Coordination with local and federal agencies and various interest groups was conducted during the NEPA process to identify issues and/or concerns related to the proposed RCT rehabilitation. In accordance with Section 7 of the Endangered Species Act, consultation letters were sent from DDOT to DDOH, the USFWS, and the NPS Center for Urban Ecology on December 14, 2010 (See **Appendix A**). In a letter dated April 20, 2011, the USFWS confirmed that there are no known federally listed species or habitat within the project limits, and Section 7 consultation with USFWS for the project was complete. No additional responses have been received to date.

Scoping letters were sent on February 27, 2009 to several local and federal agencies to solicit comments on the proposed project. The NCPC responded via a letter dated March 23, 2009 and asked that NCPC be identified as a cooperating federal agency for NEPA. NCPC asked that the EA analyze elements of the *Comprehensive Plan for the National Capital*, stormwater management, impacts to forest corridors and buffers, and historic resources and attributes. The Smithsonian Institute (SI) responded by an email dated March 18, 2009 and commented that the National Zoo Property and the Holt House are both on the National Register of Historic Places (NRHP). SI also provided concerns that they would like to be addressed in the EA including Historic Districts, transportation issues regarding road crossings, protection of Rock Creek Valley, and analysis of visual and aesthetic features. The DC OP provided comments by letter dated March 25, 2009 discussing policies of the District's Comprehensive Plan that promote multi-modal accessibility to District neighborhoods and key destinations. DC OP also asked that the EA look at the impacts of the proposed trail rehabilitation on the adjacent communities.

Scoping letters were sent out on January 24, 2011 to local and federal agencies to solicit comments and to invite recipients to an Agency Scoping Meeting. The Agency Scoping Meeting was held on February 15, 2011 at the Rock Creek Park Maintenance Yard Conference Room, 5000 Glover Road, Washington, DC 20015. The purpose of the meeting was to obtain agency and elected officials feedback on the proposed action and scope of the EA and to present the preliminary project alternatives. Agencies attending the meeting included DC Water, CFA, NCPC, DDOE, and a representative of Councilmember Bowser. The attendees were supportive of the project and provided recommendations to refine the preliminary alternative concepts including

preliminary design and stormwater management concepts. The discussion also included suggestions for items to consider in the design phase of the project, such as materials selection and signage styles.

The project team met with National Zoo senior managers on June 1, 2011 to present the proposed action and alternatives, and discuss issues such as the Zoo gates to the north and south of the Beach Drive tunnel, and the deteriorating timber retaining wall within the perimeter fence. ***A second meeting was held with the National Zoo on January 24, 2013 to discuss design plans.*** The National Zoo staff explained that the outer perimeter fence and accompanying gates, as well as their timed closures, are required in order to maintain the National Zoo's accreditation by the American Zoological and Aquarium Association (AZA). After a presentation and discussion, the National Zoo senior management endorsed Rock Creek Park Trail Alternative 3: Trail Resurfacing and Widening, including trail widening from eight feet to 10 feet on National Zoo property.

5.3. SECTION 106 CONSULTATION

Section 106 requires federal agencies to take into account the effects of their undertakings on historic properties. Section 106 consultation was initiated in 2009 for the previous EA effort. DC HPO replied on March 19, 2009. The 2009 letter stated that the project would occur within or immediately adjacent to the following sites listed on the NRHP or DC Inventory of Historic Sites: Rock Creek Park, Greystone Enclave, Piney Branch Parkway, National Zoological Park, and the Rock Creek and Potomac Parkway. The DC HPO also stated that the project may result in direct or indirect effects on the following historic districts: Mount Pleasant, Woodley Park, Kalorama Triangle, Sheridan-Kalorama, Massachusetts Avenue, Oak Hill Cemetery, Montrose Park, and Georgetown. The DC HPO stated the EA should evaluate the potential for direct and indirect effects such as visual and audible impacts within these historic districts, as appropriate.

With the continuation of the EA process and in accordance with the regulations implementing Section 106 of the NHPA, letters initiating the process were resent to the DC HPO and ACHP on December 14, 2010. No response was received from the ACHP as of the date of this EA and a response is not expected since it has been determined that the project would result in a Finding of No Adverse Effect. The consultation conducted with the DC HPO is described below.

In response to the initiation letter, the DC HPO replied on January 18, 2011 via a letter confirming that the project will occur within or adjacent to three historic districts listed in the NRHP; the Rock Creek Park, Rock Creek and Potomac Parkway, and the National Zoological Park Historic Districts. DDOT submitted a letter requesting concurrence on the APE on July 5, 2011 and DC HPO concurred with the APE on July 14, 2011. Since numerous archeology sites have been identified near the project area, the DC HPO recommended coordination with Dr. Ruth Troccoli and Dr. Stephen Potter (NPS Regional Archeologist) prior to ground disturbance. DDOT also coordinated archeological resource concerns with NPS and DC HPO as part of the archeological investigation, EA, and Section 106 processes. DDOT/FHWA then submitted an Assessment of Effect to the DC HPO on September 18, 2011 and received DC HPO concurrence on the Finding of No Adverse Effect on October 19, 2011. ***On May 21, 2014, FHWA submitted a formal letter to the DC SHPO, which outlined FHWA's determination of effects to historic resources from the project. On June 2, 2014, the DC SHPO responded and confirmed its concurrence to FHWA's determination of "No Adverse Effects".*** The aforementioned Section 106 documentation is provided in **Appendix D**.

5.4. PUBLIC COMMENTS AND HEARING FOR THE EA

The public comment period closed on January 13, 2012. DDOT and NPS received comments through written letters, emails, and the NPS Planning, Environment, and Public Comment (PEPC) website (<http://parkplanning.nps.gov/RockCreekTrailRehab>), where the EA was publicly posted on the Internet. The PEPC database is a tool used by the NPS to manage official correspondence and analyze public comment in the planning process. Comments were reviewed and analyzed and changes to the EA provided in the Final EA.

DDOT held a Public Hearing at the Columbia Heights Education Campus on December 14, 2011 from 6:00 p.m. to 8:00 p.m. The hearing was set up in an Open House format from 6:00 – 6:30, with public comments from 6:30 p.m. – 8:00 p.m. The purpose of the public hearing was to give interested parties the opportunity to provide formal comments on the Draft EA and Section 106 Evaluation

Comments on the EA and responses to substantive comments can be found in Appendix E to this Final EA.

LIST OF PREPARERS

DISTRICT DEPARTMENT OF TRANSPORTATION

Infrastructure Project Management Administration

55 M St SE, 5th Floor
Washington DC 20003

Austina Casey, DDOT Project Manager

Faisal Hameed, Chief, Project Development, Environment & Sustainability Division

Jim Sebastian, Supervisory Transportation Planner

FEDERAL HIGHWAY ADMINISTRATION

District of Columbia Division

1990 K Street, NW Suite 510
Washington DC 20006

Michael W. Hicks, Urban/Environmental Engineer

U.S. DEPARTMENT OF THE INTERIOR

National Park Service, National Capitol Region

1100 Ohio Drive, SW
Washington DC 20242

Joel Gorder, Regional Environmental Coordinator

National Park Service, Rock Creek Park

3545 Williamsburg Lane, NW
Washington DC 20008

Tara Morrison, Superintendent

Cynthia Cox, Assistant Superintendent

Nick Bartolomeo, Chief Ranger

GREENHORNE & O'MARA, INC.

810 Gleneagles Court, Suite 106
Baltimore, MD 21286

Harry Canfield, PWS
Project Manager
B.S., Biology
Pennsylvania State University, 1988

Theresa Black
Environmental Scientist
M.S., Environmental Science
Towson University, 2007

Sheila Mahoney
Environmental Planner
M.S., Environmental Sciences and Policy
Johns Hopkins University, 2005

Alexis Morris
Environmental Scientist
B.S., Environmental Science
Barton College, 2003

Caesar S. Hatami
Engineering Technician
Community College of Baltimore County,
2005

Brett Schrader
Environmental Scientist
M.S., Environmental Science
Towson University, 2011

Amad Jones, P.E.
Structural Engineer
M.S., Structural Engineering
Carnegie Mellon University, 1998

Stacy Stone, P.E.
Civil Engineer
M.S., Civil Engineering
University of Maryland, 2003

Paul Kreisa, PhD
Senior Archeologist
Ph.D., Anthropolgy
University of Illinois, 1990

Nick Vollentine
Environmental Scientist
B.S., Geography & Environmental Planning
Towson University, 2002

Julie A. Liptak
Senior Graphic Artist
B.S., Graphic Design
University of Cincinnati, 1976

John Wiser
Quality Assurance/Quality Control
B.S., Biology
Eckerd College, 1991

CGB CONSULTING

2241 Wonderview Road
Timonium, MD 21093

Caryn G. Brookman
NEPA Specialist
M.S., Environmental Sciences & Policy
Johns Hopkins University, 2005

ROBINSON AND ASSOCIATES, INC.

1909 Q Street, NW Suite 300
Washington DC 20009

Judy Robinson
Cultural Resources/Section 106 Specialist
B.A., English/Architectural and Art History
Randolph-Macon Woman's College, 1969

Janel Crist Kausner
Architectural Historian
M.A., Historic Preservation
Goucher College, 2009

GLOSSARY AND ACRONYMS

GLOSSARY OF TERMS

Affected Environment — The existing environment to be affected by a proposed action and alternatives.

Best Management Practices — Methods that have been determined to be the most effective, practical means of preventing or reducing pollution or other adverse environmental impacts.

Contributing Resource — A building, site, structure, or object that adds to the historic significance of a property or district.

Council on Environmental Quality — Established by Congress within the Executive Office of the President with passage of the *National Environmental Policy Act* of 1969. CEQ coordinates federal environmental efforts and works closely with agencies and other White House offices in the development of environmental policies and initiatives.

Cultural Landscape — Environments that include natural and cultural resources associated with a historical context.

Cultural Resources — Prehistoric and historic districts, sites, buildings, objects, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reason.

Cumulative Impacts — Under NEPA regulations, the incremental environmental impact or effect of an action together with the effects of past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions (40 CFR Part 1508.7).

Endangered Species — Any species that is in danger of extinction throughout all or a significant portion of its range. The lead federal agency for the listing of a species as endangered is the U.S. Fish and Wildlife Service, and it is responsible for reviewing the status of the species on a five-year basis.

Endangered Species Act (16 U.S.C. 1531 et seq.) — An Act which provides a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved and which provides a program for the conservation of such endangered species and threatened species.

Environmental Assessment — An environmental analysis prepared pursuant to the *National Environmental Policy Act* to determine whether a federal action would significantly affect the environment and thus require a more detailed environmental impact statement (EIS).

Executive Order — Official proclamation issued by the President that may set forth policy or direction or establish specific duties in connection with the execution of federal laws and programs.

Floodplain — The flat or nearly flat land along a river or stream or in a tidal area that is covered by water during a flood.

Impairment—Refers to a classification of poor water quality for a surface water body under the U.S. Clean Water Act.

National Environmental Policy Act (NEPA) — The Act as amended, articulates the federal law that mandates protecting the quality of the human environment. It requires federal agencies to systematically assess the environmental impacts of their proposed activities, programs, and projects including the “no build” alternative of not pursuing the proposed action. NEPA requires agencies to consider alternative ways of accomplishing their missions in ways which are less damaging to the environment.

National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.) — An Act to establish a program for the preservation of historic properties throughout the nation, and for other purposes, approved October 15, 1966 [Public Law 89-665; 80 STAT. 915; 16 U.S.C. 470 as amended by Public Law 91-243, Public Law 93-54, Public Law 94-422, Public Law 94-458, Public Law 96-199, Public Law 96-244, Public Law 96-515, Public Law 98-483, Public Law 99-514, Public Law 100-127, and Public Law 102-575].

National Register of Historic Places (NRHP) — A register of districts, sites, buildings, structures, and objects important in American history, architecture, archeology, and culture, maintained by the Secretary of the Interior under authority of Section 2(b) of the *Historic Sites Act* of 1935 and Section 101(a)(1) of the *National Historic Preservation Act* of 1966, as amended.

Scoping — Scoping, as part of NEPA, requires examining a proposed action and its possible effects; establishing the depth of environmental analysis needed; and determining analysis procedures, data needed, and task assignments. The public is encouraged to participate and submit comments on proposed projects during the scoping period.

Threatened Species — Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

ACRONYMS

ABA	Architectural Barriers Act
ABAAS	Architectural Barriers Act Accessibility Standard
ADA	Americans with Disabilities Act
ACHP	Advisory Council on Historic Preservation
ANCs	Advisory Neighborhood Commissioners
APE	Area of Potential Effect
BMPs	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CRZ	critical root zone
CWA	Clean Water Act
Dbh	diameter at breast height
DCMR	District of Columbia Municipal Regulations
DCOP	District of Columbia Office of Planning
DCOS	District of Columbia Office of the Secretary
DDOE	District Department of the Environment
DDOH	District of Columbia Department of Health
DDOT	District Department of Transportation
DM	Departmental Manual
DO	Director's Order
DPR	District of Columbia Department of Parks and Recreation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
Msl	mean sea level
MWCOG	Metropolitan Washington Council of Governments
NAAQS	National Ambient Air Quality Standards
National Zoo	National Zoological Park
NBS	National Biological Survey
NCPC	National Capitol Planning Commission
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NPOMA	National Parks Omnibus Management Act
NPS	National Park Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
PEPC	Planning, Environment and Public Comment
PL	Public Law

PWA	Public Works Administration
SFHA	special flood hazard area
HPO	Historic Preservation Office
TMDL	Total Maximum Daily Load
TNC	the Nature Conservancy
Rock Creek Park GMP	Final Rock Creek Park and the Rock Creek and Potomac Parkway General Management Plan
SWDC	Special Waters of the District of Columbia
TMDLs	Total Maximum Daily Loads
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

BIBLIOGRAPHY

Advisory Council on Historic Preservation (ACHP)

- 2008 *Nationwide Programmatic Agreement to Streamline Section 106 Process for National Park Service.* (accessed online: <http://www.achp.gov/2008%20NATIONWIDE%20PA%20-%20SIGNED.pdf> , March 21, 2011).

American Association of State Highway and Transportation Officials (AASHTO)

- 2001 *A Policy on Geometric Design of Highways and Streets.* American Association of State Highway and Transportation Officials, Washington, D.C.

Anderson, David G., and Robert C. Mainfort, Jr.

- 2002 An Introduction to Woodland Archeology in the Southeast. In *The Woodland Southeast*, edited by David G. Anderson and Robert C. Mainfort, Jr., pp. 1–19. The University of Alabama Press, Tuscaloosa.

Association of Zoos and Aquariums

- 2013 *AZA Accreditation Standards and Related Policies. Association of Zoos and Aquariums, (accessed online: <http://www.aza.org/uploadedFiles/Accreditation/AZA-Accreditation-Standards.pdf/> , May 25, 2013)*

Ayers/Saint/Gross and John Milner Associates, Inc.

- 2008 *National Zoological Park Comprehensive Facilities Master Plan, Rock Creek Campus, Washington, DC.* Ayers/Saint/Gross and John Milner Associates, Inc., Baltimore, Maryland and Alexandria, Virginia.

Barber, Michael B.

- 1991 Evolving Subsistence Patterns and Future Directions: The Late Archaic and Early Woodland Periods. In *Late Archaic and Early Woodland Research in Virginia*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 253–258. Dietz Press, Richmond, Virginia.

Barse, P. William

- 2002 *An Archeological Survey, Inventory, and Evaluation Study, and Data Recovery for the Fletcher's Boathouse Site (51NW13), C&O Canal National Historic Park, Washington, DC.* URS Corporation, Florence, New Jersey.

Barse, P. William, and Alan D. Beauregard

- 1994 *Phase III Data Recovery at the Clifton Site (18CH358).* Final report prepared for the Maryland Department of Transportation by KCI Technologies, Inc., Mechanicsburg, Pennsylvania.

Bedell, John, Stuart Fiedel, and Charles LeeDecker

- 2008 *“Bold, Rocky, and Picturesque”*: Archeological Overview and Assessment and Archeological Identification and Evaluation Study of Rock Creek Park, District of Columbia. Volume I. The Louis Berger Group, Inc., Washington, DC.

Carbone, Victor

- 1976 *Environment and Prehistory in the Shenandoah Valley*. Ph.D. dissertation, The Catholic University of America, Washington, DC.

Carroll County Maryland

- 2007 *Forest Conservation Technical Manual, Third Edition*. Westminster, Maryland. (accessed online: <http://ccgovernment.carr.org/ccg/resmgmt/forconsmanual.pdf>, February 28, 2011).

Cowardin, Lewis M., Virginia Carter, Francis C. Golet, and Edward T. LaRoe

- 1979 *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Department of the Interior, Fish and Wildlife Service, Washington DC.

Davis, T., D. Whelan, K. Grandine, C. Capozzola, N. Sheehan, and S. Mallory

- 1997 *Phase I Archeological and Phase II Architectural Investigations for the Villages at Piscataway, Prince George’s County, Maryland*. Final report prepared for Greenvest, L.C. by R. Christopher Goodwin & Associates, Inc., Frederick, Maryland

District of Columbia

- 2005-9 *NeighborhoodInfo DC: Tract Profiles*. (accessed online: <http://www.neighborhoodinfodc.org/censustract/census.html>, March 21, 2011).

District of Columbia Department of Environment (DDOE)

- 2008 *2008 Report to the Environmental Protection Agency and U.S. Congress Pursuant to Section 305(b), Clean Water Act (P.L. 97-117)*. Natural Resources Administration, Water Quality Division.
- 2010 *Rock Creek Watershed Implementation Plan (WIP)*. District Department of Environment -Watershed Protection Division.

District of Columbia Department of Health (DDOH)

- 2005 *Rock Creek Watershed Implementation Plan (WIP)*. Environmental Health Administration, Watershed Protection Division.
- 2004a *District of Columbia Final Total Maximum Daily Loads for Metals in Rock Creek*. Environmental Health Administration, Bureau of Environmental Quality, Water Quality Division.
- 2004b *District of Columbia Final Total Maximum Daily Loads for Fecal Coliform in Rock Creek*. Environmental Health Administration, Bureau of Environmental Quality, Water Quality Division.

- 2004c *District of Columbia Final Total Maximum Daily Loads for Organics and Metals in Broad Branch, Dumbarton Oaks, Fenwick Branch, Klinge Valley Creek, Luzon Branch, Melvin Hazen Valley Branch, Normanstone Creek, Pinehurst Branch, Piney Branch, Portal Branch, and Soapstone Creek.* Environmental Health Administration, Bureau of Environmental Quality, Water Quality Division.

District Department of Transportation (DDOT)

- 2010 *DCDOT Bike Map 2010.* (accessed online: <http://ddot.dc.gov/DC/DDOT/About+DDOT/Maps> , March 21, 2011).
- 2010b *Klinge Valley Trail Environmental Assessment.* Planning, Policy, and Sustainability Administration, Washington DC.
- 2011 *Rehabilitation of Oregon Avenue, NW.* Infrastructure Project Management Administration; Planning Policy and Sustainability Administration; in cooperation with the National Park Service, Washington DC.
- 2011b *Klinge Valley Trail Finding of No Significant Impact. Planning, Policy and Sustainability Administration, Washington D.C.***

District of Columbia Office of Planning (DCOP)

- 2006 *The 2006 Comprehensive Plan for the National Capital Region: District Elements; Parks, Recreation, and Open Spaces Section 1.1.2: Consideration of Federal Parkland.* (accessed online: <http://planning.dc.gov/DC/Planning/Across+the+City/Comprehensive+Plan/2006+Comprehensive+Plan> , March 21, 2011).
- 2006b *Existing Land Use Map; Map Tile 6 and Map Tile 10.* (accessed online: <http://planning.dc.gov/DC/Planning/DC+Data+and+Maps/Map+Library/Existing+Land+Use+Map> , March 21, 2011).

District of Columbia Office of the Secretary (DCOS)

- 2011 *Title 21 of the DC Municipal Regulations, Chapter 11, Water Quality Standards.* (accessed online: http://os.dc.gov/os/frames.asp?doc=/os/lib/os/info/odai/title_21/title21_chapter11.pdf , February 28, 2011).

District of Columbia State Historic Preservation Office (DC HPO)

- 1964 DC Inventory of Historic Sites Form. "Duke Ellington Bridge."
- 1964b DC Inventory of Historic Sites Form. "Oak Hill Cemetery."
- 1967 DC Inventory of Historic Sites Form. "Georgetown Historic District."

District of Columbia Water (DC Water)

- 2011 *Combined Sewer System.* (accessed online: http://www.dcwater.com/wastewater_collection/css/default.cfm , March 1, 2011).

- 2011b *Rock Creek Sewer Separation*. (accessed online: http://www.dewater.com/workzones/projects/rock_creek_cso.cfm , March 1, 2011).
- 2011c *Clean Rivers Project*. (accessed online: <http://www.dewater.com/workzones/projects/cleanrivers.cfm> , February 15, 2011).

Egloff, Keith T., and Joseph M. McAvoy

- 1990 Chronology of Virginia's Early and Middle Archaic Periods. In *Early and Middle Archaic Research in Virginia*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 61–80. Dietz Press, Richmond, Virginia.

Federal Highway Administration and the National Recreational Trails Advisory Committee

- 2013 *Conflicts on Multiple-Use Trails: Synthesis of the Literature and State of the Practice*. (accessed online: http://www.fhwa.dot.gov/environment/recreational_trails/publications/conflicts_on_multiple_use_trails/conflicts.pdf, May 29, 2013).

Feest, Christian F.

- 1978 Virginia Algonquians. In *Northeast*, edited by Bruce G. Trigger, pp. 253–270. Handbook of North American Indians, Vol. 15, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

Fehr, April Miller

- 1981 *Preliminary Archival Investigations of Impact Areas Associated with the Crosstown Watermain, N.W., Washington, DC*. Thunderbird Research Corporation, Front Royal, Virginia.

Fiedel, Stuart, John Bedell, Charles LeeDecker, Jason Shellenhamer, and Eric Griffitts

- 2008 “*Bold, Rocky, and Picturesque*”: Archeological Overview and Assessment and Archeological Identification and Evaluation Study of Rock Creek Park, District of Columbia. Volume II. The Louis Berger Group, Inc., Washington, DC.

Friends of Peirce Mill

- 2008 *Restoration on Fast Track*. (accessed online: <http://www.peircemill-friends.org/> , February 14, 2011).

Gardner, William M.

- 1982 Early and Middle Woodland in the Middle Atlantic: An Overview. In *Practicing Environmental Archeology: Methods and Interpretations*, edited by Roger W. Moeller, pp. 53–86. Occasional Paper No. 3. American Indian Archeological Institute, Washington, Connecticut.
- 1983 Stop Me if You've Heard This One Before: The Flint Run Paleo-Indian Complex Revisited. *Archeology of Eastern North America* 11:49–64.

- 1989 An Examination of Cultural Change in the Late Pleistocene and Early Holocene (circa 9200 to 6800 B.C.). In *Paleoindian Research in Virginia*, edited by J. Mark Wittkofski and Theodore R. Reinhart, pp. 5–52. Dietz Press. Richmond, Virginia.

Goode, James M.

- 2003 *Capital Losses: A Cultural History of Washington's Destroyed Buildings*. Smithsonian Books, Washington DC.

Greenhorne & O'Mara (G&O)

- 2011 *Existing Structures Along Rock Creek Trail Inspection Report*. Baltimore, MD. Prepared for the District Department of Transportation.

Historic American Buildings Survey (HABS)

- 2004 Historic American Buildings Survey/Historic American Engineering Record – *Rock Creek and Potomac Parkway*. HABS No. DC-697. (accessed online: <http://memory.loc.gov/ammem/hhhtml/hhhome.html> , February 2, 2004).

Hantman, Jeffrey L.

- 1990 Virginia in a North American Perspective. In *Early and Middle Archaic Research in Virginia*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 133–154. Dietz Press, Richmond, Virginia.

Hantman, Jeffrey L., and Michael J. Klein

- 1992 Middle and Late Woodland Archeology in Piedmont Virginia. In *Middle and Late Woodland Research in Virginia: A Synthesis*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 137–164. Special Publication No. 29. Archeological Society of Virginia, Richmond.

Holland, Kerri, Charles Goode, Lynn D. Jones, Sarah Traum, and Donna J. Seifert

- 2009 *Archeological Identification Survey for the proposed Water Main Line to the Lower Zoo, National Zoological Park, Rock Creek Campus, Washington, DC*. Draft Report. John Milner Associates, Inc., Alexandria, Virginia.

Holmes, William H.

- 1897 Stone Implements of the Potomac-Chesapeake Tidewater Province. In *Fifteenth Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1893-94*:13–152. Government Printing Office, Washington, DC.

Humphrey, Robert L., and Mary Elizabeth Chambers

- 1985 *Ancient Washington – American Indian Cultures of the Potomac*. GW Washington Studies No. 6. George Washington University, Washington, DC.

Inashima, Paul Y.

- 1985 *An Archeological Investigation of Thirty-One Erosion Control and Bank Stabilization Sites along Rock Creek and its Tributaries*. U.S. Department of the Interior, National Park Service, Denver Service Center, Denver, Colorado.

Justice, Noel D.

- 1987 *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States: A Modern Survey and Reference*. Indiana University Press, Bloomington.

Kavanagh, Maureen

- 1982 *Archeological Resources of the Monocacy River Region*. File Report No. 164. Maryland Geological Survey, Division of Archeology, Baltimore.
- 1983 Prehistoric Occupation of the Monocacy River Region. In *Piedmont Archeology*, edited by J.M. Wittofski and L. E. Browning, pp. 40–54. Special Publication No. 10. Archeological Society of Virginia, Richmond.

Klein, Michael J., and Thomas Klatka

- 1991 Late Archaic and Early Woodland Demography and Settlement Patterns. In *Late Archaic and Early Woodland Research in Virginia*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 139–184. Dietz Press, Richmond, Virginia.

Knepper, Dennis, John M. Rutherford, Daniel R. Hayes, Carter Shields, and Christopher L. Bowen

- 2006 *The Archeology of an Urban Landscape, the Whitehurst Freeway Archeological Project Volume I: Prehistoric Sites*. Parsons, Washington, DC., and Versar, Inc., Springfield, Virginia.

Littlejohn, Margaret

- 1999 *Rock Creek Park Visitor Study, Report 112*. Visitor Services Project, Cooperative Park Studies Unit, University of Idaho, Moscow, Idaho.

McNett, Charles W.

- 1972 The Potomac Avenue Site in Washington, DC. *Maryland Archeology* 8:23–35.

Metropolitan Washington Council of Government (MWCOCG)

- 2011 *Overview of COG Air Quality Program*. (accessed online: <http://www.mwcog.org/environment/air/>, March 21, 2011).

Michaud, Cassandra, Heather Crowl, and Thomas Bodor

- 2002 *Archeological Investigations at Fish Passages along Rock Creek, Washington, DC*. URS Group, Inc., Gaithersburg, Maryland.

Myler, Elizabeth A., and Richard J. Dent

1990 *Preliminary Archeological Reconnaissance of Selected Portions of the Smithsonian Institution-National Zoological Park, Washington, DC.* Potomac River Archeological Survey, Department of Anthropology, The American University, Washington, DC.

National Capital Planning Commission (NCPC)

2004 *Comprehensive Plan for the National Capital: Federal Elements.* (accessed online: [http://www.ncpc.gov/ncpc/Main\(T2\)/Planning\(Tr2\)/ComprehensivePlan.html](http://www.ncpc.gov/ncpc/Main(T2)/Planning(Tr2)/ComprehensivePlan.html) , April 16, 2013).

U.S. Department of the Interior, National Park Service (NPS)

- 1967 *Georgetown Historic District.* National Register of Historic Places – Registration Form.
- 1967b *Montrose Park.* National Register of Historic Places – Registration Form.
- 1969 *Peirce Mill.* National Register of Historic Places – Registration Form, by Nancy C. Taylor.
- 1972 *Oak Hill Cemetary Chapel.* National Register of Historic Places – Registration Form, by Suzanne Ganschinetz.
- 1973 *Dumbarton Bridge.* National Register of Historic Places – Registration Form, by T. Robins Brown.
- 1973b *National Zoological Park.* National Register of Historic Places – Registration Form, by Leonard H. Gerson.
- 1973c *Peirce-Klingel Mansion.* National Register of Historic Places – Registration Form, by Helen Dillon.
- 1975 *Mount Zion Cemetery.* National Register of Historic Places – Registration Form, by Tanya Beauchamp.
- 1990 *Historic Resources Report of Rock Creek Park, District of Columbia,* by William Bushong. Washington DC.
- 1991 *Rock Creek Park Historic District.* National Register of Historic Places – Registration Form, by William Bushong.
- 1992 *Secretary of the Interior's Standards for the Treatment of Historic Properties.* (accessed online: http://www.nps.gov/history/hps/tps/standguide/overview/using_standguide.htm , March 21, 2011).
- 1998 *Director's Order 28: Cultural Resource Management.* (accessed online: <http://www.nps.gov/policy/DOrders/DOrder28.html> , March 21, 2011).
- 1998b *Director's Order 28A: Archeology.* (accessed online: <http://www.nps.gov/policy/DOrders/DOrder28A.html> , March 21, 2011).
- 1998c *Peirce Mill Cultural Landscapes Inventory,* by Perry C. Wheelock, Nancy J. Brown, and Jennifer G Hanna. Washington DC.

- 2000 *Director's Order #42: Accessibility for Visitors with Disabilities in National Park Service programs and Services.* (accessed online: <http://www.nps.gov/policy/DOrders/DOrder42.html> , March 21, 2011).
- 2001 *Director's Order #12: Conservation Planning, Environmental Impact Analysis, and Decision Making.* (accessed online: <http://www.nps.gov/policy/DOrders/DOrder12.html> , March 21, 2011).
- 2003 *Director's Order # 77-2: Floodplain Management.* (accessed online: <http://www.nps.gov/policy/DOrders/DO77-2--Floodplains.pdf> , March 21, 2011).
- 2003b *Georgetown Historic District (amended).* National Register of Historic Places – Registration Form, by Kimberly Prothro Williams.
- 2003c *Connecticut Avenue Bridge.* National Register of Historic Places – Registration Form, by Betty Bird.
- 2005 *Culvert Architectural Feature Assessment Reconstruction and Rehabilitation of Rock Creek & Potomac Parkway, From P Street Through Beach Drive.* By The Louis Berger Group. Prepared in cooperation with HNTB Urban Design & Planning.
- 2005b *Rock Creek and Potomac Parkway Historic District.* National Register of Historic Places – Registration Form, by Eve L. Barsoum.
- 2006 *Management Policies 2006.* (accessed online: <http://www.nps.gov/policy/mp2006.pdf> , March 21, 2011).
- 2006b *Reconstruction and Rehabilitation of Beach Drive and Rock Creek and Potomac Parkway from P Street to Calvert Street.* (accessed online: <http://parkplanning.nps.gov/documentsList.cfm?parkID=198&projectID=14919> , July 12, 2011).
- 2007 *Rock Creek Park and Rock Creek and Potomac Parkway Final Environmental Impact Statement/General Management Plan.* (accessed online: <http://parkplanning.nps.gov/document.cfm?parkID=198&projectId=11262&documentID=13218> , March 21, 2011).
- 2007b *First Annual Centennial Strategy for Rock Creek Park.* (accessed online: http://www.nps.gov/rocr/parkmgmt/upload/ROCR_Centennial_Strategy.pdf , March 21, 2011).
- 2008 *Blagden Avenue Hiker/Biker Trail FONSI.* (accessed online: <http://www.dc.gov/DC/DDOT/Projects+and+Planning/Environment/Blagden+Avenue+Draft+Environmental+Assessment> , February 14, 2011).
- 2009 *Rock Creek Park Geologic Resources Inventory Report.* (accessed online: http://www.nature.nps.gov/geology/inventory/publications/reports/rocr_gri_rpt_body_print.pdf , March 23, 2011).
- 2009b *Rock Creek White Tailed Deer Management Plan/DEIS.* (accessed online: <http://parkplanning.nps.gov/document.cfm?parkID=198&projectID=14330&documentID=28397> , March 7, 2011).

- 2010 *Rock Creek Park Long Range Interpretive Plan.* (accessed online: <http://hfc.nps.gov/pdf/ip/2010-05-07-RockCreekLRIP-FinalDocument.pdf> , March 21, 2011).
- 2010b *Rock Creek Park Superintendents Compendium.* Title 36, Code of Federal Regulations, Chapter 1, Parts 1-7, authorized by Title 16 United States Code, Section 3. (accessed online: <http://home.nps.gov/rocr/parkmgmt/rock-creek-park-superintendent-compendium.htm> , March 21, 2011).
- 2011 *Klingle Valley Trail Final Environmental Assessment.* Washington DC.
- 2012 *Reconstruction and Rehabilitation of Rock Creek and Potomac Parkway Southbound at Waterside Drive, NW Environmental Assessment (accessed online: <http://parkplanning.nps.gov/document.cfm?parkID=198&projectID=39210&documentID=48877>, June 21, 2013)***

The Nature Conservancy (TNC)

- 1998 *NBS/NPS Vegetation Mapping Program: Classification of Rock Creek Park.* Boston MA: Eastern Regional Office and Arlington VA: International Headquarters.

Potter, Stephen

- 1993 *Commoners, Tribute, and Chiefs: The Development of Algonquian Culture in the Potomac Valley.* The University Press of Virginia, Charlottesville.

Robinson & Associates, Inc.

- 1993 *The Georgetown Historic District Project: A Cultural resources Survey. Volume III: Archeological Assessment of the Georgetown Historic District.* Robinson & Associates, Inc., Washington, DC.

Salwen, Bert, and Susan N. Mayer

- 1981 Letter dated 18 September 1981. Letter on file, DC HPO, Archeological Report 353.

Smith, John

- 1946 Description of Virginia and Proceedings of the Colonies. In *Narratives of Early Virginia, 1606-1625.* Lyon S. Tyler, editor, pp. 73-204. Barnes and Noble, Inc., New York.

Steponaitis, Laurie Cameron

- 1980 *A Survey of Artifact Collections from the Patuxent River Drainage, Maryland.* Monograph Series No. 1. Maryland Historical Trust, Annapolis.

Turner, E. Randolph III

- 1992 The Virginia Coastal Plain during the Late Woodland Period. In *Middle and Late Woodland Research in Virginia: A Synthesis*, edited by Theodore R. Reinhart and Mary Ellen N. Hodges, pp. 97-136. Special Publication No. 29. Archeological Society of Virginia, Richmond.

Smithsonian National Zoological Park (Smithsonian)

- 2008 *National Zoo Facilities Master Plan*. Office of Planning and Project Management, Washington DC. (accessed online: <http://nationalzoo.si.edu/AboutUs/FuturePlans/MasterPlanEA5-15-08.pdf> , March 21, 2011).

U.S. Census

- 2010 *Profile of General Population and Housing Characteristics: 2010*. (accessed online: <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml> , June 24, 2011).

U.S. Department of Agriculture (USDA)

- 1976 *Soil Survey of Washington DC*. U.S. Department of Agriculture, Natural Resources Conservation Service.
- 2011 *Hydric Soils Overview*. U.S. Department of Agriculture, Natural Resources Conservation Service. (accessed on-line: <http://soils.usda.gov/use/hydric/overview.html> , February 28, 2011).
- 2011b *Prime Farmland*. U.S. Department of Agriculture, Natural Resources Conservation Service. (accessed on-line: <http://www.va.nrcs.usda.gov/technical/Soils/primefarmland.html> , February 28, 2011).

U.S. Department of the Interior, Fish and Wildlife Service (USFWS)

- 1995 *The National Wetlands Inventory: Wetlands of Maryland*. Prepared by Ralph W. Tiner and David G. Burke.
- 2011 *Endangered Species Program*. (accessed online: <http://www.fws.gov/endangered/> , March 21, 2011).
- 2011b *Wetlands Mapper*. (accessed online: <http://www.fws.gov/wetlands/Data/Mapper.html> , February 28, 2011).

U.S. Department of Transportation, Federal Highway Administration (FHWA)

- 2001 *Designing Sidewalks and Trails for Access, Part II of II: Best Practices Design Guide*. (accessed online: <http://www.fhwa.dot.gov/environment/sidewalk2/sidewalks214.htm> , June 21, 2011).

U.S. Environmental Protection Agency (USEPA)

- 2011 *Executive Order 12088: Federal Compliance with Pollution Control Standards*. Federal Facilities Restoration and Reuse Office. (accessed online: <http://www.epa.gov/fedfac/documents/presdoc.htm> , March 21, 2011).
- 2011b *Executive Order 11988: Floodplain Management*. (accessed online: <http://water.epa.gov/lawsregs/guidance/wetlands/eo11988.cfm> , March 21, 2011).

U.S. Geological Survey (USGS)

- 1997 *Groundwater Atlas of the United States*. (accessed on-line: <http://pubs.usgs.gov/ha/ha730/> , February 28, 2011).

Wagner, Daniel P.

- 2008 Appendix A: Geomorphological Survey. In *“Bold, Rocky, and Picturesque”*: Archeological Overview and Assessment and Archeological Identification and Evaluation Study of Rock Creek Park, District of Columbia. Volume III, prepared by Stuart Fieldel, John Bedell, Charles LeeDecker, and Jason Shellenhamer, pp.A-1-A-16. The Louis Berger Group, Inc., Washington, DC.

Wesler, K., D. Pogue, A. Luckenbach, G. Fine, P. Sternheimer, and E.G. Furgurson

- 1981 *The Maryland Department of Transportation Archeological Resources Survey, Volume 2: Western Shore*. Manuscript Series No. 6. Maryland Historical Trust, Annapolis.