



FINDING OF NO SIGNIFICANT IMPACT

Wireless Telecommunication Plan/Environmental Assessment

Rock Creek Park

INTRODUCTION

The NPS has selected Alternative C, "Management to Focus on Coverage Gaps," which is also the preferred alternative in this Wireless Telecommunication Facility Plan/Environmental Assessment (WTF plan/EA) and concludes that it will not have a significant effect on the human environment. This WTF plan/EA and proposed Finding of No Significant Impact (FONSI), will provide all administered units of Rock Creek Park with a consistent framework for protecting park resources during the consideration of "right-of-way permit" applications and other inquiries submitted to the park for the construction, operation, and maintenance of WTF. Government agencies, including the National Park Service (NPS), are required to consider applications for siting WTF on their lands. The scope of this plan is limited to addressing WTF related to providing wireless telecommunication services, such as cellular phones. This plan is tailored to respond to the legal authorities governing placement of WTF on parkland which differ from those authorities applicable to other technologies, such as WiFi, radio, and television, which are not addressed in this WTF plan/EA.

A WTF plan/EA is needed at this time to:

- Meet the conditions of the *2003 Rock Creek Park Telecommunication Facilities EA Finding of No Significant Impact*, which states the NPS will develop and adopt a telecommunication facilities plan to assist the park in future decision-making regarding potential WTF permit applications.
- Provide a consistent and coordinated process for considering right-of-way permit applications for WTF use throughout Rock Creek Park administered units and assist the park with the protection of natural and cultural resources, human health, visitor safety, and visitor experience.
- Satisfy the National Capital Planning Commission (NCPC) requirement that a plan for evaluating right-of-way applications for WTF in Rock Creek Park be in place before the NCPC considers any renewals of the existing WTF in the park.

BACKGROUND

Rock Creek Park was established on September 27, 1890, as the third federal park created by Congress. It is located entirely within the District of Columbia. The park provides for the preservation from injury or spoilation of all timber, animals, or curiosities within said park, and their retention in their natural condition, as nearly as possible. Since its establishment in 1890, additional properties were added to Rock Creek Park and today the park is composed of 99 separate reservations, also referred to as units, located throughout Washington, D.C. The largest of the 99 reservations, Reservation 339, was established by Congress on September 27, 1890, and consists of 1,754 acres that include Rock Creek and the surrounding valley from the Maryland state line south to the National Zoo. Beyond Reservation 339, Rock Creek Park administers areas such as the Rock Creek and

Potomac Parkway (Reservation 360), Glover-Archbold Park (Reservation 351 and 450), Fort Reno (Reservation 470 and 515), Fort Totten (Reservation 544), and Meridian Hill Park (Reservation 327). The *Rock Creek Park and Rock Creek and Potomac Parkway Final General Management Plan/ EIS (GMP)*, *Strategic Plan for Rock Creek Park*, *Fort Circle Parks Management Plan/ EA*, *Rock Creek Park Resources Management Plan* along with other site specific planning documents, outline the management of the Rock Creek Park units. Along with applicable law, regulations and policies, these plans were the basis for determining where WTF could possibly be placed or where they would interfere with the park's mission or planned uses of the park.

The Telecommunications Act of 1996 was enacted to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.[Public Law No. 104-104, 110 Stat. 56 (1996)] There are two WTF facilities permitted within Rock Creek Park (in Reservation 339). The right-of-way permit for these existing WTF at Rock Creek Park was renewed in December 2004 following the NPS' issuance of the 2003 EA and FONSI as a result of litigation. That FONSI, among other things, called for NPS to develop a WTF plan for the park and to conduct a study on the effects of WTF on birds in the park. This present EA is for the WTF plan, and the study "The Effect of Cell Towers on Birds and Bats at Rock Creek Park," (the Bird Study), is expected to be completed in 2009. The NPS will consider the existing WTF permit, future applications and this WTF plan in light of the Bird Study and make any changes necessitated by it. The NCPC has stated that the WTF plan and Bird Study needed to be complete before the NCPC would consider another renewal of the existing WTF permit which expires in December 2009.

There are no pending applications for additional WTF in the park, although pre-application meetings with some providers have been recently held. Co-location at the two existing WTF can occur under the right-of-way permit (RW 3450-99-003), which states: "The permittee will allow any future wireless provider approved by the National Park Service to co-locate on the permittee's antenna so long as such co-location does not interfere with the permittee's existing use of the property." The NPS expects the WTF plan to be in place for NPS to use for these potential applications, otherwise the NPS will consider them for placement as described in Alternative A, the no-action alternative. In any event the NPS will continue to follow NPS procedure for these applications, RM-53 Special Park Uses, Appendix 5, Exhibit 6, Wireless Telecommunications Facilities.

There is a patchwork of statutes, regulations, Presidential directives, and agency policy and guidance governing WTF applications and their placement on federal lands including NPS parkland, referred to in the WTF plan/EA as the applicable authorities. Some pertain only to WTF, which are treated differently than other types of telecommunication facilities. Collectively, they dictate when and how applications for the use of these lands as sites for WTF are processed and reviewed by the NPS and others; moreover, they provide the criteria for determining whether to authorize WTF on parkland and under what circumstances. WTF are not to be sited where it will result in an unavoidable conflict with the federal department or agency's mission or its current or planned use of the property or access to that property. These authorities include: the Telecommunications Act of 1996, P.L. No. 104-104, 110 Stat. 56 § 704(c), 47 USCA § 332 note, the Presidential Memorandum of August 10, 1995, "Facilitating Access to Federal Property for the Siting of Mobile Services Antennas," the General Services Administration (GSA) Bulletin FMR 2007-B2, "Placement of Commercial Antennas on Federal Property," and U.S. Fish and Wildlife Service (USFWS) 2000 "Guidelines on Siting Telecommunications Facilities." Laws, regulations and policies specific to the NPS are also followed. In addition, the NCPC has guidelines for WTF while the U.S. Commission of Fine Arts reviews the designs of construction projects within certain areas of Washington, D.C.

SELECTED ALTERNATIVE

Based on the EA, public comments and information from other agencies and in consideration of the applicable authorities the NPS has decided to implement as the plan, Alternative C, Management to Focus on Coverage Gaps, the preferred alternative. Alternative C is selected because it best meets the purpose and need, responding to the Telecommunications Act of 1996 and other applicable laws and policies while protecting the natural and cultural resources of the park and simultaneously stabilizing the quality of the visitor experience. We also believe it may prove to be a more efficient process than those considered in the other alternatives. A summary of environmental effects of Alternative C, the selected alternative, as printed in the WTF plan/EA, is provided in table 2 (attached).

Under the selected alternative, the park has identified areas where coverage gaps for wireless telecommunication service exist and encourages applicants to site in these areas provided no conflicts with the park mission and planned uses exist. In these areas, permit terms and conditions are included to ensure protection of sensitive resources. These areas are located mainly along Beach Drive in the main unit of Rock Creek Park. If applications for WTF right-of-way permits are received for outside the area identified as having a coverage gap, the selected alternative identifies zones or areas of the park where WTF may not be allowed and zones or areas where they may be considered an appropriate use. In the potential locations, applications to construct and operate WTF would also be subject to permit terms and conditions specific to that area or zone. Consideration of WTF and permit terms and conditions will be based on the GMP or the individual management document for each park unit as applicable and will include elements such as the design and location requirements for a proposed facility in a particular location. Table 1 describes the potential terms and conditions that will be applicable in each of the identified zones. The results of the Bird Study will also be taken into account.

The selected alternative also includes elements identified in the WTF plan/EA as common to the action alternatives and in some instances to the no-action alternative as well. These are that:

- All applications are subject to compliance with the applicable laws, regulations, policies, and guidelines outlined in "Chapter 1: Purpose of and Need for Action."
- Co-location on the two existing monopoles will be handled as in the existing permit.
- Areas that lack in-car coverage are considered to have a coverage gap.
- All associated cables for WTF (electrical, telephone, and fiber optic) cannot be above ground.
- No fencing is permitted around WTF and their associated structures.
- Applications must include an analysis of locations outside the park that could provide similar levels of service, if available.
- Only WTF using the newest technology will be considered, following the intent of all applicable authorities to facilitate the build out of new WTF service, and conforming to the *NPS Management Policies 2006* direction to require the "best technology available."
- WTF is subject to the USFWS guidance on siting such facilities, and will not be permitted in a breeding bird census area, an area of sensitive habitat, or in a place that could impact historic resources.

- WTF will not be considered in certain areas of the park because of desired conditions stated in the park's GMP and other applicable management documents, which is provided for by the applicable authorities.
- Applicants are required to conform to the physical requirements for WTF facilities, such as height and lighting, directed by applicable authorities.

Finally, as a result of a recent suggestion by USFWS for future study on the effects of WTF radiation on birds, a topic upon which there is no U.S. field data, the NPS will seek funding and work with USFWS to develop such a study, the results of which will be considered when available.

OTHER ALTERNATIVES CONSIDERED

The WTF plan/EA evaluated two other alternatives:

Alternative A – No-Action Alternative

Under the no-action alternative, right-of-way permit applications for WTF within any unit of Rock Creek Park would continue to be evaluated by the NPS in accordance with applicable authorities and RM-53. Requests for WTF siting in all areas of the park would be reviewed in the context of the park's GMP or the individual management document for each park unit to determine if WTF siting would be acceptable in the requested area of the park. The park would continue to consider WTF applications without a more structured process or plan for the evaluation of such requests than is currently in place. This alternative was not selected because it fails to provide a foundation for decision-making regarding the issuance of right-of-way permits, fails to establish criteria or identify areas where WTF would or would not be appropriate and fails to identify conditions under which WTF would be permitted.

Alternative B – Zone Management

Under alternative B, the park would review and evaluate applications for WTF following RM-53, as described under the no-action alternative. Alternative B would add additional considerations to the process by identifying zones or areas of the park where WTF may not be allowed or where they would be considered an appropriate use based on the park's GMP or the management documents for each park unit. These permit terms and conditions are shown in table 1, and are also included in the selected alternative, Alternative C. In areas where a WTF may be considered appropriate, applications for a right-of-way permit to construct and operate a WTF could be sited and would be subject to certain permit terms and conditions specific to the area or zone proposed for the facility. This alternative was not selected because it does not best address how in-car coverage gaps will be addressed by the park.

Both of these alternatives would result in a less efficient use of NPS time and staff than the selected alternative.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The NPS identifies the environmentally preferred alternative in both its EIS's and its EA's. This is the alternative that best promotes the national environmental policy expressed in NEPA (Section 101(b)). In its guidance, the NPS uses the Council on Environmental Quality's (CEQ) definition from CEQ's *Forty Most Asked Questions*, Question 6a: the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources. After completing the environmental impact analysis, the NPS identified the selected alternative, Alternative C, as the environmentally preferred alternative because it best protects the park's natural and cultural resources by identifying areas where WTF would

conflict with planned uses of the park and provides conditions for WTF where such facilities may be considered acceptable thereby encouraging them to focus on certain areas of the park and minimizing forest fragmentation.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

The NPS has determined that the selected alternative, Alternative C, Management to Focus on Coverage Gaps will not have a significant effect on the environment as defined in 40 CFR §1508.27. Significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse: The selected alternative could benefit avian species located outside of the coverage gaps and could adversely affect avian species within the coverage gaps with the addition of WTF. However, according to the first two years of data from the Bird Study, the impacts of WTF on avian species are negligible. If results from the final year deviate from this and lead to a different conclusion, the selection of Alternative C will be reconsidered. This alternative conforms strongly with the USFWS's 2000 Guidelines on Siting Telecommunications Facilities. Keeping any new WTF to less than 30 feet above ground level, using unguyed wired facilities, concealing outbuildings, maintaining wires underground, and minimizing forest fragmentation are all sound bird-friendly practices. The USFWS Division of Migratory Bird Management concluded that the selected alternative "will have minimal impacts on migratory birds" and concluded it would be a FONSI. This correspondence is attached. Long-term beneficial impacts from excluding the main areas of avian habitat from consideration for future WTF applications, prohibitions on fencing, restrictions on disturbance in the Forest Zone, and the potential for co-location on existing facilities will reduce the potential for habitat fragmentation. Similar restrictions will ensure that adverse impacts to flora and fauna as well as sensitive species will be negligible. Long-term beneficial impacts to flora and fauna and sensitive species are expected from prohibiting facilities in the Park Road Zone, Fort Circle Parks, Dumbarton Oaks, and Montrose Park. Further, the USFWS stated that the selected alternative would "have no effect on the Hay's Spring amphipod" an endangered species found within the park. This correspondence is attached.

Construction and operation of new WTF will have short-term minor adverse impacts to air quality with long-term negligible adverse impacts during operation of the facilities. The construction, operation, and maintenance of potential future WTF is not expected to have a regional impact and will occur in accordance with all provisions set forth in the State Implementation Plan (SIP). As applicants for WTF would be encouraged to site in areas with coverage gaps, which already have levels of high ambient noise, the impacts to soundscapes will be short-term minor adverse and long-term minor to moderate adverse.

The outlined permit conditions for the selected alternative regarding size and height of the facilities will have negligible to minor long-term adverse impacts on the Rock Creek Park Historic District and cultural landscapes. Impacts to the archeological resources in the units of Rock Creek Park resulting from the selected alternative will be long-term and range from negligible to moderate adverse impacts for archeological resources because of the zone management protection of areas of known archaeological activity. For additional information see below, *Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.*

By encouraging applicants to site WTF where coverage gaps exist along Beach Drive, impacts to visitor use and experience will be long-term and negligible because of the high intensity of visitor uses

in that area. Depending on the level of visitor use in low intensity areas, impacts on the visitor experience from siting WTF in those areas will range from minor to moderate. The requirement for concealed facilities and equipment buildings and the potential for concentration of WTF in areas that are not surrounded by residential properties are expected to have potential beneficial impacts on socioeconomic resources. Under the selected alternative, all applications for new facilities will continue to be evaluated for radiofrequency emissions and would need to comply with all applicable Federal Communications Commission (FCC) regulations regarding radiofrequency emissions. For additional information see below, *Degree of effect on public health or safety*.

Degree of effect on public health or safety: The analysis in the WTF plan/EA reflects the most recent standards the FCC has published related to radiofrequency (RF) affects on human health. Implementation of the selected alternative will result in long-term beneficial impacts from increased coverage and the public's ability to contact emergency services, and long-term negligible adverse impacts from any change in the number of accidents related to cellular phone use while driving. There could also be short-term minor adverse impacts as a result of the potential for accidents during construction, implementation, and maintenance of the WTF. All WTF applications would be required to comply with FCC guidelines regarding radiofrequency emissions. Through the NEPA process for each WTF application, the RF emissions for the proposed facility and all other facilities in the area would be evaluated to make sure FCC RF regulations are complied with and to ensure that there are no impacts to human health and safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, wetlands, wild and scenic rivers, or ecologically critical areas: Under the selected alternative, WTF applicants will be encouraged to site along Beach Drive, which is a contributing element to the Rock Creek Park Historic District. The State Historic Preservation Officer for the District of Columbia concurs that the selected alternative will not have adverse impacts on the park's cultural resources. This correspondence is attached. Rock Creek Park was established as an urban park which is enjoyed by thousands of visitors a year. Under the selected alternative, unique parkland is addressed by the requirement for siting cellular facilities in pre-disturbed areas to minimize impacts to visitor use and experience. The park does not contain wild and scenic rivers and WTF would not be permitted within any wetlands, therefore these topics have not been addressed. Rock Creek Park is attractive to both large numbers of neotropical bird migrants and uncommon bird breeding species. The park has been recognized by National Audubon Society and American Bird Conservancy as an important migrant land bird resting area in the District of Columbia and contains ecologically critical areas, such as the Breeding Bird Census Area. These critical areas will be preserved as applicants use pre-disturbed areas and co-locate facilities in order to minimize the amount of impacts on avian species. Where applicants are permitted to locate WTF, all NPS, USFWS, and other applicable agency guidelines will be followed to minimize impacts to these species. The USFWS concurs that the selected alternative will have no affect on endangered species in the park, specifically stating that the selected alternative "would have no effect on the Hay's Spring amphipod." Additionally, NPS consulted with the USFWS Division of Migratory Bird Management regarding the WTF plan/EA. The USFWS concluded that the selected alternative would have minimal impacts on migratory birds and USFWS concluded it would be a FONSI. Both correspondence are attached.

Degree to which effects on the quality of the human environment are likely to be highly controversial: What we know and have learned about the effects of WTF under this plan, including about avian species, is uncontroverted. The park used the best information available to assess impact to avian species in the EA. The USFWS Division of Migratory Bird Management concluded that the selected alternative will have minimal impacts on migratory birds and concluded it would be a FONSI. However the ongoing Bird Study is not yet complete. The first two years of the Bird Study indicate

that impacts from the existing WTF on avian species are negligible. The final year of data will be assessed to determine if this conclusion remains true for all three years of the Bird Study. If results from the final year lead to a different conclusion, the plan will be reconsidered. If new WTF are permitted, impacts to avian species will be considered. Upon suggestion of USFWS, the NPS is seeking funding to study with the USFWS the effects of WTF radiation on birds. Results from this study would be used when considering future WTF applications.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks: No highly uncertain, unique, or unknown risks are associated with implementation of the selected alternative. Concerns about unknown risks relate mainly to RF emissions from WTF. The analysis in the WTF plan/EA reflects the most recent standards the FCC has published related to RF effects on human health. Radiofrequency emissions from WTF have shown ground-level power densities thousands of times less than the FCC limits for safe exposure, and these FCC limits are designed to protect the public health with a large margin of safety. All applications for new facilities at Rock Creek Park will continue to be evaluated for RF emissions and will not be approved if they do not meet FCC limits. The risks to the quality of the human environment associated with the selected alternative will be negligible.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration: The selected alternative establishes a plan for evaluation of future WTF facilities in Rock Creek Park. This general plan does not establish a NPS precedent for future actions as future requests for WTF would each be evaluated separately. Also, as concluded in the WTF plan/EA, the selected alternative would not have any significant environmental effects.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts: Cumulative effects were analyzed in the WTF plan/EA. The analysis in the WTF plan/EA, along with consideration of public comment on the draft WTF plan/EA, demonstrates that under the selected alternative there would be no significant cumulative impacts (see table 2).

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources: The NPS has complied with NHPA Section 106 and the State Historic Preservation Officer has concurred that the selected alternative has no adverse affect on the park's historic, cultural, and archeological resources. This correspondence is attached. Under the selected alternative, impacts to historic properties range from negligible to minor long-term adverse along Beach Drive in the park historic district. In this area, specific permit terms and conditions will be applied to WTF applicants that offer a certain level of protection to historic structures. Under the selected alternative, applicants for proposed WTF in areas and zones beyond the recognized coverage gaps are evaluated and applications are assessed using the zone management structure described in the selected alternative. New WTF in the park will be required to incorporate the newest technology, which includes disguised facilities that meet specific size and height limitations to ensure that facilities blend in with the natural and cultural environment. Loss or destruction of significant scientific, cultural, or historical resources will not occur under the selected alternative.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat: Under the selected alternative the park will not grant permit applications for WTF in the Forest Zone, Park Road Zone, Fort Circle Parks, Dumbarton Oaks, Montrose Park, or areas of sensitive habitat, which would have long-term benefits to sensitive species because of the protection of habitat. Impacts to endangered or threatened species or their critical habitat will be long-term and

negligible from construction, operation, and maintenance of WTF as siting will be encouraged in areas of the park with coverage gaps, and specific terms and conditions will be applied to applications in these areas. A Bird Study is underway in Rock Creek Park to examine the potential impacts of the two existing WTF on migratory birds. The first two years of data from the Bird Study have found that the impacts of WTF facilities on avian species are negligible. If results from the final year lead to a different conclusion, the plan will be reconsidered. Upon review of the plan, the USFWS also concluded that the selected alternative "will have minimal impacts on migratory birds" and would result in a FONSI. Separate consultation occurred with the USFWS Chesapeake Bay Field Office, that stated, that the selected alternative "would have no effect on the Hay's Spring amphipod," an endangered species found within the park. Both correspondence are attached.

Whether the action threatens a violation of federal, state, or local environmental protection law:

The selected alternative violates no federal, state, or local environmental protection laws, as detailed in the WTF plan/EA.

IMPAIRMENT OF PARK RESOURCES OR VALUES OR UNACCEPTABLE IMPACTS

In addition to reviewing the list of significance criteria, NPS staff determined that implementation of the selected alternative will not constitute an impairment of the park's resources and values. This determination is based on a thorough analysis of the impacts described in the WTF plan/EA and this FONSI, agency and public comments received, and professional judgment in accordance with the NPS *Management Policies, 2006*. Additionally, consultation was conducted with the State Historic Preservation Office for the District of Columbia and the USFWS. The State Historic Preservation Officer has concurred that the selected alternative has no adverse affect on the park's historic, cultural, and archeological resources. The UFWS Chesapeake Bay Field Office found that, under the selected alternative there would be no effect to the federally endangered Hay's Spring amphipod. Separate consultation occurred with the USFWS Division of Migratory Bird Management that agreed with the findings of the WTF plan/EA that the selected alternative would have minimal impacts to migratory birds.

As described in the WTF plan/EA and this FONSI, implementation of the selected alternative will result in negligible to moderate adverse impacts (see page 5, *Impacts that may be both beneficial and adverse*) and will not result in major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation of Rock Creek Park; (2) key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or (3) identified as a goal in the park's general management plan or other relevant NPS planning documents. To conform with these mandates, the selected alternative establishes zones where WTF will not be permitted and zones where they will be considered as well as, specific permit terms and conditions that minimize any potential impacts to the park's natural and cultural resources. WTF must also be concealed to minimize impacts to the visitor experience. Because the selected alternative includes these restrictions, it will not result in any long-term adverse impacts or significant impact to the park's natural and cultural resources as long as design criteria required by the NPS are met. Most negative impacts will be minor or negligible, not reaching the impairment standard. The selected alternative does not adversely impact the purpose of the park, key natural and cultural park resources or any goals identified in the park's GMP and other management plans. The evaluation of each individual WTF application, including a requirement for each application to complete the NEPA process, will further ensure that the purposes of the park, key natural and cultural park resources and goals identified in the park's GMP and other applicable management plans are not adversely affected. The WTF plan

specifically considers the park purpose and planned park uses in determining where WTF may be considered, which should result in no impairment to park resources.

In addition to considering whether a proposed action will result in an impairment of park resources, the NPS *Management Policies 2006* (MP 2006) require parks to address “unacceptable impacts” in their NEPA analysis. The evaluation of unacceptable impacts addresses the concept that, while an impact may not reach the level of impairment, it might still not be acceptable within a park’s particular environment. MP 2006, Section 1.4.7.1 states that unacceptable impacts are those that would, individually or cumulatively, be inconsistent with the park’s purpose or values, impede the attainment of a park’s desired future conditions for natural and cultural resources as identified through the park’s planning process, create an unsafe or unhealthful environment for visitors or employees, diminish opportunities for current or future generations to enjoy, learn about, or be inspired by park resources or values, unreasonably interfere with: park programs or activities, or an appropriate use, or the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park, or NPS concessioner or contractor operations or services.”

The selected alternative will not result in unacceptable impacts. Rock Creek Park was created for scenic and recreational enjoyment and to protect forests within the park. The selected alternative does not interfere with these purposes or values. The selected alternative uses the park’s desired future conditions to determine how to address future right-of-way applications for WTF. The impacts from the selected alternative do not diminish current or future opportunities for park enjoyment or unreasonably interfere with park programs, activities, or peace and tranquility of the park. The selected alternative protects forest areas and scenic enjoyment by limiting fragmentation and removal of large trees and by requiring concealed facilities among other permit terms. In those areas where WTF would be permitted, permit terms and conditions will be applied to ensure that impacts are minimized.

PUBLIC INVOLVEMENT

The public was invited to comment during the initial public scoping for the WTF plan/EA which ran from April 9, 2007 to May 13, 2007. Two public meetings were held (April 24 and April 25, 2007) in the Rock Creek Park Nature Center as part of this scoping and they included an open house, a presentation by the NPS, and an opportunity for public comment. Notices of the meetings were posted on the NPS Planning, Environment, and Public Comment (PEPC) website. The park published a press release, posted the newsletter at the nature center and park headquarters, and posted the meeting notice on the park’s web site. All cellular providers were on the mailing list.

Additionally, NPS sent newsletters, which included notices of the meetings, to 267 individuals on the park’s mailing list including organizations identified as interested parties during the 2003 *Rock Creek Park Telecommunications Facilities Environmental Assessment*.

The 30 comments received during scoping focused on the impact of WTFs on the well-being of bird species that use the park either permanently or as a migratory stop-over focusing in on facility design. Other major topics were support for co-location, coverage needs within park boundaries, and lack of need for more telecommunication facilities. The scoping comments received at the meetings, by mail, email, and through the NPS PEPC system, were considered in the development of the WTF plan/EA. Individuals commented that WTF must not be placed in the breeding bird area, that the park consider stealth technologies, that the park not trench when placing facilities, that the park only bury cables when placing facilities, that the park consider no new construction and that the park consider avian impacts when addressing the WTF plan. While not all of these comments were part of the preferred alternative which has been selected to be the plan, all of these and others received were addressed in the

WTF plan/EA.

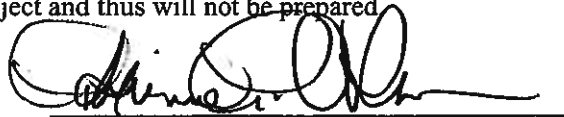
In this NEPA process, a third public meeting was held on March 27, 2008 during the public availability of the WTF plan/EA which began on March 11, 2008 with the posting of the WTF/plan EA on the NPS PEPC website for public comment. Over 300 copies of the EA were sent to the individuals, organizations, government entities and providers on the mailing list and those identified during public scoping as interested parties. Additionally, the park issued a press release and local papers published the availability of the EA for comment and announced the public meeting. The 35-day period was extended to 64 days upon public request. The public submitted 27 comments. These commented on the legal authorities applicable to siting WTF in a national park, technologies that should be considered in the park (if any), the feasibility of the technologies/height restrictions proposed in the WTF plan/EA, the status of the Bird Study and how it would be considered during consideration of WTF applications, clarification on what constitutes "encouragement" under the preferred alternative, current co-location issues for the existing facilities, defining the coverage gap, impacts to human health, impacts to wildlife, and the range of alternatives. The NPS considered all comments. No comments led to changes in the analysis or in the findings presented in the WTF plan/EA. Some of the comments resulted in changes to the WTF plan/EA and these changes are contained in the attached errata sheets. Other of these comments that required responses have been summarized and provided with their responses.

FINDING OF NO SIGNIFICANT IMPACT

The selected alternative, Alternative C, Management to Focus on Coverage Gaps, the preferred alternative, which has been selected as the plan, does not constitute an action that normally requires preparation of an environmental impact statement (EIS). It will not have a significant effect on the human environment. Negative environmental impacts that could occur are negligible to moderate in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

I find that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

Recommended:


Adrienne Coleman
Superintendent, Rock Creek Park

1/29/09
Date

Approved:


Margaret O'Dell
National Capital Region Director

1/29/09
Date

References to this Finding of No Significant Impact:

National Park Service

2001 Director's Order #12. Conservation Planning, Environmental Impact Analysis, and Decision-making. 1 August 2001.

Rock Creek Park
Wireless Telecommunication Plan & Environmental Assessment
Concern Response Report

ALI600 - Alternative C

Concern ID: 18037

CONCERN STATEMENT: Commenters expressed concerns that the design and height restrictions under alternative C were unsubstantiated and would limit the types of technologies that could be utilized. They also stated that the applicability of these technologies would be limited by costs. Other commenters supported height limitations to protect avian species.

Representative Quote(s):

Corr. ID: 7 **Organization:** T-Mobile

Comment ID: 85927 **Organization Type:** Unaffiliated Individual

Representative Quote: At a minimum, the plan would impose an effective 30' height limit along Beach Drive (page 63), along with 8" dimensional limitations on the support structure and antenna (which must be concealed within the structure). In effect, these limitations represent a microcell solution, or an even less feasible alternative, a DAS (Distributed Antenna Solution) for a very large area of the park. The technical and cost limitations of these types of facilities, which serve very narrow and short corridor sections, would be to effectively prohibit adequate coverage within the park. Moreover, this approach effectively implements Alternative B, and would necessitate the development of full scale WCF's in other zones of the Park, such as within the Urban Recreation and Visitor Facility zones. If this is the intent of the plan, it could much more clearly so state.

Corr. ID: 22 **Organization:** Institute For Public Representation

Comment ID: 85951 **Organization Type:** Unaffiliated Individual

Representative Quote: The WTF Plan provides no basis for why the proposed microcells along Beach Drive will be limited to thirty feet. Structures at that height will have limited coverage area, requiring thirty or more WTFs along Beach Drive for a single provider to ensure an adequate level of service. The WTF Plan provides no reason why thirty WTFs at thirty feet tall are preferable to, for instance, fewer forty feet tall disguised WTFs located along Beach Drive.

Corr. ID: 2 **Organization:** Howard County Bird Club

Comment ID: 85832 **Organization Type:** Unaffiliated Individual

Representative Quote: We are particularly heartened that the alternative would limit pole size 30-feet. This would present fewer hazards to migratory and resident birds. High communications towers represent a serious threat to migratory birds. The proposed 30-foot poles fall well within the United States Fish and Wildlife Service's Interim Guidelines for Recommendations on Communications Tower Siting, Construction, Operation, and Decommissioning.

Response: The NPS believes Alternative C provides a consistent framework and protects park resources as stated in the plan's objectives. The 30 foot high height restriction for WTF was chosen because it is feasible with the available technology and would be consistent with other structures, such as light poles, currently along the road although it could result in more facilities. The park did consider allowing facilities up to 120 feet in height along the tree line to reduce the number of facilities along Beach Drive, but this alternative would have required more intrusion into the Forest Zone and would have affected a greater area of sensitive habitat. NPS recognizes

that costs will be a factor for applicants.

Concern ID: 18041
CONCERN STATEMENT: Commenters noted that the EA does not clarify how alternative C will protect the Forest Zone. One commenter requested that the WTF plan/EA clarify the requirement under alternative C to protect trees only of a certain diameter.

Representative Quote(s): **Corr. ID:** 22 **Organization:** Institute For Public Representation

Comment ID: 85935 **Organization Type:** Unaffiliated Individual
Representative Quote: The WTF Plan improperly claims benefits under Alternative C regarding the protection of the Forest Zone, when Alternative C is the only alternative that permits development and trenching, which may cut tree roots causing them to suffer and die, within the Zone. EA at 145.

Corr. ID: 22 **Organization:** Institute For Public Representation
Comment ID: 85952 **Organization Type:** Unaffiliated Individual
Representative Quote: " The WTF Plan should justify its decision to protect only trees that are four inches or greater in diameter, EA at 63-64, as opposed to a smaller diameter.

Response: Alternative C requires concealed facilities. In order to use concealed facilities, minimal disturbance on the edges of the Forest Zone may be necessary. The GMP aims to limit disturbance in the Forest Zone, the park incorporated elements into Alternative C to limit disturbance. To limit the disturbance to mature trees in this area, a diameter of four inches or greater was selected while allowing for minimal disturbance to trees under this diameter. Each proposal for disturbance, however, will be reviewed and mitigated as needed.

Concern ID: 18042
CONCERN STATEMENT: Commenters stated that the analysis under alternative C should be clarified to address how the siting of the WTF will be determined, including what would constitute encouragement for siting in areas of known coverage gaps.

Corr. ID: 22 **Organization:** Institute For Public Representation
Comment ID: 85938 **Organization Type:** Unaffiliated Individual
Representative Quote: It is unclear whether Alternative C "encourages" WTF siting in coverage gap areas (i.e., along Beach Drive) or in areas that would provide coverage to those areas (e.g., maintenance yard). Compare EA at 155 (Alternative C encourages submissions "for areas where their [WTF] placement would address existing coverage gaps, which would be mainly along Beach Drive.") with EA at 156 (encouraging location in coverage gap areas). Given this lack of clarity, the WTF Plan provides insufficient information about the impacts of Alternative C. If WTFs serving Beach Drive are ultimately located in areas not adjacent to Beach Drive, then the WTF Plan is insufficient to help the public evaluate the environmental impacts of those WTFs.

Corr. ID: 22 **Organization:** Institute For Public Representation
Comment ID: 85910 **Organization Type:** Unaffiliated Individual
Representative Quote: Further, NPS provides no basis for its assumption that WTF providers would seek to locate in coverage gap areas. A more realistic assumption, and one that is validated by the existing WTF in the Park, is that providers will seek to locate on the edges of the Park to serve their customers outside the Park. [2003 EA, AR 0002495]; see also EA, app. B (2003), at 13 (noting that the tennis center WTF provides "excellent coverage to the east of 16th street," which is better coverage than within the Park). This

is particularly true since the economics do not support locating numerous WTF within the Park simply to service commuters passing through the Park. [2003 EA, AR 0002495].

Response: Alternative C states that providers would be encouraged to site in areas where there are known coverage gaps which is also where the NPS presumes many providers will seek to site their WTF. Coverage analysis was performed as part of this plan and is provided in attachment 1. The WTF plan/EA contains known restrictions and design standards for this area which could be an incentive to applicants since this may result in making the application process quicker, and more predictable and efficient for these areas.

AL1700 - New alternatives and/or elements to be considered

Concern ID: 18043

CONCERN STATEMENT: Commenters provided various alternative elements that involve new technologies they felt should be part of the WTF plan/EA, including: a Distributed Antenna Solution (DAS) network, camouflaged antennae, as well as newest available technologies, best available technologies, and different wireless spectrums in general. Additionally, one commenter requested NPS postpone the issuance of the WTF Plan until newer and less invasive technologies can be implemented or until existing technologies are proved less harmful to avian species.

Representative Quote(s):

Corr. ID: 7

Organization: T-Mobile

Comment ID: 85942

Organization Type: Unaffiliated Individual

Representative Quote: My letter to you of August 14, 2007 and the attached photograph there-to of an existing camouflaged WCF is not referenced in the record. I will attach that here as well so that it can be. I hope you will add this example of antenna mounting facilities to those shown in Figure 3, page 10 as in our view, this type of facility represents what is often the most suitable and effective "low impact" solution. Also a striking omission in this regard is the use of "tree pole" facilities, although these are not always well received or persuasive.

Corr. ID: 10

Organization: *Not Specified*

Comment ID: 85962

Organization Type: Unaffiliated Individual

Representative Quote: It would be good if design considerations are given as examples, not absolutes. Would like applicants to demonstrate they are using best available technology

Corr. ID: 16

Organization: T-Mobile

Comment ID: 86065

Organization Type: Unaffiliated Individual

Representative Quote: On behalf of T-Mobile, USA, I attended the April 24th 2007 Public Scoping meeting, and offered comments in support of a plan for the sensitive implementation of wireless communications facilities within Rock Creek Park. Particular note was made of that portion of the park around Military Road. At that time, I noted the use of certain types of support structures as appropriate to a park setting in terms of having low visual impact and limited ground area disruption. I am forwarding the enclosed photographs of existing facilities as examples of such facilities for your attention and consideration. Unfortunately, I have not been able to locate a perfect example, i.e. a brown "stealth" pole with all antenna and cables concealed within the pole within a park setting, but the photo's hopefully make the point that a low profile solution is the key, along with a height consistent the site context.

Corr. ID: 17

Organization: Lighttower

Comment ID: 86098

Organization Type: Unaffiliated Individual

Representative Quote: As such, Lighttower would posit that the park would be an ideal locale to deploy a

DAS network.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85901

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan also failed to consider an alternative that would require the issuance of the WTF Plan to be postponed until newer technologies make WTF invisible and accessible, or until existing technologies are proved harmless to avian species. This alternative would require postponing the WTF Plan until the avian impact study is completed and private carriers begin using the 700 MHz spectrum. An alternative to delay action pending additional study is inherently reasonable. See *Utahns for Better Transport v. US. Department of Transportation*, 305 F.3d 1152, 1170 (10th Cir. 2002). A delay alternative would allow the completion of the three-year avian impact study, which currently provides an insufficient basis to conclude that there will be no significant collision impacts to avian species from additional WTFs sited in the Park. EA, app. A, at 9. Since the WTF Plan establishes a precedent for future WTF applications and does not establish how NPS will incorporate the findings of the study into its consideration of WTF applications, NPS should not approve the WTF Plan or consider siting additional WTFs in the Park until the study is completed. A delay alternative is further supported by Verizon's recent acquisition of the 700 MHz spectrum and its 2008 network conversion from analog to digital, both of which will reduce or eliminate its need for WTFs in the Park. A delay alternative pending additional study is eminently reasonable, yet the WTF Plan failed to consider such a reasonable alternative.

Corr. ID: 19

Organization: Verizon Wireless

Comment ID: 85881

Organization Type: Unaffiliated Individual

Representative Quote: Page 49 - The discussion regarding "Best Technology Available" and the new NPS Management Policies is unclear if this objective is applicable to existing permitted facilities. We recommend that this be clarified to state that BT A will not be imposed retroactively on present WTFs when these are extended or renewed.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85885

Organization Type: Unaffiliated Individual

Representative Quote: Before the WTF Plan was issued, notice of an auction to private telecommunications providers of a 22MHz bandwidth in the 700 MHz spectrum was announced. On March 18, 2008, after the WTF Plan was issued, Verizon purchased this spectrum. Signals operating in the 700 MHz frequency travel farther and have better penetration through trees and buildings (known as propagation) than 800 MHz signals. Donny Jackson, *Operators Craze 700 MHz*, MRT Magazine (Oct. I, 2004), http://mrtmag.com/mag/radio_operators_craze_mhz. Yet, the WTF Plan failed to evaluate whether additional WTFs are necessary in the Park in light of this newly available frequency for wireless service. It is quite likely that Verizon could convert its existing 8 towers surrounding Rock Creek Park to use the 700 MHz spectrum and provide an adequate level of service within the Park, including along the Valley Floor, without requiring WTFs in the Park.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85946

Organization Type: Unaffiliated Individual

Representative Quote: " The WTF Plan requires that all WTF applicants apply the "newest technologies,"¹⁷ EA at 49, but those technologies may not permit concealed facilities, may increase the risk of avian collision, or may have significant adverse aesthetic impacts. While NPS is directed to require the "best technologies," NPS, Mgmt. Policies 2006 § 8.6.4.3, there is no guarantee that the "newest" technologies are the "best," from an ecological, or even a technological, perspective. NPS should ensure application of the "best" technologies from a holistic perspective, as required by NPS policies.

Response: The NPS has developed and presented an adequate range of alternatives. An alternative may be considered but dismissed from detailed evaluation if it does not meet project

purpose and need or objectives to a large degree. As stated on page 49 of the WTF plan/EA, applicants would be required to use the “newest technology” and to follow the NPS *Management Policies 2006* requiring the “best technology available.” This guidance uses terms such as “best available” and “new.” Because the NPS recognizes that these terms are open to interpretation, further qualification is provided in Elements Common to All Alternatives (page 54) and under the design criteria for Alternative C (pages 63 to 64). As stated on page 54 of the WTF plan/EA, as WTF technologies change, the park would reevaluate what types of facilities are permitted in each zone. This reevaluation would include considering the 700 MHz range once the technology is compatible with current services. Replacement of existing facilities with new technologies could be considered during the renewal of permits but is not a requirement under the WTF plan/EA. In addition each WTF application will be assessed pursuant to NEPA.

WTF technology continues to change at a rapid pace, as suggested by commenters. Requirements for newest and best technology available addresses the constant evolution of WTF technology, and any effects these technologies may have. The use of camouflaged or disguised facilities was evaluated in the WTF plan/EA with a representative sample of these types of facilities illustrated in figure 3 (page 10). Since these are not the only camouflaged facilities that would be considered by the NPS, additional examples that were provided by the public are not included in the WTF plan/EA.

It was suggested that the development of a WTF plan/EA be delayed until newer technologies become available or until the bird study is completed. The NPS committed to developing this plan in the FONSI to the 2003 EA that was conducted as a result of a court order in the suit brought by the Institute for Public Representation. Moreover, the National Capital Planning Commission concluded it will not consider further applications until the plan is in place. Finally, whether or not this plan and the bird study are completed, the NPS must continue to accept and process WTF applications, and having this plan in place will help the NPS better protect the park’s resources. See Response to Concern Statement 18097 for more information about the bird study.

Concern ID:

18044

**CONCERN
STATEMENT:**

Commenters provided various alternatives to new technologies they felt should be part of the WTF plan/EA, including: placing “call boxes” within the park to accommodate visitor safety and emergency response; focusing on areas of the park that receive the highest visitor volume and placing the WTF within these areas; increasing police presence in the park; and further banning WTF in the park. They further felt that many of these technologies (such as satellite technologies and removing the existing WTF from the

park) had been improperly dismissed from the alternatives analysis in the WTF plan/EA.

**Representative
Quote(s):**

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85898

Organization Type: Unaffiliated Individual

Representative Quote: Yet, the WTF Plan does not consider the alternative of placing call boxes at strategic locations throughout the Park with a direct line to the Park Police. Such call boxes could ensure telephone coverage and ensure access to emergency services. Call boxes would improve the Park Police's response time, since they would be directly connected to the Park Police (unlike 911 calls that are transferred from the Public Safety Answering Point to the Park Police for response). Such an alternative would also ensure that people who do not use cell phones in the Park-for instance, individuals without the means to afford cell phones, most joggers and other individuals using the Park for active recreation, [2003 EA, AR 0000426], and numerous others-would have access to emergency law enforcement and public safety services. A call box alternative is reasonable and worthy of consideration. See Exec. Order No. 12,898, Federal actions to address environmental justice in minority populations and low-income populations, 59 Fed. Reg. 7629 (Feb. 16, 1994).

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85900

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan is designed to "ensure public safety." Despite this goal, the WTF Plan does not evaluate alternatives that would increase public safety more directly than increasing cellular coverage within the Park. Although the WTF Plan relies on the fact that "some visitors" have safety concerns, the WTF Plan recognizes that those concerns are not linked to the lack of cellular coverage. EA at 129. On the contrary, the Visitor Study links the need for increased safety in the Park with a need for an increased police presence. See Littlejohn, *supra*, at 73 tbl. 13. Increasing the Park Police presence would certainly do more to ensure public safety, as well as the public's perception of safety within the Park, than any of the proposed alternatives. If the WTF Plan is truly about ensuring public safety, then the WTF Plan must consider reasonable alternative ways to increase public safety within the Park, such as increasing the Park Police presence within the Park.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85899

Organization Type: Unaffiliated Individual

Representative Quote: Since the WTF Plan is designed to "ensure public safety," not private profit or visitor convenience, the WTF Plan should evaluate the reasonable alternative of providing wireless coverage in the Park only for the safety purpose of dialing 911. Such an alternative is technologically feasible. [2003 EA, AR 0002280]. A limited-access wireless network would: (1) avoid the distraction-related risks of accidents associated with commuters using cellular phones while driving through the Park, see *infra* Part V.D; (2) minimize the disruption of the natural setting of the Park by private conversations; and (3) minimize the number of callers using the signal, thereby enabling WTFs to service a greater area and reducing the number of WTFs needed to service the Park. See CityScapes Report at 16. The WTF Plan, however, improperly fails to consider this reasonable alternative. Similarly, the WTF Plan fails to consider an alternative that limits WTFs to providing coverage where there exist coverage gaps in areas in need of additional safety measures. Such narrowly tailored, safety-based alternatives achieve the purposes of the WTF Plan while maximizing protection of Park resources, as required by the Organic Act, the Rock Creek Park enabling legislation, and NPS policies.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85897

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan improperly failed to consider alternatives providing wireless coverage using satellite technologies. The WTF Plan demonstrates that "[a] satellite solution may be able to cover the park." EA, app. B (2003), at 44. Yet, unlike the 2003 EA which considered and rejected a satellite alternative (for reasons that are no longer applicable), the WTF Plan fails to even consider such a reasonable alternative.

While it may have been the case that in 2002 and 2003 satellite technology was "capacity-limited" and

"expensive," EA, app. B, at 8, that simply is no longer the case. The CityScapes Report, prepared on August 15, 2007, incorporated by the WTF Plan states that: Satellite growth has surpassed the highest expectations of only a few years ago ... Initially satellite use was expensive because of the rarity and limited amount of available airtime. With the deployment of more and more satellites, along with advancing technologies that allow more usage of the same amount of bandwidth, satellite air time has become more affordable. CityScapes Report, at 24. Satellite services can provide "in-car" levels of service (-85 dBm) throughout Rock Creek Park, including on trails. See EA, app. B (2003), at 44; id. at 130. As the "newest" and "best" technology available, the WTF Plan must consider requiring the use of this technology for provision of wireless service in the Park. Is EA at 49; NPS, Mgmt. Policies 2006 § 8.6.4.3. The WTF Plan establishes the reasonableness of the alternative, yet improperly fails to study it in detail.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85896

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan, presumably based on its erroneous legal interpretation of NPS's duties regarding WTFs, never considered an alternative that would remove the existing WTFs in the Park (or refuse to renew the existing WTF permits) and refuse all new WTFs in the Park. NPS considered this reasonable alternative in the 2003 EA, concluding that it was the "environmentally preferable alternative." 2003 EA at 20. NPS has the authority to reject all existing and future WTFs applications in Rock Creek Park, see supra Part II; DO#53 § 3.12, and to remove any existing WTFs, DO#53 §§ 3.3, 4.1(2). Such an alternative is eminently reasonable since there exist technologies and wireless services that can ensure an adequate level of wireless service within the Park for visitors and the Park Police, including 700 MHz spectrum technologies,¹⁴ without requiring WTFs sited within the Park. NPS improperly refused to study such an alternative in this WTF Plan, however, because it improperly concluded it does not have the legal authority to reject WTFs in the Park. See EA at 68. Yet, NEPA requires a full and fair discussion of reasonable alternatives—even those that NPS lacks the authority to implement. 40 C.F.R. § 1502.14; e.g., *NRDC v. Morton*, 458 F.2d 827, 835 (D.C. Cir. 1972).

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85928

Organization Type: Unaffiliated Individual

Representative Quote: NPS may not dismiss alternatives based on mere assertions, *Rankin*, 394 F. Supp. at 658, but instead, must "seriously canvass and assay" alternatives. *City of Boston v. Volpe*, 464 F.2d 254, 257 (1 st Cir. 1972). NEPA requires that each alternative "be presented as thoroughly as the one proposed by the agency, each given the same weight so as to allow a reasonable reviewer a fair opportunity to choose between the alternatives." *Rankin*, 394 F. Supp. at 659. Yet, the WTF Plan is replete with conclusory and biased analyses in its alternatives comparison.

Response: Alternatives to WTF such as a satellite alternative, call boxes, removal of existing WTF, increasing U.S. Park Police presence, and waiting for new technology to be developed were proposed during the public comment period. Although public safety was considered in the WTF plan/EA, it is not part of the plan's purpose and need so these are outside the scope as stated on page 1 of the WTF plan/EA, and therefore are not options. The WTF plan/EA is focused solely on wireless technologies which are governed by legal requirements some of which apply only to WTF.

AP1100 - Application and Permitting Process

Concern ID: 18054

CONCERN Commenters request NPS define what constitutes a "similar" level of service.

STATEMENT:

Representative **Corr. ID:** 22

Organization: Institute For Public Representation

Quote(s):

Comment ID: 85945

Organization Type: Unaffiliated Individual

Representative Quote: The alternatives in WTF Plan require all WTF applications to demonstrate that locations outside the Park cannot provide a "similar" level of service to WTFs sited within the Park. EA at 49. The WTF Plan, however, does not define what a "similar" level of service would be, or what information or efforts it will require from applicants to demonstrate that no such sites exist outside the Park. The WTF Plan should require placement of WTFs outside the Park if those facilities can provide an adequate level of service to substantially similar coverage areas, whether or not such WTFs would provide the same level of coverage as WTFs placed in the Park.

Response: RM-53 requires that applicants demonstrate that WTF locations outside the park do not provide a similar level of service. A similar level of service is that WTF outside the park cannot generate a similar level signal to cover a gap within the park. WTF locations outside the park would be considered during the application process and would be evaluated as an alternative.

CG1100 - Coverage Gap: Extent of Coverage Gap

Concern ID: 18056

CONCERN STATEMENT: Commenters stated that certain coverage maps within the EA are incorrect and should be clarified.

Representative Quote(s):

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85878

Organization Type: Unaffiliated Individual

Representative Quote: Even assuming that the WTF Plan demonstrates a need for additional cellular coverage in the Park, it does not establish a need for additional WTFs in the Park to meet that coverage need. The WTF Plan relies exclusively on one coverage gap analysis that was not publicly released with the WTF Plan.¹⁰ That analysis, however, is insufficient to demonstrate a true coverage gap in the Park. The analysis evaluated the coverage capabilities of cellular technologies in the 800 MHz and 1900 MHz ranges. CityScapes Report at 32. Drive tests confirm that cellular coverage exists along all areas where the coverage gap areas were identified by the Report. Further, the Report did not evaluate the coverage capabilities of any other technologies, including those operating in other ranges of the wireless spectrum.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85886

Organization Type: Unaffiliated Individual

Representative Quote: Further, the WTF Plan and its coverage gap analysis fail to demonstrate an actual need for additional WTFs in the Park to ensure adequate coverage. The analysis fails to demonstrate that the coverage "gaps" exist because of the Park's topography. Indeed, topography is not the reason for the existence of coverage "gaps," since Sprint-a PCS provider in the 1900 MHz range (which has poor propagation capabilities in the Park compared to Verizon and other cellular providers in the 800 MHz range), has an adequate coverage level in the Park without WTFs in the Park despite the Park's topography. [2003 EA, AR 0000989-91]. Topography is not the problem; rather, coverage gaps exist in the Park due to the use of outdated technologies. For example, Verizon uses CDMA technology, which requires a "dominant server," or calls will be dropped.¹² EA, app. B (2002), at 12, 43. Other technologies do not have similar problems with interference, and, therefore, do not require "dominant servers" located within the Park. Yet, the WTF Plan fails to mention this factor in the existence of coverage gaps in the Park. ¹³ Without evaluating the full range of existing cellular engineering technologies available to ensure coverage within the Park without the placement of WTFs in the Park, the WTF Plan cannot properly assess or justify the need for locating WTFs within the Park.

Response: The purpose and need of this WTF plan/EA is, among other reasons, to provide a consistent framework to evaluate WTF applications (see WTF plan/EA page 1). This is not the same as ensuring that all providers have 100% coverage within the park.

Coverage levels were determined based on data from the providers, publically available data, and drive-tests to confirm these data. These data were incorporated in the Wireless Telecommunications Analysis of Rock Creek Park, provided in attachment 1. These data were presented as a whole, rather than by provider, to protect each provider's proprietary information. Commenters relating different experiences of coverage in the park may have different providers. Although an area was shown as covered in figure 9 of the WTF plan/EA (page 65), this represented that it was covered by at least one carrier and not necessarily all carriers. One carrier may have coverage in a certain area, and another not. Although there are a number of WTF in the areas surrounding the park, there are reasons why coverage gaps may exist, the primary one in Rock Creek Park being topography. Where there is "deep" topography, the cellular signal is shadowed, or blocked, by terrain, which prevents the signal from reaching into valleys.

See Concern Statement 18043 regarding change of WTF technologies.

COL1100 - Co-location

Concern ID: 18060

CONCERN STATEMENT: Some commenters felt the WTF plan/EA needed further clarification on how co-location would be achieved and where co-location would be permitted.

Representative Quote(s):

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85947

Organization Type: Unaffiliated Individual

Representative Quote: " Co-location should be mandatory when feasible, and the WTF Plan should identify how NPS will determine if co-location is feasible. As currently drafted, the WTF Plan allows WTF providers to determine if co-location would "interfere" with their existing use of the site. NPS should make that determination, with input from the providers, based on standards established in the WTF Plan.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85948

Organization Type: Unaffiliated Individual

Representative Quote: " The WTF Plan should clarify that co-location would be unacceptable at the maintenance yard location. The record demonstrates that "[m]aintenance functions require use of virtually all of the available land within the fenced complex." 2003 EA at 5, 7-8. The additional cabinetry required by co-located facilities would take up additional space, create additional noise and other impacts on avian species, conflict with the current and planned use of the site, and may require NPS to develop additional areas of the park (perhaps in the adjacent breeding bird census area) to accomplish its administrative functions. See Manager, Rock Creek Park, to Assistant Superintendent, Rock Creek Park (Sept 18, 1998) [2003 EA, AR 0000592]. This conflict is impermissible under NPS policies. DO #53, § 3.1 (prohibiting NPS from approving a right-of-way permit if the permit will "[result in significant conflict with other existing uses").

Response: All of the alternatives, including the no-action alternative, address co-location, stating that as directed under the NPS *Management Policies 2006*, it should be the first action considered when siting (see WTF plan/EA page 49). The NPS follows its own policies and considers as appropriate, other agency's policies, guidance and requirements, (see table 2 on pages 52 to 53 of the WTF plan/EA). The two action alternatives require that "Applicants must agree to co-location on any facility permitted, with fees for co-location charged by the WTF owner within fair market values for the surrounding areas as a condition of their right-of-way permit." (See page 54 of the WTF plan/EA). Moreover, the permit for the existing WTF has a co-location provision. Other areas of concern, such as further development at the maintenance yard would be assessed through NEPA at the time that development is proposed (see WTF plan/EA page 44).

CR1100 - Impacts on Cultural Resources

Concern ID: 18062

CONCERN STATEMENT: Commenters stated concerns about the effect of WTF on the park's cultural resources including inconsistency with past determination of effects, how and when WTF would be permitted in the Cultural Resource Zone, the potential visual effects on the parks cultural resources, and protection of the historic landscape.

Representative Quote(s):

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85917

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan also fails to "[p]rotect those features contributing to the historic designed landscape of all Rock Creek Park administered units," as required by the purpose and need statement. EA at 2. The WTF Plan provides that "permits may be granted for installation within these buildings if the historic structure is not impacted." EA at 56. A few paragraphs later, the WTF Plan states that "because attachment to the interior or exterior of a historic structure would alter the historical fabric of that building, a permit for that type of facility would not be granted in any RCP administered unit." EA at 56. As a result, the WTF Plan creates an inconsistency regarding whether WTFs will be permitted on historic structures, thereby making it impossible for the alternatives to protect the historic features of Rock Creek Park.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86032

Organization Type: Unaffiliated Individual

Representative Quote: " The WTF Plan does not clearly delineate whether WTFs will be permitted in the Cultural Resource Zone. Compare EA at 178 (suggesting that overlaps between the Cultural Resource Zone and other GMP zones may result in right-of-way permits being issued in cultural landscape areas) with id. (noting that WTFs affecting cultural landscapes would not be permitted).

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86023

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan does not adequately address the impacts of additional WTFs on Park aesthetics, including those impacts on cultural and historic resources.²⁸ "The features/qualities [of Rock Creek Park] which received the highest importance ratings from visitors were scenic beauty, recreational opportunities, clean air and clean water." Littlejohn, *supra*, at summary, 49 fig. 64. Nevertheless, the WTF Plan permits the introduction of non-natural structures that undermine the scenic

beauty of the Park. Despite this, the WTF Plan does not provide a clear assessment of the aesthetic impacts of additional WTF in the Park, or how the proposed mitigation measures would make those impacts insignificant.

Response: One of the purposes of the plan is to provide all administered units of Rock Creek Park with a consistent framework for protecting park resources during the consideration of a right-of-way permit (see WTF plan/EA page 1), including cultural resources within the park. Under alternatives B and C, permits in the Cultural Resource Zone would be considered subject to the limitations detailed on page 56 of the plan/EA, and each application would need to complete the NEPA process on a site specific basis and comply with Section 106 of the National Historic Preservation Act (NHPA). The permit terms and conditions, along with site specific NHPA Section 106 compliance would reflect what is learned through these processes.

By letter dated May 20, 2008, the NPS consulted with the District of Columbia State Historic Preservation Officer (SHPO) regarding the WTF plan/EA. On July 18, 2008, the SHPO concurred that the Alternative C (the WTF plan/EA) has no adverse effect upon the cultural resources of Rock Creek Park. This correspondence is attached.

See Concern Statement 18091 for a discussion of WTF effects on viewshed.

C11100 - Cumulative Impacts of Plan

Concern ID: 18057

CONCERN STATEMENT: Commenters stated that there is insufficient cumulative impact analysis within the WTF plan/EA, especially regarding radio frequencies, the human environment, and the number of WTF that may be required to ensure public safety within the park.

Representative Quote(s): **Corr. ID:** 22

Organization: Institute For Public Representation

Comment ID: 86034

Organization Type: Unaffiliated Individual

Representative Quote: -The WTF Plan fails to consider the cumulative impact of these WTFs on native vegetation. -The WTF Plan fails to consider the cumulative impact of these WTFs on aesthetic resources and values, including cultural landscapes and historic resources. See RMP at 95 ("A series of scenic compromises thus made over many years can have a cumulative adverse impact on esthetic [sic] qualities throughout the parks."); EA at 175, 181, 190 (recognizing aesthetic impacts would occur from multiple WTFs along Beach Drive spaced close together and deviating from the existing design). 46 Similarly, it is "reasonably foreseeable" that once NPS opens the Park to WTFs through the WTF Plan, it will be required to approve applications from all providers to avoid violating the prohibition against discrimination in the Telecommunications Act of 1996, § 704(c), Pub. L. 104-104, 110 Stat. 56 (Feb. 8, 1996).

- The WTF Plan fails to consider the cumulative impact of additional or co-located WTFs on RF emissions.
- The WTF Plan fails to consider the cumulative impact of these WTFs on visitor enjoyment.
- The WTF Plan fails to consider the cumulative impact of these WTFs on interference and network capabilities.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86027

Organization Type: Unaffiliated Individual

Representative Quote: Further, it is "reasonably foreseeable" that additional WTFs will be required beyond those required to provide an initial level of adequate service within the Park. The CompComm report notes that "[i]t is unlikely that the sites required by all these service providers can be contained to one of these two locations [maintenance yard and tennis center], due to the system build out requirements of individual carriers." Id. at 2-3 [2003 EA, AR 0002686-87]. The Report determines that given the competitiveness of the industry, once one carrier begins providing service in the Park, others will follow to avoid losing customers.⁴⁶ Id. at 11. [2003 EA, AR 0002695]. This analysis is validated in the CityScapes Report, which establishes that increasing the number of wireless users in a service area actually decreases the range of coverage of a particular WTF, CityScapes Report at 16, requiring additional WTFs. Since increasing cellular coverage within the Park will naturally encourage greater use of cellular phones in the Park, the need for additional WTFs is "reasonably foreseeable" to ensure coverage of the Park.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86073

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan does not identify the existing background RF emission levels, making an evaluation of the cumulative impacts of additional WTFs impossible. The WTF Plan does not conduct a cumulative impacts analysis for the number of WTFs that would be required to ensure public safety in the Park, or whether such WTFs are possible given the RF emission exposure limitations established in the WTF Plan, see EA at 197-98.

Response: In its regulations, the Council on Environmental Quality (CEQ) defines cumulative impacts as impacts "on the environment which result[s] from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 CFR § 1508.7. The list of cumulative actions for each resource area evaluated in the WTF plan/EA is provided on pages 135 to 137, which includes other WTF and other technologies located outside the park. Because the establishment of WTF within the park boundaries is what is being directed by this WTF plan/EA this was analyzed as a direct impact, not a cumulative impact, under each resource area.

Interference with network capabilities refers to how an individual cellular service provider's system interacts with other sites within the provider's system. Interference would be addressed during the application process (detailed on pages 43 to 48 of the WTF plan/EA) for each individual WTF and resolved at that time since it is not possible to predict where WTF would be located in the future, both inside and outside the park boundary. Should an unexpected problem occur related to interference, all providers operate under the authority of the Federal Communications Commission and would follow their interference-related rules.

The WTF plan/EA represents a programmatic approach to evaluating new right-of-way

applications for WTF within the park. Under this approach, the general impacts of radiofrequency emissions were evaluated (see WTF plan/EA pages 196 to 202), with emissions by existing in-park WTF and WTF surrounding the park considered to be a cumulative impact. The WTF plan/EA does not mention co-location specifically in the impacts analysis, however it does state that all applicable laws and regulations would need to be followed, such as the Federal Communications Commission radiofrequency emission guidelines, and compliance demonstrated through a separate NEPA document for each proposed facility. Through a NEPA document for each proposed WTF or application, this would ensure that all current and planned WTF are taken into account when making sure standards for radiofrequency emissions are being met, including applications for co-location.

The scope of this plan corresponds to those legal authorities which govern only placement of WTF on parklands (see WTF plan/EA page 1) so this plan does not apply to other technologies.

GA1000 - Impact Analysis: Impact Analyses

Concern ID: 18065

CONCERN STATEMENT: Commenters stated that the current WTFs within the park are not causing, nor have they caused, significant adverse impacts to the park or its resources, and felt this should be reflected in the impact analysis.

Representative Quote(s):

Corr. ID: 19

Organization: Verizon Wireless

Comment ID: 85877

Organization Type: Unaffiliated Individual

Representative Quote: Page 14-16 - There are a number of references to how WTFs "could" have a variety of impacts. The EA must recognize that the existing WTFs are NOT having such impacts - as a matter of fact. Speculation about future effects must be limited to future WTFs.

Corr. ID: 19

Organization: Verizon Wireless

Comment ID: 85890

Organization Type: Unaffiliated Individual

Representative Quote: Page 142 - There is no evidence to support the conclusions that WTFs will cause "long term moderate adverse cumulative effects to flora and fauna" in the Park. In fact, as other portions of the draft EA make clear, the evidence unmistakably demonstrates that any such effects are negligible (see p. 147-148).

Response: Any potential impacts from the existing WTF in the park were discussed in the 2003 *Rock Creek Park Telecommunications Facilities EA* (NPS 2003). The WTF plan/EA, on the other hand, evaluates the impacts from future applications, and does not address the two existing WTF other than as part of the existing environment. See Concern Statement 18057 for a discussion of cumulative effects.

HS1700 - Health and Safety: Motor vehicle use while using cellular devices

Concern ID: 18066

CONCERN Commenters felt that the use of cell phones in the park could increase automobile accidents and questioned

STATEMENT: the data used to address this concern in the WTF plan/EA. Another commenter said the District of Columbia's "hands free" regulation is not relevant to the plan.

**Representative
Quote(s):**

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86066

Organization Type: Unaffiliated Individual

Representative Quote: Studies demonstrate that using cellular phones while driving increases the likelihood of being in an accident. Indeed, using a cellular phone can increase the risk of an accident over four times that of someone not using a cellular phone, and can make drivers talking on cellular phones as dangerous as drunk drivers. The accident risks posed by cellular phone use exist whether the driver is holding the phone or is using a hands-free device. When using a cellular phone, the driver's cognition is distracted. This cognitive distraction slows down the driver's reaction time and reduces awareness substantially, increasing the risk of rear-end and other types of accidents.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86072

Organization Type: Unaffiliated Individual

Representative Quote: The Hahn and Prieger study concluded that one study conducted by Redelmeier and Tibshirani (of countless studies demonstrating the relationship between cell phone use and increased accident rates) may have overestimated the impact of cell use by thirty-six percent. They reached this conclusion by assuming that the Redelmeier methodology, which limited the data set to accidents, would necessarily increase the number of frequent drivers in the data set.⁴¹ Hahn and Prieger then assumed that frequent drivers use their cell phones more frequently than other users.⁴² Neither assumption is validated in the study. But even taking these assumptions as true, in Rock Creek Park, 95% of the drivers on the road are commuters, 1997 Transp. Study at 4-17, who, according to Hahn and Prieger, would use their cell phones with greater frequency than visitors to the park. Applying Hahn and Prieger's analysis to Rock Creek Park, the impact of cell phones on accident rates in the Park should actually exceed the rate found by Redelmeier and Tibshirani in their study (relative risk: 4.3).⁴³

The WTF Plan, which is designed to ensure public safety, fails to compare the relative risks of increased accidents from the WTF Plan to the microscopic safety improvements that might occur by increasing access to emergency services personnel through increased wireless coverage. The WTF Plan must conduct an objective evaluation of all potential impacts to public safety caused by the WTF Plan, both beneficial and adverse. Instead, the WTF Plan attempts to dismiss the findings of the Redelmeier and Tibshirani study and, in doing so, ignores the vast literature demonstrating that increasing cell phone use substantially increases the risk of motor vehicle accidents.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86071

Organization Type: Unaffiliated Individual

Representative Quote: Despite the weight of the scientific evidence demonstrating a relationship between cellular phone use and elevated risk of accidents and the potential for a significant increase in accidents in Rock Creek Park, the WTF Plan dismisses the notion that additional cellular coverage will increase the number of accidents in the Park. See EA at 131, 199. The WTF Plan improperly relies on one study by Hahn and Prieger to conclude that increasing cell phone use while driving would have a negligible impact on accidents. The Hahn and Prieger study, however, does not support this conclusion.

Corr. ID: 19

Organization: Verizon Wireless

Comment ID: 85880

Organization Type: Unaffiliated Individual

Representative Quote: Page 40 - The District's January 6, 2004 limitations on using handheld cell phones while driving have no bearing on this Plan or effects on Rock Creek. These superfluous references should be deleted.

Response: Both the benefits to and effects on human health and safety under this plan were identified in the WTF plan/EA on page 201. The purpose of presenting the Redelmeier and

Tibshirani, and Hahn studies was not to have one negate each other, but to provide a full picture of the literature available on the subject. The District of Columbia ban on the use of hand held phones while driving was included in the WTF plan/EA to provide context about the type of cellular phone use that is likely to occur on roads in the park because it is located within the District of Columbia and drivers may be employing these devices.

Concern ID: 18084

CONCERN STATEMENT: One commenter stated that the WTF plan/EA does not document a public safety concern that justifies additional WTFs. Another commenter stated that the WTF plan/EA does not address benefits from having WTF in the park.

Representative Quote(s):

Organization: Institute For Public Representation

Comment ID: 85863

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan includes "ensure public safety within the park" as one of its objectives in the purpose and need statement. EA at 73. Unfortunately, the WTF Plan does not establish the existence of a public safety problem in the Park that would justify the construction of countless additional WTFs in the Park. NPS's failure to evaluate the purported need for increased safety measures is particularly problematic since NCPC specifically directed NPS, during the BAM application process, to conduct "a study that verifies the need for additional safety measures in Rock Creek Park and presents alternative solutions if such safety measures are needed." Letter from Reginald W. Griffith, Exec. Dir., NCPC, to Mr. Terry R. Carlstrom, Regional Dir., National Capital Region, NPS (Apr. 13, 1999) [2003 EA, AR 0001494].

Corr. ID: 20

Organization: PCIA/The Wireless Infrastructure Association

Comment ID: 85985

Organization Type: Unaffiliated Individual

Representative Quote: In 2007, over half of all calls to 911 nation-wide were made from wireless devices. This figure is likely to be even higher in areas like Rock Creek Park, where visitors' wireless devices are their only communications links. A strong wireless network is required for first responders to address emergencies where a wireless device is needed to locate an incapacitated caller who cannot identify his/her location. In addition, visitors' access to wireless services like GPS and data can enhance their experience in Rock Creek park, and are services that wireless consumers depend upon where they live, work and play.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85865

Organization Type: Unaffiliated Individual

Representative Quote: The safety incident data provided in the WTF Plan do not establish a safety-based need for additional WTFs in the Park.³ The WTF Plan does not provide what number or types of crime or public safety concerns can or will be ameliorated by increasing cellular coverage. It does not provide any information about the number of 911 calls made within the Park. Information that should be available from the District's Office of Unified Communications, the 3 IPR submitted a FOIA request to the U.S. Park Police to obtain relevant incident data on April 8, 2008. IPR did not receive a response from the Park Police in time to incorporate the data into these comments.

Public Safety Answering Point within the District.⁴ EA at 129-30. Nor did the WTF Plan provide information regarding the number of 911 calls attempted within the Park that did not go through or were dropped. The WTF Plan provides no information about the number of cell users in the Park or the number of cell users who currently do not have service in areas of the Park. Further, the WTF Plan provides no information about where safety incidents occur in the Park or what type of cell coverage exists in those areas.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85909

Organization Type: Unaffiliated Individual

Representative Quote: Absent such support, the WTF Plan provides no support for the claim that Alternative C ensures public safety to any greater degree than any other alternative. Indeed, if Alternative C was effective at directing all applications into the coverage gap areas where microcells would be required¹⁶ then Alternative C would provide insufficient wireless coverage to ensure public safety. Alternative C would not ensure service to trails and other off-road areas, EA app. B (2002), at 7, and its microcells would not provide effective service to fast-moving motor vehicles traveling along Beach Drive, the prime "coverage gap" area, id

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85912

Organization Type: Unaffiliated Individual

Representative Quote: Similarly, the WTF Plan does not ensure 911 location functionality since it does not evaluate whether the proposed microcells or other WTFs could ensure triangulation required for 911 location functionality. See Dale N. Hatfield, A Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services, at 10-11.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85872

Organization Type: Unaffiliated Individual

Representative Quote: NPS's second safety-based rationale-that additional WTF would assist the U.S. Park Police-is similarly unsupported by the WTF Plan. Indeed, considering the benefits of WTFs in the Park on the activities of NPS is inappropriate. Memorandum from Deputy Director John Reynolds, NPS, to W ASO and Field Directorate and Park Superintendents (May 10, 1996) at 2 [2003 EA, AR 0003345]. But even if they were an appropriate consideration, the WTF Plan does not establish that the Park Police have coverage gaps that would undermine public safety. The WTF Plan does not establish that the Park Police Nextel service has coverage gaps. EA at 130. Nor does it establish that increasing private cellular coverage, which cannot be used by the Park Police for "essential law enforcement, public safety and management functions" and is limited "as an adjunct to park radio communications service for non-mission critical activities, DO #15 § 6, will improve public safety.⁹ Accordingly, there is no demonstrated need for additional WTFs to "ensure public safety."

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85867

Organization Type: Unaffiliated Individual

Representative Quote: Increasing cellular coverage in the Park is likely to have only very minor impacts, if any, on public safety in the Park. The number of potential 911 calls that are not currently going through is likely to be microscopic. Appendix B to the WTF Plan demonstrates that Verizon currently has a level of service sufficient to satisfy the E-911 standards. 7 EA, app. B (2003), at 21. Similarly, Sprint has an adequate level of service in the Park. [2003 EA, AR 0000989-91]. There is no information establishing that the level of service of any other carrier in the Park is insufficient for E-911 purposes. Absent that information, the WTF Plan is unable to demonstrate a safety need for additional WTFs.

Response: Although public safety was identified as an objective and evaluated in the WTF plan/EA, (see page 2 of the plan/EA), it was not part of the purpose or need for action, which is stated on page 1 of the WTF plan/EA, therefore demonstration of a safety need is not required as part of this WTF plan/EA. Having public safety as an objective is not a result of data showing the park is an unsafe place. Instead, as part of its GMP, the park's goal is to provide "a safe and healthful environment...for visitors and employees. Management actions strive to protect human life and provide for injury free visits" (NPS 2005, p26). At the same time, the GMP cautions that visitors assume a substantial degree of risk and responsibility for their own safety when visiting

areas that are managed and maintained as natural, cultural or recreational environments (NPS 2005).

Data on numbers of calls made from cellular phones was not incorporated into the analysis because this plan is a general, qualitative, and programmatic analysis. As stated in the alternatives, all individual WTF applications will need to complete the NEPA process, including and evaluation of human health and safety and will require site specific data in their analyses.

“In-car” level of coverage as a measurement of coverage being provided mean that this service would be provided to park users both on foot and in vehicles. This coverage provides long-term beneficial impacts to park visitors and staff by facilitating access to 911 (see WTF plan/EA page 201).

Any potential benefits or impacts to U.S. Park Police and other law enforcement in the area were determined by interviews with U.S. Park Police staff. Reports of problems from coverage gaps, such as not being able to operate the CapWIN system and the need for a wireless signal to implement new operating systems (see WTF plan/EA page 130) are from interviews with the U.S. Park Police during development of the WTF plan/EA. The WTF plan/EA does not state that current coverage gaps will undermine public safety, but rather that wireless coverage does provide some benefits to law enforcement in the area.

PM1100 - Park Management and Operations: Impacts

Concern ID: 18068

CONCERN One commenter questioned how funds received by the park from wireless providers would be used.

STATEMENT:

Representative **Corr. ID:** 27

Organization: Not Specified

Quote(s):

Comment ID: 85941

Organization Type: Unaffiliated Individual

Representative Quote: Plus the Burleith Citizen's Associations as well. I was also wondering about funding, you know, when the -- if it's leased at the -- that the -- the cellular service would have. And where is the money going towards?

Is -- is it going towards the National Park Service? Would it be going towards the particular part of the park? I'm curious about that -- sort of thing.

Response: The park may recover its costs associated with the WTF application process, including costs associated with required NEPA documents. Funds received by the park from the wireless providers for the permit itself must, by law, be returned to the general treasury. See RM 53 and NPS Management Policies 8.6.1.2.

CONCERN Commenters noted the plan/EA does not acknowledge the benefits to park management and operations as a
STATEMENT: result of existing WTF in the park and felt there would be no adverse impact to park operations and

*Representative
Quote(s):* [management.](#)

Corr. ID: 19

Organization: Verizon Wireless

Comment ID: 85894

Organization Type: Unaffiliated Individual

Representative Quote: Page 202-206 - The analysis fails to acknowledge or recognize benefits to Park Management and Operations from the presence of the existing WTFs. Enhanced communications are clearly a benefit to NPS, its personnel, including the Park Police, in administering Rock Creek Park.

Response: The discussion of park management and operations evaluates the effects on park staff from the WTF application process, not from the presence or absence of WTF in the park. Under Alternative C park operations and maintenance would benefit from the defined method by which to evaluate applications for WTF in the park (see pages 205 to 206). Analyzing existing WTF operations related to park staff was beyond the scope of the WTF plan/EA.

RF1100 - Radio Frequency Emissions

Concern ID: 18085

CONCERN STATEMENT: Commenters stated that radiofrequency emission levels were not adequately evaluated throughout the WTF plan/EA and that microcells, co-location, potential impacts to pace makers, and background level of radiofrequency emissions should have been addressed.

*Representative
Quote(s):*

Corr. ID: 10

Organization: Not Specified

Comment ID: 85968

Organization Type: Unaffiliated Individual

Representative Quote: Do cell towers affect pacemakers and have we considered this?

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86013

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan does not address the impact of co-location on increased RF emissions.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86074

Organization Type: Unaffiliated Individual

Representative Quote: " The CityScapes Report, cited by the WTF Plan, found that the exposure to RF emissions decreases as the height of the tower increases. See CityScapes Report at 20. The WTF Plan, however, only evaluated RF emissions at the existing WTF and towers of similar height; it did not evaluate the potential RF emissions exposure from shorter microcell WTFs as proposed in the WTF Plan. EA at 128-29.

Response: The analysis in the WTF plan/EA reflects the most recent standards the FCC has published related to radiofrequency affects on human health. The analysis of radiofrequency emissions related to human health and safety for visitors and park employees in the WTF plan/EA (see pages 127 to 129 and 196 to 202) states that all applications for WTF would need to comply with the federal rules regarding human exposure to radiofrequency energy. When a provider applies for a WTF right-of-way permit, part of that process includes looking at background levels of radiofrequency emissions to ensure that they will be in compliance with these federal

regulations. Specific calculations were not conducted in the WTF plan/EA for the 30 foot high structures under Alternative C as these calculations would occur under each separate WTF application to ensure the most accurate data and best representation of the current condition are being used. Microcell technology has power levels that are approximately 10% less than a full cellular facility. Regardless of the type of technology, tower or microcell, both are required to operate below the federal guidelines in OET Bulletin No. 65. The majority of WTF in the United States operate below 10% of the acceptable levels. For further information see: <http://www.fcc.gov/oet/rfsafety/cellpcs.html> and <http://www.fcc.gov/oet/rfsafety/>.

The Food and Drug Administration fact sheet on the potential for cellular phone interference with cardiac pacemakers concludes that in order to affect the operation of the pacemaker, the person with the pacemaker must be holding the cellular phone within six inches of the radio frequency source (*Available at* <http://www.fda.gov/cdrh/emc/pace.html>). In regards to the WTF themselves, any risk present from radiofrequency emissions would be greatly reduced compared to that of a cell phone because of the proximity between the emission source and members of the public. For WTF to impact a pacemaker, the person with the pacemaker would need to climb the WTF and be directly adjacent to the antenna (see <http://www.fda.gov/cellphones/qa.html#32>).

NPS is seeking funding for a future study with the U.S. Fish and Wildlife Service on the effects of WTF radiation on birds. These results would be used when considering future WTF applications.

VR4000 - Vegetation And Riparian Areas: Impact Of Proposal And Alternatives

Concern ID: 18086

CONCERN STATEMENT: Commenters stated that the WTF plan/EA failed to adequately analyze impacts to vegetation within the park, specifically potential impacts to native species from invasive plants.

Additionally, commenters noted the WTF plan/EA is contradictory in terms of the presence of sensitive species and if future WTF would be considered in locations containing sensitive species.

Representative Quote(s): **Corr. ID:** 22

Organization: Institute For Public Representation

Comment ID: 86022

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan does not identify the impacts of the existing WTFs on native species or the likelihood that additional WTFs at these sites will encourage the growth of invasive species to an even greater degree. As with the 1999 EA, there is a lack of evidentiary support for the conclusion that WTFs will have moderate, minor, or negligible impacts to native flora, see EA at 75 tbl. 5. [2003 EA, AR 0000822 (Superintendent Coleman's comments on the 1999 EA)]. Further, the WTF Plan does not identify mitigation engineering techniques that might address the introduction and control of invasive species without the need for the use of herbicides, as called for in the RMP.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86012

Organization Type: Unaffiliated Individual

Representative Quote: There are a variety of protected plant species in the Park, EA at 95 & 96-97 tbl. 9, yet the WTF Plan fails to address the potential impacts of additional WTFs and supporting structures on those protected species. The WTF Plan utterly fails to evaluate the impact of trenching on native flora in the Park. Removing or killing such native vegetation for a privately operated WTF is not consistent with the congressional mandate to preserve Rock Creek Park in as natural a state as possible.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86009

Organization Type: Unaffiliated Individual

Representative Quote: "The WTF Plan claims, without support, that "no sensitive species habitat is present around" existing WTF. EA at 76 tbl. 5. This is plainly contradicted by the WTF Plan, which documented sensitive species around the existing WTF. EA at 103 tbl. 11. The WTF Plan fails to evaluate how the WTF Plan protects these sensitive species or their habitats, or whether sensitive species exist in any of the areas where the WTF Plan would permit siting of WTFs.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85988

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan fails to state clearly whether sensitive species habitat may be used in the siting of WTFs. Compare EA at 147, 148 ("[A]reaps of habitat appropriate for sensitive species would not be considered" for WTF locations.) with EA at 147 ("facilities would not likely be located in sensitive species habitat") (emphasis added).

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86015

Organization Type: Unaffiliated Individual

Representative Quote: "Invasive non-native plants seriously threaten the integrity of native habitats." EA at 89 (emphasis added). In the portion of the Park where the WTF Plan would consider locating WTFs, there exist over 656 species of vascular plants. See EA at 88. "[C]onstruction of facilities could result in the creation of new edge habitats, which could create new habitat for non-native plant species and result in competition with native species, as well as habitat degradation." EA at 142, 147; see also Rock Creek Park Invasive Non-Native Plant Mitigation Program Final Report (1999) ("Most invasive plants thrive in open, disturbed areas where there is ample space and light."). Further, dumping landscaping materials-required to cover up any trace of trenching and reduce aesthetic impacts of additional WTFs-is a principal way invasive plant species enter the park. EA at 89.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86011

Organization Type: Unaffiliated Individual

Representative Quote: EA at 86. Visitors to the Park echoed this sentiment when they identified that native plants and animals are extremely important to their enjoyment of the Park, Littlejohn, supra, at 50 fig. 65, as is wildness, id. at 52 fig. 69. Despite the recognition of the importance of the Park for native flora, the WTF Plan will permit the removal of native flora for WTF construction, EA at 141, and will jeopardize native flora by increasing the opportunity and likelihood for invasive species to undermine the integrity of the existing native flora, EA at 147.17

Response: The park recognizes the threat of non-native and invasive vegetation to its natural resources, as described in its GMP and on pages 89 to 93 of the WTF plan/EA. Moreover, the park is developing an Exotic Plant Management Plan and a Deer Management Plan/EIS that will address impacts on native vegetation with the aim of lessening the potential competitive edge of non-native plants. The WTF plan/EA describes the status of non-native and invasive species and

analyzes their potential impacts generally, as a result of foreseeable WTF development (pages 147 to 149 of the WTF plan/EA). The WTF plan/EA is a programmatic document and does not delineate specific areas where WTF should be located, because these locations will only be determined when an application is received. Specific impacts could not be determined at this time. The site-specific NEPA process that will occur with each application will identify and consider the presence of sensitive species in the area, and potential impacts would be mitigated to the extent practicable and ensure that sensitive vegetative species are not impacted by trenching related to WTF siting. Alternative C protects sensitive habitat by prohibiting WTF in the breeding bird census area and other areas of sensitive habitat (see WTF plan/EA at page 49).

VU4000 - Visitor Use: Impact Of Proposal And Alternatives

Concern ID: 18091

CONCERN STATEMENT: Commenters were concerned about impacts to visitor use and experience including the aesthetic impacts to Beach Drive as a result of new WTF within the park and the impact to birdwatchers. Commenters did not feel these areas were adequately addressed in the WTF plan/EA.

Representative Quote(s):

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86029

Organization Type: Unaffiliated Individual

Representative Quote: " The WTF Plan fails to recognize that adverse impacts on the aesthetic quality of Rock Creek Park constitute a derogation of the Park's natural resources and values. This was recognized by NCPC when it approved the BAM applications. NCPC, Staff Draft Report, File No. 5856, at 7 (Nov. 4, 1999) ("[M]ost areas of the park are retained in a more natural undisturbed condition and telecommunications facilities could not be placed there without the certain derogation of park resources.") [2003 EA, AR 0001630] (emphasis added).

Corr. ID: 23

Organization: Not Specified

Comment ID: 85925

Organization Type: Unaffiliated Individual

Representative Quote: How many poles are we going to have? There's nothing in the document that addresses this problem. I just think they're poles with attachments, remember this is not just some stick, on every couple hundred feet along the Drive, we really have a seriously hurt the Drive, what's known as ,in this document -- as the view shed.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86018

Organization Type: Unaffiliated Individual

Representative Quote: Bird watchers use the maintenance yard area and other areas of the park as an easily accessible location to enjoy spring and fall migration, particularly the movement of neotropical migrants. The 2003 EA found that this user group experienced long-term moderate adverse impacts. Bird watching is a popular and well established activity in Rock Creek Park and in the area encompassing the maintenance yard. EA at 188. The WTF Plan notes that around the maintenance yard, "these impacts would be greater as recreation in these areas tends to be more passive, and could reach the level of moderate long-term adverse impacts as visitors may be dissatisfied with their park experience." EA at 189.

Yet, the WTF Plan concludes, without support, that these impacts would not be significant based on its improper definition of "major." The WTF Plan does not identify the level of potential impacts on visitor experiences (or even levels of visitor dissatisfaction) that might result from additional WTFs or co-located facilities in the Park. WTFs at the maintenance yard significantly undermine the ability of visitors to use the site for passive recreation, such as birding or research purposes, by killing birds or causing them to

avoid the habitat edges where they might be viewed by birders and researchers. This is particularly problematic since the RMP restricts access to the breeding bird census area for birding, research, and other purposes. Yet, the WTF Plan improperly assumes, without support, that such visitor experience impacts and passive recreation opportunities are insignificant and not worthy of additional study.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85937

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan claims benefits under Alternative C from concealed facilities, EA at 80 tbl. 5, yet every proposed alternative ensures that WTFs are concealed, EA at 49. The WTF Plan's arbitrary alternatives comparison is insufficient to provide the public or decision makers with the information necessary to make an informed choice among the alternatives, making the WTF Plan deficient under NEPA.

Response: Impacts to aesthetics including views were addressed in the WTF plan/EA through the evaluation of visitor experience and cultural landscapes (see WTF plan/EA pages 176 to 181 and 185 to 191). The WTF plan/EA is a programmatic document that addresses a range of options for evaluating WTF right-of-way applications for the park. Since the exact location of future WTF siting requests is unknown, a key component of the plan is the requirement to complete site-specific NEPA analyses for each WTF right-of-way application that would include analysis of viewsheds and compliance with NHPA Section 106 if applicable. Moreover, viewsheds are protected in the WTF plan/EA by permit terms and conditions in the selected alternative that require concealed facilities and a viewshed analysis in the Cultural Resource Zone (see WTF plan/EA page 80). Under the WTF plan/EA, WTF will be concealed to ensure that WTF do not adversely affect the viewshed and visitor experience in the park.

Thresholds for determining impacts to visitor use and experience (see plan/EA page 187) were developed in accordance with NPS *Director's Order #12 Handbook*. Thresholds identified address all recreation in the park, including bird watching. As stated in the WTF plan/EA, birdwatchers could be affected from the presence of WTF. Because of the programmatic nature of the WTF plan/EA, a NEPA process with a site-specific analysis including for visitor use would be required before a siting application for a WTF would be approved. As part of the "Elements Common to All Alternatives," site-specific environmental compliance be conducted for each proposed facility and WTF "would not be permitted in a breeding bird census area, an area of sensitive habitat, or in a place that would impact historic resources" (WTF plan/EA page 49).

Under Alternative C applicants would be encouraged to site in the areas where facility placement would address the coverage gap, which occurs mainly along Beach Drive. Because facilities would be shorter in height, more of them may be required, potentially 15 to 20 WTF would be

needed. Only FCC licensees can apply for applications. If co-location does not occur, the potential number of WTF could increase.

WH1300 - Wildlife and Wildlife Habitat

Concern ID: 18097

CONCERN STATEMENT: Commenters stated that existing studies used in the analysis in the WTF plan/EA are either out of date or not sufficient to determine accurate impacts. Therefore, additional studies are required and a new analysis should be performed. Commenters further stated that the WTF plan/EA should not dismiss impacts that fall within the range of natural variability and that consideration of species listed in the District of Columbia's *Wildlife Action Plan* were improperly dismissed.

Representative Quote(s):

Corr. ID: 12

Organization: Montgomery Bird Club, Maryland Ornithological Society

Comment ID: 86046

Organization Type: Unaffiliated Individual

Representative Quote: More information on use of the park by birds is urgently needed. There should be a comprehensive park-wide survey of migratory birds (it is naïve to think that migrants are all concentrated in the areas most often visited by birders; rather birders go where access and viewing is easiest.) Such a survey will also allow the park to locate the most important (or sensitive) areas used by these birds, one of the stated NPS goals for Rock Creek.

An evaluation of the current quality of park stopover habitat (in particular regard to food resources) is also needed. Invasive vegetation, increasingly widespread in areas used by both migrant and resident species, as well as loss of shrub understory due to deer browsing, should make such a study a priority for the NPS. Only then will the NPS have sufficient information with which to manage and protect avian resources within Rock Creek Park.

Corr. ID: 12

Organization: Montgomery Bird Club, Maryland Ornithological Society

Comment ID: 86045

Organization Type: Unaffiliated Individual

Representative Quote: Data on birds in Rock Creek Park is of varying quality and limited in geographic coverage. However enough information exists to demonstrate that the park is regionally important to neotropical migrant birds. As such, it deserves the highest level of protection and any activity that could potentially impact this resource must be carefully scrutinized. However, without a comprehensive picture of the distribution of birds, particularly migrants, within the park, as well as an identification of priority habitat areas and critical resources, it is impossible to predict the impact of WTF, or to rationally evaluate permit applications.

Corr. ID: 12

Organization: Montgomery Bird Club, Maryland Ornithological Society

Comment ID: 86005

Organization Type: Unaffiliated Individual

Representative Quote: While bird data is included, e.g. results from the long-term ANS breeding bird survey in RC, as well as submittals from this author and others in testimony at the 1999 WTF or 2003 Draft Master Plan hearings, the information is incomplete. It does not include the most recent information on neotropical migrant population trends, nor address current thinking regarding causes of bird population declines; in particular the importance of stopover habitat to passerine migrants.

Corr. ID: 12

Organization: Montgomery Bird Club, Maryland Ornithological Society

Comment ID: 86044

Organization Type: Unaffiliated Individual

Representative Quote: 7. The EA does not reference the most recent information on breeding birds in Rock Creek Park. Access to data from the recently-completed Maryland/DC Breeding Bird Atlas Project 2002-2006 is available on the web at <http://www.mdbirds.org/atlas.html>. The survey blocks Washington

West NE and CE include most of Rock Creek Park, and per Robert Hilton, DC coordinator for the Atlas project, virtually all of the forest-breeding species found in these blocks were recorded within Rock Creek Park boundaries. The species which are considered neotropical migrants are listed in Table 2. Note that several species that apparently no longer occur in the ANS survey area are still RC breeders, including Worm-eating Warbler (EA pg 104). (Species which bred in Rock Creek during the 1883-1987 Atlas Project (Robbins and Blom, 1996) but were not recorded this time are listed in Table 3. Three of these, Cerulean, Kentucky and Hooded Warblers, are species which are declining regionally, possibly a reflection of breeding habitat degradation.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85963

Organization Type: Unaffiliated Individual

Representative Quote: The preliminary conclusions from the bird impact study are not sufficient to enable the WTF Plan to draw meaningful conclusions regarding the potential for avian collisions with WTFs in the Park. Only one year worth of results is available from the study, and the value of the data from that year is hampered by the facts that the catchment net (designed to catch some birds that collide with the WTFs) was not available until late summer, EA app. A, at 6, and the study had a truncated spring count, id at 8. The study recognizes that "it is possible that the interaction between the towers and weather conditions were just not right to produce kills during the 2006 season, and continued monitoring might reveal that fatalities do indeed OCCUR."19 EA app. A, at 9. Considering that the study was limited to studying the impact of the two existing WTFs on avian species and is not appropriately generalized beyond those two towers, EA app. A, at 9, the WTF Plan improperly relied exclusively on the preliminary results of the avian impact study to conclude that countless additional WTFs would present only a negligible risk of killing Rock Creek Park birds.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85992

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan provides no basis for dismissing from further analysis impacts caused by the WTF Plan that fall within the range of natural variability. EA at 148, 149. Such impacts, when combined with a downward turn in the natural variability cycle, can seriously undermine the ability of sensitive species to survive.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85972

Organization Type: Unaffiliated Individual

Representative Quote: Despite the fact that the "lack of mortality studies at short towers may make it premature to assume that short towers cause fewer bird deaths than tall towers," FCC, Notice of Inquiry FCC 03-205, WT Docket No. 03-187, at 12 (Aug. 20, 2003), the WTF Plan improperly assumes that shorter towers are less risky to birds at Rock Creek Park than taller towers. The WTF Plan concludes this even though a study conducted by Albert Manville, a renowned expert on avian collision with human-made structures, identified a risk of collision and mass killing with towers 100 feet tall.²⁴ The WTF Plan's exclusive reliance on the preliminary results of the avian impact study is improper, runs counter to the weight of the reliable scientific evidence, and is insufficient to justify its impact analysis.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85993

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan improperly concludes that it need not ensure protection of species listed in need of conservation in the District's Wildlife Action Plan. EA at 98. This conclusion, however, is inaccurate. NPS must adhere to the Rock Creek Park GMP, EA at 2; see Bear Lodge Multiple Use Ass'n v. Babbitt, 176 F.3d 814 (10th Cir. 1999), which requires NPS to protect state-listed threatened species and their habitats, GMP at 20; see NPS, Mgmt. Policies (2006) § 4.4.2.3.

Corr. ID: 12

Organization: Montgomery Bird Club, Maryland
Ornithological Society

Comment ID: 86007

Organization Type: Unaffiliated Individual

Representative Quote: The EA does not describe the behavior of nocturnally-migrating songbirds, in particular, the phenomenon of "morning flight", a behavior that could render them particularly vulnerable to wireless communication structures, especially under adverse weather conditions which reduce visibility.

Corr. ID: 12

Organization: Montgomery Bird Club, Maryland
Ornithological Society

Comment ID: 86036

Organization Type: Unaffiliated Individual

Representative Quote: 5. Because of birds' behavior during migration, telecommunication facilities pose a physical risk. Construction could also impact stopover habitat in the park by permanent disturbance, destruction of native vegetation or facilitation of invasive plant species in disturbed soils. The EA contains a summary of current information on bird collisions with WTF (Appendix A). However it fails to take into account what is known about the behavior of neotropical songbirds, especially their dawn flights to seek stopover habitat. This has been well-described by Moore et al. (1995), and quoted here: "Most neotropical land bird migrants fly at night. Nocturnal migration commences shortly after sunset, peaks prior to 22.00 hrs and is virtually complete by midnight or shortly thereafter. &Most nocturnally migrating songbirds end their migratory flight well before dawn (Kerlinger and Moore 1989) so selection of a location to make a migratory stopover probably occurs during daylight hours, and most likely early in the morning." By traveling at night, birds can devote the entire period of daylight to alternate feeding and resting. This schedule permits complete recuperation and resumption of the journey on a subsequent evening after sufficient fat deposits have been restored. Banding studies have shown that the number of days an individual lays over during a migration stop is inversely dependent upon the amount of its fat stores upon arrival (Zimmerman 1998).

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85981

Organization Type: Unaffiliated Individual

Representative Quote: Instead, the WTF Plan "expects" that species would "resume using the habitat around the facilities, if suitable habitat is available," after construction is over. EA at 141. The WTF Plan, however, provides no support for its assumption that species will return to the site after the habitat modification occurs, since such modification is deemed "permanent" by the WTF Plan. Indeed, such an assumption runs contrary to the findings of the WTF Plan demonstrating that "noise generated by cooling fans and emergency generators" from WTFs "could disturb bird species that would normally utilize edge habitat in the area causing them to avoid the site." EA at 188. This would also undermine the value of the area as a bird watching location and research site, id., and cause NPS to violate NPS policy and its legislative mandate. RMP at 42. Yet, the WTF Plan improperly assumes, without support, that no significant adverse impacts will occur to avian species as a result of habitat modification caused by countless additional WTFs.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85957

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan does not adequately address the impacts of additional WTF on avian species within the Park, including the impacts to neotropical migratory birds. The WTF Plan improperly concludes that an impact to avian species only reaches a "major impact" threshold when impacts to wildlife are "permanent." EA at 140. This is an inappropriate threshold for determining whether impacts are significant pursuant to NEPA; NEPA does not require, for instance, that adverse health effects be permanent to be "significant" for purposes of triggering the NEPA requirement to prepare an EIS. Cf 40 C.F.R. § 1508.27(a) (recognizing that short-term effects may be significant). Similarly, the WTF Plan concludes that an impact to avian species is only "major" if it "might affect the viability of a sensitive species." EA at 140. This is improperly restrictive and is contrary to the requirements of NEPA.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85979

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan inadequately considers the impacts of additional WTFs on avian species through habitat modification. The WTF Plan recognizes that "[p]ermanent habitat loss would result from the actual footprint of the antenna support structure and associated structures." EA at 142. Yet, the

WTF Plan merely assumes that since there is other habitat not affected by the additional WTF, that there would not be any significant adverse impacts to avian species or other wildlife. EA at 143. This assumption is inappropriate. Not all habitats are created equal. Breeding habitat has a different ecological value than foraging habitat, and flyway stopover habitat has a different ecological value than habitat for resident species.²⁵ Migrant populations are especially susceptible to habitat modification at stop-over sites.²⁶ See Tennis Center EA at 58 ("Recent studies of the species decline have documented edge effect avoidance and habitat fragmentation as possible reasons."). Causing species to utilize less suitable habitat permanently, thereby undermining the long-term viability of the species, is a significant impact worthy of detailed consideration in NEPA documentation. Yet, the WTF Plan does not provide information about how such wildlife use the Park or the relative importance of different habitats to such wildlife. See RMP at 38 (identifying the need for additional information because the "[e]cological effects of various other environmental impacts associated with the park's urban setting, such as dumping and encroachment, are not fully appreciated").

Corr. ID: 19

Organization: Verizon Wireless

Comment ID: 85868

Organization Type: Unaffiliated Individual

Representative Quote: Completion of the bird study is another pre-requisite to extension or renewal of the present WTF permit. Consequently, it needs to be completed in a timely manner enabling both NPS and the NCPD to process an extension or renewal in 2009. The draft EA, however, is confusing regarding the prospective completion date of the bird study. On page 36, there is a reference that the "park is in the second year of three year bird study." Since the draft EA is dated February, 2008, this indicates that the study will continue through 2009. However, Appendix A presents the results of study data collection for 2006 which indicates that 2008 will be the final year of data collection. Senior NPS officials have informed VZW that data collection will be completed in 2008 and the study finished in early 2009. In that case, the study will be done in sufficient time to enable the permit extension or renewal process to proceed in 2009. This crucial point must be spelled out clearly in the final EA.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85916

Organization Type: Unaffiliated Individual

Representative Quote: Similarly, the WTF Plan purpose and need statement requires alternatives to specify the wildlife and habitat resource "conditions" that they should protect, EA at 2, 72 tbl. 4, yet none of the alternatives identify the conditions it seeks to protect. Nor do the alternatives establish how NPS will incorporate the findings of the bird impact study into future WTF application reviews. EA at 49, 153. For example, without an identified threshold of avian impacts that would trigger a prohibition against siting additional WTFs, "consideration" of the findings of the study is insufficient to ensure the protection of wildlife conditions as required by the WTF Plan.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 86034

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan fails to consider the cumulative impact of these WTFs on avian species. For instance, the WTF Plan recognizes that "Rock Creek Park represents a large area of unbroken habitat in the city," making the cumulative impacts of any habitat fragmentation "greater in that context." EA at 142. Yet, the WTF Plan fails to identify the extent of the potential habitat modification that could result from the Plan, and how significant such modifications might be in context.

Comment ID: 86038

Organization Type: Unaffiliated Individual

Representative Quote: Risk of collision with man-made structures is further increased under conditions of inclement weather, which is discussed in Appendix A of the EA. Nocturnally-migrating passerines usually fly at heights of 500 to 2000 feet based on radar studies, but under adverse weather conditions may fly lower (Mabee et al 2006). Birds encountering weather such as thunderstorms, strong head winds, and especially rain or fog, may cease flying and "fall out" in large numbers. One such episode was observed at Rock Creek on April 30th, 1995, when heavy rain & mist in the early morning resulted in a classic fall-out. An estimated 4,000 warblers of 15 species were recorded, and probably four times that number actually were present in the survey area. Although these events are rare, they have the potential for serious adverse

consequences if structures such as telecommunications towers are sited in areas where such concentrations of migrants occur. It should be noted that these areas may not initially be inside the forest boundary and birds flying in poor visibility towards more suitable habitat could be vulnerable to striking any structure in their path, even low towers located in more developed areas of the park.

Corr. ID: 12

Organization: Montgomery Bird Club, Maryland Ornithological Society

Comment ID: 86030

Organization Type: Unaffiliated Individual

Representative Quote: 4. Data from over 15 years of migratory bird observations support the role of Rock Creek as a regionally important resource for neotropical migrant birds: Migratory bird observations have been made in Rock Creek by a number of individuals since 1990, and almost daily during migration for the last decade. As cited in the EA, virtually all of the East Coast breeding cuckoos, warblers, vireos, thrushes, flycatchers, as well as other neotropical migrants, have been recorded, some in high numbers. (Cooper 1999, 2003; Mackiernan 2003). This includes a number of species which are "red" or "yellow" listed by ABC and the National Audubon Society: (<http://web1.audubon.org/science/species/watchlist/browseWatchlist.ph>), or are considered species of special concern by state and regional resource agencies.

It should be emphasized that these observations are limited to a very small fraction of the 1700-acre park (primarily picnic areas 17/18, and 19, Equitation Field, Military Field, Maintenance Yard, the Stable and Nature Center area and a few trails). Cooper (1999) estimated that only about 25 to 50% of the birds present in the survey area are actually identified for various reasons (not singing, obscured views, fly-overs, etc.) Since birds deep in the forest interior bounded by the survey area are also not recorded, it is obvious that these data represent only a very small fraction of the total number of migrants present in the park on any one day. Nevertheless, during the 2003 spring migration (for which the most recent Maryland and the District of Columbia summary data are available), Rock Creek Park reported the seasonal high numbers for 21 migrant species (Ringler, R.F. 2008) (Table 1). This is a remarkable record not matched by any other site in Maryland or DC. Cooper (2003) estimated that the number of neotropical migrants stopping over in the survey area alone during this same period, a typical migratory season, to exceed 30,000 individuals.

Corr. ID: 12

Organization: Montgomery Bird Club, Maryland Ornithological Society

Comment ID: 86037

Organization Type: Unaffiliated Individual

Representative Quote: Nocturnal migrants have been observed making "morning flights" at several locations in North America (Moore et al 1995). "Morning flight" differs from normal nocturnal migration in that: (1) it occurs during daylight, usually within the first two hours after dawn; (2) it occurs at low altitudes (sometimes from treetop to treetop) [emphasis mine]; (3) flights are of short duration and (4) migrants are often in flocks." The authors go on to note that birds tend to fly towards forested areas (and away from non-forested sites) even if the forest location is contrary to the direction of migration. Flocks tend to feed and eventually disperse after reaching wooded habitat. This phenomenon can be readily observed at Rock Creek, when flocks of migrants (chiefly warblers, vireos and flycatchers) pass through in waves at treetop level, feed actively (in early morning, often at a sunny edge) and then gradually disperse throughout the park.

Corr. ID: 12

Organization: Montgomery Bird Club, Maryland Ornithological Society

Comment ID: 86028

Organization Type: Unaffiliated Individual

Representative Quote: 3. Rock Creek Park is an important regional migratory corridor and also represents vital stopover habitat for migrants. Claudia Wilds (1992) first recognized Rock Creek Park as a major "migrant trap" □ that is, an area which due to physical and biological conditions concentrates and holds migrants. In part this is due to the park's north-south orientation, a forested ridge and stream valley in a heavily-developed urban area. As such it provides an obvious natural migration corridor through the city. However it also represents increasingly important regional stopover habitat. Washington DC has lost 64% of its forest cover in 25 years and suburban development has also severely impacted forest habitat for a wide area around the city core (American Forests 2002). In fact, forest fragmentation is a problem all along the birds' East Coast migratory flyway. Changes in quality of local forest habitat in the past decades (tree loss, invasive plants, over-browsing by deer) also reduces the availability of food for migrants, a problem that exists in Rock Creek and documented in the EA.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85978

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan permits significant impacts to the breeding bird census area by permitting further development of areas directly adjacent to the breeding bird census area, such as the maintenance yard site and the horse center, even though the U.S. Fish and Wildlife Service guidelines provide: "If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site should be recommended." ~ 8 (emphasis added). Instead of applying the guidelines, the WTF Plan assumes that locating additional WTF on the existing development footprint at the maintenance yard will result in minimal adverse impacts to avian species. This assumption, however, is patently flawed. The Rock Creek Park Resource Manager recognized that "[p]ast disturbance evident in [the maintenance yard and other areas] may not preclude the occurrences [sic] of rare species but rather may encourage them as shown in park meadows where several rare species are found." Memorandum from Resource Manager, Rock Creek Park, to Assistant Superintendent, Rock Creek Park (July 10, 1998) [2003 EA, AR 0000040]; [2003 EA, AR 0001124 (noting that although this area appears developed, it is still highly attractive to migratory birds because of the field habitat present)]. Additional WTF in areas directly adjacent to the breeding bird census area can affect these rare species, cause them to avoid the edge habitat, locate to less suitable habitats, and reduce the value of the site for birding and research purposes. See Memorandum from Resource Manager, Rock Creek Park, to Assistant Superintendent, Rock Creek Park (Sept. 18, 1998) [2003 EA, AR 0000591]. The depressed avian populations throughout the park and region and the potentially localized effects on the nearby Breeding Bird Census Area compel this need for an [sic] detailed assessment. Actions should not be approved that would exacerbate problems among bird populations that, unfortunately, are already known. Memorandum from Resource Manager, Rock Creek Park, to Assistant Superintendent, Rock Creek Park (July 10, 1998) [2003 EA, AR 0000039]. Yet, the WTF Plan does not address these impacts in sufficient detail.

Response: The NPS recognizes on page 98 of the WTF plan/EA that WTF may affect avian species in the park. The NPS used the most current and best available information at the time the WTF plan/EA was developed. The analysis includes information from peer reviewed literature studies as well as information collected by the park. By letter dated August 1, 2008 the NPS consulted with the U.S. Fish and Wildlife Service (USFWS) Division of Migratory Bird Management regarding the WTF plan/EA. On September 25, 2008, the USFWS concluded that the proposed project (the WTF plan/EA) would have minimal impacts on migratory birds and concluded it would be a FONSI. This correspondence is attached.

NPS has considered information provided by commenters on the WTF plan/EA that directed the NPS to the following website for more recent data: <http://www.mdbirds.org/atlas.html>. Data on the website was generated from 2006 observations for the District of Columbia. These data were reviewed to determine differences with the information published in the WTF plan/EA. Many species not listed in the plan/EA were observed in the park including 3 species of sandpipers, 2 species of cuckoo, the ruby-throated hummingbird, yellow-bellied sapsucker, eastern kingbird, Philadelphia vireo, purple martin, 3 species of wren, Swanson's thrush, 20 species of Warbler, Summer tanager, Lincoln's sparrow, rose-breasted grosbeak, indigo bunting, and bobolink. The NPS does not believe these additional data change the findings of the WTF plan/EA because so

far the ongoing study for the existing WTF within the park has shown that these species are not being impacted by WTF. Any new data collected would be incorporated into the site-specific NEPA process required of any applicant for a WTF right-of-way permit.

In the WTF plan/EA thresholds for determining effects to avian species (see plan/EA page 151) were developed in accordance with NPS *Director's Order #12 Handbook*. The use of “range of natural variability” for avian species provided both a quantitative and qualitative measure for analysis. The impact analysis for avian species discussed in general terms what could occur at a particular WTF site, as well as across the landscape of Rock Creek Park. This general analysis did not assume that all birds would resume using a site after disturbance, but that some would (see WTF plan/EA page 156). The provision for site-specific NEPA for each WTF application would consider different types of habitats available throughout the park and the specific impact of adding a facility in a certain type of habitat and would ensure that adequate breeding, foraging, and flyway stopover habitat would be available in the park.

The WTF plan encourages siting in already developed areas and prohibits siting in breeding bird census areas or other areas of known sensitive resources. The WTF plan/EA cites the Manville study and did take that study into consideration stating that, “Communications towers, such as WTF, are known to be a risk factor for birds (Manville 2000); therefore, each new WTF sited in the park would pose an additional risk to birds.”

There are a number of factors that limit the number of WTF so the WTF plan/EA does not assume that “countless” additional WTF would be permitted. As described, site-specific compliance would need to be conducted for all WTF applications and part of this compliance process would be to evaluate impacts to avian species. The WTF plan/EA describes the general affected environment for park units as a whole. Analyses specific to areas within the park such as the maintenance yard would occur as part of the application process for WTF being proposed there.

For instance, concern was raised related to bird disorientation and lighted or guyed wired towers following “morning flight,” when large numbers of southward birds cross the Atlantic Ocean. This particular concern is eliminated here because the WTF plan/EA would not permit either type of WTF.

The majority of existing research on bird impacts from WTF focuses on tall (usually over 100 feet) facilities that include lighting or guyed wires. As part of the 2003 FONSI on the existing WTF, the park is conducting a site specific three year study of the existing WTF on birds and bats, "The Effect of Cell Towers on Birds and Bats at Rock Creek Park." These WTF differ from those previous studies because they are neither lighted or guyed. On April 2, 2008, the second-year results were submitted to the NPS (NPS 2008, study attached). The same sampling methods used for Year 2 were used and as with Year 1, found the preliminary data that unlit, unguyed, short monopole facility construction is not obstructive to migratory birds in the area. Results from Year 3, expected in the spring of 2009, will complete the study. As stated on page 36 of the WTF plan/EA, the results will be used in evaluating future WTF applications. If results from the final year deviate from this and lead to a different conclusion, the plan will be reconsidered and the result will be considered for future applications.

Concern ID: 18101
CONCERN STATEMENT: Commenters felt the analysis in the WTF plan/EA overstates the effects to birds and information provided in the EA cannot determine moderate or major impacts.

Representative Quote(s): **Corr. ID:** 19 **Organization:** Verizon Wireless

Comment ID: 85862 **Organization Type:** Unaffiliated Individual

Representative Quote: VZW suggests that the bird effects portions of the EA (and Appendix A) be modified to include references to expert reports previously prepared by Dr. Sidney A. Gauthreaux, Jr. of Clemson University; Dr. Gauthreaux is a widely recognized expert on the effect of WTFs on birds. He provided a report to NPS and NCPC on June 30, 1999, a supplemental report to NPS on January 10, 2003 and further comments to NPS on April 28, 2003. He concluded that the then proposed VZW WTFs would have negligible impacts on birds. His expert prediction has been verified by eight years of WTF operations within Rock Creek Park as well as the NPS-commissioned bird study.

Regarding that study, VZW is persuaded that since eight years of operation and two years of study have empirically confirmed Dr. Gauthreaux's predictions, there is no need to engage in a third year of data collection. NPS has more than sufficient facts to write now the bird effects report and conclude and demonstrate that impacts are negligible

Corr. ID: 19 **Organization:** Verizon Wireless

Comment ID: 85854 **Organization Type:** Unaffiliated Individual

Representative Quote: Because of the urbanization, development and intensive activities at these two sites, VZW disagrees with conclusions that the present WTFs have "minor" impacts (Table 5, p. xi). These effects are less impactful and must be characterized as "negligible" throughout the document which is consistent with findings elsewhere in the draft EA (i.e., p. 152-153).

Most of the unwarranted controversy about the present WTFs centered on alleged effects on migratory birds. As clearly demonstrated by the bird study results (see Appendix A), these effects have been virtually non-existent. The study empirically establishes that(over 450 hours of regular observation and sampling by biologists shows that only a single bird casualty (a juvenile robin) may have resulted from actually colliding with the tower (emphasis added) (see Appendix A, p. 7-8). Hawks, weather, and NPS buildings had more impacts on birds than did VZW's WTFs. These almost non-existent effects must be more clearly

reflected in the text of the EA.

Corr. ID: 19

Organization: Verizon Wireless

Comment ID: 85892

Organization Type: Unaffiliated Individual

Representative Quote: Page 188-189 - VZW strongly disputes the conclusion that the existing WTF in the NPS Maintenance Yard h'ls imposed "long term moderate adverse impacts" on bird watchers. As the bird study demonstrates, (n)one of the casualties suffered at this site were significantly closer to the tower than would be expected by chance ... and, therefore, were unlikely to have been killed by striking the tower." So the study cannot attribute with certainty the one dead juvenile robin to the WTF in the Maintenance Yard. NPS buildings, equipment storage, and operations there are having a greater impact on birds. In addition, no one is recreating in this maintenance yard which is off limits to the public. In the earliest discussions regarding the placement of the maintenance yard monopole, the site was relocated from the rear of the maintenance yard area which is an area for migratory birds to the front parking lot of the yard which is away from birders and migratory bird patterns. Consequently, this conclusion about impacts on birders is contrary to the facts.

Corr. ID: 19

Organization: Verizon Wireless

Comment ID: 85891

Organization Type: Unaffiliated Individual

Representative Quote: Page 153 - Presentation of the facts regarding the bird study (Appendix A) must be modified to present clearly the conclusions arising from the study namely that "(the) robin found directly under the tower ... is the only casualty that may have resulted from actually colliding with the tower. The other robin, found farther away, likely collided with the NPS office building next to which it was collected. None of the casualties suffered at this site were significantly closer to the tower than would be expected by chance ... and, therefore, were unlikely to have been killed by striking the tower."(Emphasis added). The "cumulative impacts" associated with no action alternative and existing WTFs are also overstated. As previously noted, these effects are negligible and any references to "long term moderate adverse impacts to avian species" must be changed to accurately reflect the facts.

Corr. ID: 19

Organization: Verizon Wireless

Comment ID: 85873

Organization Type: Unaffiliated Individual

Representative Quote: To conclude our comments regarding birds, VZW strongly concurs in the express recognition within the EA about the U.S. Fish and Wildlife Service conclusions that only very tall towers (> 199 feet), stabilized by guy wires, lighted at night, and situated in key migration routes pose significant threats to birds (see p. 25-26; Table 2, p. 52). The EA should more clearly note that the present WTFs in the Park are substantially smaller, do not use guy wires, are not lighted at night, and are not situated in key bird migration routes. The combination of these facts and the empirical data from the bird study demonstrate conclusively that VZW's WTFs in Rock Creek Park are having, and will continue to have, only negligible to non-existent impacts on birds, if any impacts at all.

Response: Impacts stated in the WTF plan/EA considered the results of the bird study. See response to Concern Statement 18097 above. The WTF plan/EA recognized the bird study initial findings that short monopole facility construction (the existing WTFs) is not obstructive to migratory birds in the area. NPS will be considering the results of the study when available and will modify the plan and application requirements as appropriate. NPS agrees that some of the impacts under Alternative C are negligible, such as from habitat loss. Impacts to birdwatchers were related to visitor use and experience, and the NPS believes that they were correctly characterized in the WTF plan/EA.

Cumulative impacts are addressed under Concern Statement 18057. The list of cumulative actions for each resource area evaluated in the WTF plan/EA is provided on pages 135 to 137. A wide range of actions were considered as cumulative impacts when considering avian species. Because alternative A would have greater overall impacts resulting from the lack of a defined plan for siting WTF, the NPS believes that the long-term moderate finding for cumulative impacts is correct.

WH4000 - Wildlife And Wildlife Habitat: Impact Of Proposal And Alternatives

Concern ID: 18106

CONCERN STATEMENT: Commenters stated that noise from adding new WTF within the park could disturb wildlife and the scenic and relaxing atmosphere of the park setting.

Representative Quote(s): **Corr. ID:** 8

Organization: *Not Specified*

Comment ID: 85956

Organization Type: Unaffiliated Individual

Representative Quote: Such equipment also emits periodic noises that disturb the wildlife of the Park.

Corr. ID: 23

Organization: *Not Specified*

Comment ID: 85918

Organization Type: Unaffiliated Individual

Representative Quote: My major concerns are with the affect of the -- possible affects on the ecology of the park and also the affect on the scenic beauty of the park as a place that many of us use for rest, relaxation, and play.

Corr. ID: 22

Organization: Institute For Public Representation

Comment ID: 85989

Organization Type: Unaffiliated Individual

Representative Quote: The WTF Plan fails to consider the impacts of co-location on migratory and sensitive avian species, despite the fact that noise disturbance could "degrade adjacent sensitive species habitat and result in displacement of sensitive species." EA at 142,147.

Response: Effects from noise to visitors and wildlife are discussed in the WTF plan/EA (see WTF plan/EA page xi), and as a result Alternative C prohibits WTF from siting in sensitive habitats or the breeding bird census area. Where WTF are allowed to site, the noise disturbance during operation would be minimal as these areas are along developed roadways. In other areas, greater effects would be experienced by wildlife.

ROCK CREEK PARK

WIRELESS TELECOMMUNICATION PLAN/ ENVIRONMENTAL ASSESSMENT

ERRATA

The following changes have been made to the *Wireless Telecommunication Plan/Environmental Assessment* (WTF/EA) for Rock Creek Park (the park) (February 2008) to correct minor statements of fact and update information. Additions to the text are identified by underlines and deletions are marked by ~~strikeout~~ unless otherwise noted.

EXECUTIVE SUMMARY

1. BACKGROUND, PAGE I

The following change was made to correct a typographical error:

Rock Creek Park was established on September 27, 1890, as the third ~~fourth~~ federal park created by Congress.

2. TABLE 5, SUMMARY OF IMPACT, PAGE IX

The following changes incorporate potential impacts to tree root systems from installation of WTF into the impact summary and to correct the table number:

TABLE 5 ES-1: SUMMARY OF IMPACTS

Impact Topic	Alternative A: No-action Alternative	Alternative B: Zone Management	Alternative C: Management to Focus on Coverage Gaps (Preferred Alternative)
Flora and Fauna	Long-term beneficial impacts to flora and fauna are expected from not granting right-of-way permits for WTF in the Forest Zone, Park Road Zone, Fort Circle Parks, Dumbarton Oaks, and Montrose Park. Short- and long-term minor adverse impacts to flora or fauna are expected in alternative A as a result of habitat disturbance and loss during the construction, operation, and maintenance of potential future WTF throughout the park. Long-term negligible adverse impacts would be expected for co-located facilities on existing sites. Long-term moderate adverse cumulative effects would be expected for alternative A. Impairment to flora and fauna would not occur.	Long-term beneficial impacts to flora and fauna are expected from not granting right-of-way permits for WTF in the Forest Zone, Park Road Zone, Fort Circle Parks, Dumbarton Oaks, and Montrose Park. Short- and long-term minor adverse impacts are expected from ground and noise disturbance during construction, operation, and maintenance of WTF; however, impacts are expected to be less than those described in alternative A, as zone/area specific permit terms and conditions would require certain types of technologies that would promote less disturbance of habitat. Long-term minor adverse cumulative impacts would occur for alternative B. Impairment to flora and fauna would not occur.	Long-term beneficial impacts to flora and fauna are expected from not granting right-of-way permits for WTF in the Forest Zone, Park Road Zone, Fort Circle Parks, Dumbarton Oaks, and Montrose Park. Short- and long-term negligible to minor adverse impacts are expected from construction, operation, and maintenance of WTF as siting would be encouraged in areas of the park with coverage gaps, and specific terms and conditions would be applied to applications in these areas. For siting requests in areas that do not have coverage gaps, these applications would be evaluated by zone as described in alternative B, with long-term, minor, adverse impacts for facilities sited in these areas. Long-term negligible adverse cumulative impacts would occur for

TABLE ~~5~~ ES-1: SUMMARY OF IMPACTS

Impact Topic	Alternative A: No-action Alternative	Alternative B: Zone Management	Alternative C: Management to Focus on Coverage Gaps (Preferred Alternative)
			alternative C. Impairment to flora and fauna would not occur.

PURPOSE OF AND NEED FOR ACTION

3. RELATED LAWS, POLICIES, PLANS, AND ACTIONS: THE EFFECT OF CELL TOWERS ON BIRDS AND BATS AT ROCK CREEK PARK , WASHINGTON, D.C. (2007), PAGE 36

The following revisions were made to clarify when the study would be complete:

As part of the preferred alternative in the 2003 *Rock Creek Park Telecommunications Environmental Assessment*, the park was to seek funds to develop and adopt a program to monitor the impact of the existing WTF on migratory birds. As further discussed in “Affected Environment” and “Environmental Consequences” chapters of this WTF plan/EA, the park is ~~in the second year of a three year study that is~~ conducting one of the first studies to look at the impact of unlit, unguyed “short towers” and their potential impacts on avian species. As part of this study, the park is conducting a spring, summer and fall assessment, each year for three years (2006, 2007, and 2008) using both ground and net sampling to look for evidence of bird strikes at the existing facilities. The preliminary results of this study were used in developing and analyzing the alternatives for this WTF plan/EA and will be considered when evaluating future WTF applications after the study is completed in early 2009.

ALTERNATIVES

4. FIGURE 6: ROCK CREEK PARK GENERAL MANAGEMENT PLAN ZONES, PAGE 45

The figure on page 45 was labeled incorrectly, the following change was made:

~~FIGURE 7: PROCESS FOR CONSIDERING WIRELESS TELECOMMUNICATION FACILITIES APPLICATION UNDER REFERENCE MANUAL 53~~

FIGURE 6: ROCK CREEK PARK GENERAL MANAGEMENT PLAN ZONES

5. FIGURE 9: AREAS IN ROCK CREEK PARK MANAGED UNITS WITH GAPS IN WIRELESS TELECOMMUNICATIONS COVERAGE, PAGE 65

The following correction has been made to the figure legend to clarify what the figure is illustrating:

~~No Cellular Service~~ Lacks In-car Cellular Coverage

The following citation has been added to the figure:

(Cityscapes Consulting Inc, 2007)

6. TABLE 5, SUMMARY OF IMPACT, PAGE 75

The following changes incorporate potential impacts to tree root systems from installation of WTF into the impact summary:

TABLE 5: SUMMARY OF IMPACTS

Impact Topic	Alternative A: No-action Alternative	Alternative B: Zone Management	Alternative C: Management to Focus on Coverage Gaps (Preferred Alternative)
Flora and Fauna	Long-term beneficial impacts to flora and fauna are expected from not granting right-of-way permits for WTF in the Forest Zone, Park Road Zone, Fort Circle Parks, Dumbarton Oaks, and Montrose Park. Short- and long-term minor adverse impacts to flora or fauna are expected in alternative A as a result of habitat disturbance and loss during the construction, operation, and maintenance of potential future WTF throughout the park. Long-term negligible adverse impacts would be expected for co-located facilities on existing sites. Long-term moderate adverse cumulative effects would be expected for alternative A. Impairment to flora and fauna would not occur.	Long-term beneficial impacts to flora and fauna are expected from not granting right-of-way permits for WTF in the Forest Zone, Park Road Zone, Fort Circle Parks, Dumbarton Oaks, and Montrose Park. Short- and long-term minor adverse impacts are expected from ground and noise disturbance during construction, operation, and maintenance of WTF; however, impacts are expected to be less than those described in alternative A, as zone/area specific permit terms and conditions would require certain types of technologies that would promote less disturbance of habitat. Long-term minor adverse cumulative impacts would occur for alternative B. Impairment to flora and fauna would not occur.	Long-term beneficial impacts to flora and fauna are expected from not granting right-of-way permits for WTF in the Forest Zone, Park Road Zone, Fort Circle Parks, Dumbarton Oaks, and Montrose Park. Short- and long-term negligible <u>to minor</u> adverse impacts are expected from construction, operation, and maintenance of WTF as siting would be encouraged in areas of the park with coverage gaps, and specific terms and conditions would be applied to applications in these areas. For siting requests in areas that do not have coverage gaps, these applications would be evaluated by zone as described in alternative B, with long-term, minor, adverse impacts for facilities sited in these areas. Long-term negligible adverse cumulative impacts would occur for alternative C. Impairment to flora and fauna would not occur.

ENVIRONMENTAL CONSEQUENCES

7. FLORA AND FAUNA – IMPACTS OF ALTERNATIVE C: MANAGEMENT TO FOCUS ON COVERAGE GAPS, PAGES 144-145:

The following changes incorporate potential impacts to tree root systems from installation of WTF:

Analysis. Long-term beneficial impacts to flora and fauna would be expected from not granting permits for WTF under any circumstances in the Park Road Zone, Fort Circle Parks, Dumbarton Oaks, and Montrose Park, as described in alternative A.

Long-term negligible impacts would be expected for alternative C from construction, operation, and maintenance of WTF, because facilities would be encouraged to locate in areas of the park that are needed to address coverage gaps, mainly along Beach Drive in Reservation 339 and the tributaries along the road. Within the areas where siting would be encouraged, specific permit terms and conditions would be applied to address the physical aspects of new WTF (height, width, appearance), as well as the types of disturbance that would not be allowed along the edges of the Forest Zone. In areas outside of Beach Drive and the tennis center, siting would not be encouraged, but any applications for those areas would be evaluated under the zone/area structure described in alternative B.

Short- and long-term construction, operation, and maintenance impacts would be the same as those in alternative B but would be considered negligible because the disturbance would be much more limited in those areas where the park would encourage siting. These areas in the park are busy urban roadways, or consist of urban landscapes (maintained lawns), and therefore are highly disturbed areas and do not provide habitat for the majority of species at the park. Species in the Forest Zone, which adjoins to these roadway areas, would still experience a low level of disturbance from noise associated with construction, operation, and maintenance, but this level of disturbance would be more indirect and would be long-term, negligible to minor, and adverse. Potential minor impacts would result from development on the Forest Zone as tree root systems may be disturbed. However, during the siting process, WTF providers would be required to compete NEPA compliance and as part of that, look at potential disturbance to tree root systems. If disturbance would occur, the WTF provider would be required to detail the mitigation they would take to reduce or limit these impacts. Further, as no trees over 4 dbh would be permitted to be removed, impacts to vegetation would also be limited.

In alternative C, permits for WTF would not be strictly limited to disturbed areas where the coverage gaps occur, as applications would be accepted and evaluated for all units of Rock Creek Park. Based on studies that show Beach Drive as the area with coverage gaps, it is assumed that this is the area where providers would most likely to want to site. The anticipated demand for siting is in areas with coverage gaps and because siting would be encouraged in areas with coverage gaps, would likely result in long-term, negligible, adverse impacts to flora and fauna in all units of Rock Creek Park.

Cumulative Impacts. Cumulative impacts for alternative C would be the same as those described in alternative A. However, the level of impact for alternative C would be less than described in alternative A, resulting in long-term negligible cumulative impacts. Construction of WTF would likely occur in highly disturbed areas adjacent to urban roadways, similar to or the same as those proposed under DDOT projects and the Rehabilitation of Rock Creek and Potomac Parkways. This would result in the potential for less habitat loss than alternatives A or B and allow for sufficient alternative habitats for wildlife displaced by noise and disturbance from human presence. There would also likely be less habitat loss associated with construction, maintenance, and operation of trails, roads, and WTF.

The impacts on the park's flora and fauna resources resulting from these past, present, and future actions, in combination with the long-term minor adverse impacts for the alternative C, would continue to result in long-term negligible adverse cumulative impacts.

Conclusion. Long-term beneficial impacts to flora and fauna are expected from not granting right-of-way permits for WTF in the Forest Zone, Park Road Zone, Fort Circle Parks, Dumbarton Oaks, and Montrose Park. Short- and long-term negligible to minor adverse impacts are expected from construction, operation, and maintenance of WTF as siting would be encouraged in areas of the park with coverage gaps, and specific terms and conditions would be applied to applications in these areas. For siting requests in areas that do not have coverage gaps, these applications would be evaluated by zone as described in alternative B, with long-term, minor, adverse impacts for facilities sited in these areas. Long-term negligible adverse cumulative impacts would occur for alternative C. Impairment to flora and fauna would not occur

GLOSSARY AND REFERENCES

8. GLOSSARY, PAGE 215

The following definition was added to the glossary:

Coverage Gap: For the purposes of the WTF plan/EA a coverage gap is areas of Rock Creek Park that lack “in-car” cellular coverage.

9. REFERENCES, PAGES 285–312

The following references were considered during the EA process, but were not directly cited in the WTF plan/EA.

Avian Powerline Interaction Committee (APLIC).

1994 *Migrating Bird Collisions with Power Lines: The State of the Art in 1994*. Edison Electric Institute, Washington D.C., 78 pp.

Gehring, Joelle, Ph.D.

2005a Avian Collision Study for the Michigan Public Safety Communication system (MPSCS).

2005b Summary of Spring 2005 Field Season (Aug. 12, 2005) at 1 (Gehring August 2005 Report).

2005c Avian Collision Study for the Michigan Public Safety Communications System (MPSCS).

2005d Summary of Fall 2005 Field Season (Dec. 30, 2005) at 1 (Gehring Dec. 2005 Report).

Salmons, S. Natural Resources Specialist. Rock Creek Park. Email correspondence. 29 Jan 2003 and 12 Feb. 2003.