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## COMMUNICATION TOWER AND ANTENNA CONSULTATION IN NEW JERSEY

The U.S. Fish and Wildlife Service's (Service) New Jersey Field Office recognizes that individual project review by the Service is not required under certain conditions. The Service provides the following comments in accordance with provisions of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), the Migratory Bird Treaty Act of 1918 (MBTA) (40 Stat. 755; 16 U.S.C. 703-712), the Bald and Golden Eagle Protection Act of 1940 (16 U.S.C. 668-688d), and the National Environmental Policy Act of 1969 (83 Stat. 852; 42 U.S.C. 4321 *et seq.*).

Migratory birds are a Federal trust resource and are protected under the MBTA. Communication towers may pose a hazard to migrating birds and to birds nesting in the area. Risk factors include tower height, physical design, lighting, and site location relative to migratory corridors and bird concentration areas. In addition, certain communication towers may adversely affect federally listed threatened and endangered species through direct disturbance of listed plants and animals, impacts to their habitats, and/or creation of a collision hazard for listed birds and bats.

The Service has determined that the following proposed actions are not likely to adversely affect federally listed species in New Jersey, nor have any significant impacts on migratory birds or other wildlife resources under Service jurisdiction:

- routine maintenance (*e.g.*, painting, antenna replacement) at existing tower sites or other existing tower support structures;
- repair or replacement of existing towers and/or equipment;
- co-location of new equipment or antennas on an existing structure (*e.g.*, tower, water tank, flagpole, building), where proposed activities will not require the addition of lights or guy wires to an existing structure, or increase the height of an existing structure above 200 feet; and
- construction of new towers without lights or guy wires, under 200 feet in height

### PROVIDED that:

- (1) all ground disturbance is at least 150 feet from any beach or dune;
- (2) in areas where the iPac species list<sup>1</sup> includes bog turtle, red knot, Indiana bat, dwarf wedgemussel, swamp pink, Knieskern's beaked-rush, sensitive joint-vetch, or Hirsts' panic grass: (a) any net gain in impervious surface is under 0.25 acre, AND (b) all ground disturbance is at least 150 feet from any wetland or open water (*e.g.*, river, stream, pond, lake) or is limited to existing developed areas (*e.g.*, rooftops, pavement, gravel, maintained lawn);
- (3) in areas where the iPac species list includes Indiana bat, any tree clearing is under 0.25 acre (including for access roads) and trees over 5 inches diameter at breast height will be cut between October 1 and March 31; in municipalities<sup>2</sup> with hibernation occurrence, cutting will occur between November 16 and March 31;
- (4) in areas where the iPac species list includes northern long-eared bat, the project will comply with the 4(d) rule<sup>3</sup>;
- (5) the project is consistent with the Service's National Bald Eagle Management Guidelines;<sup>4</sup>
- (6) the project is not located in a National Wildlife Refuge;<sup>5</sup>
- (7) removal of native vegetation (which provides migratory bird habitat) will not exceed 0.5 acre; and
- (8) tree clearing will be seasonally restricted from March 1 to August 31 OR, if clearing will occur during that season, all trees will be inspected no more than 24 hours prior to cutting to ensure no active nests of any migratory bird<sup>6</sup> are present.

**Do not contact this office for review of projects that meet the above criteria.** This document may be used as the Service's concurrence with an ESA determination of "not likely to adversely affect" federally listed species for projects in New Jersey that meet the above criteria.

<sup>1</sup> Information, Planning, and Conservation System, <http://ecos.fws.gov/ipac/>

<sup>2</sup> See the list of bat municipalities at <http://www.fws.gov/northeast/njfieldoffice/Endangered/>

<sup>3</sup> Information on 4(d) rule compliance is available at <http://www.fws.gov/Midwest/endangered/mammals/nleb/>

<sup>4</sup> <http://www.fws.gov/northeast/ecologicalservices/pdf/NationalBaldEagleManagementGuidelines.pdf>

<sup>5</sup> Refuge boundary mapping is available at [http://www.fws.gov/gis/data/national/index.html#NWRS\\_BOUNDARY](http://www.fws.gov/gis/data/national/index.html#NWRS_BOUNDARY)

<sup>6</sup> <http://www.fws.gov/birds/management/managed-species/migratory-bird-treaty-act-protected-species.php>

***2013 U.S. Fish and Wildlife Service (USFWS) Revised Voluntary Guidelines for Communication Tower Design, Siting, Construction, Operation, Retrofitting, and Decommissioning –***

**Suggestions Based on Previous USFWS Recommendations to FCC Regarding WT Docket No. 03-187, FCC 06-164, Notice of Proposed Rulemaking, "Effects of Communication Towers on Migratory Birds" (2007), Docket No. 08-61, FCC's Antenna Structure Registration Program (2011), Service 2012 Wind Energy Guidelines, and Service 2013 Eagle Conservation Plan Guidance**

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[Comm Tower 2013 Revised Guidance-to FCC-AMM.docx]

1. Collocation of the communications equipment on an existing communication tower or other structure (e.g., billboard, water and transmission tower, distribution pole, or building mount) is strongly recommended. Depending on tower load factors and communication needs, from 6 to 10 providers should collocate on an existing tower or structure provided that frequencies do not overlap/"bleed" or where frequency length or broadcast distance requires higher towers. New towers should be designed structurally and electronically to accommodate the applicant's antenna, and antennas of at least 2 additional users – ideally 6 to 10 additional users, if possible – unless the design would require the addition of lights and/or guy wires to an otherwise unlit and/or unguyed tower. This recommendation is intended to reduce the number of towers needed in the future.

2. If collocation is not feasible and a new tower or towers are to be constructed, it is strongly recommended that the new tower(s) should be not more than 199 feet above ground level (AGL), and that construction techniques should not require guy wires. Such towers should be unlighted if Federal Aviation Administration (FAA) regulations and lighting standards (FAA 2007, Patterson 2012, FAA 2013 lighting circular anticipated update) permit. Additionally, the Federal Communications Commission (FCC) through recent rulemaking now requires that new towers  $\geq$  450 ft AGL contain no red-steady lights. FCC also recommends that new towers 350-450 ft AGL also contain no red-steady lights, and they will eventually recommend that new towers  $<$  350 ft AGL convert non-flashing lights to flash with existing flashing lights. LED lights are being suggested as replacements for all new construction and for retrofits, with the intent of future synchronizing the flashes. Given these dynamics, the Service recommends using lattice tower or monopole structures for all towers  $<$  200 ft AGL and for taller towers where feasible. The Service considers the less than 200 ft AGL option the "gold standard" and suggests that this

is the environmentally preferred industry standard for tower placement, construction and operation – i.e., towers that are unlit, unguyed, monopole or lattice, and less than 200 ft AGL.

3. If constructing multiple towers, the cumulative impacts of all the towers to migratory birds – especially to Birds of Conservation Concern (FWS 2008) and threatened and endangered species, as well as the impacts of each individual tower, should be considered during the development of a project.

4. The topography of the proposed tower site and surrounding habitat should be clearly noted, especially in regard to surrounding hills, mountains, mountain passes, ridge lines, rivers, lakes, wetlands, and other habitat types used by raptors, Birds of Conservation Concern, and state and federally listed species, and other birds of concern. Active raptor nests, especially those of Bald and Golden Eagles, should be noted, including known or suspected distances from proposed tower sites to nest locations. Nest site locations for Golden Eagles may vary between years, and unoccupied, inactive nests and nest sites may be re-occupied over multiple years. The Service's 2013 Eagle Conservation Plan Guidance, Module 1, Land-based Wind Energy, Version 2, available on our website, is a useful document (USFWS 2013).

5. If at all possible, new towers should be sited within existing "antenna farms" (i.e., clusters of towers), in degraded areas (e.g., strip mines or other heavily industrialized areas), in commercial agricultural lands, in Superfund sites, or other areas where bird habitat is poor or marginal. Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., state of federal refuges, staging areas, rookeries, and Important Bird Areas), in known migratory, daily movement flyways, areas of breeding concentration, in habitat of threatened or endangered species, or key habitats for Birds of Conservation Concern (FWS 2008). Disturbance can result in effects to bird populations which may cumulatively affect their survival. The Service has recommended some disturbance-free buffers, e.g., 0.5 mi around raptor nests during the nesting season, and 1-mi disturbance free buffers for Ferruginous Hawks and Bald Eagles during nesting season in Wyoming (FWS WY Ecological Services Field Office, referenced in Manville 2007:23). The effects of towers on "prairie grouse," "sage grouse," and grassland and shrub-steppe bird species should also be considered since tall structures have been shown to result in abandonment of nest site areas and leks, especially for "prairie grouse" (Manville 2004). The issue of buffers is currently under review, especially for Bald and Golden Eagles. Additionally, towers should not be sited in areas with a high incidence of fog, mist, and low cloud ceilings.

6. If taller (> 199 ft AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used. Unless otherwise required by the FAA, only white strobe or red strobe lights (red preferable since it is generally less displeasing to the human eye at night), or red flashing incandescent lights should be used at night, and these should be the minimum number, minimum intensity (< 2,000 candela), and minimum number of flashes per minute (i.e., longest duration between flashes/"dark phase") allowable by the FAA. The use of solid (non-flashing) warning lights at night should be avoided (Patterson 2012, Gehring et al. 2009) – see recommendation #2 above. Current research indicates that solid red lights attract night-migrating birds at a much higher rate than flashing lights (Gehring et al. 2009, Manville 2007, 2009). Recent research

indicates that use of white strobe, red strobe, or red flashing lights alone provides significant reductions in bird fatalities (Patterson 2012, Gehring et al. 2009).

7. Tower designs using guy wires for support, which are proposed to be located in known raptor or waterbird concentrations areas, daily movement routes, major diurnal migratory bird movement routes, staging areas, or stopover sites, should have daytime visual markers or bird deterrent devices installed on the wires to prevent collisions by these diurnally moving species. The efficacy of bird deterrents on guy wires to alert night migrating species has yet to be scientifically validated. For guidance on markers, see Avian Power Line Interaction Committee (APLIC). 2006. *Suggested Practices for Avian Protection on Power Lines -- State of the Art in 2006*. Edison Electric Institute, APLIC, and the California Energy Commission. Washington, DC, and Sacramento, CA. 207 pp, and APLIC. 2012. *Reducing Avian Collisions with Power Lines -- the State of the Art in 2012*. Edison Electric Institute and APLIC. Washington, DC. 159 pp. Also see [www.aplic.org](http://www.aplic.org), [www.energy.ca.gov](http://www.energy.ca.gov), or call 202-508-5000.

8. Towers and appendant facilities should be designed, sited, and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint." However, a larger tower footprint is preferable to the use of guy wires in construction. Several shorter, un-guyed towers are preferable to one, tall guyed, lighted tower. Road access and fencing should be minimized to reduce or prevent habitat fragmentation, disturbance, and the creation of barriers, and to reduce above ground obstacles to birds in flight.

9. If, prior to tower design, siting and construction, if it has been determined that a significant number of breeding, feeding and roosting birds, especially of Birds of Conservation Concern (FWS 2008), state or federally-listed bird species, and eagles are known to habitually use the proposed tower construction area, relocation to an alternate site is highly recommended. If this is not an option, seasonal restrictions on construction are advised in order to avoid disturbance, site and nest abandonment, especially during breeding, rearing and other periods of high bird activity.

10. Security lighting for on-ground facilities, equipment and infrastructure should be motion- or heat-sensitive, down-shielded, and of a minimum intensity to reduce nighttime bird attraction and eliminate constant nighttime illumination, but still allow safe nighttime access to the site (USFWS 2012, Manville 2011).

11. Representatives from the USFWS or researchers from the Research Subcommittee of the Communication Tower Working Group should be allowed access to the site to evaluate bird use; conduct dead-bird searches; place above ground net catchments below the towers (Manville 2002); and to perform studies using radar, Global Position System, infrared, thermal imagery, and acoustical monitoring, as necessary. This will allow for assessment and verification of bird movements, site use, avoidance, and mortality. The goal is to acquire information on the impacts of various tower types, sizes, configurations and lighting protocols.

12. Towers no longer in use, not re-licensed by the FCC for use, or determined to be obsolete should be removed from the site within 12 months of cessation of use, preferably sooner.

13. In order to obtain information on the usefulness of these guidelines in preventing bird strikes and better understanding impacts from habitat fragmentation, please advise USFWS personnel of the final location and specifications of the proposed tower, and which measures recommended in these guidelines were implemented. If any of these recommended measures cannot be implemented, please explain why they are not feasible. This will further advise USFWS in identifying any recurring problems with the implementation of the guidelines, which may necessitate future modifications.

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U.S. Fish and Wildlife Service. 2012. U.S. Fish and Wildlife Service Land-Based Wind Energy Guidelines. March, 82 pp.

U.S. Fish and Wildlife Service. 2013. Eagle Conservation Plan Guidance, Module 1, Land-based Wind Energy, Version 2. Division of Migratory Bird Management. April, 103 pp.



Federal Communications Commission  
Washington, D.C. 20554

December 22, 2015

**Opportunities to Reduce Bird Collisions with Communications Towers  
While Reducing Tower Lighting Costs**

On December 4, 2015, the Federal Aviation Administration (FAA) revised its advisory circular that prescribes tower lighting to eliminate the use of L-810 steady-burning side lights on towers taller than 350 ft. Above Ground Level (AGL). See [http://www.faa.gov/documentLibrary/media/Advisory\\_Circular/AC\\_70\\_7460-1L .pdf](http://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_70_7460-1L.pdf). While the FAA made this change to reduce the number of migratory bird collisions (by as much as 70%), it also reduces construction and maintenance costs to tower owners. Implementing this type of lighting on towers that received an FAA Study prior to the release of the new advisory circular can be achieved through a simple application process with the FAA and the Federal Communications Commission (FCC).

The FAA and FCC recognize that:

- Birds are attracted to non-flashing red lights, such as L-810 side-marker lights; and
- Birds are much less attracted to flashing lights on towers, such as L-864 and L-865 lights.

A “lighting deviation” can be used to extinguish or eliminate L-810 steady-burning side lights from an existing registered tower, and typically the FAA quickly approves such a request. The following steps are necessary:

1. File a Marking and Lighting study electronically with the FAA (<https://oeaaa.faa.gov/oeaaa/external/portal.jsp>) requesting the elimination or omission of steady-burning lights (L-810) with Form 7460-1, Notice of Proposed Construction or Alteration. Designate structure type: “Deviation from Red Obstruction Light Standards.”
2. Once the FAA has approved the request and assigned a FAA Study Number, file Form 854 with the FCC via the Antenna Registration System (ASR). Please select “MD – Modification” and choose the appropriate FAA Lighting Style.<sup>1</sup> The FCC will typically approve the application and modify the registration within 24 hours.
3. Once the lighting change for a tower has been granted by the FCC via ASR, the steady-burning, side-marker, L-810 tower lights can be extinguished. This is typically accomplished in the tower transmission building and does not ordinarily require climbing the tower. Per the FAA requirements, flashing red lights should flash at 30 FPM (+/- 3 FPM).

The elimination of continuously burning security lights under towers will also minimize bird attraction to the site and reduce energy costs. Many tower operators use down-shielded, motion sensor-triggered security lighting, which promotes tower safety and reduces the possibility of attracting migratory birds.

<sup>1</sup> If the FAA grants a lighting deviation referencing an advisory circular other than 70/7460-1L, select “3. Other” and describe the lighting in the field provided. If the FAA issues a new Study referencing 70/7460-1L, select the lighting style that corresponds to the lighting in the FAA Study.



## COMMUNICATION TOWERS AND ANTENNAS: ENVIRONMENTAL REVIEW PROCEDURES IN NEW JERSEY



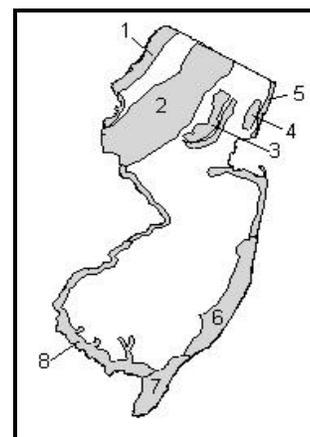
### INTRODUCTION

Wireless communication towers and antennas in New Jersey have greatly increased in number in recent years. Cumulatively, communication towers have a potentially significant impact on wildlife, especially migratory birds. All communication towers and antennas requiring authorization from the Federal Communications Commission (FCC) are subject to the environmental review procedures required by Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) (ESA) and by the National Environmental Policy Act (83 Stat. 852; 42 U.S.C. 4321 *et seq.*) (NEPA). The U.S. Fish and Wildlife Service (Service) routinely reviews proposed communication projects and provides recommendations to project proponents and the FCC to avoid adverse impacts to federally listed endangered and threatened species, migratory birds, and other wildlife.

This paper provides information on: potential impacts to fish, wildlife, and other resources from communication towers; concerns regarding tower siting near Wilderness Areas and National Wildlife Refuges; and required environmental review procedures for wireless communication facilities. Recommendations to avoid adverse impacts to wildlife through tower siting and design are also included. Sources of additional information and a Tower Site Evaluation Form are also provided. The form is a tool developed by the Service to assist project proponents, planners, natural resource managers, and others in making tower siting decisions. Information and recommendations contained in this paper reflect the September 14, 2000 Service Interim Guidelines for Recommendations On Communications Tower Siting, Construction, Operation, and Decommissioning.

### MIGRATORY BIRDS

All native migratory birds (e.g., waterfowl, shorebirds, passerines, hawks, owls, vultures, falcons) are afforded protection under the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 703-712). Migratory birds are a federal trust resource responsibility, and the Service considers migratory bird concentration areas environmentally significant. Bird concentration areas include: traditional migratory flight corridors (e.g., ridges, shorelines, river valleys); rookeries and other bird breeding areas; stopover, staging or resting areas (e.g., land bounding large bodies of water, wetlands, forests, and natural grasslands); wildlife preserves (e.g., National Wildlife Refuges; State Parks, Forests, Wildlife Management Areas, and Natural Areas; private sanctuaries); and seasonal flight paths (e.g., between feeding and nesting or roosting areas). Some critical bird migration corridors in New Jersey (Figure 1) include: (1) Appalachian ridges and valleys; (2) the Highlands; (3) central Passaic wetlands; (4) the New York/New Jersey Harbor Estuary area, including the Hackensack Meadowlands; (5) the Palisades; (6) Atlantic Coast beaches, bays, and barrier islands; (7) the Cape May Peninsula; and (8) the Delaware Bayshore. In addition, the Service maintains five National Wildlife Refuges in New Jersey; further information is provided below.



**Figure 1.** Critical Migratory Bird Areas (Dunne, 1989).

Communication towers pose a collision hazard to birds in flight, especially some 350 species of night-migrating birds. Cumulatively, communication towers kill an estimated four to five million birds per year nationwide (Manville, 2000). The risk of bird collisions is related to tower height, design, lighting, and location relative to migratory bird concentration areas. Most documented bird kills at communication towers involve tall, lighted structures, and birds migrating at night during inclement weather. During these events, birds attracted by the lights congregate and circle around the tower, with mortality resulting from collisions with guy wires, other birds, and the ground, or from exhaustion. However, occurrences of bird collision mortality at communication towers have also been documented during daytime and fair-weather conditions.

## NATIONAL WILDLIFE REFUGES

The Service administers a national system of wildlife refuges. A key purpose of the National Wildlife Refuge (NWR) System is to protect and maintain habitat for migratory birds and other wildlife. Five NWRs have been established within the State of New Jersey, each with a role in protecting the diversity of the Nation's flora and fauna and the natural habitats upon which native species depend. The five NWRs in New Jersey are (Figure 2): Wallkill River, Great Swamp, Edwin B. Forsythe, Supawna Meadows, and Cape May. The National Wildlife Refuge System Improvement Act of 1997 (105 Stat. 57; 16 U.S.C. 668dd-668ee, as amended) provides guidelines and directives for administration and management of all areas in the refuge system. Any proposal to construct a commercial communication tower or antenna facility within a NWR would require a compatibility determination (65 FR 62457-62483; 50 CFR 25, 26 and 29) before a Special Use Permit would be granted from the Service's Division of Refuges and Wildlife.

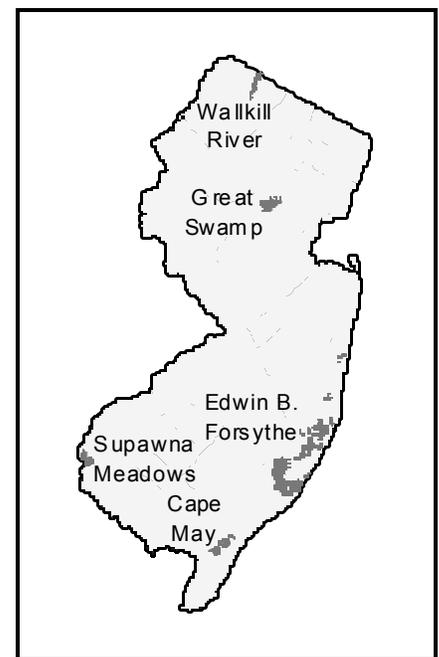


Figure 2. National Wildlife Refuges

## WILDERNESS AREAS

Wilderness is a designation made by Congress pursuant to the Wilderness Act (78 Stat. 890; 16 U.S.C. 1131-1136), which established the National Wilderness Preservation System. The Act defines wilderness as "an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain; an area of underdeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation and which is protected and managed to preserve its natural conditions." Permanent structures, including communication towers and antenna facilities, are prohibited in federally designated wilderness areas. In New Jersey, federally designated wilderness areas are included within the Great Swamp and Edwin B. Forsythe NWRs. These areas are given the added designation of "wilderness" to preserve their natural values.

## **ENVIRONMENTAL REVIEW PROCEDURES**

### **Endangered Species Act**

Threatened and endangered species and their habitats are afforded protection under the ESA pursuant to Section 7(a)(2), which requires every federal agency in consultation with the Service to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. Consultation with the Service pursuant to Section 7(a)(2) of the ESA must be carried out for all projects licensed or otherwise authorized by a federal agency, including the FCC, prior to project implementation for any project that may affect a federally listed species. The FCC complies with this provision of the ESA through its rules implementing NEPA (47 CFR 1.1301 to 1.1319).

Regulations implementing the ESA (50 CFR Part 402.14) specify that a federal agency shall make no irreversible or irretrievable commitment of resources that would prevent formulating or implementing any reasonable and prudent alternatives for an action. This prohibition is in force until the requirements of Section 7(a)(2) are satisfied.

### **National Environmental Policy Act**

The FCC requires all license applicants for antenna facilities and structures, including towers, to review their proposed actions for environmental consequences. Regulations implementing NEPA with regard to actions of the FCC are presented under 47 CFR Sections 1.1301 to 1.1319. These rules place responsibility on each applicant to investigate all of the potential environmental effects of antenna facility construction.

Section 1.1307(a) lists eight categories of projects that may significantly affect the environment. Among these are facilities to be located in officially designated wilderness areas or wildlife preserves, facilities that may affect federally listed threatened or endangered species or designated critical habitats, facilities to be located in a flood plain, and facilities whose construction will involve significant change in surface features such as wetland fill, deforestation or water diversion. Proposed antenna facilities that do not fall under any of the eight categories listed at 1.1307(a) are “categorically excluded” from further environmental processing. However, if a proposed antenna facility falls under one or more of the listed categories, Section 1.1308(a) requires the applicant to prepare an Environmental Assessment (EA). Preparation of an EA may also be required for facilities otherwise categorically excluded, if an interested party petitions the FCC with environmental concerns (Section 1.1307(c)), or if the FCC determines on its own that the project may have a significant environmental impact (Section 1.1307(d)). The applicant is responsible for determining whether the proposed facility meets any of the conditions that require an EA. This environmental screening is normally accomplished through the preparation of a “Categorical Exclusion” document. The Categorical Exclusion document (or, if required, the EA) must be prepared prior to project implementation.

Any required EAs must address alternative sites or facilities (Section 1.1311(a)(4)); zoning issues (Section 1.1311(a)(2)); and determinations of any local, State, and federal authorities regarding environmental effects (Section 1.1311(a)(2)). In addition, the EA must deal specifically with any feature of the site that has special environmental significance (e.g., wilderness areas, wildlife preserves, natural migration paths for birds and other wildlife). The EA must also detail any substantial change in the character of the land utilized (e.g., deforestation, water diversion, wetland fill, or other extensive change of surface features). In the case of wilderness areas, wildlife preserves, or other like areas, the EA must discuss the effect of any continuing pattern of human intrusion into the area (e.g., necessitated by the operation and maintenance of the facilities) (Section 1.1311(b)).

## **Role of the Service in Communication Project Review**

### Endangered Species

As noted above, federal regulations implementing NEPA require FCC applicants to prepare an EA for a proposed communication tower or antenna that may adversely affect a federally listed species. Therefore, prior to applying for FCC authorization, communication project proponents routinely submit project information to the Service for review, pursuant to Section 7 of the ESA, to determine whether project implementation is likely to adversely affect any federally listed species.

If a listed species is present in the vicinity of the project site, the Service works with the project proponent through the informal consultation process to gather additional information, conduct surveys, or modify the project to avoid adverse impacts to the species. If, after these steps, project implementation is still likely to adversely affect a listed species, the Service will recommend that the project proponent prepare a Biological Assessment (BA) pursuant to Section 7(c) of the ESA. A proposed project that may affect a federally listed species also requires preparation of an EA pursuant to NEPA regulations (47 CFR 1.1307(a)). The BA may be consolidated with interagency cooperation procedures required by other statutes, such as NEPA, and the results of a BA may be incorporated into an EA or an into Environmental Impact Statement. The satisfaction of the requirements of other statutes, however, does not in itself relieve a federal agency of its obligation to comply with the BA procedures of the ESA. The BA should contain information concerning listed or proposed species that may be present in the action area, and an analysis of any potential effects of the proposed action on such species. The Services reviews the BA to determine if formal consultation pursuant to Section 7 of the ESA is required.

### Migratory Birds

Migratory birds are a federal trust resource, protected under the Migratory Bird Treaty Act. Since communication towers and other tall structures represent a potential collision hazard to migrating birds, the Service's New Jersey Field Office (NJFO) routinely considers the design of new

communication towers, and their locations relative to migratory corridors and bird concentration areas, concurrent with endangered species reviews. If a proposed tower represents a significant hazard to migratory birds (e.g., towers taller than 199 feet with lights and/or guy wires in or near a bird concentration area), the Service recommends that the applicant address migratory bird concerns in an EA.

### **State and Local Review**

In addition to the above-mentioned federal laws, communication towers and antennas are also subject to State laws, regulations, and environmental review procedures. Some relevant New Jersey State laws include:

- Freshwater Wetlands Protection Act (N.J.S.A. 13:9B *et seq.*) requires permits for certain activities in wetlands.
- Endangered and Nongame Species Conservation Act of 1973, as amended (N.J.S.A. 23:2A *et seq.*) prohibits taking, possessing, transporting, exporting, processing, selling, or shipping State-listed wildlife species. “Take” is defined by the law as harassing, hunting, capturing, or killing, or attempting to do so.
- Regulations implementing the Pinelands Protection Act (N.J.A.C. 7:50-5.4 *et seq.*) require authorization from the New Jersey Pinelands Commission for most structures to be located within the Pinelands National Reserve exceeding 35 feet in height.
- Coastal Area Facility Review Act (N.J.S.A. 13:19) regulates most development near coastal waters in the southern part of the State, and the Waterfront Development Law (N.J.S.A. 12:5) regulates activities in and near tidal waters.

Local ordinances, including zoning rules, also apply to communication towers and antennas. The Telecommunications Act of 1996 (Act) specifically preserves the authority of State and local governments over decisions regarding the placement, construction, and modification of personal wireless service facilities, with some exceptions. According to the Act, State and local governments may not unreasonably discriminate among providers of functionally equivalent services, and must act upon a request for authorization to place, construct, or modify personal wireless service facilities within a reasonable time. In addition, as long as proposed wireless communication facilities comply with FCC regulations regarding radio frequency (RF) emissions, the Act expressly preempts State and local governments from regulating the placement or construction of these facilities on the basis of the environmental effects of RF emissions. With these restrictions and in accordance with other applicable laws, State and local governments may exercise discretion in siting and authorizing new communication towers and antennas.

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## FURTHER INFORMATION

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