



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE



West Virginia Field Office  
694 Beverly Pike  
Elkins, West Virginia 26241

June 21, 2011

Re: Evaluation of Communication Tower Projects in West Virginia under the Migratory Bird Treaty Act and Endangered Species Act

Dear Interested Party:

The U.S. Fish and Wildlife Service's (Service) West Virginia Field Office recognizes that review of individual proposed actions by the Service is not required under certain conditions, such as small-scale proposed actions that have routine and predictable minor or discountable impacts on the environment. In this regard, the Service has reviewed our recent consultations on communication tower projects within the State of West Virginia, and updated our recommendations. This letter supercedes the information in our previous March 9, 2007, letter.

To streamline the review process for these proposed actions, we have developed avoidance and minimization measures for migratory birds, Criteria for "No Effect" Determinations for Federally-listed species, and procedures for proposed action review and reporting. Our analysis takes into consideration available information on migratory birds and Federally-listed threatened and endangered species within the State, in accordance with provisions of the Migratory Bird Treaty Act of 1940 (MBTA) (40 Stat. 755; 16 U.S.C. 703-712); the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*); and the National Environmental Policy Act of 1969 (83 Stat. 852; 42 U.S.C. 4321 *et seq.*).

### **Migratory Birds**

#### Recommendations to Protect Migratory Birds

The MBTA prohibits the taking, killing, possession, and transportation of migratory birds, their eggs, parts and nests, except when specifically permitted by regulations. Migratory birds are a Federal trust resource and are protected under the MBTA. Each year millions of migratory birds collide with communication and cell towers, especially those with lights and guyed wires. The number of communication towers is increasing, which indicates a greater potential impact to migratory birds. The Service has reviewed recent published information regarding this potential effect and revised our recommendations accordingly to reduce impacts to migratory birds and comply with the spirit and intent of the MBTA.

Gehring et al. (2009) conducted a study to determine what risks, if any, the nighttime communication tower lighting systems posed to migratory birds. The study compared different lighting systems being used at night, and different communication tower heights combined with different lighting systems. The study concluded that shorter towers between 381-479 feet (116-146 meters above ground level [AGL])

equipped with only red or white flashing lights had a significant decrease in migratory bird mortality as opposed to taller towers greater than 1000 feet (305 meters AGL) that had red pulsating or constant red lights.

As the number of communication and cell towers increases, the mortality rate of migratory birds is also expected to increase. To minimize adverse individual and cumulative impacts, the Service strongly encourages lowering tower height to below 479 feet (146 meters AGL), collocating new equipment and antennae on existing structures (e.g., towers, water tanks and large buildings, etc.), and minimizing lighting. To reduce bird fatalities when lights are used on new guyed towers, the Service recommends red or white flashing lights. For existing guyed towers, the Service recommends replacing lights with red or white flashing lights. The implementation of the above recommendations will provide significant protection and reduce the impact to migratory birds. These recommendations are based on the best information available at this time, and are the most prudent and effective measures for avoiding bird strikes at towers. As new information becomes available, these recommendations will be updated accordingly.

#### **Federally-listed Species**

The purpose of the ESA is to protect and recover imperiled species and the ecosystems upon which they depend. Imperiled species are added to the Federal List of Endangered and Threatened Wildlife and Plants as threatened or endangered. These Federally-listed threatened and endangered species are afforded protection under the ESA. Please refer to the current list of Federally-threatened and endangered species in West Virginia on this website: <https://www.fws.gov/westvirginiafieldoffice>. Proposed actions (or projects) have varying levels of impacts on threatened and endangered species and their habitats. The Service has determined that proposed actions complying with the following criteria should have no effect on Federally-listed species in West Virginia.

#### Criteria for “No Effect” Determinations

1. Collocate new equipment and antennae with an existing structure (e.g., tower, water tank, large building, etc.) where all ground disturbance occurs within previously cleared areas.
2. Conduct routine maintenance of existing tower sites (e.g., painting, antennae replacement).
3. Repair or replace existing towers and/or equipment, provided such activities occur within previously cleared areas.
4. Transfer ownership of existing towers.
5. Construct new towers to meet all of the following criteria such that the proposed action:
  - involves alteration of less than one acre of habitat during construction (including access roads, construction preparation, and tower sites);
  - does not result in any impacts to, or crossings of, streams listed in the enclosure titled Aquatic Habitats Supporting Federally-listed Species in West Virginia;

- does not involve tree clearing, grading, placing gravel or fill, or other alterations to habitats in Grant, Greenbrier, Pendleton, Pocahontas, Randolph, Tucker or Webster counties that occur above 2600 feet (793 meters) Mean Sea Level; and
- has received a negative finding in response to a data request to the West Virginia Division of Natural Resources (WVDNR) Natural Heritage Program. (The WVDNR may be reached at P. O. Box 67 Elkins, West Virginia 26241; or by phone at 304-637-0245. Please contact them to obtain their review procedures.)

### **Proposed Action Review and Reporting Procedures**

The procedures in this document may be used to make an ESA determination of “no effect” for all Federally-listed species within West Virginia. For a proposed action that complies with the above Criteria for “No Effect” Determinations for Federally-listed threatened and endangered species, and implements the recommendations to reduce impacts to migratory birds, there is no need to contact this office for individual proposed action review.

In order that the West Virginia Field Office may track the number of proposed actions covered under this letter and periodically review how each proposed action will demonstrate compliance with the “no effect” criteria and migratory bird recommendations outlined above, please send a letter to this office with the following statement and information:

- “The following proposed communication tower action has incorporated into the project description the U. S. Fish and Wildlife Service’s recommendations to avoid and minimize impacts to migratory birds to the extent practicable, and complies with criteria for the “no effect” determination to Federally-listed species as outlined in the Service’s letter dated May 25, 2011.”
- Please provide the name of the company proposing to do the work, the name of the proposed action, county location and U.S. Geological Survey (USGS) topographic map quadrangle(s) in which the proposed action occurs, and the criteria number (i.e., 1, 2, 3, 4, or 5) under which the proposed action is determined to have no effect on Federally-listed species. More than one proposed action may be included in each letter.

If a proposed action does not comply with the Criteria for “No Effect” Determinations or implement the migratory bird recommendations outlined above, please send this office a letter requesting individual proposed action review that includes the following information:

- a brief description of the proposed action, including name, West Virginia county, company proposing the work, the type of habitats affected, and the amount of clearing or filling associated with proposed action construction;
- the reason(s) why the proposed action does not comply with the Criteria for “No Effect” Determinations or implement the migratory bird recommendations above. Please provide any supporting documentation as available;
- a copy of the USGS topographic map showing the location of all project-related facilities. Please identify the quadrangle(s) in which the proposed action may be located;

Evaluation of Communication Tower Projects in  
West Virginia under the Migratory Bird Treaty Act  
and Endangered Species Act  
June 21, 2011

4

- recent photographs of the proposed site including any access roads, and areas to be filled or cleared; and
- contact name, address, and phone number in case additional information may be required.

The Service will provide a site-specific review of the proposed action. While we normally attempt to respond to individual requests within 30 days of the receipt of the request, staffing and work-load considerations that are beyond our control may delay our response beyond this timeframe.

If additional information on Federally-listed threatened and endangered species becomes available, the determination criteria in this letter may be reconsidered. The Service will annually review and update this letter, if required. If you have any questions regarding this issue, please contact Ms. Barbara Douglas of my staff at (304) 636-6586, Ext. 19, or at the letterhead address.

Sincerely,



Deborah Carter  
Field Supervisor

Enclosure

Evaluation of Communication Tower Projects in  
West Virginia under the Migratory Bird Treaty Act  
and Endangered Species Act  
June 21, 2011

5

#### LITERATURE CITED

Gehring, J., P. Kerlinger, and A. M. Manville. 2009. Communication towers, lights, and birds: Successful methods of reducing the frequency of avian collisions. *Ecological Application* 19(2):505-514.

Evaluation of Communication Tower Projects in  
West Virginia under the Migratory Bird Treaty Act  
and Endangered Species Act  
June 21, 2011

6

cc:

Project File

Reader File

ES:WVFO:TLewis:skd:6/21/2011

Filename: P:\1 - Users\Tamara Lewis\Blanket Cell Tower T&E Clearance June 21, 2011.docx

**Aquatic Habitats Supporting Federally-listed Endangered, Threatened, and Candidate Species in West Virginia (Updated April 2012)**

There are fourteen federally listed endangered and threatened species that are associated with specific aquatic habitats in West Virginia. These include ten endangered freshwater mussels - clubshell (*Pleurobema clava*), fanshell (*Cyprogenia stegaria*), James spinymussel (*Pleurobema collina*), Northern riffleshell (*Epioblasma torulosa rangiana*), pink mucket pearlymussel (*Lampsilis abrupta*), rayed bean (*Villosa fabilis*), sheepnose (*Plethobasus cyphus*), snuffbox (*Epioblasma triquetra*), spectaclecase (*Cumberlandia monodonta*), and tubercled-blossum pearlymussel (*Epioblasma torulosa torulosa*); two endangered plants - harperella (*Ptilimnium nodosum*) and Northeastern bulrush (*Scirpus ancistrochaetus*); one threatened plant - Virginia spiraea (*Spiraea virginiana*); and one threatened crustacean – Madison Cave isopod (*Antrolana lira*). Additionally, the diamond darter (*Crystallaria cincotta*), a fish found only in the Elk River, is currently not listed by the ESA. If eventually listed, it will not affect the number of West Virginia currently listed species. Nine aquatic habitats also occur in West Virginia; those speci

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The aquatic habitats below, in the Army Corps of Engineers (Corps) Regulatory Districts that operate in West Virginia, represent the most current information on the locations of the federally listed species described above. Prior to conducting any project that could affect these aquatic habitats (e.g., projects that involve the construction of a dam, bridge, or other structure adjacent to these habitats, or the withdrawal or diversion of water into a stream or toxic chemicals into waterways, or which could affect the habitat in any way), please contact the U.S. Fish and Wildlife Service, West Virginia Office, at (304) 253-6586. To determine if a permit is required for projects in West Virginia, please contact the Huntington District Office at (412) 395-7152.

**U.S. Army Corps of Engineers**

1. Big Sandy Creek; Kanawha County: snuffbox.
2. Bluestone River; Mercer and Summers counties (Bluestone Gorge to slackwater of Bluestone Reservoir): Virginia spiraea.
3. Cedar Creek; Braxton and Gilmer counties: snuffbox.
4. Cove Creek; Monroe County: James spinymussel.
5. Elk River; Braxton, Clay, and Kanawha counties (Sutton Dam to slackwater below Coonskin Park), including the lower one-half mile reaches of its tributaries Birch River, Blue Creek, and Laurel Creek: clubshell, pink mucket pearlymussel, Northern riffleshell, rayed bean, and snuffbox, diamond darter.
6. Gauley River; Fayette and Nicholas counties (Summersville Dam to Swiss): Virginia spiraea.
7. Greenbrier River; Greenbrier and Pocahontas counties: Virginia spiraea.
8. Henry Fork; Calhoun and Roane counties: snuffbox.

9. Hughes River; Ritchie and Wirt counties, including the lower one-half mile reach of its tributary Goose Creek: snuffbox.
10. Kanawha River; Fayette, Kanawha, Mason, and Putnam counties: fanshell, pink mucket, pearl mussel, sheepnose, spectaclecase, and tubercled-blossum pearl mussel.
11. Leading Creek; Gilmer and Lewis counties, including the lower one-half mile reach of its tributary Fink Creek: snuffbox.
12. Little Kanawha River; Braxton, Calhoun, Gilmer, Wirt, and Wood counties, including the lower one-half mile reaches of its tributaries Leading Creek (Calhoun Co., different stream than 5.d. above), Pine Creek, Sand Fork, Slate Creek, Straight Creek, Tanner Creek, Tucker Creek, and Walker Creek: snuffbox.
13. Marsh Fork River including Dingess Branch and Millers Camp Branch and associated palustrine emergent and scrub-shrub wetlands; Raleigh County: Virginia spiraea.
14. McElroy Creek; Doddridge and Tyler counties: snuffbox.
15. Meadow River; Fayette, Greenbrier, and Nicholas counties: Virginia spiraea.
16. Meathouse Fork of Middle Island Creek; Doddridge County, including the lower one-half mile reaches of its tributary Toms Fork: clubshell and snuffbox.
17. Middle Island Creek; Doddridge, Pleasants, and Tyler counties, including the lower one-half mile reaches of its tributaries Arnold Creek, Bluestone Creek, Buckeye Creek, Indian Creek, McKim Creek, Point Pleasant Creek, and Sancho Creek: clubshell, rayed bean, and snuffbox.
18. New River (Lower); Fayette County (Route 19 to Gauley Bridge): Virginia spiraea.
19. North Fork Hughes River; Ritchie and Wirt counties, including the lower one-half mile reaches of its tributaries Addis Run, Bonds Creek, Devilhole Creek, and Gillespie Run: snuffbox.
20. Ohio River; Cabell, Jackson, Mason, Pleasants, Tyler, Wetzell, and Wood counties: fanshell, pink mucket, pearl mussel, sheepnose, and snuffbox.
21. Potts Creek and South Fork of Potts Creek; Monroe County: James spinymussel.
22. Reedy Creek; Roane and Wirt counties: snuffbox.
23. South Fork Hughes River; Doddridge, Ritchie, and Wirt counties, including the lower one-half mile reaches of its tributaries Bone Creek, Indian Creek, Leatherbark Creek, Otterslide Creek, Slab Creek, and Spruce Creek: clubshell and snuffbox.
24. Spring Creek; Roane and Wirt counties: snuffbox.
25. Steer Creek; Calhoun and Gilmer counties: snuffbox.
26. Sugar Creek; Pleasants County: snuffbox.
27. West Fork Little Kanawha River; Calhoun, Roane, and Wirt counties: snuffbox.

**U.S. Army Corps of Engineers Pittsburgh District**

28. Back Creek; Berkeley County: harperella.
29. Cacapon River; Morgan County: harperella.
30. Dunkard Creek; Monongalia County: snuffbox.
31. Fish Creek; Marshall County: snuffbox.
32. Fishing Creek; Wetzel County: snuffbox. Note – the mouth of Fishing Creek at the Ohio River is regulated by the Huntington District.
33. Hackers Creek (of the West Fork River); Harrison and Lewis counties: clubshell and snuffbox.
34. Potomac River; Morgan County (from the mouth of the Cacapon River to the mouth of Sleepy Creek): harperella.
35. Sleepy Creek; Morgan County: harperella.
36. West Fork River; Harrison, Lewis, and Marion counties: snuffbox.
37. Streams, springs, and wetlands connected to the groundwater system including caves, areas near sinkholes, and other groundwater/surface interfaces, from the Potomac River west to Opequon Creek, especially in the Rippon and Leetown Areas, and the Evitts Run Watershed; Jefferson and Berkeley counties: Madison Cave isopod.
38. Wetlands; Berkeley and Hardy counties: Northeastern bulrush.