



TEXAS

PARKS &

WILDLIFE

Wind Turbine Guidelines Federal Advisory Committee

2003: Service published *Interim Guidelines to Avoid and Minimize Wildlife Impacts from Wind Turbines*

October 2007: Secretary established Wind Turbine Guidelines Advisory Committee and appointed 22 Members

Committee Scope and Objective (from Charter)

The Committee will provide advice and recommendations to the Secretary of the Interior on developing effective measures to avoid or minimize impacts to wildlife and their habitats related to land-based wind energy facilities

Taber Allison, Mass Audubon
Ed Arnett, Bat Conservation International
Michael Azeka, AES Wind Generation
Kathy Boydston, Texas Parks & Wildlife Department
René Braud, Horizon Wind Energy
Scott Darling, Vermont Fish & Wildlife Department
Mike Daulton, National Audubon Society
Aimee Delach, Defenders of Wildlife
Commissioner Karen Douglas, California Energy Commission
Greg Hueckel, Washington Department of Fish & Wildlife
Jeri Lawrence, Blackfeet Nation
Steve Lindenberg, U.S. Department of Energy
Andrew O. Linehan, Iberdrola Renewables
Robert Manes, The Nature Conservancy
Winifred Perkins, NextEra Energy
Steven Quarles, Crowell & Moring, LLP
Rich Rayhill, Ridgeline Energy, LLP
Robert Robel, Kansas State University
Keith Sexson, Association of Fish and Wildlife Agencies
Mark Sinclair, Clean Energy States Alliance
David Stout, U.S. Fish and Wildlife Service
Patrick Traylor, Hogan & Hartson, LLP

Eleven meetings since Feb
2008

Adopted a “tiered
framework” approach to
decision making

Chartered until Oct 26
2009

Reauthorized until Oct
2011



Chapter 3- Tiered Process

Chapter 4 – Mitigation

Chapter 5 – Advancing Use, Cooperation
and Effective Implementation of the
Guidelines

- Tier process
 - Questions
 - Methods and Metrics
 - Use of Tier I information
- Tier 1 – Preliminary Evaluation of Potential Sites
- Tier 2 – Site Characterization
- Tier 3 – Field Studies
- Tier 4 – Post Construction Fatality Studies
- Tier 5 – Other Post Construction Studies
- Retrofitting, Repowering and Decommission

Tier I questions (Site Selection)

Are there species of concern present on the proposed site or is habitat (including designated critical habitat) present for these species?

Are there known critical areas of wildlife congregation, including but not limited to, maternity roosts, hibernacula, staging areas, winter ranges, nesting sites, migration stopovers or corridors, leks or other areas of seasonal importance?

Tier 2 questions (Site Characterization)

Are there plant communities of concern present or likely to be present at the sites(s)

Which species of birds and bats, especially those known to be at risk caused by wind energy facilities, are likely to use the proposed site based on an assessment of site attributes?

Tier 3 questions (Preconstruction Field Studies)

Do field studies indicate that species of concern are present or likely to use the proposed site?

What is the distribution, relative abundance, behavior and site use of species of concern identified in Tiers 1 or 2, and to what extent do these factors expose these species to risk from the proposed wind energy development?

Tier 4 questions (Post Construction Fatality Studies)

Frequency of carcass searches

Number of turbines to monitor

Delineation of search plots

Search protocol guidance

Field Bias and Error Estimate

Post-construction fatality studies

- Number of years depends on outcomes of Tier 3 AND Tier 4 studies
- All Tier 3 and Tier 4 studies conducted per guidelines
- Comparison among facilities
 - Comparable sites – similar in topography, vegetation and species under consideration
- Relationships of fatalities w/ site characteristics
 - Actual vs. predicted fatalities
- **Are operational or mitigation measures warranted?**

Habitat fragmentation

- addressed only for those species for which this is an issue/concern
- Species identified in Tier 1 or Tier 2
- Tier 3 studies – framework for those studies
 - buffer language for sage and prairie grouse

- Early coordination
- Consistency and clarity
- Best available science
- Enforcement discretion for “good faith” developers
- Greater conservation achieved
- Adherence is voluntary

Next Steps: Recommendations

March 2010: Committee consensus on final edits to draft recommendations

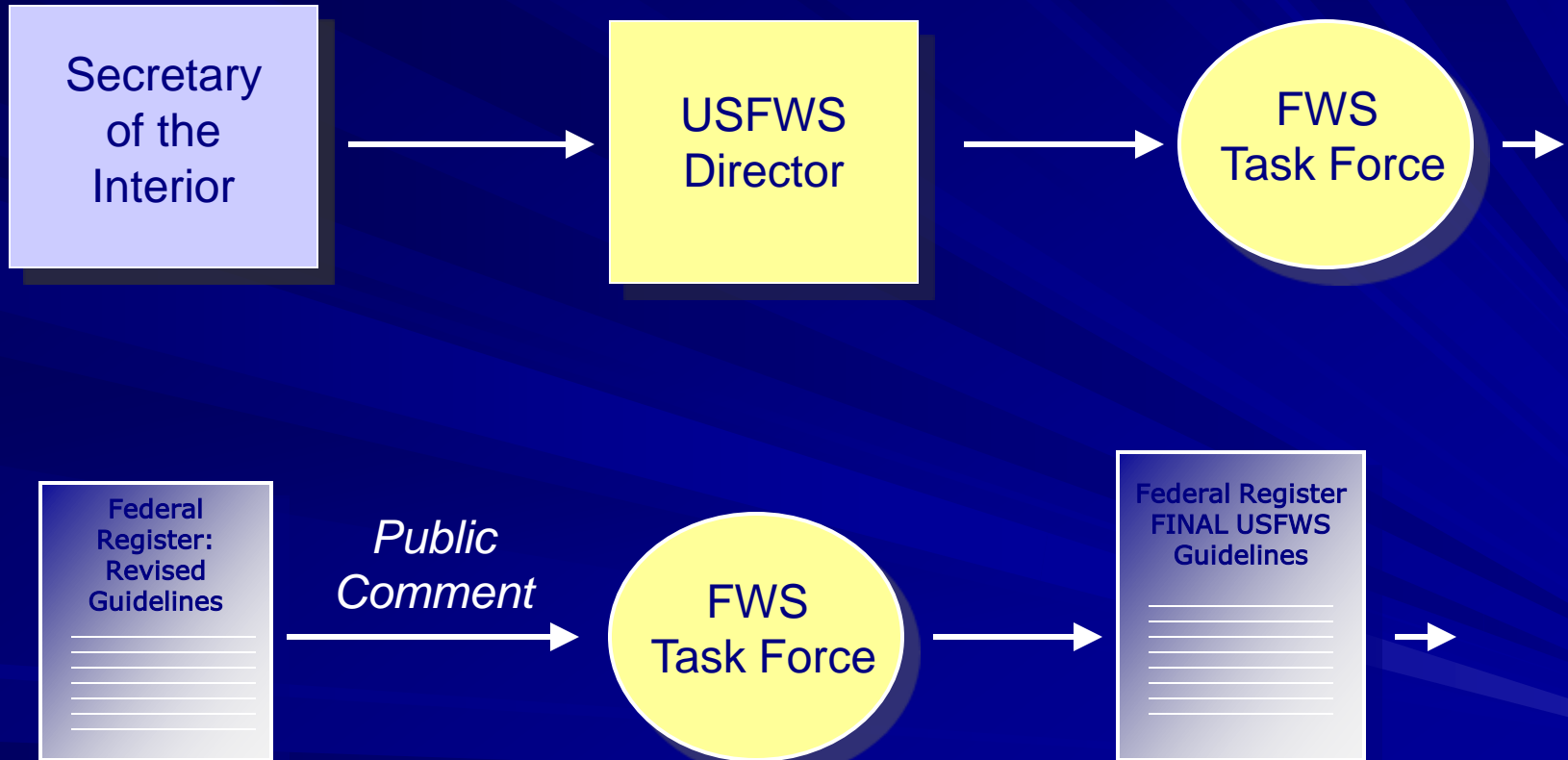


*USFWS
Director*



Final Draft has been approved by Committee and transmitted to the Secretary

Next Steps USFWS Guidelines



David J. Stout

Chief, Division of Habitat and Resource Conservation

703-358-2161

Dave_Stout@fws.gov

www.fws.gov/habitatconservation/windpower/wind_turbine_advisory_committee.

kathy.boydston@tpwd.state.tx.us

(512) 389-4638