

U.S. Fish and Wildlife Service Perspective on Coastal Windpower



E. Dawn Whitehead, Deputy Field Supervisor,
Ecological Services Field Office, Corpus Christi, TX
Dawn_Whitehead@fws.gov

Introduction

- Wind power has been fastest growing energy industry. It is significant for the landscape/seascape.
- DOE estimates that > 900,000 MW potential wind generation capacity exist w/in 50 miles off our coasts – amount roughly equivalent total current installed U.S. electrical capacity.

Introduction

- Secretary of the Interior strongly endorses wind energy. USFWS concurs so long as development is done in environmentally responsible way.
- Recent experience with 2 coastal sites in Kenedy County, TX: Penascal and Gulf Wind Phase I.



Key Issues

- Collision Risk
- Habitat disturbance, disruption, and fragmentation
- Impacts of Light on Migrating Birds



Key Issues

- Agency Review
- Use of Radar with SCADA
- Monitoring and Reporting

Affected Resources

- Shorebirds
- Colonial Waterbirds
- Trans-Gulf Neotropical migrants



Affected Resources

- Threatened and Endangered species
- Waterfowl concentrations



How Significant is the Impact?

- Bottom-line: we don't know; site specific
- Altamont Pass, California
 - Several hundred raptors/yr: Golden Eagles, Red-tailed hawks, and American Kestrels
- An average of 2.19 avian fatalities per turbine (U.S. – all spp. combined); 0.033 raptor fatalities per turbine
- >30,000 turbines predicted to be operational and on-line by 2015 (minimum)

What is the FWS Doing?

- No Federal Nexus—Partnership approach
- Migratory Bird Treaty Act Violations



What is the FWS Doing?

- FWS Guidelines

<http://www.fws.gov/r9dhcbfa/wind.pdf>



- American Wind Energy Association

<http://www.awea.org/>

- Wildlife Work Group of the National Wind Coordinating Committee

<http://www.nationalwind.org/>

Potential Solutions

- Siting and configuration considerations
- Pre-construction and post-construction studies and monitoring
- Shutting down turbines during “events” along with seasonal and daily timing of use

Potential Solutions—cont.

- Mechanical guard on turbine
- Structural considerations for towers
- Upgrade, retrofit and relocate older turbines

More Information?

- Where to go for Information?
 - Colonial waterbird surveys
 - Hawkwatch International
 - University Research

