

WREZ Environment and Land Work Group Work Plan

I. Overview

The E&L work group will be responsible for categorizing the development potential of candidate study areas based on environmental, land use, and wildlife criteria. This group will also identify policies and best practices to facilitate development in sensitive areas and recommend criteria for siting generation and routing transmission to the zones.

II. Goals and Objectives

- Reduce impact from renewable energy development and transmission on important wildlife habitat, sensitive ecosystems and other sensitive lands.
- Facilitate the development of renewable energy in the Western Interconnection by providing timely information about sensitive lands and options for avoiding, minimizing and mitigating impacts from development in these areas.
- Working with the state fish and wildlife agencies, assist in developing overlay maps of crucial wildlife habitat relevant to the areas that have been identified as WREZ candidate study areas. Within these maps, identify priority levels of concern, e.g., avoid/minimize/mitigate/monitor.
- Identify and develop overlay maps for other areas of concern (relevant to the WREZ candidate study areas) to land use not currently excluded from development of transmission or renewable energy and that may require additional studies, monitoring and/or mitigation.
- Recommend best practices and policies for avoidance, minimization, mitigation, and/or monitoring of impacts to wildlife and other land use impacts for areas associated with priority levels and transmission, renewable energy, or both.

III. Phase One Tasks

A. Western Wildlife Habitat Council (WWHC)

- Coordinate the relevant state fish and wildlife agencies for the purpose of compiling state and regional wildlife maps relevant to the WREZ candidate study areas.
- Develop protocols and definitions for collecting State data (including species being impacted by renewable generation and format of information).
- Coordinate with the E&LWG and integrate into state wildlife maps, as appropriate, other relevant information identified and collected by the E&LWG.
- Develop and submit state overlay maps of wildlife to inform where WREZ candidate study areas should avoid development, minimize impacts to wildlife, or mitigate impacts, and coordinate this state data across the Western Interconnection region. The WWHC should consider and incorporate as appropriate information from the E&LWG in determining the level of sensitivity, i.e., avoid, minimize, or mitigate.

- In coordination with the E&LWG, recommend and implement policies and best practices for avoiding, minimizing and mitigating impacts to wildlife in the WREZ zones and corresponding transmission.

B. E&L Work Group

- Develop Operating Procedures for Work Group
- Develop Draft Work Plan
- Identify screens for initial exclusion areas for use in identification of WREZ candidate study areas. Outcome would be that we agree on and map areas currently excluded by law, policy or other agreed to criteria associated with renewable energy generation, e.g., state and national parks. (Some areas excluded for screening of generation areas might be suitable for appropriately sited transmission.)
- Wildlife and Lands Issues that the E&LWG will consider are:
 - Wildlife habitat and sensitive ecosystems including:
 - Wildlife habitats
 - a. Crucial wildlife habitats and wildlife corridors - state fish and game agencies
 - b. Federal and state listed species occurrences - State natural heritage programs
 - c. State and global imperiled species occurrences - NatureServe and state natural heritage programs
 - d. Important bird areas - Audubon Society
 - Threatened ecosystems - native ecosystems that, due to severe alteration or outright conversion by humans, have decreased in extent by more than 50% since ca. 1500.
 - Fragile ecosystems - native ecosystems characteristic of locations where environmental extremes constrain biotic composition, rates of succession are very slow, recovery from human disturbance is very slow, and environments are documented as being particularly susceptible to invasion by non-native species when disturbed by humans (e.g., alpine tundra, wetlands, some desert systems) - defined in national vegetation classification.
 - Unique ecosystems - native ecosystems that, either due to natural rarity or due to intensive land use and conversion, are known from fewer than 25 locations worldwide - tracked by state Natural Heritage Programs
 - High conservation value areas - areas identified through systematic conservation assessment and planning as being high probability for meeting stated conservation goals, including:
 - e. State wildlife action plan priority areas - state fish and game agencies

- f. Ecoregional portfolio areas – TNC
- g. Potential conservation areas - State natural heritage programs
 - Regulatory or statutorily-protected lands that may or may not preclude development, as well as other sensitive lands¹
- Provide input to the WWHC regarding wildlife data protocols and definitions.
- Identify and compile non-state data on wildlife corridors and crucial habitat in the candidate study areas. The data should be consistent with the WWHC protocols. Possible sources for this data include federal agencies, conservation groups, research institutions, and industry. Data from this effort will be submitted to the WWHC for their consideration and possible integration into state and regional wildlife maps.
- Identify additional environmental and land constraints for application within candidate study areas.
- In coordination with WWHC, develop decision rules for how non-exclusive constraints apply within candidate study areas.
- In coordination with the WWHC, recommend policies and best practices for avoiding, minimizing and mitigating impacts to wildlife in the WREZ zones and corresponding transmission.

IV. Draft Timeline

Timeframe	Who	Activity
July 15 – Sept 15	E&LWG	<ul style="list-style-type: none"> • Develop and apply initial criteria for excluding lands based on regulatory designations.
Sept - Oct	E&LWG	<ul style="list-style-type: none"> • Provide input to the WWHC regarding list of key impacted species for each renewable energy resource, e.g., wind, solar, and geothermal, and consideration of designations of multi-species/communities, e.g., TNC's ecoregional assessments. • Provide input to the WWHC on protocols and definitions for purposes of soliciting relevant wildlife data from states (and other sources), including desired format for the data. • Identify other potential sources of data, e.g., federal agencies, conservation groups, universities, industry, etc.
Sept 15 – Nov 1	E&LWG	<ul style="list-style-type: none"> • Continue developing criteria for excluding lands based on regulatory designations (those areas that were not identified in the initial criteria).
Oct 6 - 13	E&LWG	<ul style="list-style-type: none"> • Comment on wildlife data request and provide other sources for data collection.
Nov 10 – Nov 14	E&LWG	<ul style="list-style-type: none"> • Provide input to the WWHC on draft “avoidance” criteria based on wildlife considerations.
Dec 15 – 22	E&LWG & WWHC	<ul style="list-style-type: none"> • Review and comment on draft wildlife overlay maps characterizing wildlife “avoidance” areas.
Dec 31	E&LWG & WWHC	<ul style="list-style-type: none"> • Submit initial wildlife overlay maps that characterize the wildlife values in the candidate study areas, including areas to avoid.

¹ Ultimately, the list of all statutory and regulatory protected areas will be reviewed and enhanced, as necessary, by state and federal agencies.

Jan 1 – Mar 15	E&LWG	<ul style="list-style-type: none"> • Develop criteria for determining further characterization of the REZs based on lands considerations, namely, areas to “avoid”, areas to “minimize” impacts and areas to “mitigate” impacts. • Develop recommendations for best practices and other tools for “minimizing” and “mitigating” impacts. These recommendations should also include estimates for the associated costs of applying the best practices and tools, for purposes of determining the bus-bar costs of the energy.
Jan 1 – Mar15	E&LWG & WWHC	<ul style="list-style-type: none"> • Develop criteria for determining further characterization of the REZs based on wildlife considerations, namely, areas to “minimize” impacts and areas to “mitigate” impacts. • Develop recommendations for best practices and other tools for “minimizing” and “mitigating” impacts. These recommendations should also include estimates for the associated costs of applying the best practices and tools, for purposes of determining the bus-bar costs of the energy.
Mar 15 to June 1	E&LWG	<ul style="list-style-type: none"> • Provide input to the WWHC in the application of the “minimization” and “mitigation” criteria to further characterize the renewable energy zones and inform the bus-bar cost estimates.

V. Outreach

The Environment and Lands Work Group has two main outreach objectives: 1) solicit relevant wildlife data from targeted groups as appropriate; 2) make the process public and transparent for identifying exclusion areas and avoidance criteria. This will be accomplished by:

- Outreach to groups with data for data request including state wildlife agencies, federal agencies, conservation groups, research institutions, and industry.
 - Provide contact information and summaries of data received during data request on WREZ website.
- Hold bi-weekly conference calls open to the public, and send out call notices and materials to all interested parties. Post on WREZ website call and meeting summaries and draft documents for review.
 - Make exclusion areas publically available on WREZ website as they are identified during the process.
 - Hold briefing webcast on wildlife overlays once they have been identified.
 - Solicit comments on minimization and mitigation criteria.
- Provide work group members and interested parties with the necessary tools to communicate work group activities and decision items with their broader stakeholder group.

The work group will work within the broader WREZ project public comment structure to allow detailed input on E&L work products. After public comment the work group will assess whether any changes are necessary.