

Texas Parks and Wildlife Department Suggested Guidelines for Preparation of Environmental Assessment Documents

Following is an outline of categories of information needed to evaluate a proposed project or action. Every effort should be made to supply quantified data. If subjective data is all that can be supplied, documentation verifying the credentials of the data collector should be provided.

Categories considered essential for adequate biological review by this agency are noted by an asterisk (*). Depending on the complexity and scope of the proposed project or action, or requirements by other agencies, all the items listed below may be required.

Whenever practical, environmental documents should be supported by aerial photography, topographic maps, schematics, charts, tables, etc. with minimum narrative sufficient to describe, quantify, and qualify the data.

A. Project Description

- * • Identify who is proposing the project.
- * • Identify who is conducting the assessments and provide credentials of this person(s).
- * • Describe the purpose of the project.
- * • Define the scope of work.
- * • Identify the project area and study area (total acres, miles of r-o-w, etc.)
- * • Identify the time table projected for the entire project.
- * • Describe any required coordination and review for the project.
- * • List or describe any required public input.
- Provide historical information significant to the project.

B. Description of the Affected Environment

1. Natural Resources

- Describe the geology within the study area.
- * • Describe the soils present and their characteristics.
- * • Describe the landform (topography) and the natural processes impacting the present landform.
- Describe the climatic factors affecting the study area.
- * • Describe the supply and quality of surface water resources in the study area.
- * • Describe the supply and quality of groundwater resources including aquifer recharge zones occurring within the study area.
- * • Describe natural hazards affecting the study area, i.e. tidal influences, flood activity, etc.).
- Describe the quality of the air in the study area.
- * • Describe the vegetation communities (cover type) specifically impacted by the project to include: dominant plant species, estimated height of trees, woody shrubs or brush; and estimated canopy coverage of woody vegetation. Total acreage of each cover type disturbed by the project should also be listed.
- * • Describe the fauna that would be associated with the dominant vegetation cover types identified above.
- * • Identify "sensitive" ecosystems which occur in the study area such as: springs, streams,

rivers, floodplains, vegetation corridors, bottomland hardwoods, wetlands, bays, estuaries, native grasslands, etc.

- * • Describe the occurrence of threatened/endangered species (or their habitats) and unique or rare natural communities which occur in the study area.
 - a. On site inspection of the study area for permanent or seasonal occurrence.
 - b. On site inspection of the study area for occurrence of habitat.
 - c. Interviews with recognized experts on all species with a potential of occurrence.
 - d. Literature review of data applicable to a potential occurring species concerning species distribution, habitat needs, and biological requirements.

2. Cultural Resources

- * • Identify public use and open space areas in the vicinity of the proposed project such as parks, natural areas, wildlife preserves and management areas.
- Identify previous, present, and proposed land uses within the study area.
- Identify significant archeological features within the study area.
- Identify significant historical features in the study area with special consideration of "National Register of Historic Places" properties.
- Identify rights-of-ways, easements, public utilities, and transportation features within the study area.
- Identify noise pollution sources and current noise levels within the study area.
- Identify existing and proposed public health and hazardous waste facilities which exist in the study area such as land fills, hazardous waste sites, wastewater treatment facilities, septic tanks, etc.
- Identify socioeconomic factors, if applicable.

*C. Project Alternatives

List and describe project alternatives (including "no action") and associated impacts (direct and indirect) to described resources. If the project is potentially large in scope, cumulative effects with other similar projects may be required.

*D. Mitigation

A major responsibility of TPWD is to conserve and protect the state's fish, wildlife, and plant resources. Certain categories of these biotic resources warrant special consideration. These include habitats that are locally and regionally scarce, habitats supporting unique species or communities, stream and river ecosystems, bays, estuaries, wetlands, bottomland hardwoods, and native grasslands. All projects which could adversely affect these resources should be fully evaluated, and where possible, implementation of less damaging alternatives undertaken. If it is determined that a project or action will potentially affect fish, wildlife or plant resources, a process for adverse impact reduction should be initiated. Mitigation measures should be developed and implemented sequentially as follows:

1. **AVOIDANCE:** Avoiding adverse impacts through changes in project location, design, operation, or maintenance procedures, or through selection of other less damaging alternatives to the project or action.
2. **MINIMIZATION:** Minimizing impacts and by project modification or rectification to

restore or improve impacted habitat to pre-project condition; or through reducing the impacts over time by preservation and maintenance operations during the life of the project or action.

3. **COMPENSATION:** Compensating for unavoidable impacts by providing replacement or substitute resources (including appropriate management) for losses caused by project construction, operation, or maintenance.

Mitigation should be an integral part of any action or project which adversely affects fish, wildlife, and habitats upon which they depend. Failure to adequately avoid or minimize adverse impacts or to adequately compensate for unavoidable losses of natural resources is a serious deficiency in any project plan and may cause delays in this Department's review and assessment of the adverse impacts upon fish & wildlife resources. In assessing project impacts, reasonable foreseeable secondary and cumulative impacts should be included.

***E. Coordination**

Provide copies of pertinent coordination correspondence.

***F. Document Preparers and Their Qualifications**

***G. Bibliography**

(references: 40 CFR Parts 1500-1508 and various EPA handouts concerning Environmental Assessment documentation.)