

GUIDELINES FOR PREPARATION OF BIOLOGICAL REPORTS

San Luis Obispo County Department of Planning & Building, Environmental Division

A. Types of Biological Reports

1. Full biological (includes botanical, zoological, and any aquatic biological resources)
2. Botanical
3. Zoological
4. Focused (e.g.: Morro shoulderband snail, Morro Bay kangaroo rat, San Joaquin kit fox, blunt-nosed leopard lizard, giant kangaroo rat, etc.)
5. Freshwater
6. Marine

B. Contents for All Reports

1. Synopsis - a one or two paragraph summary of resources, impacts and recommended mitigation measures
2. Introduction
 - a) Applicant's name, County permit number, and Assessor's Parcel Number (APN).
 - b) Project description and location
 - c) Written description of project location
 - d) Vicinity map with project location accurately plotted
 - e) Description of the focus of the survey and analysis
 - f) Rationale for the approaches taken
3. Survey Methods
 - a) Personnel, dates and hours of fieldwork
 - b) Weather conditions
 - c) Route of survey either described or depicted on map
 - d) Other sources of site information, e.g. aerial photographs, previous biological reports in area, personal communications, etc.
 - e) Identify the standard nomenclature used in the report
 - f) Description of how the data was collected, analyzed and interpreted
4. Setting
 - a) Physiographic setting to include: general soil characteristics, general description of topography and drainage patterns, and any unusual features such as rock outcrops or cliffs.
 - b) Description of on-site land uses and disturbance factors; adjacent land uses; past uses if appropriate.

- c) Identify any public and private open space or reserves on-site or in the area, and the purpose for such reserves (identify the sensitive species known from the reserve).
- 5. Existing conditions (the content of this section will vary, depending on the focus of the report. A botanical report, for example, will contain the vegetation, flora and rare plant sections).
- 6. Discussion of potential impacts
 - a) Discuss impacts specific to the project proposed by applicant, but keep the discussion generic enough to allow the County flexibility of analysis in the event changes in project description occur.
 - b) Quantify impacts whenever possible (e.g. "project will result in the elimination of 3.5 acres of coastal scrub habitat").
 - c) Possible disturbances (e.g. alteration of drainage, erosion, sedimentation, noise, introduction of exotic plants and animals, and other potential disturbances, which may become evident during project review).
 - d) Evaluate impacts the development may have on the habitats, and whether the development will be consistent with long-term viability of the habitats.
 - e) Are setbacks from the habitat area adequate to protect the habitat? If not, recommend appropriate setbacks.
 - f) Consider all phases of development including grading, construction, occupation, and/or operation.
 - g) Incidental take of rare/threatened/endangered species.
 - h) Identify which impacts are significant.
 - i) Consider cumulative impacts and their significance
- 7. Recommended mitigation measures
 - a) Identify the maximum feasible mitigation measures (other than "no project") to protect the resources and suggestions for monitoring and evaluating the effectiveness of the mitigation measures.
 - b) Recommend conditions of approval for the restoration of damaged habitats, where feasible.
 - c) Consider a range of possibilities, including: avoidance, fencing, open space easements, clustering and off-site mitigation.
 - d) Strive for solutions which work toward regional protection of the resources, including: combining open space easements with adjacent ownerships, maintenance of open space corridors.

8. Complete list of references cited and persons contacted with their institutional affiliation.
9. One copy of the tentative map or site plan "blueprint" secured from the applicant, clearly marked to show vegetation communities, precise location of sensitive resources (i.e. GPS'd location) and other appropriate information (in other words, a cleaned-up and complete version of your field map)
10. Clear, photo-reproducible, report-sized map to include: contour lines, scale, north arrow, precise location of resources or aerial photo with GPS'd location of resources.
11. Each page shall be numbered, initialed and dated

C. Additional Contents for Botanical Reports

1. Vegetation and flora
 - a) Descriptions of each plant community, including dominant species, approximate height and density, vegetation quality, and disturbance factors.
 - b) Discussion of rare or threatened plant communities and their significance (e.g. coastal salt marsh, coastal dune scrub, etc.).
 - c) Floral checklist of all plant species observed, annotated with relative abundance and habitat.
 - d) Discussion of flora (e.g.: endemism, range extensions, unusual assemblages of species, presence of invasive exotics on or adjacent to the site, which could harm resources on-site).
 - e) Maps of vegetation communities (refer to items B 9 and 10, above).
 - f) Wetland delineations when appropriate (include discussion of methodology).
2. Rare and Endangered or otherwise sensitive plants
 - a) Table that includes potential sensitive species for the area, soil types and habitats associated with species occurrence, potential to occur on site or documented occurrence on site, and for undocumented species, the reason(s) why occurrence of the species is or is not expected.
 - b) Discussion of each species to include precise location and habitat found, population estimate or count, habitat requirements, SLO County and global distribution, status with state and federal agencies, California Native Plant Society (CNPS) status, significance of population on-site.
 - c) Discussion of taxa known from area but not detected (explain why not detected, e.g. wrong season, habitat not present, etc.).

- d) Explanation of sensitivity ratings used by the various resource agencies and CNPS (can be a stock appendix).
- e) Copies of completed CNDDDB forms with copy of USGS map (biologists should send CNDDDB forms to Sacramento).
- f) Topographic map or aerial photo of project site that shows precise location of habitats and sensitive resources (GPS'd locations).

D. Additional Contents for Zoological Reports

1. Discussion of vegetation communities as they relate to importance as wildlife habitat, including discussion of actual or potential wildlife movement and gene flow between surrounding open space to the project site
2. For animal species observed or otherwise detected, include numerical estimate of population size, and identification of habitat(s) where found
3. Rare and Endangered or otherwise sensitive animals
 - a) Table that includes potential sensitive species for the area, habitats associated with species occurrence, potential for species to occur on site or documented occurrence on site, and for undocumented species, the reason(S) why its occurrence is or is not expected at the project site.
 - b) Discussion of those species actually detected, anticipated, and known from area but not detected (explain why not detected, e.g. wrong season, habitat not present, etc.)
 - c) Discuss signs of potential occupation by sensitive animals (e.g. burrows, tail drag marks for kangaroo rats).
 - d) Topographic maps or aerial photographs showing precise (i.e. GPS'd) locations of resources and potential habitat areas for sensitive species (refer to items B 9 and 10, above).
 - e) Discussion of each species: location and habitat found, habitat requirements, SLO County and global distribution, status with state and federal agencies, significance of population on-site
 - f) Explanation of sensitivity ratings used by the various resource agencies (appendix o.k.)
 - g) Copies of completed CNDDDB forms with accompanying USGS map (biologists should send CNDDDB forms to Sacramento)