CITY OF SAN DIEGO

GUIDELINES FOR CONDUCTING BIOLOGY SURVEYS

October, 1998
(Revised July, 2002)

TABLE OF CONTENTS

I. GOALS OF THE BIOLOGY SURVEY GUIDELINES

These guidelines are intended to prescribe the content of biology survey reports and will be used in the analysis and preparation of environmental documents. The Biological Survey Guidelines shall be used as part of the environmental review process to meet the requirements of the California Environmental Quality Act (CEQA), the Multiple Species Conservation Program (MSCP), and the City's Environmentally Sensitive Lands (ESL) Regulations.

The intent of the biology survey is to identify biological resources on the project site, determine impacts, and recommend suitable mitigation measures. Mitigation and monitoring requirements pursuant to the City's Biology Guidelines (May 2001) and CEQA shall ensure preservation of the native species and sensitive biological resources of San Diego.

II. PREPARER'S QUALIFICATIONS AND CERTIFICATIONS

Persons preparing or responsible for biological technical reports should have the following qualifications: formal educational background in appropriate areas of study to understand local floral and faunal relationships; sufficient local field experience in identification of flora or fauna, particularly rare, endangered, and threatened species with knowledge of their local and range-wide population status and trends, experience in habitat evaluation and in quantifying environmental impacts, and familiarity with suitable mitigation methods including revegetation design and implementation. With regards to focused surveys, the Principal or other member of the survey team must meet regulatory agency protocol qualifications and posses or obtain appropriate permits, prior to conducting the survey, where necessary.

III. TYPES OF SURVEY REPORTS

No two project sites are identical in terms of the biological resources present, the degree of disturbance, the proximity to developed areas, and the type of project proposed. For these reasons, three types of biological surveys are suggested. These types are the "General", the "Letter" and the "Focused" survey. All conditions of the City's Biology Guidelines (May 2001), (herein after called the Biology Guidelines) must be met. For example, Table 1 of the Biology Guidelines will aid in determining the need for focused surveys. In most cases a General Survey Report will be required or a previous basic report may need to be updated. Letter Survey Reports may (with complete flora and fauna lists) be acceptable for a small disturbed site or where previous reports are applicable. If sensitive species (e.g., listed threatened or endangered species, candidate species, etc.) are on the site or are likely to be present, Focused Survey Reports will be required. Focused Survey Reports shall follow any required state or federal agency protocols where appropriate. Biologists conducting surveys are responsible for contacting federal and state and local agencies, and acquiring

protocol survey guidelines.

NOTES:

1. Protocol surveys shall be performed by a biologist who possesses current survey permit(s) for certain species, as required by state or federal regulatory agencies, or by the City of San Diego.

2. Biology Survey Reports for emergency public works projects or code violation enforcement cases shall include relevant information as appropriate. In other words, "before-impact" surveys may not be possible, but prior conditions shall be reconstructed to the greatest extent feasible.

A. GENERAL SURVEY REPORT

Projects involving or permitting modification of land in a natural or near natural state, and all areas containing sensitive habitats or sensitive species shall be investigated as follows:

1. Time in the field shall be proportional to the size of the project site and biological heterogeneity and the significance of sensitive habitats present.

2. Completeness of the biological inventory will be based on a "diminishing returns" criterion. In other words, the level of effort should be based on significance of resources present.

3. Data collected should be quantified where appropriate to indicate the extent of resources on the project site.

4. It is highly recommended that field surveys be performed when the majority of critical resources can be best evaluated. Some survey times are mandated per protocol established by state and federal agencies for certain species (e.g. Quino checkerspot butterfly). See Attachment I.

5. The most recent generally accepted nomenclature shall be used to indicate plant and animal names to avoid confusion (see Attachment IV. or more recent literature).

6. Surveys shall include information on the presence or absence of Narrow Endemic Species (Page 3 of the Biology Guidelines) likely to be present. If not present, a statement explaining the theoretical physical/biological basis for the lack of expected species shall be included.

7. Conditions of MSCP coverage shall be addressed for covered species (listed in Appendix A "Species Evaluated for Coverage Under the MSCP" of the MSCP Subarea Plan) found on or adjacent to the site.

8. Vernal Pools: If this habitat is suspected, a focused survey shall be required to determine presence/absence of vernal pools. Focused surveys for vernal pools shall occur during the winter months when the pools are typically inundated. Historical photos and additional research may be necessary on a case-by-case basis. The entire vernal pool watershed shall be surveyed and mapped. (See Attachment II, B-3). Fairy shrimp surveys will be required per U.S. Fish & Wildlife Service Vernal Pool Guidelines.

9. Other procedures, as listed below in C., Focused Survey Report and in the Biology Guidelines.

B. LETTER SURVEY REPORT

A Letter Survey Report may be acceptable (at the discretion of the City Manager or his/her designee) for projects with:

1. Recent adequate General Survey Report.

2. Projects involving minimal habitat alteration.

3. Highly disturbed areas, including but not limited to, agricultural areas presently or recently under cultivation. Additional information may be required based upon the results of the Letter Survey Report.

4. Very small sites, especially when they are isolated by development or when there are only temporary impacts.

C. FOCUSED SURVEY REPORT

1. Focused surveys shall be performed in conformance with Table 1 of the Biology Guidelines (included herein). Surveys should be done at the appropriate time of year to determine presence/absence of sensitive species. If surveys are not done at the appropriate time of year, and the potential for occurrence is moderate to high (based on historical knowledge, site records, determination by the biologist, etc.), then it will be concluded that their presence exists on the property. The emphasis of the survey shall be directed at a search for rare, endangered, threatened, or otherwise sensitive resources. See Section H, page 10, for vernal

pool survey requirements.

2. When appropriate, the methodology for the focused survey(s) and report(s) shall be obtained from the appropriate regulating agencies (i.e. protocols for state listed species would be obtained from the California Department of Fish and Game and federal species would be obtained from U.S. Fish and Wildlife Service). Depending on the
species, one or more focused surveys may be required. In some instances, protocol survey guidelines may not be available. It is the responsibility of the consulting biologist to assure all required protocols are followed. See Attachment I for examples of typical protocol survey requirements.

3. A statement explaining the theoretical physical/biological basis for any lack of expected species shall be included.

IV. SUBMISSION REQUIREMENTS AND REPORTING FORM, AND CONTENT

The survey reports shall contain the elements listed below and be presented in the following format. For the Letter Survey Reports, the format can be presented in correspondence form, but pertinent items such as brief methodology, species list, vegetation map, impact analysis, and mitigation measures shall be addressed.

A minimum of three draft and final reports/letters shall be submitted to Development Services for distribution. The total number of final copies will vary depending on the extent of distribution associated with CEQA public review.

A. TITLE PAGE

1. Report title (type of study, project name, city, state)
2. LDR (Land Development Review Division) Project number(s).
3. Party for whom report prepared (e.g. , contracting or responsible party such as agency, developer or lead agency under CEQA)
4. Party preparing report (example: Biologist or consulting firm preparing report-name, address, telephone number)
5. Investigators (include titles)
6. Date (month, year)
7. Signature block of the principal investigators.

B. TABLE OF CONTENTS

1. Major report sections, subheadings, and appendices with page numbers.
2. Figures/graphics/maps with page numbers.
3. Tables with page numbers.

Table 1. Summary of Biological Survey Requirements. (Page 11 of Biology Guidelines)

RESOURCE	SURVEY REQUIREMENTS	
	Inside MHPA	Outside MHPA
Vegetation		
• Uplands	Confirm/Revise MSCP mapping.	Confirm/Revise MSCP mapping.
• Wetlands	Delineate wetlands per City definition.	Delineate wetlands per City definition.
Covered spp[1]		
• Listed spp (e.g. Ca. gnatcatcher)	Focused survey per protocol.	Per MSCP conditions of coverage[2].
• Narrow endemic (e.g. S.D. Thornmint)	Focused survey per protocol.	Focused survey per protocol.
• Other (e.g. S.D. horned lizard)	Survey as necessary to comply with sitting requirements as outlined in Section II.A.2 of these Guidelines.	Per MSCP conditions of coverage[2].
Non-Covered spp[1]		
• Listed spp (e.g. pacific pocket mouse)	Focused survey per protocol.	Focused survey per protocol.
• "Other Sensitive Species[3]" (e.g. little mouse tails)	Case-by-case determination depending on the spp.	Case-by-case determination depending on the spp.

1 Based upon the MSCP mapping, site specific surveys, the NDDB records, previous EIRs and biological surveys, and/or discussion with the wildlife agencies, the potential for listed species, narrow endemics and CEQA sensitive species will be determined. Where there is a reasonable likelihood that one of these species exists, surveys will follow the above requirements.

2 Survey as necessary to conform with Appendix A of the City of San Diego MSCP Subarea Plan (March 1997).

3 "Other Sensitive Species"Those other species that are not listed by federal and/or state agencies and/or not covered by the MSCP and to which any impacts may be considered significant under CEQA.

C. MANAGEMENT SUMMARY/ABSTRACT

Briefly state the purpose, results of the survey, sensitive species present, and the impacts anticipated with any feasible measures to reduce or eliminate likely impacts. State whether or not the project site is entirely within, partially within, adjacent to, or outside the Multi-Habitat Planning Area (MHPA) of the City's MSCP.

D. INTRODUCTION

1. Purpose of study (relevant federal, state, and local laws). If applicable, reference any previous studies.
2. Location map of the project shown on 800-foot scale City Engineering base map with survey boundaries.
3. Project description, all areas of impacts, and construction staging areas.
4. Project schedule, including phasing and duration.

E. METHODS AND SURVEY LIMITATIONS

Discuss survey methodology including rationale for the use of the given survey method. Include dates, times, personnel (with qualifications), weather conditions during the survey; limitations for the survey (e.g. portions of the property indirectly surveyed or seasonal variability); and a map showing the location of transects, sample points and the areas actually visited, as appropriate. If surveys for state or federally-listed, sensitive or MSCP-covered species are completed more than 24 months before the application is submitted, then the surveys should be updated, as appropriate, to accurately reflect resources on site. Surveys should be done at the appropriate time of year to detect presence/absence of sensitive species. If surveys are not done at the appropriate time of year, and the potential for occurrence is moderate to high (based on historical knowledge, site records, determination by the biologist, etc.), then it will be concluded that their presence exists on the property.

NOTE: Protocol Survey requirements/protocol guidelines are subject to change by the regulatory agencies and methods must be valid at the time of the survey.

V. SURVEY RESULTS

A. Physical Characteristics

Briefly describe the physical characteristics of the property from a biological perspective; include existing land use, slope/aspect (exposure), topographic characteristics, water resources, soil and rock types, rock out-

crops, and adjacent land uses.

Include a brief discussion of habitats present. Discuss any wetlands, water bodies, watersheds or stream beds on the project site which would be modified and subject to the California Fish and Game (CDFG) Code, section 1600-1603, the U.S. Army Corps of Engineers (ACOE) Section 404 of the Clean Water Act, or the City's Environmentally Sensitive Lands regulations. Describe existing conditions, sensitive lands per MSCP, and any critical habitats of endangered species as determined by the wildlife agencies. A discussion of wetland jurisdiction/definition for the ACOE, CDFG, and the City of San Diego shall be required, including a discussion of existing and proposed wetland buffers as accepted by the regulatory agencies.

B. Biological Resources

1. Botanical Resources-Flora

Describe the existing vegetation communities as well as disturbed areas, and list the dominant (indicator) species of each vegetation community type. Identify, if possible, the nature of any disturbance, e.g., grading, fire, etc. Each vegetation community should be categorized into either wetland(s) and/or type of upland(s) as shown on Tables 2 & 3, pages 14 and 16 of the Biology Guidelines). Include a vegetation map (at least one copy submitted must be on a project plan map) overlain by the development proposal. The amount of each vegetation community or habitat type present on the property should be indicated in acres, hectares, or square feet, as appropriate. Quantify transect data when appropriate. Indicate locations of sensitive plants as points or polygons as appropriate. Include a complete listing (in an appendix) of all plant species observed, including scientific and common names. Indicate in which community or habitat each species was found and which species are not native to the area.

2. Zoological Resources - Fauna

Provide a list of all vertebrate species observed or detected in an appendix. Both common and scientific names should be used. "Regional Lists" are not acceptable. Listing of particular expected species may be appropriate but should be justified (migratory, estivating, nocturnal species, etc.).

Include the method used to identify the species (e.g., direct sighting, scat, or calls) in the text or lists. Indicate the number

and location of individuals detected or estimated. Note indications of breeding activity (i.e., nests, dens) on the property. Occurrence of the species should be related to the vegetative community or wildlife habitat types on the property when possible. Relative amounts of each wildlife habitat type should be indicated (may be same as plant communities).

Discuss invertebrates in special situations (i.e., rare, threatened or endangered butterfly species, fairy shrimp, unusual species concentrations, or pest species).

If a species is reported which is considered rare or unusual in occurrence in the region, verify its identification with a photographed or a written species diagnostic description in the appendix or use the form provided as Attachment III.

Indicate locations of (on at least one copy of a project map) and discuss areas exhibiting concentrations or a higher diversity of wildlife or wildlife signs, and discuss possible reasons for these activities (e.g. amphibian breeding areas, deer feeding, raptor hunting areas, etc.). Such areas may reflect physical attributes of the property such as dunes, rock out-crops, streams, ponds, stands of trees, etc. which should be mapped.

C. Rare, Threatened, Endangered, Endemic and/or Sensitive Species or MSCP-Covered Species

The report shall contain a separate discussion of any sensitive species occurring on or using areas directly or indirectly affected by the project that are recognized by a governmental agency, conservation or scientific group, or the investigator(s) as being depleted, potentially depleted, declining, rare, critical, endemic, endangered, or threatened, and/or any species nominated or on a state or federal rare, endangered or threatened species list.

The survey report shall contain a theoretical discussion and/or list of rare, endangered, and threatened species and habitats likely to occur on site or nearby. Species discussed shall be based on sources listed in the paragraph above or more recent data. Discuss the suitability of the habitat on the property for each such species and the probability of the property being utilized by them, particularly if the survey was done when the species would not be identifiable. Discuss the known growth requirements of said species, including required soil types, exposure, elevation, availability of water, etc., as well as when the species is identifiable. Confirm the identification of rare, endemic, endangered, or threatened species, by a species-diagnostic photograph or by a written

description. A California Natural Diversity Data Base "California Native Species Field Survey Form" (Attachment V) should be completed where a species has not been reported before, or as deemed appropriate.

D. Maps

All maps submitted with the biology survey report must be of sufficient scale to show the location of the identified resources and their relationship to the project (See Attachment II). Elevations/topography, north direction, and scale must be indicated on all maps. The map should identify biological resources (plants and animals) present on site, including any portions of the site identified as part of or adjacent to the MSCP's MHPA and any other species not listed by federal and/or state agencies and/or not covered by the MSCP and to which any impacts may be considered significant under CEQA. In addition, at least one copy of a full scale project map (Tentative Map, Tentative Parcel map, Site Plan, etc.) must be submitted, showing the resources identified and project characteristics including lot lines, roads, grading, open space easements, off-site improvements etc. To summarize, the following maps are required:

1. A copy of the project map or site plan, etc. with sensitive species/habitats plotted thereon (see interactive mapping feature on the following web site: www.sangis.org.; page 12, MSCP.);

2. A copy of the project map or site plan with the MHPA boundaries shown thereon; and

3. A copy of the project map or site plan showing project impacts in relationship to biological resources.

NOTE: All information can be put on one map if it can be clearly depicted. If information is depicted on separate maps, all maps must be presented at the same scale.

VI. PROJECT IMPACT ANALYSIS

Identify all potential impacts of the project (both on-site and off-site impacts such as roads, staging areas, water, and sewer lines) to sensitive biological resources and to other significant biological resources as determined by the CEQA process (i.e. sensitive, non-covered species). The report should evaluate the significance, and quantify/qualify impacts. Impact assessments need to include analysis of direct impacts (e.g. grading, Zone I brush management), indirect (e.g. lighting, noise, edge effects, sediment loading, etc.) and cumulative impacts, if appropriate. The City of San Diego's, Significance Determination Guidelines (Biological Resources, page 11, July 2002 or as amended) under the California

Environmental Quality Act (City of San Diego, 1994), should be used as a reference. The proposed area of impact to each resource by the project must be presented in both a graphic and tabular form. In addition, this section shall contain a discussion of the following:

A. An evaluation of the physical or biological features used by flora and fauna on the property and their relative importance.

B. An evaluation of the physical and biological relationship of the property to surrounding or contiguous habitats and relationships to the MHPA. Discuss, if the proposed project will disrupt the integrity or continuity of an important habitat, (i.e., disruption of a wildlife corridor and/or an extensive riparian woodland, etc.).

C. Indicate the percentage (or acreage) of plant communities and habitats to be removed or modified in tabular form by the proposed development or reasonably anticipated to be removed. Discuss likely subsequent impacts for phased and staged development, even if they are not a part of the project.

D. A determination of significance must be done per the City of San Diego's, Significance Determination Guidelines (Biological Resources, Page 11, July 2002 or as amended);

E. Quantify the anticipated loss of sensitive plant and animal habitat, populations, or individuals. Define where possible, the local and regional significance of this loss.

F. Discuss and evaluate indirect impacts anticipated on and off site from project implementation.

G. Discuss the following consistency issues with the MSCP (Discuss how the project will provide for the long-term viability of wildlife and sensitive habitats):

1. Whether or not the project lies within or adjacent to the MHPA (see interactive mapping feature on the following web site: www.sangis.org; Page 12, MSCP).

2. Describe any relevant MHPA Guidelines (map notes).

3. Assess compliance with the planning policies and guidelines (is the project an allowed use within the MHPA ?).

4. Address, if applicable, the land use adjacency guidelines (as shown on Page 48, the MSCP Subarea Plan).

5 . Identify any appropriate management issues per Section 1.5, MSCP Subarea Plan.

6. Assess whether any special conditions of coverage apply to the species affected by the project (per Covered Species list, Appendix A, MSCP Subarea Plan).

7. Discuss any boundary adjustments to the MHPA. If proposed, evaluate for functional equivalency per Sections 1.1.1 and 5.4.2 of the MSCP Subarea Plan.

8. Discuss whether or not the project is located on the least sensitive portion of the site (see Page 5, Biology Guidelines).

H. Vernal Pools (see also Attachment II)

A focused survey evaluating the quantity and quality of vernal pool(s) and watershed must be provided. Substantial evidence must be presented that demonstrates: 1) presence/absence of the pools; 2) what measures are being taken to avoid the pools and 3) if unavoidable, provide substantiation as to why the impacts can not be avoided and what measures are being used to minimize impacts (see Page 4 of the Biology Guidelines).

I. Cumulative Impacts

Projects that conform to the MSCP would not result in significant cumulative impacts. However, a rare circumstance could occur where impacts to a particular species not covered by the MSCP (e.g. little mousetails, salt marsh daisy) may still result in a cumulative/significant impact. In this case, the report would identify those species and describe why a cumulative impact still exists regardless of the habitat level protection provided by the MSCP.

VII. MITIGATION AND MONITORING REQUIREMENTS

This program will consist of three elements: 1) Mitigation Element, 2) Protection and Notice Element, and 3) Management Element. Refer to page 12 of the Biology Guidelines, May 2001. For instances where revegetation or restoration is proposed, a revegetation/restoration plan shall be prepared in accordance with Attachment III (See also Attachment B of the Biology Guidelines).

NOTE: 1. Creation of vernal pools in historically non-vernal pool areas is not acceptable.

2. All wetland impacts must have an identified wetlands mitigation site and an accompanying conceptual revegetation plan.