

COUNTY OF SAN DIEGO

REPORT FORMAT AND CONTENT REQUIREMENTS

REVEGETATION PLANS



LAND USE AND ENVIRONMENT GROUP

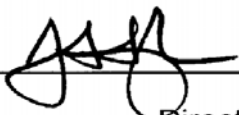
Department of Planning and Land Use
Department of Public Works

July 30, 2007

APPROVAL

I hereby certify that these **Report Format and Content Requirements for Revegetation Plans** are a part of the County of San Diego, Land Use and Environment Group's Technical Report Format and Content Requirements and were considered by the Director of Planning and Land Use, in coordination with the Director of Public Works on the 30th day of July, 2007.


ERIC GIBSON
Interim Director of Planning and Land Use


JOHN SNYDER
Director of Public Works

I hereby certify that these **Report Format and Content Requirements for Revegetation Plans** are a part of the County of San Diego, Land Use and Environment Group's Technical Report Format and Content Requirements. The Director of Planning and Land Use is authorized to approve revisions to these Report Format and Content Requirements for Revegetation Plans.

Approved, July 30, 2007


CHANDRA WALLAR
Deputy CAO

PURPOSE

The requirements contained within this document provide guidance on preparing Revegetation Plans that are required as part of mitigation for discretionary projects and/or violation cases that are being processed by the Land Use and Environment Group. These guidelines are designed to:

- Ensure the quality, accuracy and completeness of Revegetation Plans.
- Aid in staff's efficient and consistent review of maps and documents from different consultants.
- Provide adequate information to make appropriate planning decisions and to make determinations regarding conformance with applicable regulations and policies.
- Increase the efficiency of the review process and avoid unnecessary time delays.
- Provide better consistency between the County and other regulating agencies.

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List of Acronyms

DPLU	Department of Planning and Land Use
POC	Point of Connection
RP	Revegetation Plan
UTM	Universal Transverse Mercator

1.0 INTRODUCTION

The Revegetation Plan (RP) shall follow the formats and guidance in this document. The overall length of the RP and the amount of information to include will vary depending on the size, scope and complexity of the mitigation.

1.1 General Issues for Writing a Revegetation Plan

1.1.1 Format

Unless an exception is granted, every draft RP shall have the components as detailed in the following pages.

DOCUMENTS THAT DO NOT CONTAIN ALL OF THE MANDATORY SECTIONS DESCRIBED IN THIS DOCUMENT WILL NOT BE ACCEPTED FOR REVIEW BY COUNTY STAFF UNLESS AN EXCEPTION IS GIVEN BY THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND LAND USE (DPLU).

1.1.2 Electronic Format

Any draft text submitted electronically to the County for comment and review shall be formatted in Microsoft Word (2003 version or later). Staff may also request draft text to be submitted in PDF files. The electronic submission of draft text should be placed on CD.

1.1.3 Document Length

The length of the draft RP must be kept to the absolute minimum. The document shall be only as long as required to accurately convey the pertinent issues and proposed mitigation/monitoring. Extraneous and "filler" material must always be omitted from the RP.

1.1.4 Editorial Matters

- The draft RP must be properly edited for correct format, spelling, grammar, page numbering, internal consistency and other editorial matters.
- The draft RP must be prepared in a clear format, written in clear language for review and understanding by decision-makers and the public. (§15140.)
- To the extent possible, complex and extremely analytical materials should be summarized and simplified.
- The draft RP must be written in a factual and objective manner.
- The document must provide a good faith effort of full disclosure.
- An RP that attempts to "bias" the document in favor of or against the development project are unacceptable. **COUNTY STAFF WILL REJECT THE DRAFT RP IF PRELIMINARY REVIEW REVEALS NUMEROUS EDITORIAL AND/OR FACTUAL ERRORS OR OBVIOUS SLANT.**

- Other documents may be incorporated by reference, provided that the referenced document is summarized in the draft RP and is made available for public inspection at a public place identified in the draft RP, including a County office.

1.2 General Guidance and Key Compliance Points for the Preparation of a Revegetation Plan

- Do not include extraneous or surplus information.
- Instead of referring to "County Policy ...," specify whether the cited document is a County regulation (cite Code section), a Board of Supervisors Policy (cite policy number), a Departmental Policy, or an informal policy or practice.
- Maintain consistent terminology.
- Present discussion and analysis with a tone that is professional, academic and impartial, rather than argumentative or development project advocacy.
- Where other documents are incorporated by reference, explain the purpose for doing so and briefly describe or summarize the part or parts incorporated. Such reference should be placed in the applicable narrative sections.
- Provide factual SUPPORT and RATIONALE for all conclusions stated.
- Check the accuracy of all factual statements. For example, it is not acceptable to state that a County regulation sets forth a particular requirement, if in fact it does not.
- Reports should be concise and written in a professional manner suitable for peer review. Staff may reject reports based on quality if the report is written in such a manner that a timely and accurate review cannot be completed.
- Attached plot plans and maps must be to standard engineering scale and contain a north arrow and both number and bar scales. When maps are reduced, they are to be scalable by standard engineering scale.
- Draft copies of the report should have all changes made in response to staff comments in strikeout/underline form. Final copies of the report should be clean, with all editing marks removed.
- The Draft RP will be reviewed for accuracy and completeness by a County Biologist and County Landscape Architect. The plan is considered draft until accepted by the Director of Planning and Land Use.

2.0 REVEGETATION PLAN REPORT FORMAT

2.1 Cover Page

The Cover Page of the RP shall not include company slogans or pictures. It shall include the following information:

- Project common name
- Project application number, associated discretionary permit numbers (TMXX-XXX, ZAPXX-XXX) and the environmental log number (Log No. XX-XX-XXX).
- Date of the original report, followed by the date(s) of all iterations (Final document to only show date of acceptance).
- Principal author's name, firm name and address
- Signature of principal author
- Project applicant's name and address
- A statement that reads: "*Prepared for the County of San Diego*"

2.2 Table of Contents and Headings

The table of contents must follow the order and format outlined in this document. Page numbers should be assigned when possible. Titles of each attachment/appendix should be listed in the order in which they are found in the document. The Table of Contents must be formatted in the following manner:

CHAPTER I. CHAPTERS SHALL BE SPECIFIED BY NUMBER AND SHALL BE PRESENTED IN BOLD AND IN ALL CAPS

I.I First level subchapters shall be specified by number and shall be presented in upper and lower case, bold, and underlined

I.I.I Second level subchapters shall be specified by number and shall be presented in upper and lower case, and bold.

I.I.I.I Third level subchapters shall be specified by number and shall be presented in upper and lower case, italics, and bold.

2.3 Description of the Development Project/Impact Site for which Compensatory Mitigation is Required

2.3.1 Responsible Parties

Identify who is responsible for the proposed development project.

2.3.2 Location of the Development Project

Discuss the development project location in the local and regional context. Include a vicinity map, project map, and a map showing location of revegetation work within the site. In the event the revegetation site is adjacent to steep topography or continuous habitat, additional mapping information may be required.

2.3.3 Summary of Overall Development Project with Proposed Mitigation

Describe the development project by summarizing the existing environmental conditions on the proposed development project site, the impacts to be caused by the development, and the general design approach (concept) of the revegetation project. At a minimum, include the following items for the development site:

- (1) Current environmental setting and site conditions
- (2) Project size (acres)
- (3) Topography
- (4) Vegetation types
- (5) Wildlife
- (6) Sensitive species
- (7) As an appendix to the Revegetation Plan, a copy of the relevant sections of the biology report (mitigation requirements and habitat being impacted) for the development project.
- (8) Sensitive resources affected, by habitat
- (9) Types, functions, and values of habitat(s) to be restored
 - (a) Describe the development project impacts resulting in the revegetation requirement, both permanent and temporary, as applicable (give quantitative impacts in a table).
 - (b) Identify the type, function, and value components of the habitat(s) to be impacted on the development site.

2.4 Goal(s) of the Compensatory Mitigation Project

2.4.1 Responsibilities

Describe in detail the responsibilities of the following entities in regards to the mitigation effort:

- (1) The project owner; and
- (2) The County.

Describe in detail the responsibilities and qualifications of the following entities in regards to the mitigation effort:

- (3) The compensatory mitigation project designer;
- (4) The installation contractor;
- (5) The revegetation monitor; and
- (6) The revegetation maintenance contractor.

2.4.2 Type(s) and Area(s) of Habitat to be Established, Revegetated, Restored, Enhanced, and/or Preserved

Summarize the following (be succinct):

- (1) Habitat types shall be identified with their Holland Codes, each with a list of agencies having regulatory jurisdiction (if applicable).
- (2) The area of proposed revegetation shall be specified for each habitat type and it shall be no less than what is required by the applicable conditions of approval (provide entire resolution or form of decision with applicable conditions highlighted as an appendix).
- (3) Discussion of mitigation needs (mitigation site acreage, mitigation ratios, habitat types, and proposed enhancements) as applicable. Include a table where appropriate.
- (4) Summarize the discretionary permit or enforcement action conditions and requirements associated with the mitigation project.
- (5) If a conceptual revegetation plan is referenced in the environmental document or resolution of approval, summarize the requirements or concerns of the other agencies, such as U.S. Fish and Wildlife, State Fish and Game, and Army Corps of Engineers, etc.
- (6) For vernal pool restoration, provide a goal that specifies overall watershed improvements to be gained.

2.4.3 Functions and Values

Describe the specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved.

2.4.4 Time Lapse

Describe the time lapse between impacts and expected compensatory mitigation success.

2.4.5 Cost

Provide the estimated total cost including the following:

- (1) Include all compensatory mitigation site preparation, planting, maintenance, and monitoring.
- (2) Provide a complete itemized cost estimate for each installation, each maintenance year, and each monitoring year of the mitigation project. Include a 3 percent (compounding) annual inflation factor per year for the compensatory mitigation costs to be applied to the total project cost.

2.5 Description of the Proposed Compensatory Mitigation Site

2.5.1 Site Selection

Describe the process used to select the proposed mitigation site, including.

- (1) Describe why the chosen revegetation site is suitable. At a minimum, the plan must address the following factors:
 - Physical. These factors include the soil and landscape characteristics of the site and whether they are appropriate for the resource being restored.
 - Biological. These factors include the presence of appropriate habitat in the surrounding area, the susceptibility of the site to weed invasion, and other biological factors.
 - Logistical. The accessibility of the site for implementation, maintenance, monitoring, and site protection from unauthorized use. The site should be easily accessible but protected from off-road-vehicle use or heavy bicycle or foot traffic. This also should be considered when preparing or evaluating the accuracy of the price estimate.
 - Historical. This factor considers using a site that is currently occupied by a sensitive plant or animal species to be restored to the site or using a site where the target species is not known to be present, but where

revegetation would create potential habitat that would be suitable for the target species.

- (2) For riparian projects, provide evidence that the natural site hydrology and salinity is suitable for supporting the proposed riparian system after irrigation is removed.
- (3) Provide evidence of soil suitability.

2.5.2 Location and Size of Compensatory Mitigation Site

Describe the location and size of the site, including latitude/longitude or Universal Transverse Mercator (UTM) coordinates.

2.5.3 Functions and Values

Describe the existing functions and values of the compensatory mitigation site, including:

- (1) Describe the baseline condition of the area proposed for compensatory mitigation.
- (2) Provide the results of a biological survey of the mitigation site to determine percent cover by native species, percent cover by weeds, species diversity, and any other information relevant to establishing success criteria for the proposed compensatory mitigation project.

2.5.4 Jurisdictional Delineation

Include the results of the Jurisdictional Delineation if one has been done on the compensatory mitigation site.

2.5.5 Present and Proposed Uses

- (1) Identify the present and proposed uses of the Compensatory Mitigation Site and All Adjacent Areas (including zoning and long-term protection measures)
- (2) If temporary and/or permanent fencing is required, show on construction/implementation documents. If fencing is required gates should be specified and located on the plan. In addition, the access route to the revegetation area should also be defined to limit damage and disturbance to areas surrounding the reveg site. Signage may also be required to protect the site.

2.5.6 Reference Site(s)

- (1) Provide the results of a biological survey of the reference site to determine percent cover by native species, percent covered by weeds, species diversity, and any other information relevant to establishing success criteria for the proposed compensatory mitigation project.

- (2) Provide the standards for tracking the progress of the compensatory mitigation project
- (3) Establish reference site(s) of adequate size to determine mitigation success criteria. Show location of the reference site on a mitigation project site map. The site should be within 500 feet of the proposed revegetation site or impact site, if possible.
- (4) Flag the site in the field so that a County representative can review the site at the time of Revegetation Plan submittal.

2.6 Implementation Plan for the Compensatory Mitigation Site

2.6.1 Rationale for Expecting Implementation Success

Describe the rationale for expecting that the revegetation program will be successful.

2.6.2 Financial Assurances

- (1) Specify type of assurances and identify the responsible party.
- (2) Include the following statement: **“A revegetation agreement shall be signed and notarized by the property owner following approval of this revegetation plan and accompanied by the required security as agreed upon by the County of San Diego.”**

2.6.3 Schedule

Describe the schedule for the complete revegetation program.

2.6.4 Site Preparation

- (1) Describe in general terms, the type of equipment proposed for use to implement the revegetation project, i.e., heavy equipment for grading, imprinted, hydroseed truck, etc.
- (2) Describe the accessibility to the site for such equipment.
- (3) Describe the measures for protecting adjacent habitat during construction.
- (4) Describe the permanent and temporary protection measures for the revegetation areas.
- (5) Provide anticipated start and completion dates. If the compensatory mitigation project is phased, provide estimated dates for the various phases.
- (6) Provide a list of proposed container plants for the project. Include plant scientific and common names, quantity, and container size. Include any

qualitative requirements such as mycorrhiza inoculant. Also, include recommended plant spacing.

- (7) Provide a list for the proposed seed mixes. Include scientific and common names, pounds per acre and percent live seed. Identify any qualitative requirements such as seed scarification or inoculation. Include hydroseed slurry components (e.g. fiber mulch, bonded fiber matrix, stabilizing emulsion, and fertilizer).
- (8) Identify the sources for plant material, including the location from which seed and/or cuttings will be collected. Seed (for hydroseeding and growing container stock) and/or cuttings should be collected from the project site, if feasible. Otherwise, seed and cuttings should be collected from locations within the same sub-watershed (XXX.XX) as the project site.

2.6.5 Planting Plan

- (1) Describe the requirements for soil preparation, amendments, and/or additives such as mycorrhiza. Generally, fertilizer will not be allowed.
- (2) Describe the proposed planting and seeding methods including how local propagule collection will be ensured. Provide actual anticipated collection and nursery growing and estimated completion dates. Include with planting methods any special requirements for cuttings, deep tube containers, staking and plant protection/cages.
- (3) The plans must show plants and irrigation for all areas to be restored. Planting plans and irrigation plans shall be separate sheets. The base drawing for the planting and irrigation shall include topography, grading, and drainage improvements (if applicable).
- (4) Plans shall show planting locations of container stock and seeded areas. It is advised to use a polygon with hatching identifying the plant community being restored and the list/quantity of plants being installed within the polygons. The proper placement of plants needs to consider the conditions on-site at the time of planting and other ecological factors (such as a clay lens that could not be observed until all the weeds were removed, etc), under direction of the restoration biologist. Note requirement for local propagule collection, if required. Plans shall identify seed mixes and container plants. Seed mixes should include purity and germination information and container plants shall be identified by scientific and common name, container size, and quantity.

2.6.6 Irrigation Plan

- (1) Describe the proposed irrigation methods. Include description of irrigation system: permanent, temporary, below grade, surface mounted, drip, bubbler, overhead spray.

- (2) Irrigation Plans shall show the Point of Connection (POC), available pressure, controller location, valves, piping, and head locations (use appropriate materials if using a drip system). If the POC is beyond the limits of the revegetation area, the offsite irrigation service line to the POC should be identified. Provide the required backflow protection at the POC. Identify the power source for the irrigation controller (if applicable).

2.7 Maintenance During Monitoring

2.7.1 Maintenance Activities

Describe the maintenance activities that will be done during the monitoring period, including:

- (1) Describe general irrigation maintenance needs – provide flexibility to account for weather.
- (2) Provide the proposed weeding schedule. Note that the weeding schedule should represent the minimum weeding proposed. The actual schedule should be flexible, but simply stating quarterly is not acceptable. Four visits may be adequate with weeding conducted 2 to 3 times in the spring and once in the summer to adequately control exotics.
- (3) Describe the proposed pruning program or the restrictions on pruning. For example, pruning of some existing mature plants on a restoration site may be necessary to allow establishment of young plants between them.
- (4) Describe the proposed trash removal program.
- (5) Describe the proposed pest control program.

2.7.2 Schedule

- (1) Provide the proposed maintenance schedule.
- (2) Provide the general proposed irrigation schedule.
- (3) Identify the proposed timing for the removal of the irrigation system.

2.8 Monitoring Plan for the Compensatory Mitigation Site

2.8.1 Performance Standards for Target Dates and Success Criteria

- (1) Establish success criteria based on the reference site study. Success criteria shall be established for annual assessment. Success criteria shall be established for such items as native plant cover, weed cover, species diversity and recruitment, survivorship, and plant density.

- (2) Describe a program for adaptive management and remedial actions if identifiable problems arise or success goals are not met.

2.8.2 Target Functions and Values

Describe the function and values that the mitigation site will have at the end of the revegetation program.

2.8.3 Target Hydrological Regime (wetland/vernal pools only)

Describe the hydrological regime the revegetation program is aiming toward for wetlands and vernal pools. If wetlands and/or vernal pools are not part of the revegetation program, disregard this section.

2.8.4 Target Acreages

Describe the acreages to be established, restored, enhanced, and/or preserved. Specify the acreage of each type, i.e., acres to be established, acres to be restored, acres to be enhanced, and/or acres to be preserved.

2.8.5 Monitoring Methods

Describe the monitoring methods to be used for assessing success.

2.8.6 Monitoring Schedule

- (1) On-site monitoring is expected to vary according to the habitat type being restored. As such, it is expected that the proposed monitoring schedule will be determined based upon best professional practice in order to achieve the success criteria outlined in this report. Provide the proposed monitoring schedule and include a discussion on how the schedule will achieve the success criteria.
- (2) Monitoring will be a minimum five years. A reduction/increase in the 5-year monitoring may be permitted/required if success criteria is/is not met within the five year period.

2.8.7 Monitoring Reports

- (1) The monitoring reports shall be submitted to the County as follows:
 - Year 1: Year-End Report
 - Year 2: Annual
 - Year 3: Annual
 - Year 4: Annual
 - Year 5: Annual

- (2) Each report shall include a qualitative and quantitative analysis.
- (3) Monitoring and maintenance field data shall be included as an addendum to each report.
- (4) Reports shall be submitted to the County no later than the first week of January.
- (5) The revegetation plan must also include the following note:

“Any significant issue or contingency that arises on the job site (e.g. plant survival issues, fire, or flooding) shall be reported in writing to the County of San Diego within two weeks from the date of the incident. Accompanying the report shall be a plan for remediation, with an implementation schedule and a monitoring schedule.”

2.9 Completion of Compensatory Mitigation

- (1) Provide Notification of Completion (written notification is required) to the County.
- (2) Agency Confirmation (*ONLY APPLIES FOR CORPS JURISDICTION*)

2.10 Contingency Measures

2.10.1 Initiating Contingency Procedures

Describe the procedures to initiate contingency measures if the revegetation site is not achieving the anticipated goals.

- (1) Describe the circumstances necessitating the initiation of contingency measure.
- (2) Describe a proposed plant replacement program.

2.10.2 Alternative Locations for Contingency Compensatory Mitigation

Identify and describe the alternative locations that have been chosen if the mitigation site is considered inappropriate.

2.10.3 Funding

Describe the mechanism for funding the contingency compensatory mitigation.

2.11 Drawing Requirements

Drawings must be included in the appendix of the RP and include the following. Additional plans/information may be required. Note: the following is encouraged, but not required for conceptual plans.

- (1) The construction/implementation drawings must be legible, professionally prepared, and be a print of an original drawing. No Xerox copies or Xerox reductions.
- (2) Scale: All detailed drawings shall be a maximum of 1"=20' unless previously approved by the County Landscape Architect.
- (3) Size: Must be standard 24" x 36" blueprint sheets unless previously approved by the County Landscape Architect.
- (4) Provide all necessary details and specifications concerning planting and irrigation systems.
- (5) Plans shall have a County title block.
- (6) Plans must be prepared by a California registered landscape architect. All plans shall bear the landscape architect's stamp. Provide Landscape Architect's "Statement of Compliance" on each sheet.