

GLOSSARY

Adjacent Open Space - natural areas adjoining development parcels.

Administrative Parcel - a portion of San Bruno Mountain within the Planning Areas which corresponds to present land ownership.

Barriers - objects acting as obstructions to butterfly movement, i.e. trees, dense brush, roads, etc.

Biological Refuge - a unique area harboring unusual populations of animals and endemic plants which are rare or absent in the rest of its surrounding region.

Biological Study - refers to Endangered Species Survey for San Bruno Mountain: Biological Study - 1980-1981, prepared by Thomas Reid Associates.

Brush Species - several types of woody vegetation found on San Bruno Mountain, including Artemesia, Baccharis, Eriophyllum and Ceanothus.

Buffer Area - a strip of land at least 30 feet wide surrounding a development intended to provide some isolation-for the conserved habitat, in order to protect the development from range fires as well as to protect the Conserved Habitat from changes in stormwater runoff and irrigation within the development areas.

C C & Rs - Conditions, Covenants and Restrictions imposed on the use of property in a recorded document by the landowner.

Cities - the cities of Brisbane, Daly City and South San Francisco.

Colony - a major concentration of butterflies within a larger population, which are partially isolated from the remainder of the population by intervening barriers or lack of habitat.

Compliance - conformance by the private sector landowner/developers and public agency participants with the terms and obligations of this plan.

Conservation – “to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition, protection and maintenance, propagation, live trapping and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.” (The Endangered Species Act, 1973)

Conserved Habitat - those portions of the San Bruno Mountain Area that are presently or hereafter are to be held in fee ownership by the County and/or the State pursuant to the Agreement With Respect to the San Bruno Mountain Area Habitat Conservation Plan.

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Corridors - Areas through which the butterflies can travel unimpeded. Differs from open space in that there can be no natural barriers, i.e. dense brush or trees, within a corridor.

County - San Mateo County, California.

Critical Habitat –“(i) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of ... this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with ... this Act, upon a determination by the Secretary that such areas are necessary for the conservation of the species.’ (The Endangered Species Act, 1973).

Dedication - transfer of title to San Mateo County those areas of land now in private ownership which will become conserved habitat at the time a grading permit is issued.

Design Guides - directions for conserving habitat in open space and for minimizing impact on species of concern, formulated to guide developers in preliminary site planning.

Developer - person or organization in charge of designing a development plan.

Development Agreement - an agreement provided for by California law (Govt. Code Section 65864, et seq.), which permits a local agency and private landowner to fix their mutual obligations at a point in time.

Development Areas - those portions of the San Bruno Mountain Area that are excluded from Conserved Habitat and are anticipated to be subject to urban uses.

Development Plan - layout of approximate building envelopes, access roads, utilities and associated grading for each parcel which follows necessary design guides and which includes schemes for dedication and phasing, reclamation and open space protection.

Diversity of Habitat - naturally occurring combination of different environmental features in an area, such as annual and perennial grassland, brushland and grassland, north and south-facing slopes, exposed and protected areas, moist and dry areas, high and low density areas of butterfly host plants.

Ecosystem - the complex of an ecological community and environment forming a functioning whole in nature.

Ecosystem stability - the integrity of species relationships in an ecological community maintained against succession, urbanization and other impacts.

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Endangered - "any species which is in danger of extinction throughout all a significant portion of its range, other than a species of the class Insecta determined by the Secretary to constitute a pest whose protection under the provision of this Act would prevent an overwhelming and overriding risk to man", (Endangered Species Act, 1973).

Endangered Species Act - means the Endangered Species Act of 1973, as amended, 16 U.S.C. Sections 1531-1543.

Endemic - a plant or animal species which inhabits only one limited geographic locality, usually due to dependence on certain climatic, physical or biological conditions existing only in that locality. Compare: cosmopolitan.

Enhancement - the restoration of former habitat or improvement of existing habitat through the use of habitat enhancement techniques (e.g. revegetating with host plant species).

Exotics - species which have been introduced into local habitat from outside the United States and which often become pests, outcompeting native species.

Extinct - having disappeared as a species due to failure to reproduce in sufficient numbers to maintain succeeding generations.

Extirpated - extinct in one area although not as a species (not extinct throughout the species' range).

Feature - a topographic feature within an Administrative Parcel or Management Unit which warrants particular attention with regard to uses of that Parcel or Unit.

Fire Resistant Vegetation - species of plants known to be relatively inflammable and therefore valuable buffer material for protection of development areas from fires occurring in open space.

Flight Season - the portion of the year during which the adult, winged, reproductive form of a butterfly is found, and during which reproduction occurs.

Funding Program - a specific program for providing necessary funds for conservation activity on San Bruno Mountain. The Funding Program is described in Chapter V.

Gorse - Ulex europaeus. A thorny, leguminous shrub with oily wood; 'Native of Europe; escaped from cultivation and often well established on the Pacific Coast from Vancouver Island to central California" (Abrams). Extensive on San Bruno Mountain, especially in the Saddle Area.

Grading Plan - layout of areas within a parcel to be temporarily or permanently disturbed in the process of development, indicating the phasing of each disturbed area -- the time at which it will be graded.

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Grassland Species - comprising one of the two dominant vegetation communities on San Bruno Mountain, and including localized bunch grasses and many broadleaf species of wildflowers. Compare: brush.

Habitat Conservation Plan - the San Bruno Mountain Area Habitat Conservation Plan as adopted by the County Board of Supervisors on September 14, 1982 (Resolution No. 43770). Synonyms: HCP, Plan.

Habitat Contiguity - unobstructed connection of large open space areas to facilitate the butterflies' need to move through and to specific areas during their flight season.

Habitat Easement - a recorded restriction on the use of property to prevent uses which are inconsistent with use of the land as habitat by the Mission Blue, Callippe Silverspot and other species of concern.

Habitat Enhancement Techniques - manipulation of habitat in conserved areas to reverse the effects of previous disturbance, control exotic species, retain natural diversity, and maximize the value to endangered species. Examples: seeding/propagation, soil modification, chaining brush. Synonym: habitat manipulation.

Habitat Manager - the employee or contractor engaged by the Plan Operator to supervise the administration of the Conserved Habitat and the Habitat Conservation Plan.

Habitat Maintenance - care and preservation of the biological resources of conserved habitat which occurs naturally, or is subsequently created through habitat enhancement techniques.

Habitat Manipulation - deliberate alteration of habitat for enhancement. Synonym: habitat enhancement.

Habitat Utilization - in butterflies, use of various larval food or nectar plant species, perching substrates, protective terrain or other natural features present in certain areas on San Bruno Mountain.

Hilltopping - mating behavior peculiar to several types of butterflies in which males and females find each other near knolls and ridgetops to mate.

Human Encroachment - any disturbance of habitat by man, including off road vehicle activity, dumping, domestic animal activity, illegal burning and other forms of vandalism, and on a broader scale, urban development and quarrying.

Indefinite Perpetuation - the continued existence on San Bruno Mountain of a viable, reproducing population of *a species of concern* far into the future; the purpose of the HCP. Compare: extinction, extirpation.

Landowner(s) - Visitacion and developers or other persons and entities who own or have a right to acquire fee ownership of lands within the San Bruno Mountain Area.

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Larval Food Plant - particular species of vegetation required by butterflies as an energy source for survival in the first stages of development, on which the adults will oviposit. For Mission Blue: the three Lupinus species; for Callippe: Viola pedunculata; for Elfin: Sedum spathulifolium.

Management - treatment afforded portions of SBM to enhance or protect existing habitat or to reclaim habitat lost to construction or other disturbance.

Management Unit - any management unit shown in Chapter VII of the HCP or any management unit subsequently established for unplanned parcels by the local agency having land use jurisdiction and in accordance with the Agreement With Respect to the San Bruno Mountain Area Habitat Conservation Plan.

Marginal Habitat - an area which by the presence of certain species (e.g. host plants), is considered to be habitat but for some reason is poorly utilized at present.

May - Identifies a permissive element which is left fully to the discretion of the landowner/developer.

Minimize - refers to disturbance; to lessen the impact on an area of habitat through management techniques and mitigation measures.

Mitigation - The term 'mitigation' shall have the same definition in this HCP that it has in the regulations promulgated pursuant to the California Environmental Quality Act (Title 14 California Administrative Code, Section 15032.5) or the National Environmental Policy Act (40 C.F.R., Section 1508.20) and includes the designation or reservation of land as open space or the provision of money to provide funding for wildlife conservation, protection or enhancement, and further includes the lessening of adverse development impacts through design modification, fencing at the grading perimeter, erosion control, reclamation, habitat enhancement or other protective activities.

Monitoring - the task, undertaken by the Plan Operator of regular observation of biological processes, development and conservation activities on San Bruno Mountain; the purpose is to assure compliance with the plan, and to measure the success of its implementation.

Natural Open Space - undeveloped land which has not been altered by man's activities (e.g. agriculture).

Nectaring - behavior of adult butterflies where an insect feeds on the nectar of flowers.

Nectar Plants - certain species of plants required by the adult butterflies as energy sources for survival during mating and egg-laying behavior. For Mission Blue: include Brodiaea pulchella, Eriogonum latifolium, Monardella villosa, and others; for Callippe: include various thistle species, Chrysopsis villosa, and others.

No Project Alternative - status quo; no habitat conservation or enhancement, and no additional urban development on San Bruno Mountain.

Open Space Buffer - see Buffer.

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Oviposition - egg-laying by insects.

Permanent Disturbance - the portion of a development envelope designated for buildings, paving or private landscaping; area permanently lost as habitat.

Pesticide - a chemical agent used to destroy insect pests.

Phasing - refers to the time schedule of development; the area which can be graded each year.

Pilot Study - small scale test of a habitat enhancement technique or mitigation method to provide statistical verification of success before expansion to a larger area.

Plan Operator - the County of San Mateo (or its successors as Plan Operator).

Planned Parcel - a parcel for which development plans have been set forth in Chapter VII of the HCP. See Table VI-2. These parcels have been reviewed and modified, as necessary to preserve natural habitat for Species of Concern and to contribute to and be consistent with the HCP and the Agreement With Respect to the San Bruno Mountain Area Habitat Conservation Plan.

Planning Areas - four areas of the Mountain defined by characteristic vegetation patterns and distribution of Species of Concern.

Planning Assistance - activities implemented prior to and in conjunction with development which will mitigate impacts on the species of concern.

Potential Habitat - areas currently containing marginal habitat which can be modified or enhanced to become usable habitat.

Preservation - maintenance of habitat in its present condition.

Preserved Habitat - those portions of the San Bruno Mountain Area that will be protected against grading and disturbance and which are now in public ownership or which are identified in the HCP for dedication to the State or County.

Range Limit Plants - a plant species for which the population found on San Bruno Mountain represents the southern geographic limit of the biological range of that species.

Rare - a legal term used by the state of California which is approximately equivalent to the federal term 'threatened', see below.

Reclamation Plan - provides for fencing, revegetation, and possible subdivision of Management Units for ease of administration on all graded areas.

Reclaimed Habitat - the portions of a Developable Administrative Parcel which are to be disturbed by grading and thereafter reclaimed as viable habitat for the species of

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concern and dedicated to the County or State, as appropriate, as conserved habitat pursuant to the Agreement With Respect to the San Bruno Mountain Area Habitat Conservation Plan.

Recovery Benchmark - a measure of the status of a species of concern on San Bruno Mountain after set intervals of time have elapsed from commencement of the Plan.

Research - an ongoing program carried out by the Plan Operator, designed specifically to aid the Plan activities, which includes pilot studies on succession, monitoring and enhancement strategies, executed through field work and preceded by literature investigation into methods and costs.

Resource Agencies - United States Fish and Wildlife Service (USF&WS) and the California Department of Fish and Game (CDFSG).

Restoration - recreation of ecological conditions after disturbance or in a new area (e.g. clearing brush to create grassland), through habitat enhancement. Compare: preservation.

San Bruno Mountain Area - the approximately three thousand acres in San Mateo County, California which is shown on Figure VI-1 of the HCP and which is the subject of the Agreement With Respect to the San Bruno Mountain Area Habitat Conservation Plan. Synonyms: SBM, the Mountain, San Bruno Mountain.

San Bruno Mountain Habitat Conservation Trust Fund - a trust fund established within the Plan area to provide income for habitat conservation activities as specified in this plan. Synonym: Trust Fund.

Section 7 - a section of the Endangered Species Act which requires federal agencies, in consultation with the Secretary of the interior, to ensure that any action, authorized, funded or carried out by them is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of the critical habitat of such species. (16 USC 11536)

Section 9 - a section of the Endangered Species Act which prohibits the "taking of endangered species. (16 USC 01538)

Section 10a - a section of the Endangered Species Act which authorizes the Secretary of the Interior to permit, under such terms and conditions as he may prescribe, any act otherwise prohibited by Section 9 of the Act. The acts may be permitted for scientific purposes, or to enhance the propagation or survival of the affected species (16 U.S.C. Section 1539)

Shall - Identifies a mandatory element.

Should - Identifies guidance provided in this plan which is based on policy considerations determined by the San Bruno Mountain Steering Committee.

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Species - 1) "includes any subspecies of fish or wildlife or plants, and any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." (Endangered Species Act, 1973) 2) "A group of organisms judged by taxonomists (by diverse criteria) to be worthy of formal recognition as a distinct kind." (Ehrlich and Holm, *The Process of Evolution*, 1963). Synonym: species of concern.

Species of concern - these include the following:

Animals

1. The Mission Blue butterfly (*Plebejus icarioides missionensis*) - State and Federally listed endangered species
2. The San Bruno Elfin butterfly (*Callophrys mossii bayensis*) - State and Federally listed endangered species
3. The Bay Checkerspot butterfly (*Euphydryas editha bayensis*) - Candidate for the Federal endangered species list
4. The Callippe Silverspot butterfly (*Speyeria callippe callippe*) - formerly under Federal proposal for endangered status, proposal expired July 3, 1980
5. The San Francisco Tree Lupine Moth (*Grapholitha edwardsiana*) - formerly under Federal proposal
6. The San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*) - State and Federally listed endangered species
7. The Solitary Bee (*Dufourea stagei*) has never been proposed for listing

Plants - Larval Food

1. *Plantago erecta* - larval food plant for the Bay Checkerspot
2. *Sedum spathulifolium* - larval food plant for San Bruno Elfin
3. *Lupinus albifrons* - larval food plant for the Mission Blue
4. *Lupinus variicolor* - larval food plant for the Mission Blue
5. *Lupinus formosus* - larval food plant for the Mission Blue
6. *Viola pedunculata* - larval food plant for the Callippe Silverspot
7. *Lupinus arboreus* - larval food plant for Tree Lupine Moth
8. *Orthocarpus densiflorus* - larval food plant for the Checkerspot

Other Plants - Host Plant, Rare, Endemic, and Range Limit

1. *Homatium utriculatum* - host plant
2. *Orthocarpus floribundus* - San Francisco Owl's Clover; range limit; under federal review
3. *Helianthella castanea* - endemic; under federal review
4. *Silene verecunda verecunda* - The Dolores Campion; range limit= under federal review
5. *Erysimum franciscanum* var. franciscanum - The San Francisco Wallflower; range limit; under federal review
6. *Arabia blepharophylla* - Coast Rock Cress; range limit; under federal review
7. *Arctostaphylos imbricata* - Manzanita; endemic; under federal review
8. *Arctostaphylos montaraensis* - Montara Manzanita; endemic; under federal review
9. *Arctostaphylos Pacifica* - endemic; under federal review
10. *Arctostaphylos uva-ursi* - Bear-berry; range limit
11. *Vaccinium arbuscula* - Huckleberry; range limit

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12. Lathyrus vestitus - Pacific Pea; endemic
13. Clarkia rubicunda - Farewell to Spring; range limit
14. Chorizanthe pungens var. Hartwegii - Spine-flower; endemic
15. Grossularia leptosma = Bay/Canyon Gooseberry; range limit
16. Castilleja franciscana - Franciscan Paint Brush; range limit
17. Ligusticum apiifolium Lovage; range limit
18. Maianthemum dilatatum - False Lily of the Valley; range limit
19. Allocarya chorisiana - endemic
20. Sambucus callicarpa - Red Elderberry; range limit
21. Silene scouleri - range limit
22. Chrysopsis villosa - Golden Aster; range limit; host plant
23. Cirsium quercetorum - Brownie Thistle; range limit; host plant
24. Grindelia maritime - Steyermark; endemic; under federal review
25. Layia hieracioides - endemic
26. Pentachaeta bellidiflora - endemic; under federal review
27. Senecio aronicoides - Butterweed; range limit
28. Tanacetum camphoratum - Dune Tansy; endemic; under federal review
29. Eriogonum latifolium - Wild Buckwheat; host plant
30. Brodiaea pulchella - Blue Dicks; host plant
31. Carduus sp. - host plants
32. Silybum marianum - Milk Thistle; host plant
33. Pteridium aquilinum - Broken Fern; host plant
34. Monardella villosa - Coyote Mint, Pennyroyal; host plant
35. Horkelia californica - California Horkelia; host plant
36. Scabiosa atropurpurea - Pincushion Plant; host plant

State - the State of California, acting by and through its department of Parks and Recreation.

Sub-species - "a geographical subdivision of a species deemed worthy of formal recognition by a taxonomist." (Ehrlich and Holm)

Succession - undirectional change in the composition of a biological community as the available competing organisms, especially the plants, respond to and modify the environment.

Surveyed - to observe and census elements of the biological communities on San Bruno Mountain, such as butterflies and their host plants, using a transect or quadrat method at regular intervals over time and area.

Sweep Method - a method of generally surveying an area for host plant density and distribution where the terrain or size of an area prevents a detailed census. It involves direct mapping of plant locations and classification of density estimates as abundant or scarce. Compare: transect, quadrat.

Take - "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" with regard to endangered species. (Endangered Species Act, 1973 as amended 1978)

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Technical Advisory Committee - a body established to evaluate the scientific and cost effectiveness of the Plan, as executed by the Plan Operator, and recommended revisions. The composition of the TAC is set forth in Chapter V of the HCP.

Temporary Disturbance - the portion of a development envelope designated for grading at the time of development, but which will become reclaimed habitat after a reclamation program is complete; area temporarily lost as habitat.

Threatened - "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range", (Endangered Species Act, 1973).

Undisturbed - the portion of a development envelope designated to be excluded from any grading associated with development; a preserved area of habitat.

Unplanned Parcels - those parcels for which development plans have not been set forth in the HCP. The Unplanned Parcels are set forth in Table VI-2.

Untreated - to be left as currently exists, with no habitat enhancement required.

Visitacion Associates (VA) - also includes VA successors and assigns.