

COMMUNITY DEVELOPMENT AGENCY

January 15, 2013

Brian C. Crawford
DIRECTOR

Marin County Board of Supervisors
3501 Civic Center Drive
San Rafael, CA 94903

Marin County Civic Center
3501 Civic Center Drive
Suite 308
San Rafael, CA 94903
415 473 6269 T
415 473 7880 F
415 473 2255 TTY

SUBJECT: Local Coastal Program Amendments (LCPA)
Fourth Board Public Hearing
Agriculture and Biological Resources

Building and Safety
Environmental Health Services
Planning
Federal Grants
Redevelopment Agency

www.marincounty.org/cda

Dear Members of the Board,

RECOMMENDATION:

Continue discussion of, and provide approval for, the Local Coastal Program Amendments to Agriculture and Biological Resources of the LCP, as revised per your direction and set forth in attached Exhibits 1 and 2.

BACKGROUND:

At the November 13, 2012 public hearing, the Board specifically discussed a number of Local Coastal Program Amendments (LCPAs) relating to Agriculture and Biological Resources, and provided direction to staff on those that the Board accepted, and those that should be revised.

Exhibit 1 provides new revisions requested by the Board to specific policies, including those related to Agricultural Operations, Environmentally Sensitive Habitat Area (ESHA) definitions, site assessment and buffer adjustment policies, and clarification of a small number of other policies.

Following a brief discussion, recommended new text is shown in cross-out underline format in boxes labeled "PROPOSED AMENDMENTS, Board Action Required," to facilitate your final approval of these provisions. (The revised text for the Wetland and Stream Buffer Adjustment items is somewhat more complex, and is presented as "clean copy," with Exhibit 2 providing the cross-out / underline version).

The recommendations presented in Exhibit 1 are fairly straightforward, however staff is seeking direction from the Board regarding alternative permitting threshold amounts base on the definition of "Grading (coastal)" on page 3 of Exhibit 1. A brief explanation of three alternatives ranging from 50 cubic yards to 250 cubic yards, is provided, although your Board may wish to specify another number, if any at all.

SUMMARY:

The other LCPAs concerning Agriculture and Biological Resources adopted by the Planning Commission on February 23, 2012, and alternative language in response to issues raised by the Coastal Commission staff and others, have previously been considered by your Board in prior hearings. Actions on these remaining provisions will complete work on the Agriculture and Biological Resources sections of the LCPA.

FISCAL/STAFFING IMPACT:

No fiscal or staffing impact as a result of the LCPA is expected since the work to complete the LCP amendments is budgeted in the current fiscal year and programmed in the Department's Performance Plan.

REVIEWED BY: (These boxes must be checked)

<input type="checkbox"/> Department of Finance	<input type="checkbox"/> N/A
<input checked="" type="checkbox"/> County Counsel	<input type="checkbox"/> N/A
<input type="checkbox"/> Human Resources	<input type="checkbox"/> N/A

SIGNATURE:


 Jack Liebster
 Planning Manager

Reviewed by:


 Brian C. Crawford
 Director

ATTACHMENTS:

1. Exhibit 1: Staff Recommendation
2. Exhibit 2: Cross-out and underline revisions for Policies C-BIO-20 and 25.

EXHIBIT #1
Local Coastal Program Amendments (LCPA)
Staff Recommendation

TABLE OF CONTENTS	
AGRICULTURE	2
Agricultural Operations.....	2
Intergenerational Housing	6
BIOLOGICAL RESOURCES.....	7
Types of ESHA and ESHA Definition	7
Uses in ESHA and Site Assessments.....	8
Terrestrial ESHA Buffers.....	9
Wetland ESHAs	9
Streams ESHAs.....	9
Wetland & Stream Buffer Adjustments	10
“Allowed Development in ESHA” – Safe Harbor for Expansion of ESHA	14
Use and Management of ESHA Buffers.....	15
Prescriptive Rights	16

AGRICULTURE

Agricultural Operations

Approved by Board (10-2-12)

At the October 2, 2012 hearing, the Board indicated support for two provisions concerning agricultural operations:

1. That on-going agriculture operations including cultivation, crop and animal management, and grazing are not considered to be development. (*Section 22.68.030*);
2. That viticulture should be a permitted (appealable) use rather than part of the principal permitted use in the C-APZ district. (*Policy C-AG-2, Section 22.62.060.B.1*)

Discussion of Additional Amendments

At the November 13, 2012 hearing, it was suggested that a small “test” vineyard might be allowed as a principal permitted use if it did not require grading. The Board did not come to a conclusion on the maximum size that would qualify as a principally permitted use, offering suggestions of 5 acres or less, and up to 10 acres.

After further consideration, staff finds that provisions for “test” vineyards are not necessary for the reasons outlined in Section 3 (Viticulture Operations); therefore no further Board action on this issue is recommended. However, consideration of the viticulture issue has highlighted the need to better define the meaning and intent of several terms currently used in the LCPA, specifically “grading” and the “significant alteration of land forms,” particularly with respect to agricultural activities. Recommended revisions to clarify these terms are discussed below in Section 1 (Grading and Agricultural Operations). Additionally, in response to recent Coastal Commission correspondence, staff is recommending a further clarification of the term “on-going agricultural operations” (Section 22.68.030) as discussed in Section 2 (Coastal Permits for Agricultural Operations).

1. GRADING AND AGRICULTURAL OPERATIONS

Discussion

The Coastal Act definition of “development” includes the “grading, removing, dredging, mining, or extraction of any materials,” but the term “grading” is not further defined. The existing certified LCP similarly indicates that grading would be considered a “project” subject to Coastal Permit approval, but later specifies standards and conditions which only apply to 150 cubic yards or more of grading or excavation and which are clearly intended for construction projects (not agricultural operations). The existing LCP also refers to Title 23 (Natural Resources) of the Marin County Code, which requires a Grading Permit (and thus a Coastal Permit) for the “artificial movement of over 250 cubic yards of earth” but then specifically exempts “grading necessary for agricultural operations” (unless it would endanger a structure or obstruct a watercourse). The proposed LCPA incorporates a variety of new resource-protective policies related to grading operations, but relies on the Coastal Act definition of “development,” which doesn’t define the type or amount of grading which would trigger the need for Coastal Permit review.

In order to avoid further confusion regarding grading in the Coastal Zone, staff recommends adding a definition of the term “grading” to the LCPA which: 1) explicitly excludes routine agricultural practices (consistent with the position that routine agricultural operations should not be considered development requiring a Coastal Permit), and 2) establishes a quantitative threshold at which grading is considered to be “development” subject to Coastal Permit approval. Staff is requesting that the Board provide direction to staff as to what threshold would be appropriate. However, options for a specific grading quantity include the 250 cubic yard limit established in Title 23, the implied threshold of 150 cubic yards in the existing LCP, or some smaller quantity, consistent with recent Coastal Commission actions (for example, a grading threshold of 50 cubic yards was recently approved for San Luis Obispo County). To ensure that grading provisions are clearly reflected in Development Code Chapter 22.68, staff also recommends revising section 22.68.060 (Non-Exempt Projects) to specifically reference the grading definition and to incorporate text from Section 22.68.030 (carried over from the certified LCP) which expands on the meaning of “significant alteration of land forms.”

PROPOSED AMENDMENTS, Board Action Required

- **22.130.030 Definitions**

Grading (coastal) – Any excavation, stripping, cutting, filling, or stockpiling of soil material, or any combination thereof that exceeds [] cubic yards of material. As used in this Development Code, grading does not include plowing, tilling, harrowing, aerating, disking, planting, seeding, weeding, fertilizing or other similar routine agricultural cultivation practices.

- **22.68.060 Non-Exempt Projects**

...
I. Landform alterations. *Any significant alteration of land forms including grading as defined in Section 22.130.030 and the removal or placement of vegetation on a beach, wetland, or sand dune, or within 100 feet of the edge of a coastal bluff, stream, or in areas of natural vegetation designated as environmentally sensitive habitat areas (ESHA).*

2. COASTAL PERMITS FOR AGRICULTURE OPERATIONS

Discussion

At the October 2, 2012 hearing, the Board supported text revisions to clarify that, “on-going agriculture operations including cultivation, crop and animal management, and grazing are not considered to be development”. However, correspondence from Coastal Commission staff received the day before the November 13th hearing indicates that further clarification of the intent of this statement is needed. As discussed in previous staff reports, Coastal Permits for agricultural production are not required under Marin’s existing LCP, nor do they appear to have been required under the certified LCPs of other jurisdictions as far as staff has been able to determine. However, to ensure that existing agricultural operators can continue to conduct their agricultural activities and diversify their operations without excessive regulation, while also protecting sensitive resources from new disturbances, staff recommends further qualifying the previously approved statement as shown below. Note that staff is also recommending deletion of an unnecessary reference to agricultural processing facilities.

PROPOSED AMENDMENTS, Board Action Required

- **22.68.030 Coastal Permit Required**

A Coastal Permit is required for development in the Coastal Zone proposed by a private entity of a state or local agency unless the development is categorically excluded, exempt, or qualifies for a De Minimis Waiver.

Development is defined in Article VIII of this Development Code and is interpreted to include installation of water or sewage disposal systems, the closure of County-managed public accessways, changes in public access to the water including parking availability, and the significant alteration of landforms. Significant alteration of land forms entails the removal or placement of vegetation on a beach, wetland, or sand dune, or within 100 feet of the edge of a coastal bluff, stream, or in areas of natural vegetation designated as environmentally sensitive habitat areas (ESHA). On-going agricultural operations including cultivation, crop and animal management and grazing are not considered to be development or a change in the density or intensity of the use of land. For the purposes of this Chapter, "on-going agricultural operations" are those which exist presently or historically, and do not entail new encroachment within 100 feet of the edge of a wetland, stream or riparian vegetation. For agricultural uses, a "change in the intensity of use of water, or access thereto" means the development of new water sources such as construction of a new well or the creation or expansion of a surface impoundment.

3. VITICULTURE OPERATIONS

Discussion

Previously, the Board supported the Planning Commission's recommendation that viticulture should be a permitted (appealable) use rather than part of the principal permitted use in the C-APZ district (*Policy C-AG-2; Section 22.62.060*). However, during the November 13th hearing, Board members directed staff to explore an alternative suggested by the Marin Farm Bureau to allow small hobby or test vineyards (subject to size and slope limitations) to be included as part of the principal permitted agricultural use. After further consideration, staff does not recommend pursuing this alternative for the reasons outlined below. It should be noted that this recommendation and the discussion that follows does not alter the Planning Commission's recommendation but rather provides a more detailed explanation of how proposed permit provision would apply to viticulture in the Coastal Zone.

By definition, agricultural production includes viticulture (the cultivation of grapes) and the existing certified LCP does not in any way differentiate viticulture from other agricultural uses. Furthermore, your Board has supported revised Development Code language which clarifies that, "On-going agricultural operations including cultivation, crop and animal management and grazing are not considered to be development" and accordingly, do not require Coastal Permit approval. Therefore, the planting and cultivation of grapes in and of itself would not trigger the need for a Coastal Permit. There are, however, certain activities commonly associated with viticulture operations which are subject to Coastal Permit review. Specifically, the expansion or construction of water wells requires Coastal Permit approval per Development Code Section 22.68.060.I. Thus the establishment of a vineyard which entails installation of a new or expanded water supply would require Coastal Permit approval. A Coastal Permit is also required for grading as discussed above. Accordingly, the establishment of a new vineyard which results in substantial terracing would similarly trigger Coastal Permit review. Because the Planning Commission designated viticulture as a "Permitted" use, and this report does not propose to change that part of the

Planning Commission's action, those viticulture projects that would trigger a coastal permit requirement by proposing a new well or substantial terracing would be appealable to the Coastal Commission. As currently structured, these provisions would appropriately address the need for Coastal Permit review when a viticulture project entails a new well or land terracing (regardless of vineyard size), without placing a new requirement to obtain a Coastal Permit for the cultivation of grapes within an ongoing agricultural operation where suitable terrain and an existing water supply are present. Since a small "test" or hobby vineyard would be unlikely to alter land forms or require development of a new well, these could generally proceed without Coastal Permit approval. It is important to note however, that separate from the LCPA, all vineyard projects throughout the County are now subject to the Marin County Vineyard Erosion and Sediment Control Ordinance (VESCO), adopted in 2011, which is further described below.

Marin County Vineyard Erosion and Sediment Control Ordinance

Vineyards of any size have been a principal permitted use in the C-APZ zoning district since the existing LCP was adopted in the early 1980s, and historically, the establishment of vineyards has not required Coastal Permit approval in the Coastal Zone (or any other type of permit countywide). Despite the absence of special permitting requirements, there are currently less than 200 acres of commercial vineyards in Marin County, a figure which represents less than two tenths of one percent of the County's 150,000 acres of agricultural land. In comparison, Sonoma County supports approximately 60,000 acres of vineyards. The dramatic discrepancy between the extent of vineyard development in Marin versus Sonoma County is generally attributed to Marin's cooler climate, which is less suitable to grapes, as well as more limited water availability. Despite the very small extent of vineyards in Marin, the County undertook development of a Vineyard Erosion and Sediment Control Ordinance (VESCO), modeled on similar ordinances in effect in Sonoma and Napa County, which was adopted by the Board of Supervisors on May 10, 2011. The intent of VESCO, which is applicable to the planting and re-planting of vineyards countywide, is to minimize erosion and sedimentation and protect streams and riparian habitat in the County. Some key provisions of VESCO include the following:

- All vineyard plantings and re-plantings greater than 1/3 acre must be reviewed and authorized by the agricultural commissioner;
- A professionally prepared erosion and sediment control plan is required for all vineyards on slopes above 30% (or 15% on highly erodible soils);
- Vineyards are prohibited on slopes over 50% regardless of soil type;
- Best management practices and riparian setbacks are required for all vineyards; and
- Strict enforcement provisions include high civil penalties and stop work orders

While VESCO does not substitute for coastal permitting requirements, it does provide for a consistent baseline level of review for all vineyards countywide without limiting provisions in the LCP that ensure additional scrutiny for viticulture projects in the Coastal Zone which entail an expanded water supply or changes to existing terrain.

Intergenerational Housing

Approved by Board (10-2-12)

At the October 2, 2012 hearing, the Board supported the concept of Intergenerational Housing as well as provisions imposing a limit of no more than two intergenerational units per property, subject to a total size restriction (in combination with the main farmhouse) of 7,000 square feet.

Discussion of Additional Amendments

At the November 13, 2012 hearing, the Board directed staff to add deed restriction provisions which would address those limited cases where an intergenerational home is no longer needed for a family member. Specifically, the Board supported potential use of a vacant intergenerational home by agricultural workers or as an agricultural homestay (both of which are part of the principal permitted agricultural use of the property). The Board also agreed that conversion of an existing intergenerational home to deed restricted affordable or locally-employed housing could be considered through a Coastal Permit Amendment process. Accordingly, staff recommends the following revisions to the Intergenerational Housing standards contained in Development Code Section 22.32.024 (new changes highlighted, previously approved changes shown without highlighting).

PROPOSED AMENDMENTS, Board Action Required

- **22.32.024 – Agricultural Intergenerational Homes (Coastal)**

...

B. Limitations on use. *Intergenerational homes shall not be subdivided or sold separately from the primary agricultural legal lot. Occupants must be members of the farm operator or owner's immediate family. Occupants shall not be required to be actively and directly engaged in the agricultural use of the land. In cases where an intergenerational home is no longer needed for a family member, the unit may also be occupied by agricultural workers or used as an agricultural homestay. Conversion of the unit to deed restricted affordable or locally-employed housing may also be considered through the Coastal Permit Amendment process.*

...

F. Restrictive Covenant. *Intergenerational housing requires the preparation and recordation of a restrictive covenant running with the land for the benefit of the County ensuring that intergenerational housing will continuously be occupied by the owner or operator's immediate family. The covenant must include, at a minimum, the following:*

1. *A detailed description of the intergenerational home or homes.*
2. *Assurance that any change in use will be in compliance with 22.32.024.B and in conformance with applicable zoning, building and other ordinances and noting that all appropriate permits must be issued and completed prior to any change in use.*
3. *Assurance that the intergenerational housing will not be subdivided or sold separately from the primary agricultural legal lot.*

...

BIOLOGICAL RESOURCES

Types of ESHA and ESHA Definition

Approved by Board (11-13-12):

The Board approved Policy C-BIO-1 Environmentally Sensitive Habitat Areas (ESHAs) and the proposed definition of Environmentally Sensitive Habitat Area (Section 22.130.030) during their hearing on November 13, 2012.

Discussion of Additional Amendments:

At the Board hearing on November 13, 2012, staff was directed to prepare a definition for Terrestrial ESHA that encompasses riparian vegetation associated with ephemeral streams.

All habitat area for threatened or endangered species is included in the ESHA definition. The LCP Amendments would carry forward the existing stream definition, which applies to perennial and intermittent streams mapped by the USGS. Streams are a type of ESHA that, along with their riparian vegetation, are protected by the stream buffer policy. The proposed definition for Terrestrial ESHA describes non-aquatic ESHA and clarifies that riparian vegetation which is associated with ephemeral streams is also ESHA, as shown below. Minor wording changes to the ESHA definition and Policy C-BIO-1, which align with subsequent policies and the related definitions, are also provided for review.

PROPOSED AMENDMENTS, Board Action Required:

- **22.130.030 Definitions**

Environmentally Sensitive Habitat Area (ESHA), Terrestrial (coastal). *Includes non-aquatic ESHA, including habitats of plant and animal species listed under the Federal or California Endangered Species Act and existing populations of the plants listed as 1b or 2 by the California Native Plant Society; coastal dunes; groves of trees that provide colonial nesting and roosting habitat for butterflies or other wildlife; and riparian vegetation that is associated with an ephemeral watercourse. Does not include "Stream (coastal)" or "Wetland (coastal)". See also, "Environmentally Sensitive Habitat Area (ESHA)(coastal)" and "Riparian Vegetation (coastal)".*

- **22.130.030 Definitions**

Environmentally Sensitive Habitat Area (ESHA) (coastal). *Areas in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. ESHAs include wetlands, coastal streams and riparian vegetation, and habitats of ~~special-status species of plants and animals (i.e., species listed under the Federal or California Endangered Species Act and existing populations of the plants listed as 1b or 2 by the California Native Plant Society).~~*

- **C-BIO-1 Environmentally Sensitive Habitat Areas (ESHAs)**

...

~~2. For the purposes of this Chapter, ESHA is addressed in consists of three general categories: wetlands, streams and riparian vegetation, and terrestrial ESHAs. Terrestrial ESHA refers to those non-aquatic habitats that support rare and endangered species; coastal dunes as referenced in C-BIO-7 (Coastal Dunes); roosting and nesting habitats as referenced in C-BIO-10 (Roosting and Nesting Habitats); and riparian vegetation that is not associated with a perennial or intermittent stream. The ESHA policies of C-BIO-2 (ESHA Protection) and C-BIO-3 (ESHA Buffers) apply to all categories of ESHA, except where modified by the more specific policies of the LCP.~~

Uses in ESHA and Site Assessments

Approved by Board (11-13-12):

The Board approved C-BIO-2 ESHA Protection in general, but requested further revisions to Policy C-BIO-2.2 regarding public access.

Discussion of Additional Amendments:

During the November 13 hearing, the Board discussed the public access language contained in Policy C-BIO-2.2 and directed staff to provide more detailed policy language about avoiding ESHAs in siting and designing trails and ensuring that mitigation measures are provided.

Coastal Act Section 30240(a) provides that ESHAs “shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas” (this language is incorporated into Policy C-BIO-2.1). In discussion during the November 13 hearing, staff referred to recent Coastal Commission findings state that trails are resource-dependent uses. Additional policy guidance can be derived from Commission staff recommendations on policy language; recent case findings as well as LUP policies for Malibu (a certified plan that was prepared by Commission staff) and Santa Barbara (Coastal Commission staff “suggested modifications”) have the following common themes:

- Trails are considered resource-dependent for “nature study” or access;
- ESHA should be avoided, or if they cannot be avoided the incursion/disturbance should be minimized;
- Policies describe examples of measures to protect ESHA (signage/fencing, boardwalks, seasonal closures, etc.).

Based upon this information, as well as the guidance provided by the Board of Supervisors on November 13, staff recommends the Board adopt the following language for Policy C-BIO-2.2.

PROPOSED AMENDMENTS, Board Action Required:

- **C-BIO-2 ESHA Protection**

...

- 2. Accessways and trails are resource dependent uses that shall be sited and designed to protect ESHAs against significant disruption of habitat values in accordance with Policy C-

BIO-2.1. The design and development of accessways and trails shall minimize intrusions to the smallest feasible area or least impacting routes. As necessary to protect ESHAs, trails shall incorporate measures to control the timing, intensity or location of access (e.g. seasonal closures, placement of boardwalks, limited fencing, etc.). ~~Control public access to ESHAs, including the timing, intensity, and location of such access, to minimize disturbance to wildlife.~~

Terrestrial ESHA Buffers

Approved by Board (11-13-12):

The Board approved C-BIO-3 ESHA Buffers on November 13, 2012.

Per Board direction, staff has prepared a definition for Terrestrial ESHA that encompasses riparian vegetation associated with ephemeral streams (see “Proposed Amendments” on p. 7).

Wetland ESHAs

Approved by Board (11-13-12):

The Board approved Policies C-BIO-14, C-BIO-15 and C-BIO-19, which address the limited uses, conditions of use, and standard buffer requirements for wetland ESHAs.

Streams ESHAs

Approved by Board (11-13-12):

The Board approved Policies C-BIO-24 and C-BIO-“TBD” (reorganized text from LCPA Policy C-BIO-24), which address the limited uses, conditions of use, and standard buffer requirements for streams and riparian vegetation. The definition of Stream (coastal), which is carried over from the existing LCP, was also approved.

Wetland & Stream Buffer Adjustments

Prior Board Action (11-13-12):

On November 13, 2012 staff presented revisions to the PC-approved buffer adjustment policies, C-BIO-20 (Wetland Buffer Adjustments) and C-BIO-25 (Stream and Riparian Buffer Adjustments). As compared with the PC-approved policies, the revisions were more closely aligned with Coastal Act Section 30240(b) and responded to prior Board direction regarding the use of vague terms such as “feasible.”

During the presentation, Board members took no action on the proposed buffer adjustment policies, but requested the following:

1. Prepare an analysis of how existing LCP requirements relate to proposed policies;
2. Provide information about the number of existing properties that would be affected by the proposed 50 foot “absolute minimum” buffer; and
3. Incorporate requirement for “net environmental benefit” into policies relating to buffer adjustments for streams and wetlands.

Discussion of Additional Amendments:

Existing vs. Proposed LCP

The existing LCP Units I and II establish design review as the mechanism for evaluating proposed structures that would be located within the stream buffer. There are no buffer adjustment considerations for wetlands within the existing LCP. The table below summarizes key features of the buffer adjustment policies within the existing regulatory framework, as compared with the proposed LCP amendments.

Table 1: Comparison of Existing and Proposed Buffer Adjustment Policies

Buffer adjustment considered if:	Existing			Proposed
	LCP Unit I	LCP Unit II	Interim Dev. Code	LCP Amendment
Parcel is located entirely within stream buffer;	X	X	X	X
Placement of structure outside buffer would be more environmentally damaging than within the buffer;		X	X	X
Development cannot be accommodated entirely outside of the buffer.				X
Requirements of buffer adjustment:				
Siting/design measures must prevent adverse impacts to ESHA.	X	X	X	X
Provide net environmental improvement (site).				X
“Absolute minimum” 50 foot buffer which cannot be adjusted.				X

The Planning Commission’s recommended buffer adjustment policies are shown in Exhibit 2, both in their original form and as amended to date. While the policies remain similar in intent, they have been revised to incorporate Coastal Commission staff recommendations for buffer distance and improved for clarity and consistency with the Coastal Act to:

- Incorporate the precise review standards of Coastal Act Section 30240(b) – the PC-approved policies apply standards from Section 30233 which actually specifically address diking, dredging and filling issue;
- Clearly describe the site assessment requirements in relation to buffer adjustment requests;
- Require a “net environmental improvement” over existing site conditions as a condition of any stream or wetland buffer adjustment.
- Establish a 50 foot “absolute minimum” buffer per recommendations of Coastal Commission staff;
- Maintain consistent format, language and review standards in both sets of policies (wetlands and streams);

The existing certified LCP policies and PC-approved LCPA policies for stream buffer adjustments allow such adjustments only for principal permitted uses. Section 30240(b) of the Coastal Act focuses on the impact of development on the adjoining ESHA; to this end, land use is one of many factors (including siting, design, landscaping, etc.) that determine how development will ultimately impact an ESHA. Thus, for this reason and to maintain consistency between wetland and stream buffer adjustment policies, the limitation which allows only a principal permitted use in an adjusted stream buffer is not retained.

Marin’s LCP is not unique in allowing for adjustments to wetland or stream buffers. All coastal counties with certified LCP’s provide a mechanism to consider buffer adjustments. Of these, three counties provide some sort of “absolute minimum” for an adjusted buffer (Mendocino County: 50’ for all ESHA; San Luis Obispo: 25’ for wetlands; San Mateo County: 50’ for wetlands, 20’ for streams in developed residential areas). A common theme in the certified county LCP’s is that a determination must be made as to the adequacy of a buffer, regardless of width, to protect the ESHA. While Marin’s LCP is fairly specific in enumerating the circumstances that would warrant consideration of a buffer adjustment, many others state simply that a buffer adjustment is to be considered when there is no other feasible alternative and the reduced buffer will not result in significant adverse impacts to ESHA.

Existing Conditions within the Coastal Zone

During the November 13 public hearing, staff presented examples from the communities of Inverness and Stinson Beach to illustrate how buffer requirements would be applied. The Board requested more contextual information regarding the number of parcels severely impacted and also how buffer adjustments have been addressed in the past.

There are a total of 5,154 parcels within the Coastal Zone (excluding public land). Of these, estimates based on available geographic information and the current National Hydrographic Dataset (NHD) indicate that 3,541 (approximately 69%) do not fall within the required buffers for streams or wetlands. The table below provides more detail about parcels within the County’s jurisdiction estimated to be at least partially within an ESHA buffer.

Table 2: Parcels Located within ESHA Buffers (Coastal Zone)

ESHA Buffer	Total Parcels*	Developed Parcels (residential/commercial)	Unimproved Parcels
Wetland**	356	239	117
Stream	749	474	275

* note that some parcels contain both wetland and stream buffers.

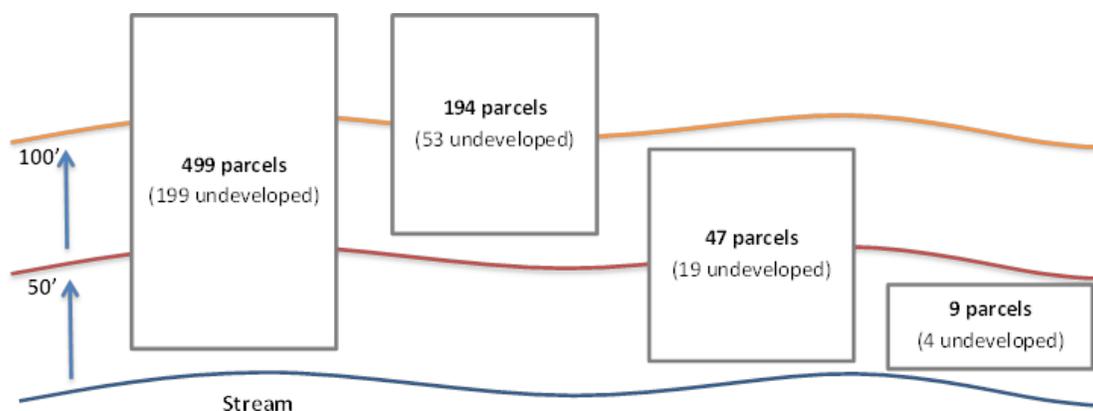
** areas under CCC jurisdiction are excluded (787 total parcels).

Due to the pattern of existing development, including parcel size and physical layout of subdivisions, the properties most likely to be constrained by buffer requirements are those located near or along streams. A total of 58 parcels are estimated to be located entirely within the 100' stream and riparian vegetation buffer; of these, 9 appear to be entirely within the proposed 50' absolute minimum buffer. Figure 1 below illustrates various extents of ESHA buffers on existing stream parcels.

These "stream" illustrations roughly correlate to the categories that may be considered for buffer adjustment through C-BIO-25.1 "a" through "c." The two groups on the right ("47 parcels" and "9 parcels") represent circumstances that would be addressed by C-BIO-25.1.a, where lots are entirely within the buffer. However, the 9 parcels entirely within 50 feet of the stream/riparian ESHA would be subject to 50-foot restriction requested by Coastal Commission staff and incorporated in C-BIO-25.4. Potential development of the approximately 4 undeveloped lots in this situation may be subject to a "takings" evaluation. Development of all these lots would be conditioned to prevent impacts to the ESHA, under C-BIO-25.2 and provide net environmental improvement under C-BIO-25.3.

The two groups on the left of the Figure (499 and 194 parcels) would be subject to either C-BIO-25.1 "b" or "c" depending on the findings of the site assessment. No portion of development would be allowed within the 50-foot "inner buffer" unless necessary to avoid a takings.

Figure 1: Parcels Located within Stream Buffer



There have been approximately 20 projects in the Coastal Zone over the past six years (since adoption of the 2007 Countywide Plan) that intersect with either the stream or wetland buffer. About half of these projects were for utility, maintenance, or to support ongoing operations. On balance, the approved permits resulted in placement of structures outside the required stream buffer. In a handful of cases, where existing structures were already located within the buffer and/or parcels were almost entirely within the buffer, additions were reduced in scale and permitted subject to mitigation measures such as riparian restoration, removal of invasive species, on-site stormwater management or other appropriate improvements.

Net Environmental Improvement

On November 13, the Board expressed support for a policy concept that would require a net environmental benefit, or improvement, over existing site conditions for projects proposed within a buffer.

This improvement would be above and beyond the level of protection required by the Coastal Act and any site development improvements required by Code. Based upon feedback provided at the hearing, the “net environmental improvement” is incorporated into the text of the buffer adjustment policies as shown below. The measures that are listed within the policies are similar to those that were required as conditions of approval for recent projects near streams in the Coastal Zone.

PROPOSED AMENDMENTS, Board Action Required:

Clean text of the proposed buffer policies as recommended to the Board of Supervisors is provided below. For strike-through/underline changes to the PC-approved policies, please refer to Exhibit 2, Tracked Buffer Adjustment Policies.

C-BIO-20 Wetland Buffer Adjustments.

1. *A Coastal Permit that requires a buffer adjustment may only be considered if it conforms with zoning and:*
 - a. *It is proposed on a legal lot of record located entirely within the buffer; or*
 - b. *It is demonstrated that permitted development cannot be accommodated entirely outside the required buffer; or*
 - c. *It is demonstrated that permitted development outside the buffer would have greater impact on the wetland and the continuance of its habitat than development within the buffer; or*
 - d. *The wetland was constructed out of dry land for the treatment, conveyance or storage of water and does not affect natural wetlands.*
2. *A buffer adjustment may be granted only if supported by the findings of a site assessment which demonstrate that the adjusted buffer, in combination with incorporated siting, design, or other mitigation measures, will prevent impacts that significantly degrade the wetland and will be compatible with the continuance of the wetland ESHA.*
3. *A coastal permit authorizing a buffer adjustment shall require measures that create a net environmental improvement over existing conditions, in addition to what is otherwise required by minimum applicable site development standards. Such measures shall be commensurate with the nature and scope of the project and shall be determined at the site level, supported by the findings of a site assessment or other technical document. Appropriate measures may include but are not limited to:*
 - a. *Retrofitting existing improvements or implementing new measures to reduce the rate or volume of stormwater run-off and improve the quality of stormwater run-off (e.g., permeable “hardscape” materials and landscape or site features designed to capture, absorb and filter stormwater);*
 - b. *Elimination of on-site invasive species ;*
 - c. *Increasing native vegetation cover (e.g., expand continuous riparian vegetation cover, reduce turf areas, provide native groundcover, shrubs and trees);*
 - d. *Reduction in water consumption for irrigation (e.g., drought-tolerant landscaping or high efficiency irrigation system)s;*
 - e. *Other measures that reduce overall similar site-related environmental impacts.*
4. *The buffer shall not be adjusted to a distance of less than 50 feet in width from the edge of the wetland.*

C-BIO-25 Stream and Riparian Buffer Adjustments.

1. A Coastal Permit that requires a buffer adjustment may only be considered if it conforms with zoning and:
 - a. It is proposed on a legal lot of record located entirely within the buffer; or
 - b. It is demonstrated that permitted development cannot be accommodated entirely outside the required buffer; or
 - c. It is demonstrated that permitted development outside the buffer would have greater impact on the stream or riparian ESHA and the continuance of its habitat than development within the buffer.
2. A buffer adjustment may be granted only if supported by the findings of a site assessment which demonstrate that the adjusted buffer, in combination with incorporated siting, design, or other mitigation measures, will prevent impacts that significantly degrade the stream or riparian vegetation and will be compatible with the continuance of the stream/riparian ESHA.
3. A coastal permit authorizing a buffer adjustment shall require measures that create a net environmental improvement over existing conditions, in addition to what is otherwise required by minimum applicable site development standards. Such measures shall be commensurate with the nature and scope of the project and shall be determined at the site level, supported by the findings of a site assessment or other technical document. Appropriate measures may include but are not limited to:
 - a. Retrofitting existing improvements or implementing new measures to reduce the rate or volume of stormwater run-off and improve the quality of stormwater run-off (e.g., permeable “hardscape” materials and landscape or site features designed to capture, absorb and filter stormwater);
 - b. Elimination of on-site invasive species ;
 - c. Increasing native vegetation cover (e.g., expand continuous riparian vegetation cover, reduce turf areas, provide native groundcover, shrubs and trees);
 - d. Improvement of streambank or in-stream conditions (e.g. replace bank armoring, slope back streambanks, create inset floodplains, install large woody debris structures) in order to restore habitat;
 - e. Reduction in water consumption for irrigation (e.g., drought-tolerant landscaping or high efficiency irrigation systems);
 - f. Other measures that reduce overall similar site-related environmental impacts.
4. The buffer shall not be adjusted to a distance of less than 50 feet in width from the edge of the stream/riparian ESHA.

“Allowed Development in ESHA” – Safe Harbor for Expansion of ESHA
Att. 4, Item VII

Approved by Board (11-13-12):

The Board approved clarifications to Program C-BIO-5.b, which sets a future work item to establish “safe harbor” policies that would encourage expansion of ESHA (e.g., voluntary fencing or habitat restoration program) without a corresponding increase in the width of the buffer.

Use and Management of ESHA Buffers

Discussion of Additional Amendments:

In their letter dated November 9, 2012, Coastal Commission staff noted that the buffer distance specified by the LCP amendments can be functionally diminished by ongoing activities associated with development, such as fire safety clearance. Policy C-BIO-3.1 adapts Coastal Action Section 30240(b), and is supported by the more specific policies of the LCP which require that buffers be maintained in a natural condition. For streams and wetlands, uses within the minimum 100 foot buffer are limited to those which are resource-dependent or otherwise allowed within the ESHA. In all instances, development or uses within an ESHA buffer shall not significantly degrade the habitat and shall be compatible with its continuance.

While the Biological Resources policies are clear in their intent to maintain natural buffers and avoid activities or development that would significantly degrade the buffer, there is an opportunity to provide some clarification and better integrate the buffer standards with related policies C-DES-11 and C-EH-25 which, taken together, convey the intent of the LCP to protect ESHA while still allowing for vegetation management where necessary. While clear in their intent, the policies are written so as to provide flexibility in consideration of other design measures (building materials, landscaping, on-site fire suppression systems) that affect the need for vegetation management or other maintenance activities at the site level. Minor amendments to Policies C-EH-25 and C-DES-11 are provided for consideration, below.

PROPOSED AMENDMENTS, Board Action Required:

▪ **C-BIO-3 ESHA Buffers.**

In areas adjacent to ESHAs and parks and recreation areas, site and design development to prevent impacts that would significantly degrade those areas, and to be compatible with the continued viability of those habitat and recreation areas.

▪ **C-EH-25 Vegetation Management in Environmentally Sensitive Habitat Area.**

Minimize risks to life and property in ESHAs from uncontrolled fire and disease by allowing for the management or removal of major vegetation. Site and design new development, to minimize the need for initial and future fire safety clearance or other ongoing maintenance activities that would significantly impact ESHAs or ESHA buffers.

(see also C-BIO-3, C-BIO-19 and C-BIO-24 (ESHA, Wetland, Stream Buffers), and C-DES-11 (Minimization of Fuel Modification)).

▪ **C-DES-11 Minimization of Fuel Modification.**

Site and design new development to minimize required initial and future fuel modification and brushing in general, and in particular, within ESHAs and ESHA buffers, to the maximum extent feasible, in order to minimize habitat disturbance or destruction, removal or modification of natural vegetation, and irrigation of natural areas, while providing for fire safety.

(see also Policies C-BIO-3, C-BIO-19 and C-BIO-24 (ESHA, Wetland, Stream Buffers), C-BIO-4 (Protect Major Vegetation) and C-EH-25 (Vegetation Management in Environmentally Sensitive Habitat Areas)).

Prescriptive Rights

Approved by Board (11-13-12)

At the November 13, 2012 hearing, the Board concurred with staff's recommendation that references to "potential prescriptive rights" contained in Policy C-BIO-9 are unnecessary and should be deleted.

Discussion of Additional Amendments

In a related issue, staff had also recommended deleting a reference to "fencing" in Policy C-BIO-7 for consistency with the language of Policy C-BIO-9, which generally discourages fencing in dune areas. However, after further consideration, staff finds that appropriately designed "sand" fencing (i.e. non-permanent slat-and-wire fencing) can be an appropriate mechanism to prevent overuse of dune areas. Therefore, staff recommends adding a modified reference to fencing back into Policy C-BIO-7 as shown below (shown in double-underline; previously approved changes to Policy C-BIO-9 are also shown for context).

PROPOSED AMENDMENTS, Board Action Required

- ***C-BIO-7 Coastal Dunes***

Prohibit development in coastal dunes to preserve dune formations, vegetation, and wildlife habitats. Prevent overuse in dune areas by mechanisms such as restricting parking, and directing pedestrian traffic through signage and sand fencing to areas capable of sustaining increased use, ~~and fencing~~....

- ***C-BIO-9 Stinson Beach Dune and Beach Areas***

Prohibit development that would adversely impact the natural sand dune formation and, sandy beach habitat ~~and potential prescriptive rights~~ in the areas west of the paper street Mira Vista and the dry sand areas west of the Patios. Prohibit development west of Mira Vista, including erection of fences, signs, or other structures, to preserve the natural dune habitat values, vegetation and contours, as well as the natural sandy beach habitat, ~~and to protect potential public prescriptive rights over the area~~. Continue to pursue a land trade between the lots seaward of Mira Vista and the street right-of-way to more clearly establish and define the boundaries between public and private beach areas.

EXHIBIT #2
Local Coastal Program Amendments (LCPA)
Tracked Changes to PC-Approved LCPA Buffer Adjustment Policies

C-BIO-20 Wetland Buffer Adjustments

Approved by Planning Commission: 2-13-2012

C-BIO-20 Wetland Buffer Adjustments and Exceptions. Consider granting adjustments and exceptions to the wetland buffer width standard identified in policy C-BIO-19 in certain limited circumstances for projects that are implemented in the least environmentally damaging manner, as follows:

1. The County determines that the applicant has demonstrated that a 100-foot buffer is unnecessary to protect the resource because any disruption of the habitat values of the resource is avoided by the project and specific proposed protective measures are incorporated into the project. An adjustment to the wetland buffer may be granted only where:
 - a. There is no feasible less environmentally damaging alternative;
 - b. Measures are provided that will eliminate adverse environmental effects when possible, or when elimination is not possible, will minimize and reduce adverse environmental effects to less than significant levels; and
 - c. Any significant disruption of the habitat value of the resource is avoided.
2. The wetland was artificially created for the treatment and/or storage of wastewater, or domestic water.
3. The wetland was created as a flood control facility as an element of a stormwater control plan, or as a requirement of a National Pollutant Discharge Elimination System (NPDES) Permit, and the Coastal Permit for the development incorporated an ongoing repair and maintenance plan to assure the continuing effectiveness of the facility or stormwater control plan.
4. The project conforms to one of the purposes identified in policy C-BIO-14 or C-BIO-16.

(PC app. 12/1/11, 6/28/10)

[New policy, not in Unit I or II]

Suggested Revisions, Board Hearing #4: 1-15-2013

C-BIO-20 Wetland Buffer Adjustments and Exceptions.

1. Consider granting adjustments and exceptions to the wetland buffer width standard identified in Policy C-BIO-19 in certain limited circumstances for projects that are implemented undertaken in the least environmentally damaging manner. An adjustment may be granted in any of the following circumstances. A Coastal Permit that requires a buffer adjustment may only be considered if it conforms with zoning, and:
 - a. It is proposed on a legal lot of record located entirely within the buffer; or
 - b. It is demonstrated that permitted development cannot be accommodated entirely outside the required buffer, complies with Policy C-BIO-20.2 in order to protect the wetland and the continuance of its habitat; or

- c. It is demonstrated that the permitted development outside the buffer would have greater impact on the wetland and the continuance of its habitat than development within the buffer; or
 - d. The wetland was constructed out of dry land for the treatment, conveyance or storage of water and does not affect natural wetlands.
2. A buffer adjustment may be granted only if 4. The County determines that the applicant has demonstrated that a 100 foot buffer is unnecessary to protect the resource because any significant disruption of the habitat values of the resource is avoided by the project and specific proposed protective measures are incorporated into the project. A wetland buffer may be adjusted to a distance of not less than 50 feet if such reduction is supported by the findings of a site assessment which demonstrates that the adjusted buffer, in combination with incorporated siting, and design or other mitigation measures, will prevent impacts which would that significantly degrade the wetland these areas, and will be compatible with the continuance of the wetland ESHA. The buffer shall not be adjusted to a distance of less than 50 feet in width from the edge of the wetland these habitat areas. An adjustment to the wetland buffer may be granted only where:
- a. There is no feasible less environmentally damaging alternative;
 - b. Measures are provided that will eliminate adverse environmental effects when possible, or when elimination is not possible, will minimize and reduce adverse environmental effects to less than significant levels; and
 - c. Any significant disruption of the habitat value of the resource is avoided.
- ~~2. The wetland was artificially created for the treatment and/or storage of wastewater or domestic water (e.g., detention pond or urban drain). However, facilities that drain a naturally occurring wetland shall be subject to the provisions of C-BIO-20.1.~~
- ~~3. The wetland was created as a flood control facility as an element of a stormwater control plan, or as a requirement of a National Pollutant Discharge Elimination System (NPDES) Permit, and the Coastal Permit for the development incorporated an ongoing repair and maintenance plan to assure the continuing effectiveness of the facility or stormwater control plan.~~
- ~~4. An adjustment may be granted for the wetland buffer if the use within the buffer will. The project conforms to one of the purposes identified in policy C-BIO-14 or C-BIO-15 C-BIO-16.~~
3. A coastal permit authorizing a buffer adjustment shall require measures that create a net environmental improvement over existing conditions, in addition to what is otherwise required by minimum applicable site development standards. Such measures shall be commensurate with the nature and scope of the project and shall be determined at the site level, supported by the findings of a site assessment or other technical document. Appropriate measures may include but are not limited to:
- a. Retrofitting existing improvements or implementing new measures to reduce the rate or volume of stormwater run-off and improve the quality of stormwater run-off (e.g., permeable "hardscape" materials and landscape or site features designed to capture, absorb and filter stormwater);
 - b. Elimination of on-site invasive species ;
 - c. Increasing native vegetation cover (e.g., expand continuous riparian vegetation cover, reduce turf areas, provide native groundcover, shrubs and trees);
 - d. Reduction in water consumption for irrigation (e.g., drought-tolerant landscaping or high efficiency irrigation systems);
 - e. Other measures that reduce overall similar site-related environmental impacts.

4. The buffer shall not be adjusted to a distance of less than 50 feet in width from the edge of the wetland.

C-BIO-25 Stream and Riparian Buffer Adjustments

Approved by Planning Commission: 2-13-2012

C-BIO-25 Stream Buffer Adjustments and Exceptions. Consider granting adjustments and exceptions to the coastal stream buffer standards in policy C-BIO-24 in certain limited circumstances for projects that are undertaken in the least environmentally damaging manner. An adjustment or exception may be granted in any of the following circumstances:

1. The County determines that the applicant has demonstrated that a 100/50-foot buffer (see Policy C-BIO-24(3)) is unnecessary to protect the resource because any disruption of the habitat value of the resource is avoided by the project and specific proposed protective measures are incorporated into the project. An adjustment to the stream buffer may be granted only where:
 - a. There is no feasible less environmentally damaging alternative;
 - b. Measures are provided that will eliminate adverse environmental effects when possible, or, when elimination is not possible, will minimize and reduce adverse environmental effects to less than significant levels; and
 - c. Any significant disruption of the habitat values of the resource is avoided.
2. Where a finding based upon factual evidence is made that development outside a stream buffer area either is infeasible or would be more environmentally damaging to the riparian habitat than development within the riparian protection or stream buffer area, limited development of principal permitted uses may occur within such area subject to appropriate mitigation measures to protect water quality, riparian vegetation, and the rate and volume of stream flows.
3. Exceptions to the stream buffer policy may be granted for access and utility crossings when it has been demonstrated that developing alternative routes that provide a stream buffer would be infeasible or more environmentally damaging. Wherever possible, shared bridges or other crossings shall be used to provide access and utilities to groups of lots covered by this policy. Access and utility crossings shall be accomplished by bridging, unless other methods are determined to be less damaging, and bridge columns shall be located outside stream channels where feasible.
4. When a legal lot of record is located substantially within a stream buffer area, development of principal permitted uses may be permitted but the Coastal Permit shall identify and implement the mitigation measures necessary to protect water quality, riparian vegetation and the rate and volume of stream flows. Only those projects that entail the least environmentally damaging alternative that is feasible may be approved. The Coastal Permit shall also address the impacts of erosion and runoff, and provide for restoration of disturbed areas by replacement landscaping with plant species naturally found on the site.
5. The project conforms to the purposes and standards identified in policy C-BIO-24(1)

(PC app. 2/13/12, 12/1/11, 6/28/10)

[Adapted from Unit I Stream Protection Policy 4, p. 19]

Suggested Revisions, Board Hearing #4: 1-15-2013

C-BIO-25 Stream and Riparian Buffer Adjustments and Exceptions. Consider granting adjustments and exceptions to the coastal stream buffer standards in policy C-BIO-24 in certain limited circumstances for projects that are undertaken in the least environmentally damaging manner. An adjustment or exception may be granted in any of the following circumstances

1. A Coastal Permit that requires a buffer adjustment may only be considered if it conforms with zoning and:
 - a. It is proposed on a legal lot of record located entirely within the buffer; or
 - b. It is demonstrated that permitted development cannot be accommodated entirely outside the required buffer ~~complies with Policy C-BIO-25.2 in order to protect the stream and riparian ESHA and the continuance of its habitat;~~ or
 - c. It is demonstrated that permitted development outside the buffer would have greater impact on the stream or riparian ESHA and the continuance of its habitat than development within the buffer.

2. A buffer adjustment may be granted only if 4. The County determines that the applicant has demonstrated that a 100/50 foot stream buffer (see Policy C-BIO-24.3) is unnecessary to protect the resource because any significant disruption of the habitat value of the resource is avoided by the project and specific proposed protective measures are incorporated into the project. A stream buffer may be adjusted to a distance of not less than 50 feet from the top of the stream bank if such a reduction is supported by the findings of a site assessment which demonstrates that the adjusted buffer, in combination with incorporated siting, and design, or other mitigation measures, will prevent impacts which would that significantly degrade the stream or riparian vegetation these areas, and will be compatible with the continuance of the stream/riparian ESHA these habitat areas. The buffer shall not be adjusted to a distance of less than 50 feet in width from the edge of the stream/riparian ESHA. An adjustment to the stream buffer may be granted only where:

- a. ~~There is no feasible less environmentally damaging alternative;~~
- b. ~~Measures are provided that will eliminate adverse environmental effects when possible, or, when elimination is not possible, will minimize and reduce adverse environmental effects to less than significant levels; and~~
- c. ~~Any significant disruption of the habitat values of the resource is avoided.~~

2. ~~Where a finding based upon factual evidence is made that development outside a stream buffer area either is infeasible or would be more environmentally damaging to the riparian habitat than development within the riparian protection or stream buffer area, limited development of principal permitted uses may occur within such area subject to appropriate mitigation measures to protect water quality, riparian vegetation, and the rate and volume of stream flows.~~

(Move to Policy C-BIO-24.2): ~~3. Exceptions Adjustments to the stream buffer policy may be granted for Access and utility crossings shall be accomplished by clear span bridging, unless other methods are determined to be less disruptive to the stream and/or riparian ESHA. when it has been demonstrated that developing alternative routes that provide a stream buffer would be infeasible or more environmentally damaging. Wherever possible, shared bridges or other crossings shall be used to provide access and utilities to groups of lots covered by this policy. Access and utility crossings shall be accomplished by bridging, unless other methods are determined to be less damaging, and Bridge abutments columns shall be located outside stream channels where feasible and designed to minimize disturbance of riparian vegetation.~~

- ~~4. When a legal lot of record is located substantially within a stream buffer area, development of principal permitted uses may be permitted but the Coastal Permit shall identify and implement the mitigation measures necessary to protect water quality, riparian vegetation and the rate and volume of stream flows. Only those projects that entail the least environmentally damaging alternative that is feasible may be approved. The Coastal Permit shall also address the impacts of erosion and runoff, and provide for restoration of disturbed areas by replacement landscaping with plant species naturally found on the site.~~
- ~~5. An adjustment to the stream buffer may be granted if the use within the buffer will conform to one of the purposes and standards identified in policy C-BIO-24(1).~~

3. A coastal permit authorizing a buffer adjustment shall require measures that create a net environmental improvement over existing conditions, in addition to what is otherwise required by minimum applicable site development standards. Such measures shall be commensurate with the nature and scope of the project and shall be determined at the site level, supported by the findings of a site assessment or other technical document. Appropriate measures may include but are not limited to:

- a. Retrofitting existing improvements or implementing new measures to reduce the rate or volume of stormwater run-off and improve the quality of stormwater run-off (e.g., permeable "hardscape" materials and landscape or site features designed to capture, absorb and filter stormwater);
- b. Elimination of on-site invasive species;
- c. Increasing native vegetation cover (e.g., expand continuous riparian vegetation cover, reduce turf areas, provide native groundcover, shrubs and trees);
- d. Improvement of streambank or in-stream conditions (e.g. replace bank armoring, slope back streambanks, create inset floodplains, install large woody debris structures) in order to restore habitat;
- e. Reduction in water consumption for irrigation (e.g., drought-tolerant landscaping or high efficiency irrigation systems);
- f. Other measures that reduce overall similar site-related environmental impacts.

4. The buffer shall not be adjusted to a distance of less than 50 feet in width from the edge of the stream/riparian ESHA.

(PC app. 2/13/12, 12/1/11, 6/28/10)

[Adapted from Unit I Stream Protection Policy 4, p. 19]