Stream Conservation Area for San Geronimo Valley

Marin County Planning Commission
June 13, 2022

Marin County Community Development Agency

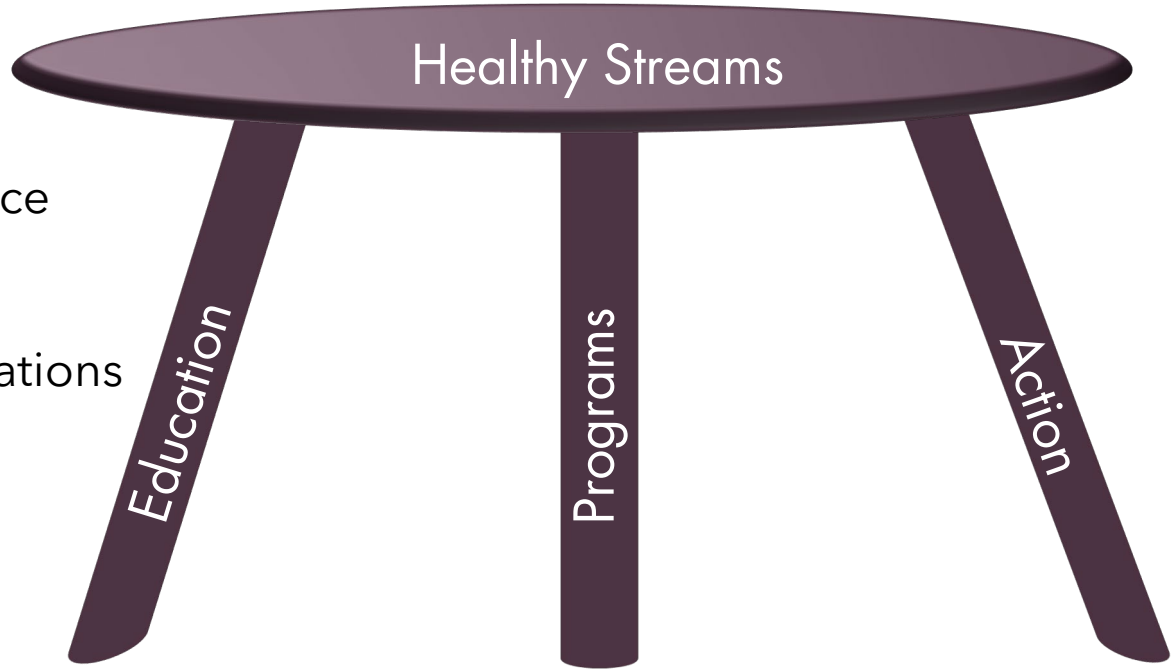
Kristin Drumm, AICP

Agenda

- Overview of Planning Commission Recommended SCA Ordinance
- Proposed Changes
- Recommendation
- Next Steps

The "Three-legged Stool"

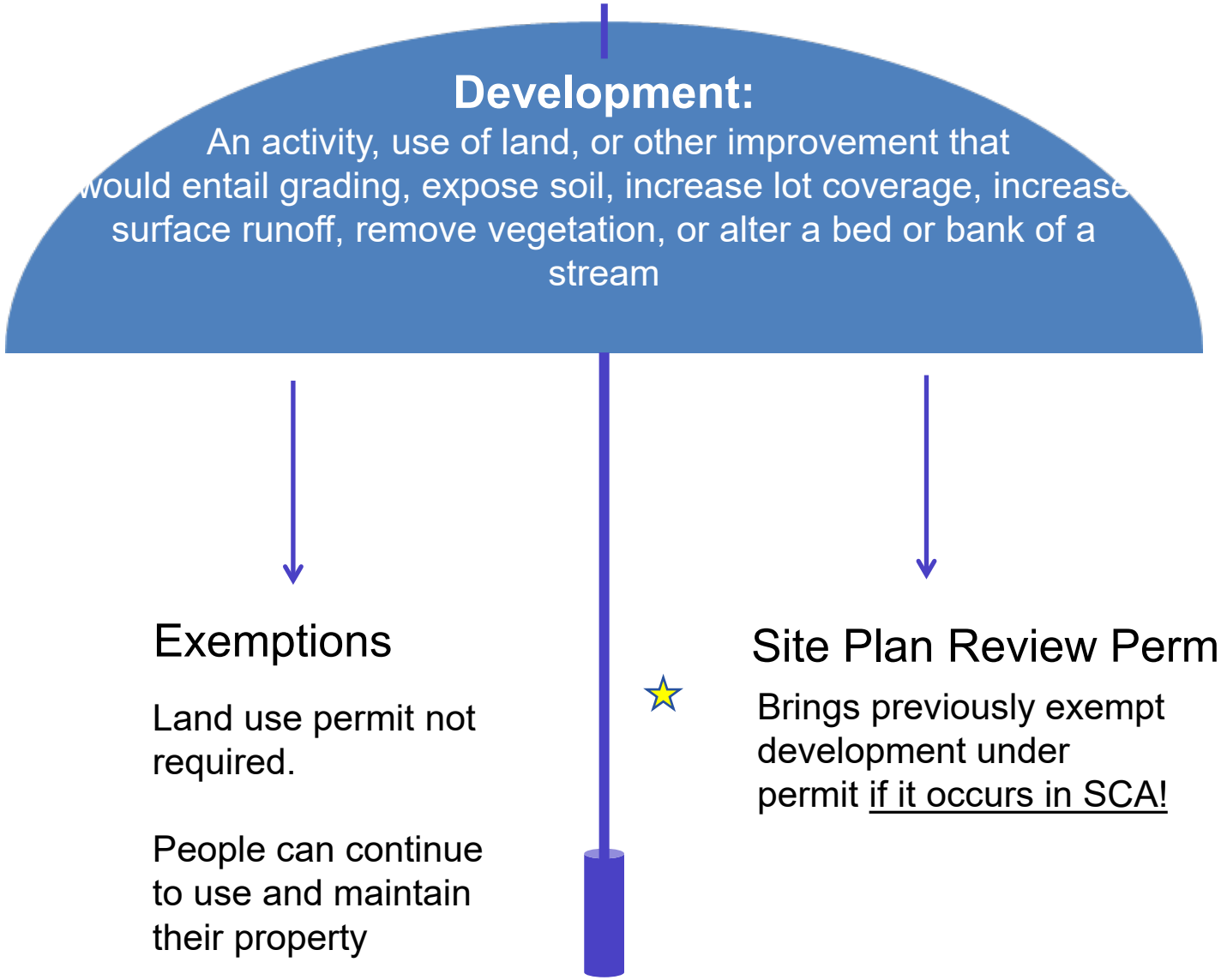
- MCSTOPPP
- Landowner Assistance Program
- Resource materials
- Community organizations



- Stream restoration
- Fish barrier removal program
- Voluntary use of BMP's
- Sedimentation reduction
- County maintenance activities (culvert replacements)

- Creek Permit (existing)
- Stream Ordinance (proposed)

Development in SCA Context



Overview of the Proposed SCA Ordinance for San Geronimo Valley

Planning Commission Recommended SCA Ordinance:

Summary of Development Code Amendments

- Rezone all lots within San Geronimo Valley to add SGV zoning "overlay"
- Establish new San Geronimo Valley development standards
- Establish SCA buffer along perennial, intermittent, & certain ephemeral streams
- Require Site Plan Review permit application
- Require site assessment
- Require projects incorporate Standard Management Practices (SMPs)
- Limit allowable land uses within the SCA
- Allow additions up to 500 s.f. of cumulative floor area
- Require finding that development does not adversely alter hydraulic capacity; result in a net loss of habitat acreage, value, or function; and/or degrade water quality
- Ensure LID applied throughout San Geronimo Valley watershed

Proposed Changes to the PC Recommended SCA Ordinance for San Geronimo Valley

1. Address Low Impact Development Standards

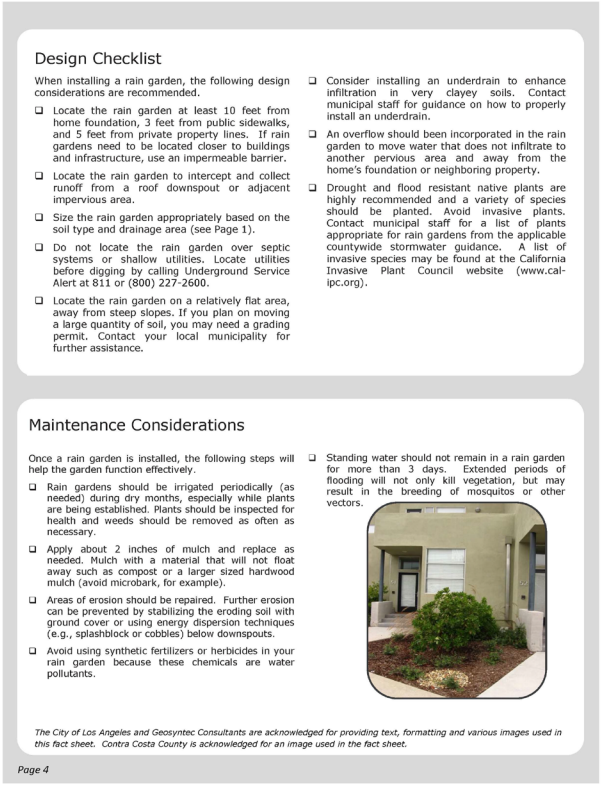
Staff proposed change:

What: Modify Section 22.30.045 to add design standards for certain roads & driveways and development that would create & replace 500 s.f. of lot coverage.

Modify Section 22.52.020 to require Site Plan Review for the above.

Would apply throughout Valley.

Why: Control & reduce fine sediment to streams to protect salmonid winter rearing habitat.



Design Checklist

When installing a rain garden, the following design considerations are recommended.

- ❑ Locate the rain garden at least 10 feet from home foundation, 3 feet from public sidewalks, and 5 feet from private property lines. If rain gardens need to be located closer to buildings and infrastructure, use an impermeable barrier.
- ❑ Locate the rain garden to intercept and collect runoff from a roof downspout or adjacent impervious area.
- ❑ Size the rain garden appropriately based on the soil type and drainage area (see Page 1).
- ❑ Do not locate the rain garden over septic systems or shallow utilities. Locate utilities before digging by calling Underground Service Alert at 811 or (800) 227-2600.
- ❑ Locate the rain garden on a relatively flat area, away from steep slopes. If you plan on moving a large quantity of soil, you may need a grading permit. Contact your local municipality for further assistance.
- ❑ Consider installing an underdrain to enhance infiltration in very clayey soils. Contact municipal staff for guidance on how to properly install an underdrain.
- ❑ An overflow should been incorporated in the rain garden to move water that does not infiltrate to another pervious area and away from the home's foundation or neighboring property.
- ❑ Drought and flood resistant native plants are highly recommended and a variety of species should be planted. Avoid invasive plants. Contact municipal staff for a list of plants appropriate for rain gardens from the applicable countywide stormwater guidance. A list of invasive species may be found at the California Invasive Plant Council website (www.cal-ipc.org).

Maintenance Considerations

Once a rain garden is installed, the following steps will help the garden function effectively.

- ❑ Rain gardens should be irrigated periodically (as needed) during dry months, especially while plants are being established. Plants should be inspected for health and weeds should be removed as often as necessary.
- ❑ Apply about 2 inches of mulch and replace as needed. Mulch with a material that will not float away such as compost or a larger sized hardwood mulch (avoid microbark, for example).
- ❑ Areas of erosion should be repaired. Further erosion can be prevented by stabilizing the eroding soil with ground cover or using energy dispersion techniques (e.g., splashblock or cobbles) below downspouts.
- ❑ Avoid using synthetic fertilizers or herbicides in your rain garden because these chemicals are water pollutants.
- ❑ Standing water should not remain in a rain garden for more than 3 days. Extended periods of flooding will not only kill vegetation, but may result in the breeding of mosquitos or other vectors.

The City of Los Angeles and Geosyntec Consultants are acknowledged for providing text, formatting and various images used in this fact sheet. Contra Costa County is acknowledged for an image used in the fact sheet.

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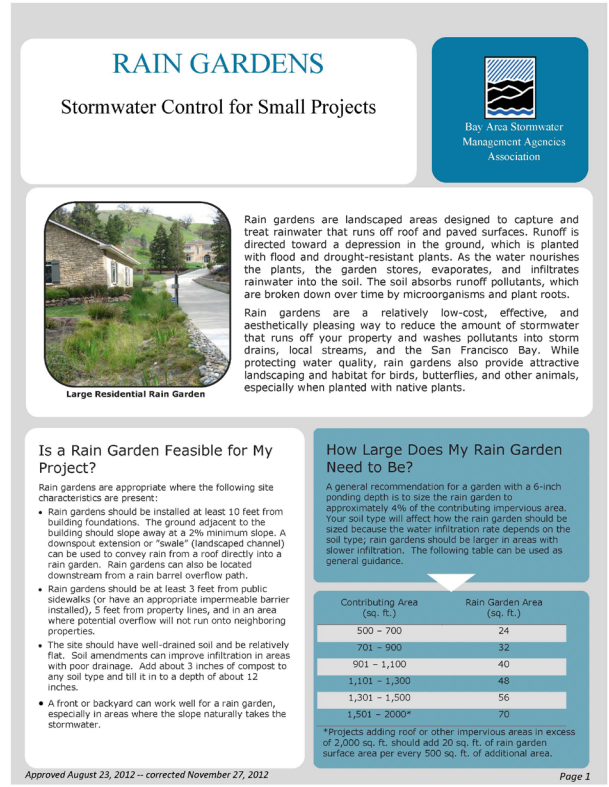


RAIN GARDENS

Stormwater Control for Small Projects

Bay Area Stormwater Management Agencies Association

Rain gardens are landscaped areas designed to capture and treat rainwater that runs off roof and paved surfaces. Runoff is directed toward a depression in the ground, which is planted with flood and drought-resistant plants. As the water nourishes the plants, the garden stores, evaporates, and infiltrates rainwater into the soil. The soil absorbs runoff pollutants, which are broken down over time by microorganisms and plant roots.

Rain gardens are a relatively low-cost, effective, and aesthetically pleasing way to reduce the amount of stormwater that runs off your property and washes pollutants into storm drains, local streams, and the San Francisco Bay. While protecting water quality, rain gardens also provide attractive landscaping and habitat for birds, butterflies, and other animals, especially when planted with native plants.

Is a Rain Garden Feasible for My Project?

Rain gardens are appropriate where the following site characteristics are present:

- Rain gardens should be installed at least 10 feet from building foundations. The ground adjacent to the building should slope away at a 2% minimum slope. A downspout extension or "swale" (landscaped channel) can be used to convey rain from a roof directly into a rain garden. Rain gardens can also be located downstream from a rain barrel overflow path.
- Rain gardens should be at least 3 feet from public sidewalks (or have an appropriate impermeable barrier installed), 5 feet from property lines, and in an area where potential overflow will not run onto neighboring properties.
- The site should have well-drained soil and be relatively flat. Soil amendments can improve infiltration in areas with poor drainage. Add about 3 inches of compost to any soil type and till it in to a depth of about 12 inches.
- A front or backyard can work well for a rain garden, especially in areas where the slope naturally takes the stormwater.

How Large Does My Rain Garden Need to Be?

A general recommendation for a garden with a 6-inch ponding depth is to size the rain garden to approximately 4% of the contributing impervious area. Your soil type will affect how the rain garden should be sized because the water infiltration rate depends on the soil type; rain gardens should be larger in areas with slower infiltration. The following table can be used as general guidance.

Contributing Area (sq. ft.)	Rain Garden Area (sq. ft.)
500 – 700	24
701 – 900	32
901 – 1,100	40
1,101 – 1,300	48
1,301 – 1,500	56
1,501 – 2000*	70

*Projects adding roof or other impervious areas in excess of 2,000 sq. ft. should add 20 sq. ft. of rain garden surface area per every 500 sq. ft. of additional area.

Approved August 23, 2012 -- corrected November 27, 2012

Page 1

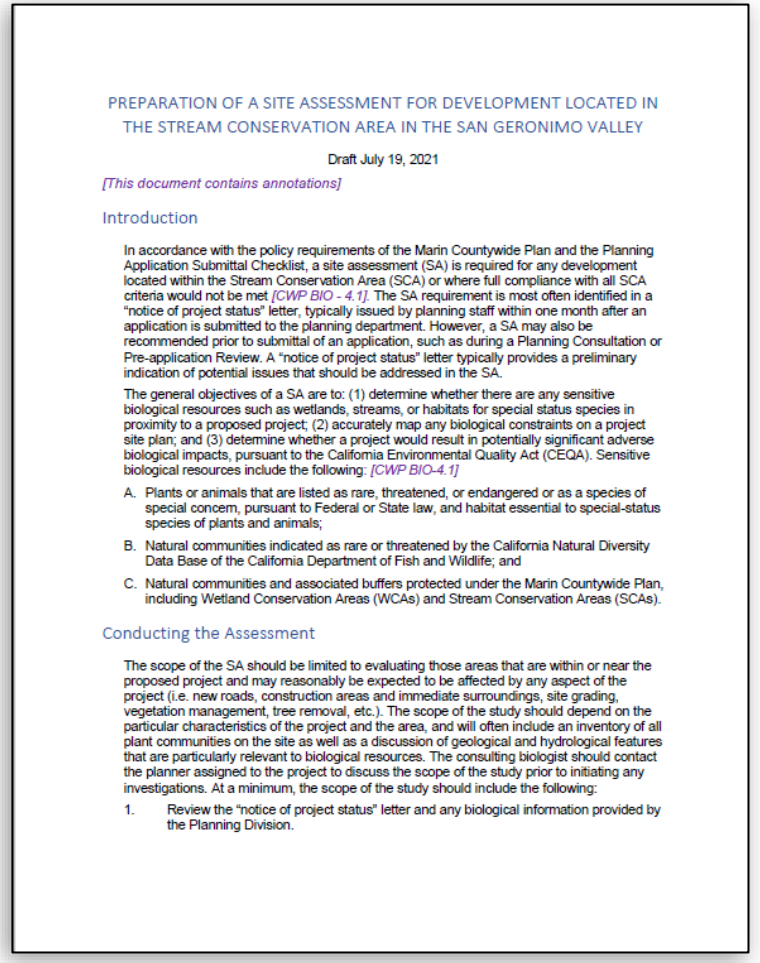
Source: BAASMA Rain Garden Fact Sheet

2. Modify Site Assessment Requirements

Proposed changes:

What: Modify Section 22.30.045 to clarify Site Plan Review requirements.

Why: Codify standards to ensure compliance with the Standard Management Practices (SMPs) & "no net loss"



PREPARATION OF A SITE ASSESSMENT FOR DEVELOPMENT LOCATED IN THE STREAM CONSERVATION AREA IN THE SAN GERONIMO VALLEY

Draft July 19, 2021

[This document contains annotations]

Introduction

In accordance with the policy requirements of the Marin Countywide Plan and the Planning Application Submittal Checklist, a site assessment (SA) is required for any development located within the Stream Conservation Area (SCA) or where full compliance with all SCA criteria would not be met *[CWP BIO - 4.1]*. The SA requirement is most often identified in a "notice of project status" letter, typically issued by planning staff within one month after an application is submitted to the planning department. However, a SA may also be recommended prior to submittal of an application, such as during a Planning Consultation or Pre-application Review. A "notice of project status" letter typically provides a preliminary indication of potential issues that should be addressed in the SA.

The general objectives of a SA are to: (1) determine whether there are any sensitive biological resources such as wetlands, streams, or habitats for special status species in proximity to a proposed project; (2) accurately map any biological constraints on a project site plan; and (3) determine whether a project would result in potentially significant adverse biological impacts, pursuant to the California Environmental Quality Act (CEQA). Sensitive biological resources include the following: *[CWP BIO-4.1]*

A. Plants or animals that are listed as rare, threatened, or endangered or as a species of special concern, pursuant to Federal or State law, and habitat essential to special-status species of plants and animals;

B. Natural communities indicated as rare or threatened by the California Natural Diversity Data Base of the California Department of Fish and Wildlife; and

C. Natural communities and associated buffers protected under the Marin Countywide Plan, including Wetland Conservation Areas (WCAs) and Stream Conservation Areas (SCAs).

Conducting the Assessment

The scope of the SA should be limited to evaluating those areas that are within or near the proposed project and may reasonably be expected to be affected by any aspect of the project (i.e. new roads, construction areas and immediate surroundings, site grading, vegetation management, tree removal, etc.). The scope of the study should depend on the particular characteristics of the project and the area, and will often include an inventory of all plant communities on the site as well as a discussion of geological and hydrological features that are particularly relevant to biological resources. The consulting biologist should contact the planner assigned to the project to discuss the scope of the study prior to initiating any investigations. At a minimum, the scope of the study should include the following:

1. Review the "notice of project status" letter and any biological information provided by the Planning Division.

3. Expand SCA to all Ephemeral Streams

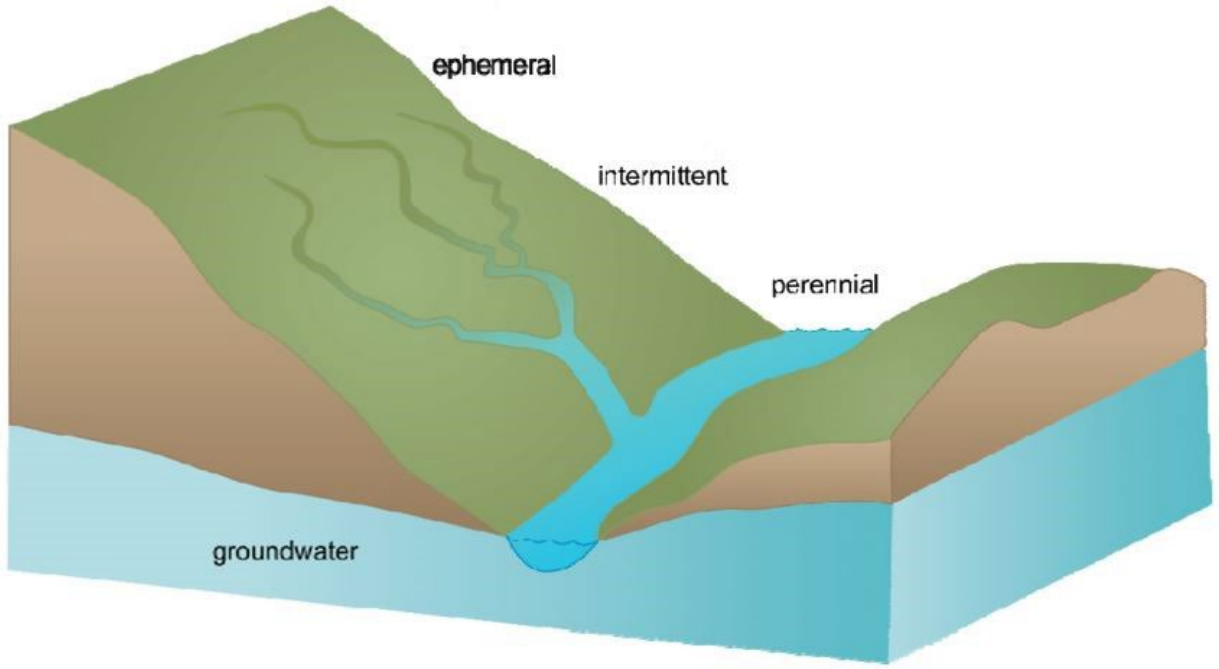
Proposed change:

What: Expand SCA to include all ephemeral streams regardless of extent of riparian vegetation or presence of sensitive resources.

Applies only to ephemerals within San Geronimo Valley.

Ephemerals are mapped and shown on marinmap.org.

Why: Ephemerals provide important hydrological functions and are important to overall watershed health.



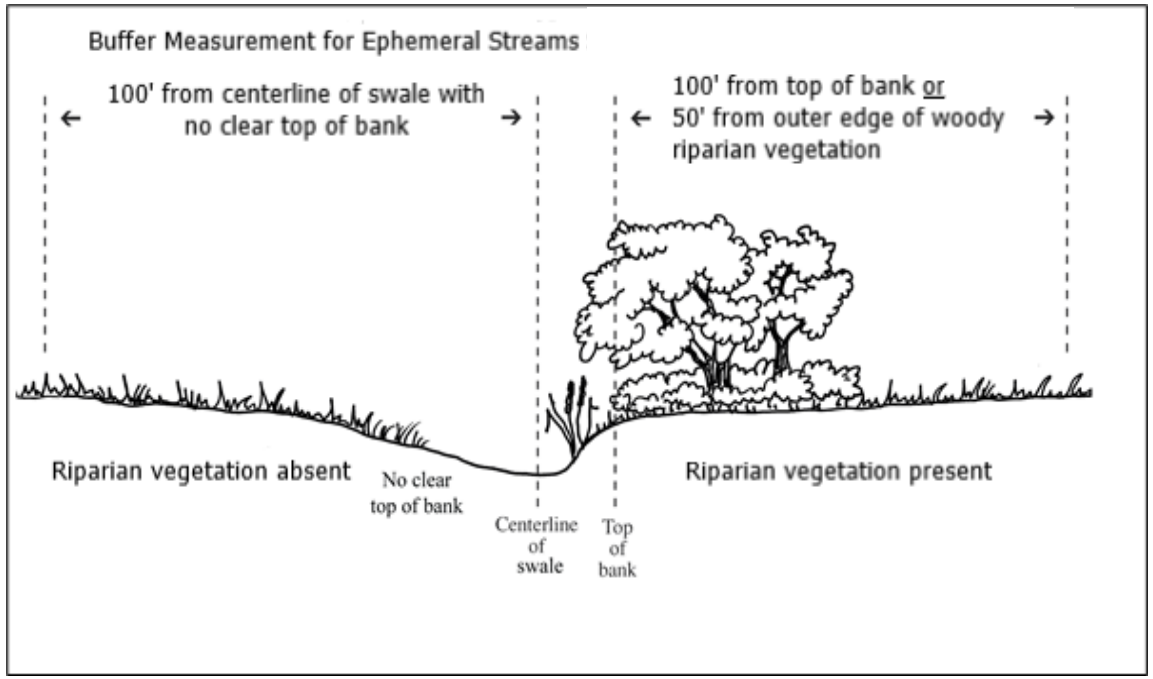
Source: McDonough, O.T. & Hosen, Jacob & Palmer, Margaret. (2011). Temporary streams: The hydrology, geography, and ecology of non-perennially flowing waters. River Ecosystems: Dynamics, Management and Conservation. 259-290.

4. Clarify measurement of SCA for Ephemerals

Proposed Change:

What: Measure the SCA from top of stream bank or from the centerline of swale if there is no defined top of bank.

Why: Provide clarity; approach consistent w/ 20’ drainage setback (CWP Figure 2-2).



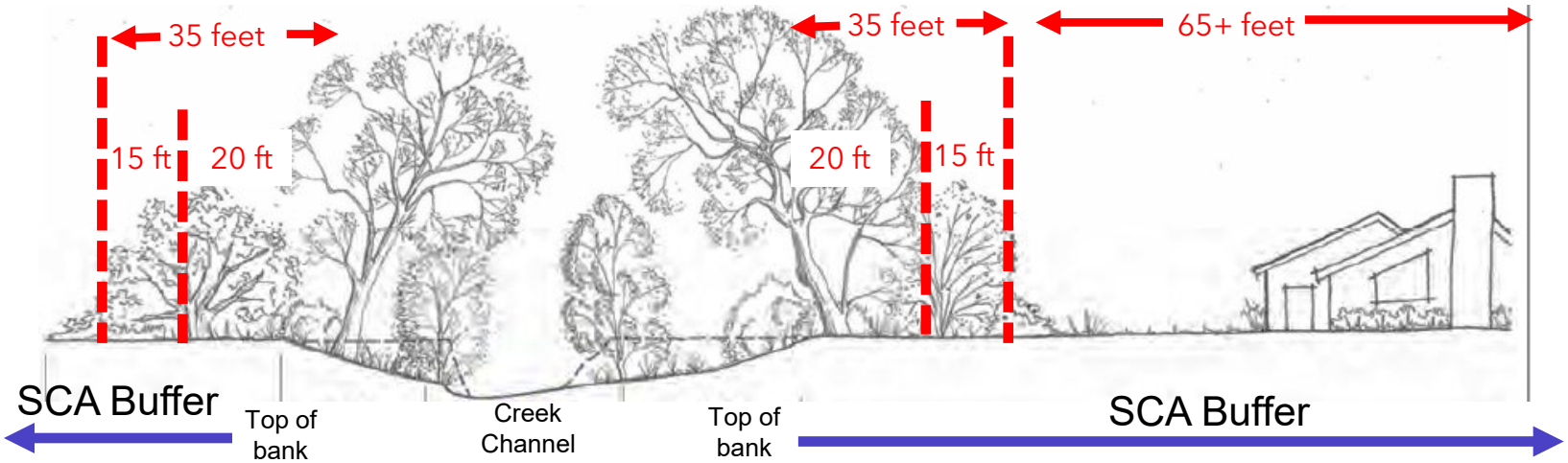
5. Create new 35-foot buffer

Proposed change:

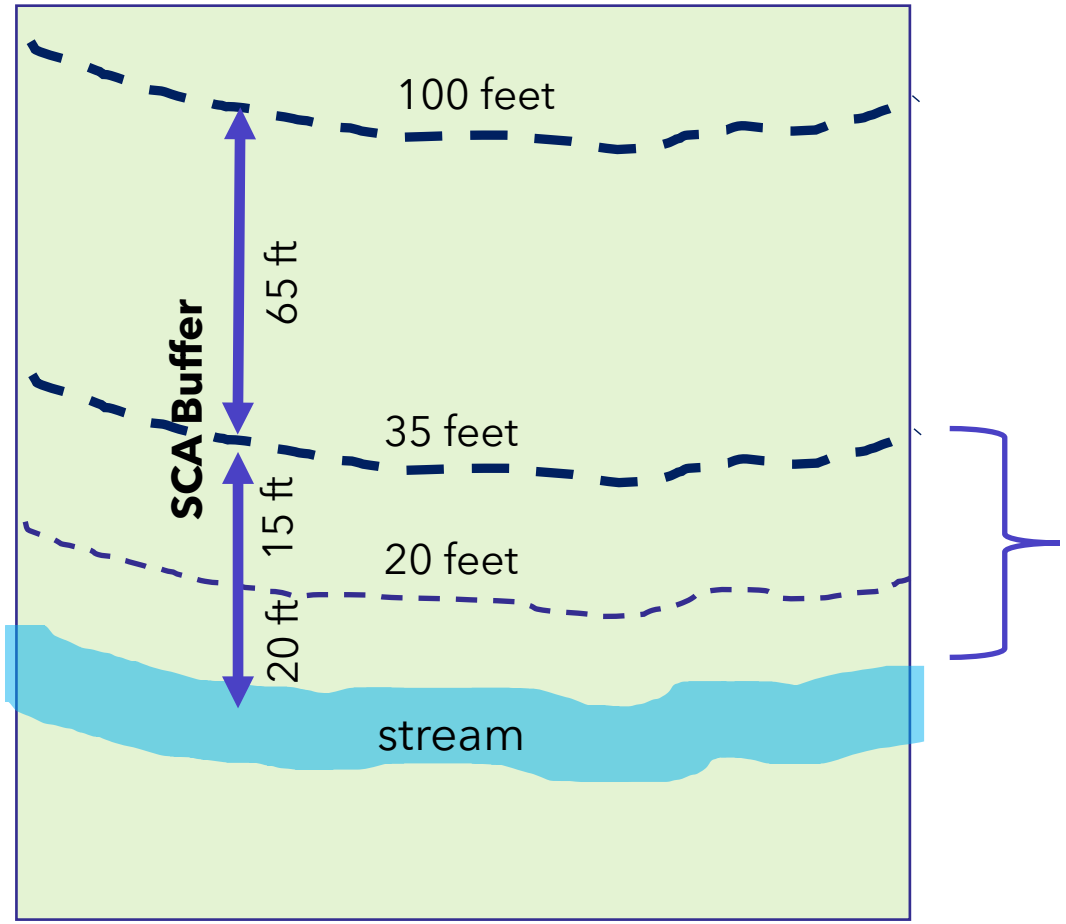
What: Creates new 35-foot buffer along all streams.

Measured from stream top of bank, or from centerline of swale for ephemerals without a defined top of bank.

Why: Protect key riparian functions by promoting native vegetation



What is allowed within the 35-foot buffer?

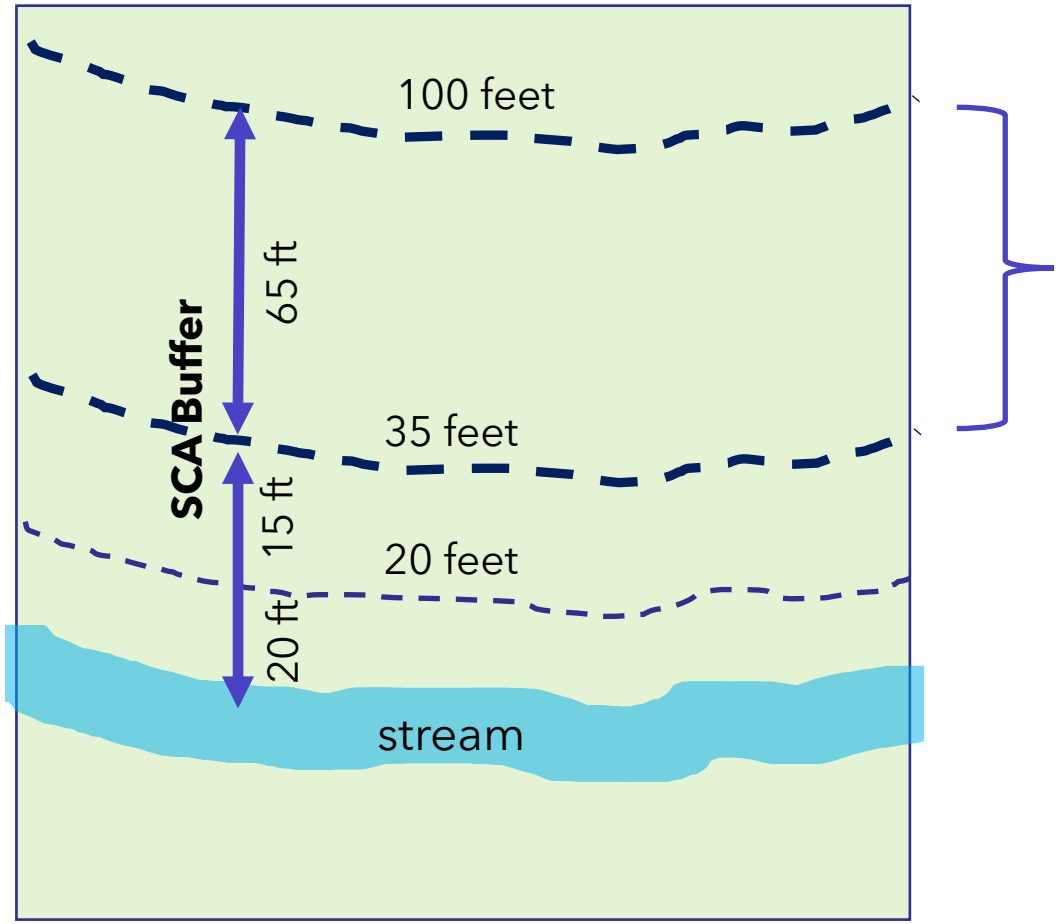


Proposed change:

<u>Allowable land use outside 35 ft from top of bank within the SCA:</u>

- Maintenance & repair of existing permitted structures within the existing footprint
- Driveway & road crossings
- Habitat improvement projects
- Water monitoring installations
- Passive recreation
- Necessary water & flood control projects

What is allowed outside 35 ft and within rest of SCA ?



Proposed change:

<u>Allowable land use outside 35 ft from top of bank within the SCA:</u>

- Maintenance & repair of existing permitted structures
- Additions up to 300 s.f. of lot coverage
- Driveway & road crossings
- Habitat improvement projects
- Water monitoring installations
- Passive recreation
- Necessary water & flood control projects
- Certain ag uses

6. Reduce additions to 300 s.f. of lot coverage

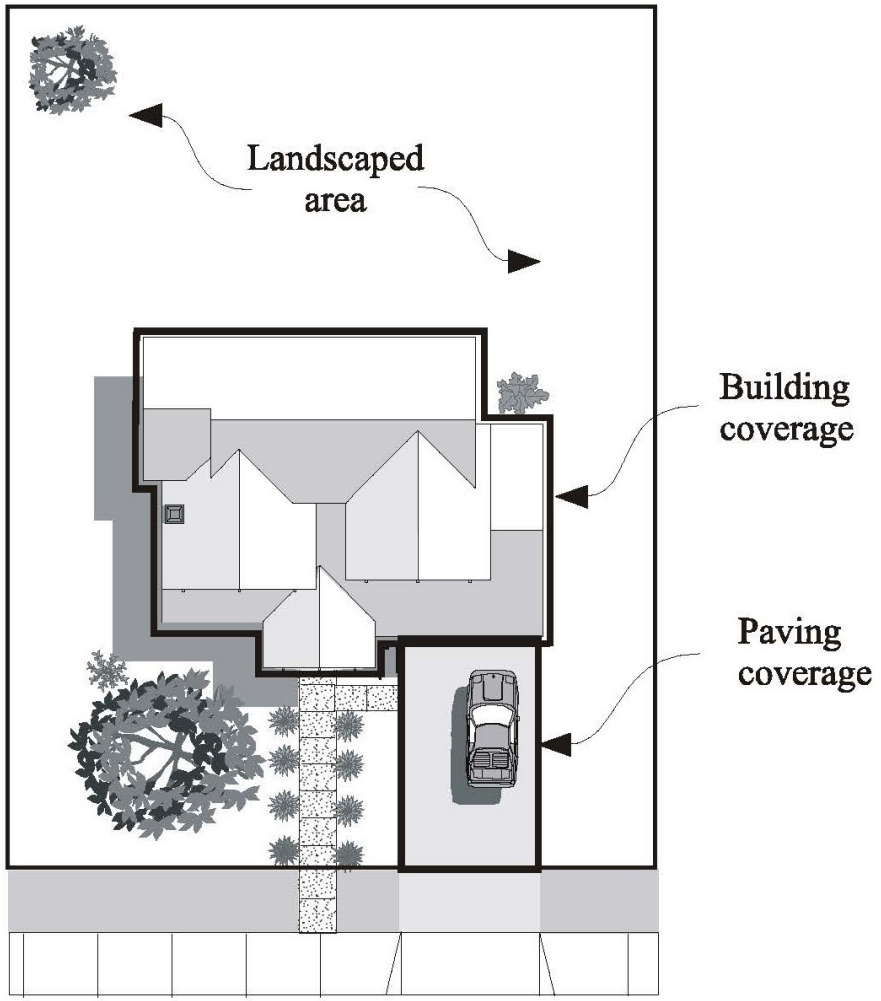
Proposed change:

What: Reduce potential additions from 500 s.f. of floor area to 300 s.f. of lot coverage.

Vertical additions not counted towards lot coverage total.

No additional lot coverage once exhausted.

Why: Limit total impervious surface in the SCA.



What is Lot Coverage?

The percentage of a total site area occupied by buildings and other structures, impervious paving, and other hard surfaces that have water runoff factor of **0.5** or more.

Table 4.1 Runoff Factors for small storms	
Roofs and paving	1.0
Landscaped areas	0.1
Bricks or solid pavers – grouted	1.0
Bricks or solid pavers – on sand base	0.2
Pervious concrete or asphalt	0.1
Turfblock or gravel	0.1
Open or porous pavers	0.1

Source: BAASMA Post-Construction Manual Design Guidance for Stormwater Treatment and Control For Projects in Marin, Sonoma, Napa, and Solano Counties

7. Modify exceptions to SCA compliance

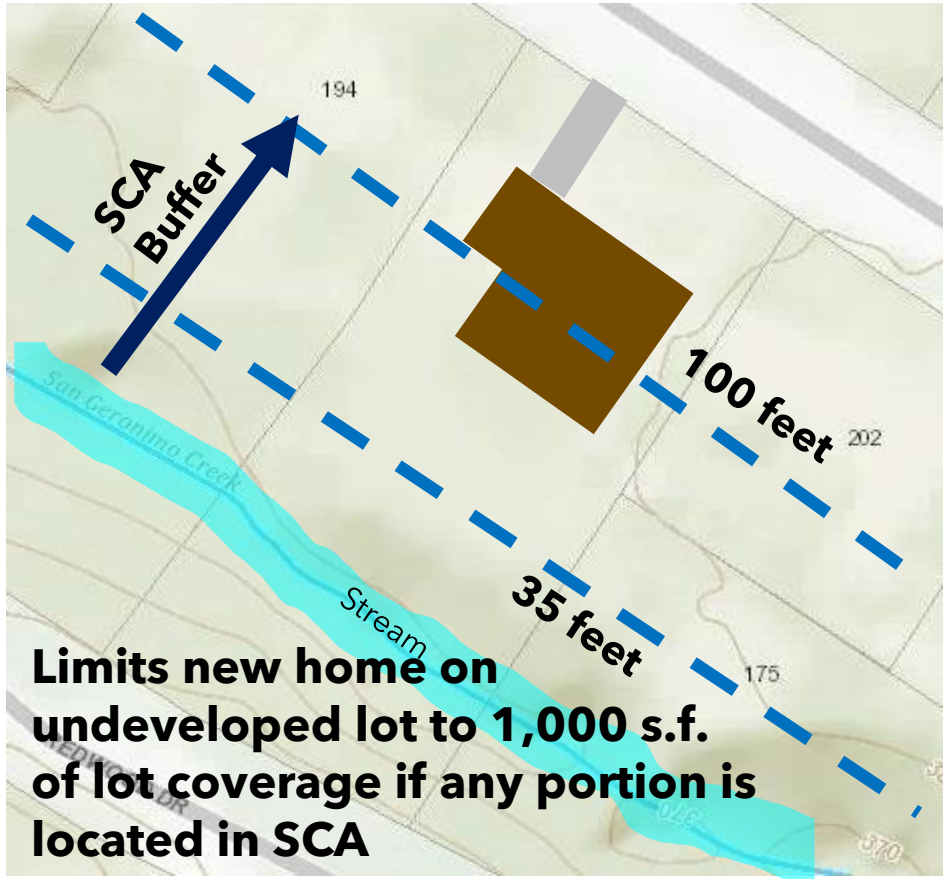
Proposed Changes:

What: Allow exceptions only if the parcel is **undeveloped** and:

1. A parcel falls entirely within the SCA; and/or
2. Development on the parcel outside the SCA cannot be accomplished even if limited to 1,000 s.f. of lot coverage on the entire parcel that minimizes SCA encroachment or relocated on another portion of the parcel to avoid SCA encroachment.

No exceptions allowed for uses within the 35-ft buffer.

Why: Limit cumulative impervious surface in the SCA.



8. Modify exemptions for removal of pyrophytic vegetation

Proposed Change:

What: Removal of any live tree or vegetation greater than 6" dbh that is below top of bank would not be exempt unless the tree or vegetation presents an immediate hazard to public safety.

Why: Mature trees provide high quality habitat elements when located immediately adjacent to the stream channel.

Large trees provide roots to stabilize banks and provide habitat for fish.

Source: San Geronimo Valley Salmon Enhancement Plan

9. Clarify “no net habitat loss”

Proposed change:

What: Clarifies “no net habitat loss” to mean complete replacement of habitat acreage, value and function.

Why: Ensure rehabilitation of habitat quantity and quality.

How: Onsite replacement with native vegetation at a 2:1 ratio.

Monitor at least five years to ensure effective replacement.

10. Require habitat restoration fee

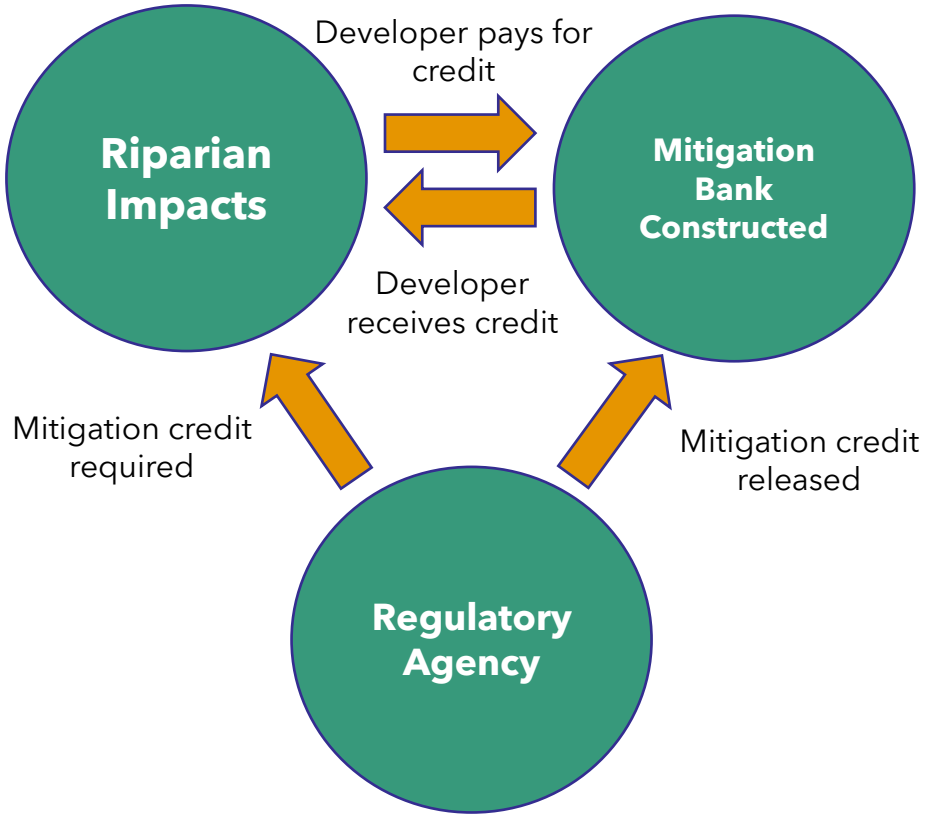
Proposed Change:

What: All Site Plan Review permit approvals required to pay impact fee.

Program fee tbd – nexus study.

Onsite mitigation until mitigation bank is established.

Why: Offset development impacts to streams to provide funding for restoration and enhancement of riparian habitat in the Valley.



Mitigation Bank

10. Enforce SCA Compliance

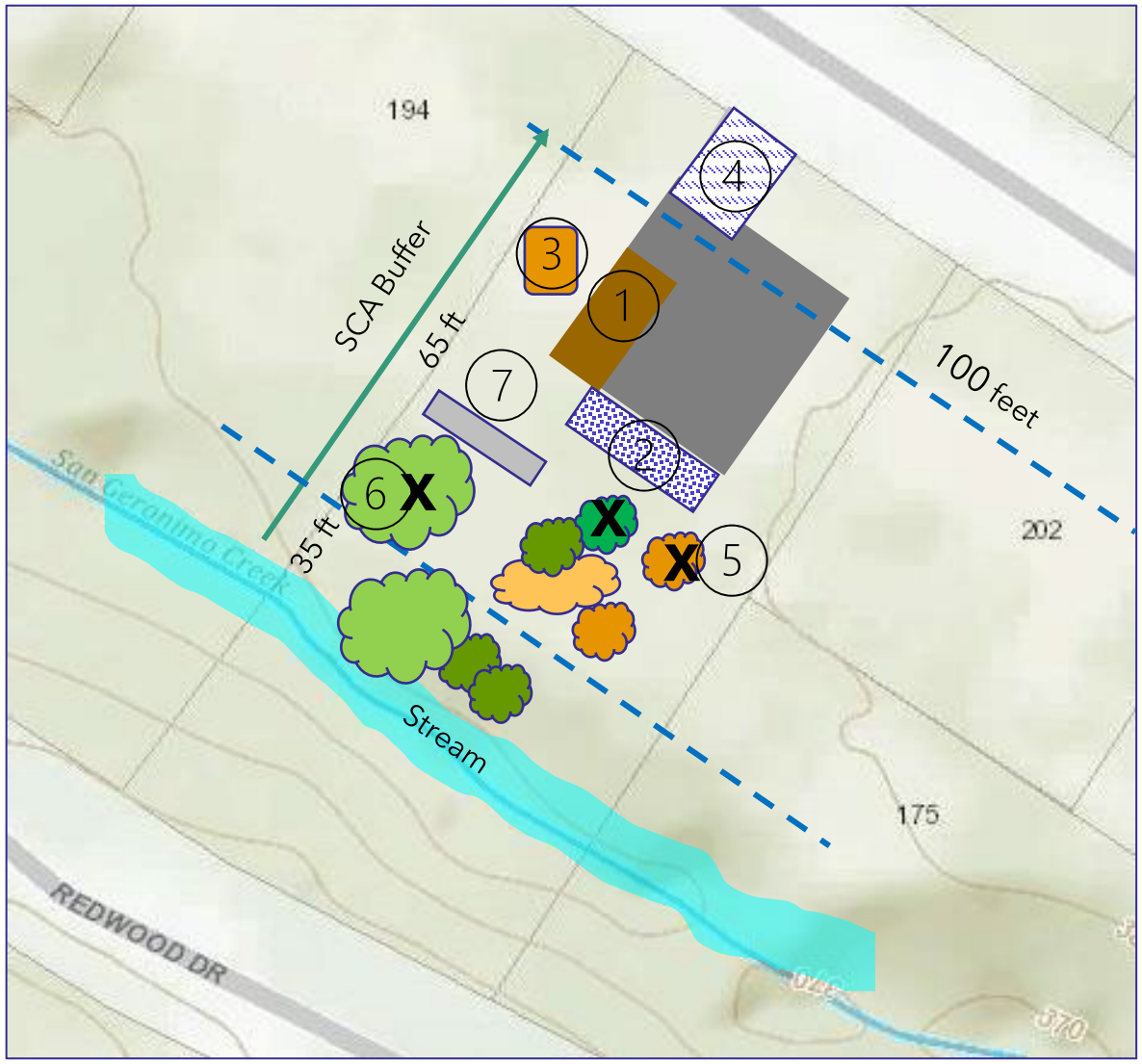
Proposed change:

What: Amplify violations of ordinance provisions are a public nuisance subject to abatement remedies, including administration citation fines.

All Marin County Code provisions are subject to the same process for correcting and/or abating a nuisance or violation.

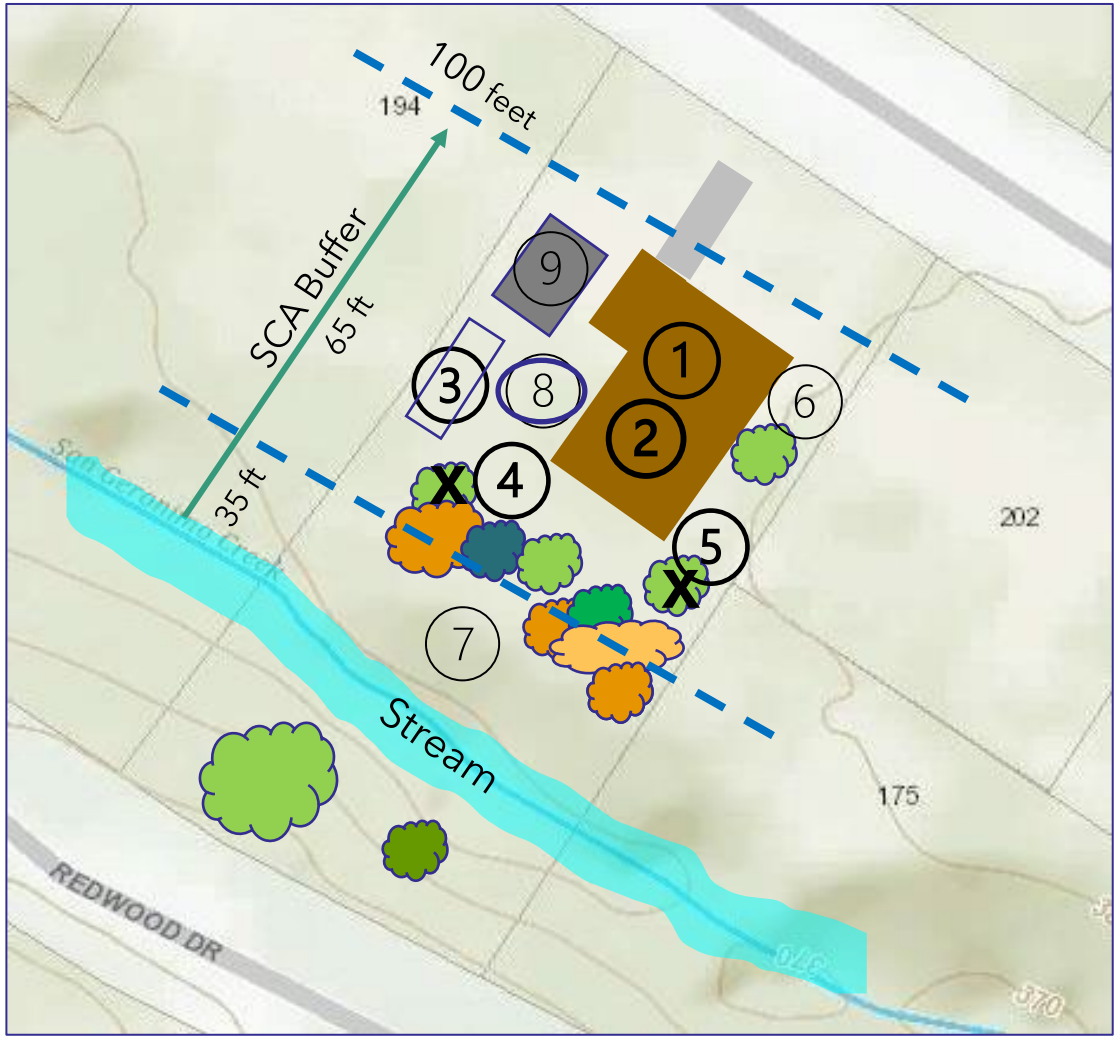
Why: Ensure adequate compliance and enforcement of measures for the protection of riparian habitat.

Examples of activities that will require a Site Plan Review permit



1. Additions to existing structures
2. Accessory structures (deck, patio, shed, pool)
3. Dog run or chicken coop
4. New or expanded driveway
5. Removal of native vegetation
6. Tree removal (healthy native protected/heritage tree)
7. Retaining wall

Examples of Activities exempt from Site Plan Review Permit



1. Interior remodeling
2. Repair & maintenance
3. Repair & maintenance of septic systems (including replacement)
4. Trim and removal of dead, exotic, & fire prone vegetation
5. Removal of pyrophytic live trees or vegetation
6. Planting of (non pyrophytic) native vegetation
7. Mowing, trimming, weeding
8. Temporary/movable objects (trampolines, RVs, etc)
9. Category 1 Accessory Dwelling Units
10. Solar energy systems & electronic vehicle charging stations

Other Changes

VOLUNTARY POINT OF SALE INSPECTION PILOT PROGRAM

INSPECTIONS FOR SCA COMPLIANCE

ANONYMOUS COMPLAINTS

EXPAND ENFORCEMENT CAPACITY

BIANNUAL REPORT REQUIREMENTS

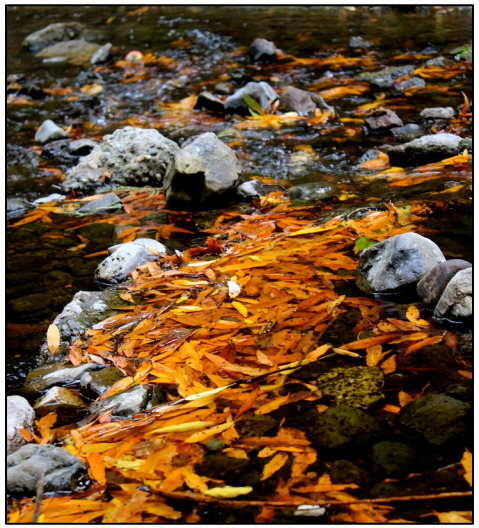
Resource Materials

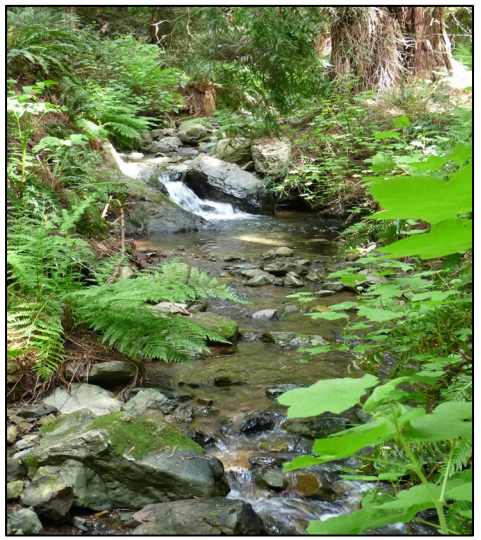
- Planning Application Submittal Guide
- Site Assessment Requirements
- Standard Management Practices
- San Geronimo Valley Fact Sheet
- Landowner Resource Guide for Properties Near Streams
- CWP riparian protection policies
- Frequently Asked Questions
- SCA webpage

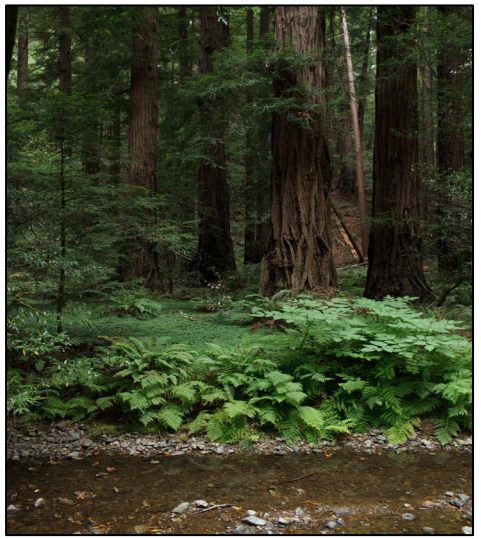
Recommendation

Approve the following:

1. Resolution to Amend the Development Code for the SCA Ordinance; and
2. Resolution to Adopt the Rezoning for the San Geronimo Valley







Next Steps

7/19

Board of Supervisors action on Revised SCA Ordinance.

Summer/Fall

Community outreach, workshops, demonstration projects & technical assistance

9/1 Adopt point of sale pilot

10/11

Settlement finalized; SCA Ordinance becomes effective

Launch anonymous complaint & inspection programs

Spring 2023

March: Launch point of sale pilot

Report to Board on SCA Ordinance status

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Thank you