

From: [Andrea Taber](#)
To: [Rice, Katie](#); [Kinsey, Steven](#); [Adams, Susan](#); [Arnold, Judy](#); [Sears, Kathrin](#)
Cc: [Dan Stein](#); [Thorsen, Suzanne](#); [Lai, Thomas](#)
Subject: Sleepy Hollow Homeowners Association Letter of Opposition to the SCA Ordinance
Date: Wednesday, May 22, 2013 8:12:53 PM
Attachments: [Document4.docx](#)

Dear Supervisors-

Attached please find our letter of opposition to the SCA Ordinance for Sleepy Hollow as drafted by our attorney Neil Moran of Freitas McCarthy MacMahon & Keating, LLP.

Sleepy Hollow Homeowners Association

May 3, 2013

Board of Supervisors of Marin County
3501 Civil Center Drive
San Rafael, CA 94903-4157

**Re: Stream Conservation Area (SCA)
Proposed Amendments to the Development Code**

Honorable Members of the Board of Supervisors:

INTRODUCTION

The Sleepy Hollow Homes Association (SHHA) objects to the proposed changes to Chapters 22.33 (Stream Protection) and 22.63 (Stream Conservation Area Permit) as they would apply to the residents of the unincorporated portion of San Anselmo known as Sleepy Hollow.

We ask that the County exempt and/or delay implementation of any changes to Chapters 22.33 and 22.63 *as to the city-centered corridor streams, including Sleepy Hollow.*

The SHHA supports implementation of the proposed amendments to the San Geronimo Valley, to protect wildlife habitat in streams where Coho Salmon currently exist. The SHHA supports regulations to ensure the health and survival of the species in these areas. The SHHA recognizes the urgency of this matter to the San Geronimo Valley, both for the survival of the endangered and declining Coho population and for the property rights of the affected residents who are currently subject to a building moratorium.

The one-size-fits-all approach inherent in the current draft is wrong-headed. Unlike the San Geronimo Valley, Sleepy Hollow Creek and other areas Marin east of White's Hill (the built-up City-Centered Corridor streams) are heavily urbanized, with retaining walls, bridge pillars, and other concrete in the creek channel that stabilize creek hydrology. The proposed draft amendments fail to take into account that these heavily urbanized streams are fundamentally different from less urbanized streams in the San Geronimo Valley that support Coho salmon, a species much more sensitive to the pressures of urbanization. The County should recognize this and defer rollout of the outreach and mapping of the SCA Ordinance as applied to City-Centered Corridors until a sound regulation can be drafted and rolled out first in the Coho watersheds under immediate threat.

There is no need for haste in locations like Sleepy Hollow and other the City Centered Corridor's heavily urbanized streams.

The SHHA opposes the proposed amendments on the following additional grounds:

- The County has failed to notify many affected residents in Sleepy Hollow of the proposed amendments. Thus, the proposed amendments deny our clients' their due process and equal protection rights.
- The proposed amendments as applied to the residents of Sleepy Hollow are *ad hoc* takings, and constitute unreasonable limitations on the use and value of the land.
- The proposed amendments are arbitrary and fail the "no rational basis" test.
- They constitute confiscatory government conduct in violation of our clients' substantive due process rights.
- The amendments contain unduly burdensome permitting procedures and costly new fees that result in no public benefit.
- These amendments turn our clients' properties into pseudo "wetlands" without compensation or public benefit.
- We reserve all other grounds for opposition.

SCA PLANNING CONSIDERATIONS FOR SLEEPY HOLLOW

The residents of Sleepy Hollow overwhelmingly oppose the draft SCA Ordinance because it provides no environmental benefit to Sleepy Hollow, imposes onerous permitting requirements, unnecessary and exorbitantly expensive fees, and diminishes our clients' property values.

Here are some of our concerns and some of the deficiencies in the planning process and proposed amendments:

- The County has a mandate to directly inform property owners of a proposed action which may affect their property. The County generated list of Sleepy Hollow property owners is incomplete and excludes a significant number of homes in proximity to existing intermittent and ephemeral streams.
- The adoption of the SCA Ordinance has been fast-tracked and does not provide adequate time for public review and comment and substantive draft modifications.
- Although completion of Countywide Plan Implementing Programs, such as BIO-4.b and BIO-4.d, is not mandated prior to the implementation of the SCA Ordinance, it is reasonable to assume that studies to "Re-evaluate the SCA Boundaries" and "Establish Functional Criteria for Land Uses in SCAs" would provide critical and relevant information, and therefore should be completed prior to adopting the ordinance.
- The draft SCA Ordinance will diminish real estate values in Sleepy Hollow. Prospective buyers will be intimidated by title constraints imposed by the ordinance, uncertainty and excessive permitting costs related to improvements and realtor disclosures which will create ambiguity and threaten sales.
- Sleepy Hollow should be exempt from the SCA Ordinance because it is almost completely built out and has its own protective measures in place. These include building

ordinance No. 784 R-1:B-D which identifies setbacks, building restrictions, and guidelines for development in the community, as well as the Countywide watercourse preservation ordinances 11.08.010/11.08.020. The Sleepy Hollow Homeowners Association Creek Committee successfully manages flood protection, creek stewardship, hydrology, wildlife protection, and education in the community. Additional regulations are unnecessary, onerous, and duplicate what is already in place.

- The September 10, 2012 ruling by the Marin County Superior Court specifically addresses Coho salmon in San Geronimo Valley. Coho salmon do not exist in the intermittent and ephemeral streams of Sleepy Hollow.
- The SCA Ordinance does not provide any additional environmental benefit or protection for Sleepy Hollow.

PROPOSED AMENDMENTS TO THE DRAFT SCA

The draft Marin Stream Conservation Area Ordinance, which has the laudable goal of protecting the County's streams, is seriously flawed when applied to built-out areas such as Sleepy Hollow, for the following reasons:

- o Because Sleepy Hollow is largely built out, the draft ordinance would provide little or no benefit for wildlife habitat, including fish.
- o Because Sleepy Hollow is largely built out, the draft ordinance would provide little or no benefit for the hydraulic character of Sleepy Hollow Creek.
- o In many cases, the draft ordinance would significantly degrade property values.
- o For home-owners wishing to remodel, the draft ordinance would significantly increase compliance costs.
- o For all affected property owners, the draft ordinance would significantly degrade property rights.
- o On many properties, the draft ordinance would cause environmental damage by compelling construction on slopes and removal of mature vegetation outside the riparian corridor.

Below are our proposed revisions to the draft ordinance to make the ordinance less onerous to affected residents.

We propose the draft amendments exclude all areas east of White's Hill, including Sleepy Hollow.

We also propose the following changes in the draft ordinance. Proposed changes to the text of the ordinance are shown in *italics*, with ~~strikeout~~ and underline.

- 1) **STANDARD OF REASONABLENESS.** The draft ordinance is unreasonable *per se* and in general should be revised to reflect **a standard of reasonableness**. It might be suggested that the County concurs in this unfavorable assessment of the draft regulations, since the draft regulations exempt County activities from the ordinance and impose it only on private citizens.

22.33.010 – Purpose of Chapter. The provisions of this Chapter are intended to implement the Stream Conservation Area (SCA) policies and programs in the Countywide Plan to protect the active channel, water quality and flood control functions, and associated fish and wildlife habitat values along streams. This is accomplished by assuring that permitted development avoids SCAs wherever ~~feasible~~ it is reasonable to do so, minimizes any ~~unavoidable-unreasonable~~ incursion into the SCA, and mitigates adverse impacts.

22.33.030 – Stream Conservation Area General Requirements.

A. Requirements.

Consistent with the purpose of this Chapter, the following requirements shall be implemented to achieve the maximum reasonable protection of stream and riparian resources:

1. Development shall avoid SCAs wherever ~~feasible-it is~~ reasonable to do so.
2. Where complete avoidance of an SCA is not ~~feasible-reasonable~~, the stream channel shall be avoided to the maximum extent ~~feasible-reasonable~~ and incursion into the SCA shall be reasonably minimized.
3. Development within the SCA shall ~~not be permitted~~ regulated if it would directly or indirectly result in any of the following:
 - a. Adverse alteration of hydraulic capacity;
 - b. A net loss in habitat acreage, value, or function;
 - c. Degradation of water quality.

22.63.010 – Purpose of Chapter. This Chapter provides procedures for the processing of Stream Conservation Area (SCA) Permits where avoidance of the SCA is not ~~feasible~~ reasonable.

- 2) SETBACKS. The draft ordinance is seriously flawed with respect to its requirements for setbacks. The draft Ordinance applies varying setbacks based on the gross lot size. The spirit of this provision is to allow lesser setbacks on smaller sites, which is fair *in principle*. However, it is a very blunt instrument which produces arbitrary and capricious results when applied to actual lots.

Consider a ½ acre lot, about 105' x 210', with a stream running along one end, no slopes or existing trees and buildings to preserve, and no easements to avoid. With a typical rear yard setback, therefore would be enough room to accommodate the draft ordinance setback of 50' and still have a reasonable building site.

Now consider the same ½ acre lot with the stream running through the middle of it.) After accommodating the rear setback and the SCE setback, the remaining building area is a strip of land only a few feet wide, which is useless as a building site.

This problem would be even worse if the property has slopes or mature vegetation that should be preserved, buildings or swimming pools which need to be avoided, etc. The proposed

setbacks would, in these instances, compel the property owner to build on slopes (potentially aggravating erosion), remove mature vegetation (worsening, not protecting, the hydraulic character of the creek and the wildlife habitat of the property), or demolish valuable existing structures.

The fair solution to this is to make the setback from the SCA a variable function of the depth of the usable area, excluding the stream and riparian corridor, required setbacks, slopes, areas with mature trees, easements, and areas with existing structures (including swimming pools). This solution will fairly embody the spirit of the ordinance, which is that setbacks should be greater on lots where the property owner has room to accommodate them but smaller where the property owner is more constrained.

22.33.030 – Stream Conservation Area General Requirements.

B. SCA Setbacks.

The Stream Conservation Area includes setbacks as provided in this subsection.

1. SCA setbacks for properties within the City-Centered Corridor:

a. For lots more than 2 acres in size, the SCA setback shall be a minimum of 100 feet from each side of the top of bank;

b. For lots from 0.5 acres to 2 acres in size, the SCA setback shall be a minimum of 50 feet from each side of the top of bank; and

10% of the distance from the boundary of the SCA to the opposite edge of the usable area of the lot. The usable area is defined as the largest contiguous portion of the property which is suitable for building, excluding the stream and riparian corridor, required setbacks, areas where the slope exceeds the average slope of the lot by 10% or more, areas with mature trees, easements, and areas with existing structures (including swimming pools). The distance from the boundary of the SCA to the opposite edge of the usable area of the lot shall be measured parallel to the nearest property line which intersects the SCA.

(A similar approach is appropriate for Inland Rural Corridor, Baylands Corridor, and Coastal Corridor areas, but we defer to others the specifics.)

This 10% standard is roughly consistent with the setbacks proposed in the draft ordinance. For example, under the draft ordinance, a rectangular lot 100' x 200', with a stream along one of the 100' sides, would be required by the proposed ordinance to have a setback of 20', 10% of the lot depth.

As discussed below, the draft ordinance should state the regulations unambiguously, not empower the County staff to set regulations at their discretion. Hence, section 22.33.030.B.3 should be stricken.

22.33.030 – Stream Conservation Area General Requirements.

B. SCA Setbacks.

~~3. In all Corridors, regardless of lot size, an additional SCA setback may be required based on the results of a Site Assessment. A Site Assessment~~

~~may also be required to confirm the avoidance of woody riparian vegetation and to consider site constraints, identify the presence of other sensitive biological resources, provide options for alternative mitigation, and determine the precise SCA setback.~~

- 3) SCOPE OF THE DRAFT ORDINANCE; BUREAUCRATIC EMPOWERMENT; POTENTIAL FOR ABUSE. The scope of the draft ordinance is unreasonably broad. Furthermore, the Ordinance gives extraordinary discretion to the County staff to impose requirements on applicants that are not part of the public process for considering the ordinance. It should explicitly state the requirements that applicants must observe, rather than empowering County staff to create requirements as they see fit. This is a fundamental principle of American democracy: we have a “government of laws, and not of men”, in the words of John Adams. (He meant “people”.)

22.63.020 – Applicability to Development

A. Application of SCA Provisions.

1. The provisions of this Chapter apply to permitted development within the Stream Conservation Area as described in Chapter 22.33 (Stream Protection). Except as specified in this Chapter, the exemptions from Land Use Permit Requirements in Section 22.06.050 (Exemptions from Land Use Permit Requirements) do not apply to development within the Stream Conservation Area. Compliance with this Chapter does not affect applicability of any other requirements by this or any other agency. As used in this Chapter, permitted development includes the following structures and other development activities:

a. All structures to the extent that they are in contact with grade, regardless of whether the work requires a building or grading permit, including fencing that entirely prevents wildlife access to a riparian habitat, decks on grade, platforms on grade, parking lots, utility crossings, pedestrian or vehicular access ~~routes~~ structures, and other similar improvements, but excluding fencing, decks, access routes, and other structures supported above grade by structures comprising 20% or less of the horizontal area of the structure;

b. Clearing of 50% or more of the plant mass in that portion of the property occupied by the SCA ~~land~~ including the removal of any vegetation or any protected or heritage tree;

c. The deposition of refuse or other nonindigenous material not otherwise subject to a permit pursuant to Marin County Code Section 11.08 (Watercourse Diversion or Obstruction); ~~or~~

d. Any other activities determined by the Director to have potentially adverse impacts to hydraulic capacity; habitat acreage, value or function; or water quality.

- 4) TIER 1 PERMITS. The draft ordinance requires a Site Assessment to identify impacts and mitigation measures. This, in and of itself, is a reasonable requirement. However, the draft

ordinance gives the staff the discretion to reject an application unless “the Site Assessment determines that there would be **no** adverse impacts to the SCA, or that any impacts to the SCA can be **fully** avoided” (emphasis added). This is an impossible standard to meet; as a practical matter, any activity will have some impacts. **This wording has the perverse effect of making every application a Tier 2 application at the discretion of the staff and subjecting every permit applicant to bureaucratic run-around.** Any permit applicant who complies with Requirements 2 and 3 (Development Standards and Standard Management Practices) of the Tier 1 Review Procedure should ipso facto be entitled to a permit. The Site Assessment should be used to identify reasonable mitigation measures, not to deny the permit.

The draft ordinance requires that the Site Assessment “be prepared by a qualified professional retained by the County”. Having a Site Assessment prepared by a qualified professional is appropriate. However, having the professional retained by the County is a manifest conflict of interest and an invitation to abuse and cronyism. Staff members inclined to deprive property owners of the economic value of their property would steer professionals onto the list that are inclined to further this outcome. Furthermore, a list of professionals established by the County would be likely to include cronies of the staff and would curtail fee competition. The applicant should be free to select any qualified professional, subject to the County’s approval based on the professional’s qualifications. The County should be empowered to review the Site Assessment Study and reject it if it is technically unsound but should not be empowered to compel the applicant to retain a County-selected consultant.

Finally, text that is overly broad or ambiguous or which unduly empowers County staff to impose restrictions on property owners should be modified to conform to a standard of reasonableness and clarity.

22.63.030 – Stream Conservation Area Permit (Tier 1)

A. SCA (Tier 1) Development. Permitted development activities eligible for consideration under the Stream Conservation Area (Tier 1) Permit Review Procedures include but are not limited to:

- 1. Additions to permitted or legal non-conforming structures that existed prior to February 25, 2013, provided that such additions ~~do not increase the existing horizontal incursion into the SCA and~~ do not result in the expansion of the existing building footprint within the SCA by more than 500 square feet;*
- 2. New or expanded water supply or septic facilities, including any excavation or disturbance that is necessary for facility connections;*
- 3. New decks, patios, platforms and other similar improvement~~s~~ ~~determined by the Director;~~*
- 4. Pedestrian or vehicular access routes, including paths, ramps, driveways, roads, and bridges;*
- 5. Drainage improvements, such as downdrains, pipes and swales;*
- 6. Retaining walls, erosion control structures, and similar improvement located upland from the top of bank as determined by the Director;*

7. Necessary flood control projects.

Development activities listed herein shall be ineligible for an SCA Permit (Tier 1) Procedure if the proposed development would not incorporate applicable Standard Management Practices as required by a Site Assessment or would result in adverse impacts to hydraulic capacity; habitat acreage, value or function; or water quality that are not mitigated as required by Section 22.63.060.B.4.

B. SCA (Tier 1) Project Review Procedure

1. Ministerial Review. *The Stream Conservation Area Permit (Tier 1) shall be undertaken as a ministerial action subject to implementation of required Development Standards and project-specific Standard Management Practices.*

2. Development Standards. *Stream Conservation Area (Tier 1) Permits shall comply with the following development standards:*

a. *Where permitted development within an SCA would result in removal of riparian vegetation, such vegetation must be replaced on-site as required in accordance with a Standard Management Practice or Site Assessment. Replacement vegetation may consist of native trees, shrubs and ground covers appropriate to replicate the structure and species composition of vegetation that is removed, ~~subject to County approval.~~*

b. *New impervious area within the SCA shall not drain directly to the stream. Run-off from new impervious surfaces shall flow to an adjacent pervious area (i.e., vegetated or porous surface).*

c. *New driveways, roads and roadfill slopes shall be located outside SCAs, except at stream crossings.*

d. *Clear span bridges or arched culvert designs, with no part of the bridge except support structures and foundations located below the top of bank, shall be utilized at road and driveway crossings over perennial or intermittent streams.*

e. *Permitted work shall not result in alterations that directly or indirectly create barriers to fish migration near or within streams mapped as currently and/or historically supporting salmonids.*

3. Standard Management Practices. *Subject to approval by the Board, the CDA shall maintain a list of Standard Management Practices to be incorporated into all projects for the protection of hydraulic capacity, habitat and water quality within SCAs. The Site Assessment (Tier 1) will identify those Standard Management Practices appropriate to ensure that adverse impacts of permitted development are ~~avoided~~ reasonably mitigated. Applicable Standard Management Practices shall be implemented at the earliest reasonably possible time ~~but in any event no later than final inspection.~~*

4. *Site Assessment (Tier 1).* ~~The Site Assessment (Tier 1) shall be prepared by a qualified professional retained by the County and paid for by the applicant, subject to approval by the County of the professional's qualifications, which approval shall not be unreasonably withheld.~~ The assessment shall delineate the extent of the SCA on the lot, including the precise stream location and limits of woody riparian vegetation; recommend Standard Management Practices corresponding to the nature of development; and determine whether the project, in conjunction with Standard Management Practices, would result in adverse impacts to the stream and riparian resources. The Director may waive individual requirements of the Site Assessment (Tier 1) commensurate with the nature and scope of permitted development. If the Site Assessment determines that there would be no adverse impacts to the SCA, or that any impacts to the SCA can be fully avoided through implementation of specific Standard Management Practices as part of the development approval, the County ~~may~~ shall proceed to process the application as a Tier 1 permit. If the Site Assessment determines that there would be significant adverse impacts to the SCA which cannot be fully avoided through implementation of specific Standard Management Practices, the County shall proceed to process the application as a Tier 1 permit and shall furthermore require that the applicant implement reasonable Standard Management Practices to mitigate those impacts. Standard Management Practices shall be deemed reasonable if the cost to the applicant of implementing them is 10% or less of the total cost of the development, but not otherwise.

5) TIER 2 PERMITS

22.63.040 – Stream Conservation Area Permit (Tier 2)

A. *SCA (Tier 2) Development.* ~~The Stream Conservation Area Permit (Tier 2) shall be required for any development types not listed as exempt per Section 22.63.020.B or eligible for Tier 1 as provided in Section 22.63.030; and to all discretionary approvals; to any project eligible for Tier 1 that does not incorporate the design standards and/or Standard Management Practices; and to any development that would result in adverse impacts to the SCA.~~

B. *SCA (Tier 2) Project Review Procedure*

1. *Discretionary Review.* ~~The Stream Conservation Area Permit (Tier 2) shall be undertaken as a discretionary action~~ subject to incorporation of Design Standards, Standard Management Practices, and/or any other mitigations as determined through a Site Assessment (Tier 2) necessary to ~~avoid~~ reasonably mitigate adverse impacts to hydraulic capacity; habitat acreage, value or function; and water quality.

2. *Design Standards.* Stream Conservation Area (Tier 2) Permits shall comply with the following development standards:

a. All development standards applicable to Tier 1 permits provided in Section 22.63.030.B.2, except where the a Site Assessment (Tier 2) demonstrates that alternate mitigations would be more appropriate to reasonably mitigate ~~prevent~~ adverse alteration of hydraulic capacity; a net loss in habitat acreage, value or function; or degradation of water quality.

C. Mitigation Criteria. Where development would occur within an SCA, and adverse impacts to hydraulic capacity, habitat, or water quality are identified, mitigation shall conform to the provisions below and shall be incorporated into the project or be required through conditions of approval. The Site Assessment (Tier 2) shall present options for alternative mitigation that meet the following criteria.

1. When removal of riparian vegetation is unavoidable in an SCA, require establishment of native trees, shrubs, and ground covers at a rate sufficient to replicate, after a period of the greater of five years and the length of time necessary for the replacement vegetation to mature, the appropriate density and structure of vegetation removed. Replacement and enhancement planting shall be monitored and maintained until successful establishment provides for a minimum replacement or enhancement ratio of ~~2:1~~ 1:1.

6) DECISION AND FINDINGS

22.63.060 – Decision and findings

The Review Authority shall issue the decision and the findings upon which the decision is based. The Review Authority ~~may~~ shall approve or conditionally approve an application ~~only~~ if all of the following findings are made:

For a SCA (Tier 1) Permit:

A. The project meets the requirements of Section 22.63.030 (Stream Conservation Area Permit (Tier 1))

B. Either (1) the project will not adversely alter hydraulic capacity; cause a net loss in habitat acreage, value or function; and degrade water quality or (2) impacts caused by the development are mitigated as provided in Section 22.63.030.B.4.

For a SCA (Tier 2) Permit:

A. The project meets the requirements of Section 22.63.040 (Stream Conservation Area Permit (Tier 2))

B. Either (1) the project will not adversely alter hydraulic capacity; cause a net loss in habitat acreage, value or function; and degrade water quality or (2) impacts caused by the development are mitigated as provided in Section 22.63.040.B.2. Exceptions may be allowed if the lot falls entirely within the SCA or development on the lot entirely outside the SCA is infeasible or would have greater impacts on water quality, wildlife habitat, other sensitive biological resources, or other environmental constraints than development within the SCA.

7) Related Development Code Amendments

8. Add new definitions.

Disturbed Area. An area that has experienced significant alteration from its natural condition as a result of clearing, grading, paving, construction, landscape and other activities, as determined by the Director.

- 8) AMENDMENTS TO THE GENERAL PLAN. To the extent that these proposed modifications to the draft ordinance require changes to the General Plan, we propose that the ordinance be modified forthwith and amendments to the General Plan be adopted to be consistent with these changes retroactively. Alternatively, we propose that the draft ordinance, insofar as it is applicable to City Centered Corridors, be set aside until the General Plan can be modified appropriately.

When we asked to meet with Supervisor Kinsey to present our concerns, his aide said he was too busy and would be too busy for the next few weeks. We find this high-handed and offensive.

We reserve our rights to provide additional objections, and to pursue all of our administrative and legal remedies.

This letter was authorized by a unanimous vote of the Board of Directors of the SHHA at its meeting of May 2, 2013.

Sincerely,

Sleepy Hollow Homes Association

By: _____

Dan Stein, its President

cc: Neil J. Moran, Freitas McCarthy MacMahon & Keating, LLP, Attorneys for SHHA



May 8, 2013

To: Marin County Board of Supervisors
Marin County Board of Supervisors
3501 Civic Center Drive, Room 329
San Rafael, CA 94903

Re: Stream Conservation Ordinance

To whom it may concern,

California Trout would like to commend the Board for their work to enact a Stream Conservation Ordinance. Your work is particularly important, as you are stewards of the Lagunitas Creek watershed, the last stronghold for endangered Coho Salmon in Central California. Therefore, it is of utmost importance that the Stream Conservation Ordinance which is currently before the board, meets the goals of Marin County's General Plan which mandates no net loss of aquatic habitat, and provisions of recovery actions of the US Coho Recovery Plan. Particularly germane is action suite 5 (Landscape Patterns) of the *Coastal Diversity Stratum Actions for Restoring Habitats* which states:

5.1. Objective: Address the present or threatened destruction, modification, or curtailment of the species habitat or range

5.1.3. Recovery Action: Reduce adverse impacts to landscape patterns

5.1.3.1. Action Step: Work with Mendocino, Sonoma and Marin counties (including cities and local jurisdictions) to improve permitting processes, road maintenance, ordinances, etc. to reduce ongoing impacts of urbanization, agriculture, road building, grading activities, and timberland conversions.

CalTrout looks forward to seeing a science-driven ordinance that will protect aquatic and riparian habitat from the impacts of additional residential development in Lagunitas Creek and its tributaries, especially the vital seasonal streams of the watershed's headwaters.

Sincerely,

Jacob Katz
Central California Programs Manager

From: [Stratton, Debra](#)
To: [Lai, Thomas](#); [Thorsen, Suzanne](#)
Cc: [Crawford, Brian](#)
Subject: FW: Stream Conservation Ordinance letter from California Trout
Date: Tuesday, May 14, 2013 6:53:17 PM
Attachments: [Marin stream ordinance letter.pdf](#)
[ATT00001.htm](#)

From: jacob katz [mailto:jvkatz@ucdavis.edu]
Sent: Monday, May 13, 2013 5:55 PM
To: Stratton, Debra; Kinsey, Steven; Adams, Susan; Arnold, Judy; Rice, Katie; Sears, Kathrin
Subject: Stream Conservation Ordinance letter from California Trout

Marin County Board of Supervisors,

Please find attached a letter from California Trout regarding the Stream Conservation Ordinance currently before the board. CalTrout looks forward to seeing a science-driven ordinance that will protect aquatic and riparian habitat from the impacts of additional residential development in Lagunitas Creek and its tributaries, especially the vital seasonal streams of the watershed's headwaters.

Sincerely,
Jacob Katz

Jacob Katz
California Trout
Director of Salmon & Steelhead Initiative
Regional Program Manager - Central California
Nigiri Project Principal Investigator

Central California Region Office
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MARIN MUNICIPAL WATER DISTRICT

220 Nellen Avenue Corte Madera CA 94925-1169

www.marinwater.org

June 5, 2013

Suzanne Thorsen, Planner
Marin Community Development Agency
3501 Civic Center Drive, Suite 308
San Rafael, CA 94903

JUN 6 2013 09:11:10 Planning

RE: Draft Marin Stream Conservation Ordinance

Dear Ms. Thorsen,

The Marin Municipal Water District has a long-standing commitment to the preservation and restoration of creeks throughout our service area and beyond for the benefit of all. We believe that the current draft of the Ordinance would yield significant positives toward our common commitments.

We have reviewed the proposed Stream Conservation Area Ordinance from the perspective of determining its potential effect on District operations. We concur with your staff's decision to modify Section 22.63.020 B.1.a concerning exemptions for public utility facilities as recommended by the North Marin Water District.

Sincerely,

Dain Anderson
Environmental Services Coordinator

From: [Dee Lawrence](#)
To: [Kinsey, Steven](#)
Cc: [Thorsen, Suzanne](#)
Subject: Stream Ordinance
Date: Monday, June 10, 2013 8:57:29 AM

Dear Mr Kinsey,

We are in agreement with the San Geronimo Valley Stewards points listed below.

As owners of property with an "ephemeral stream" (a stream that flows only briefly during and following a period of rainfall in the immediate locality), we wish to make the following points.

Our small ditch to carry hillside run off can only be called a stream during torrential rain. The rock lined ditch was put in place by the former owner and was a mud trickle prior to his work. Our ditch has no fish and from Feb to November, the main wildlife that use the little mud packed water it carries are yellow jackets. There is so little water it doesn't even reach the street main. When the water runs off the hillside during a torrential rain, no wildlife can use it as the water is moving too swiftly. I would say that the irrigated plants we have on the property offer more water to the birds that inhabit the property.

As caretakers of the ditch, we remove the leaves and mud that pile up during the summer to keep it running during the winter. We also remove debris from the street access.

The ditch caused a long and arduous hold up in permitting during a recent addition (located more than 300 yards from the stream) and proved to be a ridiculous delay, a complete waste of time for the county, a waste of a considerable amount of money and time for us and for all those we had involved in the construction process. This kind of water passage should not be considered to impact "fish and wildlife," nor be considered under the aegis of "stream conservation," "stream protection," "stream conservation permits," "fish streams and tributaries" and a setback of 5 feet should be more than sufficient to safeguard any impacts.

Please go carefully when evaluating these "environmental" issues. We will be at the meeting on Tuesday June 18, but find it regretful that county decisions like these require that we all get involved before silly rules that cost taxpayers are put in place.

Accordingly we request:

- **A 35 foot setback on perennial and seasonal streams only**
- **Elimination of so called "ephemeral streams"**
- **All activities proposed to require Tier 1 permits shall be Exempt**
- **Voluntary actions (with tax break incentives) instead of institutional control**
- **Grandfather all existing property improvements**
- **A "reasonable and scientifically based" stream ordinance that: Protects stream habitat AND Protects the rights of property owners**

Sincerely,

Dee Lawrence

RE: Stream Conservation Area Ordinance

June 10, 2013

Marin County Board of Supervisors
Susan Thorsen, Planner, CDA

RE: Stream Conservation Area Ordinance

Dear Board of Supervisors:

I wish to commend the county for undertaking to write a Stream Conservation Area ordinance. But this ordinance, as it is written, must be considered, at best, a first draft with substantial changes needing to be incorporated before it can be formally adopted. It's not expected that one or two staff people, unless skilled in riparian science, could draft a successful policy in one go. Public comment, especially by experts in the field, is required and essential to ensure that this ordinance is the best it can be. The Board of Supervisors is now in the position to ask for and require those necessary changes to make this ordinance compliant with the law, both state and federal, and to set policy that will not merely conserve streamside riparian habitat but enhance and expand it.

In addition to the changes suggested by SPAWN in their letter signed by numerous reputable scientists and riparian experts, I have some additional changes that are needed. As a zoologist by training (UC Berkeley) and a watershed advocate by personal passion (founding member Gallinas Watershed Council), I hope these comments are fully taken into account.

1. I strongly object to the 20 foot city corridor stream setback and 20 feet as a minimum setback for any area of unincorporated Marin. This is inadequate for stream protection and dis-incentivizes cities and residents from doing what is needed for full streamside protection. Grandfathering in what is already there and not easily removed is fair but if things are to change to benefit the health of the creeks and streams and the wildlife they support, the corridor needs to be larger. We suggest 30 feet at the barest minimum, with incentives for 50 feet or more.
2. Ephemeral streams, drainage areas, and intermittent streams also require protection. So much of the historical drainage patterns are changed, culverted or destroyed that any channels that are currently present are now alone in fulfilling this essential function as water filters and as capillaries feeding the creeks and underground streams. These areas may not need large setbacks but they need to be identified, defined and protected.
3. With so much impervious development, we are at the point where merely keeping what we have is not enough; sustainability is no longer an option in this situation. Data shows that < 20% impervious development degrades water quality in an

exponential curve¹. We are well past that level of development in most areas of Marin that are not included in protected open space. So it must be our goal to not only preserve what we have but to actively work towards increasing the riparian habitat around our creeks and streams. There can be no net loss of habitat. Inspections and/or disclosures at the point of sale to catch and remove any unpermitted work will help find and remove barriers to fish passage and impervious structures. Additionally, incentives need to be supplied for homeowners to voluntarily restore creek habitat. This creates a win-win situation and rewards people for doing the right thing.

4. People live near streams because it is pleasant to do so. There needs to be substantial programs available to educate streamside dwellers on the value—economic, aesthetic and ecological—of having a functional, healthy creek in their backyard. Education and outreach and open partnership are critical to win community support. Backyards where restorations have been successfully implemented—preferably with online photos—would go far towards encouraging similar work by homeowners. There can be cumulative neighborhood benefits with creeks restored to ecological functioning. Where steelhead and coho exist, this cannot be an option but must be vigorously encouraged with multiple incentives in the form of tax breaks, financial assistance for restoration, conservation area easements, and adequate (at least 2:1 restoration:degradation) restoration mitigation within the same reach for any development that is permitted, along with stiff and sizeable penalties if rules are broken.

The recent news of the wedding of Sean Parker in the public lands of Big Sur—professing his great love of nature while simultaneously showing a callous disregard for nature's needs and the public good by wreaking ecological havoc—could be equally applied to homeowners who buy creekside property only to build fatally close to them, or dam them, or culvert them, or throw trash in, or seek to engineer a human design aesthetic without appreciation for the other species that need that creek to survive. Native riparian habitats need to be treasured for what they provide other species, as well as the beauty and grace they offer to us. Creeks and streams are community treasures, with adjacent property owners ideally the careful stewards.

5. Well-established land use law prohibits work upstream that affects downstream properties. Buildings and impervious structures placed too close to the streambank affect downstream properties as water runoff is increased and funneled through a smaller channel, resulting in incision and erosion and flooding. Topography needs to be taken into account as sloping hillsides require the greater setbacks.

6. Stream setbacks based on lot size make no sense ecologically. It's easy to imagine a two-acre parcel with a required 100 foot setback next to standard lots with only 20 foot setback or less. This strangles the creek at that point, leading to incision and

¹ Fraser M. Shilling, UC Davis Department of Environmental Science Policy

RE: Stream Conservation Area Ordinance

promoting easy blockage and erosion. This language needs to be changed with 100 foot setbacks in unincorporated Marin required.

7. It is understandably viewed as unfair and corrupt when the ordinance excludes the County of Marin or other municipalities from its requirements. The law needs to apply equally.

8. It would be best for the county to adopt a "Within Reach" program, one which takes a creek by creek approach to education, analysis, suggested remedies, appropriate incentives and serious enforcement of violators in order to safely and intelligently address our creeks and streams in a watershed-wise fashion. The Ordinance should lay the broad strokes necessary to prevent inappropriate development and encourage restoration while focusing down later on each creek area individually. It is abundantly clear, when talking to the different Friends of Creeks groups or in hiking the watersheds, that each creek is unique: each one has different challenges and needs; each one has its own beauty and areas of ugly. These groups are County's best allies in defining what is needed and where and prioritizing those needs. I would hope that the county would continue to act in collaboration and allow volunteer groups a significant place at the table in restoring Marin Creeks.

Sincerely,

Judy Schriebman
3 Poco Paso
San Rafael, CA 94903
Los Ranchitos, unincorporated Marin



June 10, 2013

Marin County Board of Supervisors
Marin County Civic Center
3501 Civic Center Drive, Rm. 329
San Rafael, CA 94901

Dear Board of Supervisors

The San Geronimo Valley Planning Group supports the County's 2007 County Wide Plan (CWP) Goal Bio-4.1 whose stated objectives are, *"To protect the active channel, water quality and flood control functions, and associated fish and wildlife habitat along streams."* We believe staff has taken bold and enlightened steps to achieve these mandated objectives. However, we also believe that, unless the County's policy makers empower the Community Development Agency Staff to implement this far reaching and complex piece of legislation, there is the potential to do a disservice to those who will be impacted by the Ordinance as well as those hoping the Ordinance will have the desired effects of improving riparian habitat.

The Planning Group has met with County staff, various community organizations, its membership and residents of the San Geronimo Valley and been present for the entirety of the two Planning Commission meetings. As a result of these conversations, our participation and observations at the Planning Commission hearings and our review of the revised draft Ordinance recommended by the Planning Commission, we believe that the Board of Supervisors should approve this ordinance and that with appropriate implementation support it will result in an effective and equitable application of the intended goals of the CWP. Your approval should include the following implementation strategies:

1. Support Staff's request for monies to train staff to implement this ordinance. In addition, the Planning Group urges you to establish a fully funded position focusing on the implementation of this Ordinance. This position will significantly enhance the Educational component of Staff's proposed 'three-legged stool'. The Ordinance can be fair and effective only if it can be understood. With 3600 SCA parcels Countywide and 1100 in the San Geronimo Valley, only a very small percentage of those affected have even attempted to understand what's in the Ordinance and, even in that small group, many have shown misunderstandings.
2. One of the duties for the newly created staff position would be to nurture the development of community based organization partnerships that are committed to work with County Staff in a program that will educate, evaluate and integrate the principles of the CWP for private property owner stewardship. We believe that such a program will require resources that the County currently does not possess.
3. The staff person's job scope would also include identifying and securing outside funding for contractual on-site visits modeled after the Land Owner Assistance Program, which would be the preferred method of education. Leverage federal and statewide agencies as a source of funds and grants to improve the education process, and significantly increase the likelihood of compliance. Also seek funds for mitigation of prior damage. The subject matter is at best difficult for the layperson to understand but, even if a resident could learn to appreciate the difference between an intermittent and an ephemeral stream, and between riparian and non-riparian vegetation, it would still be difficult to apply the definitions on his or her property when development or mitigation decisions are being made. Almost as much effort will need to go into classifying and modifying currently mapped SCA's and, even when this is done, ambiguity would still remain in the instance of a specific property. A "boots on the ground" site visit would assess the existing

private property land use impacts have upon the riparian habitat, determine what future if any development may have upon the habitat, and finally, offer suggestions including a “tool kit” that would include how to mitigate conditions that are adversely affecting the habitat.

4. Fund an analysis to differentiate the impact of rarely flowing small streams relative to the impact of regularly-flowing spawning creek beds. Consider prioritizing these differentiations as part of a site visit implementation plan. This could enable the County to focus resources on properties with the most impact on the health of County streams, and also allow the flow of any grant or public mitigation funds to properties doing the most damage to creekside health. This would also allow for prioritization of voluntary site visits. Homeowners near the highest volume of water flow would be first in line for early educational efforts and first in line for available mitigation funds. The time required for individual site visits would be only somewhat more than the time required for differential-impact mapping of the County’s SCA’s, and would have the added advantage of being specific to any property owner considering development and/or mitigation. Additionally, funding agencies would likely be more generous with the knowledge that their contributions would have the maximum impact.
5. Permit fees - Encourage mitigation of existing SCA development and reward homeowners who take such steps by waiving permit fees and, as soon as possible, identify grant funds for habitat improvement projects. This is necessary to offset future non-permitted development, which is sure to occur. Without such offsetting improvements, it will not be possible to meet the goals of the SCA Ordinance.
6. Reward homeowners who have developed their properties with sensitivity to the SCA, and those who take steps to mitigate damage that has already been done. Consider awarding a ‘Streamside Compliant’ designation on the property title report, for those properties that meet the objectives of the SCA Ordinance. Such a designation could have a tiered approach. For example, use a blue designation for those properties that have mitigated adversely affecting water quality by decreasing surface water flows into the creeks and increasing soil infiltration rates. A green designation would include those properties that have improved native species bio-diversity on their property by native plantings and invasive removals and improving channel complexity. A gold designation would recognize a property that has adopted both the blue and the green levels. Those properties would be eligible for reduced water rates by MMWD because they are supplementing and reducing MMWD costs associated with mandated habitat restorations throughout the county. MMWD could point to these properties and take credit for their work and the property owners could reap the benefits of reduced water bills. Such a designation should increase the value of the property not only to those who continue living there, but also at the time the property is sold. Grants may be available to offset costs of the enabling County inspections and reviews.

Through our experience working with the Department of Public Works during the Land Owner Assistance Program that brought together a three way partnership of the County, Univ. of Cal Coop Extension and the Planning Group that engaged many diverse community members in a common cause, we learned the value of education in the form of hands-on guidance by experts. We believe these recommendations will allow for a robust and equitable implementation of this legally mandated Ordinance with a modest investment. We believe that the proven Landowners Assistance Program and the “tool kit” provided 40 property owners that participated in the program, could be replicated providing the proven benefits we witnessed and experienced.

- We urge the Board to stay focused on the objectives.
- We urge the Board to approve the Planning Commission’s recommended ordinance.
- We urge the Board to fund the necessary resources needed to implement this Ordinance so it is both fair and effective.

Our communities deserve more than an ordinance that removes the moratorium and sits on a shelf.

Sincerely,

San Geronimo Valley Planning Group

SCA Committee

Dan McKenna, Chair, Phil Sotter, Eric Morey and Jean Berensmeier

From: peggycreeks@comcast.net
To: [Thorsen, Suzanne](#); [Patterson, Diane](#)
Subject: San Geronimo Valley Stewards Requests to Amend CountyWide Plan and Change Stream Ordinance
Date: Monday, June 10, 2013 4:54:20 PM

San Geronimo Valley Stewards respectfully submits these requests and analysis to be included in the CDA staff report for the June 18, 2013 meeting of the Board of Supervisors. SGV Stewards will also deliver to the Board and staff before June 18 other materials in support of our comments.

We request the Board allow us 15 minutes time for a power point presentation and general comments. SPAWN was granted 10 minutes for a power point to the Planning Commission, but the Commission cut off Stewards time to respond.

We request that the period for PUBLIC COMMENT be held OPEN, and not be terminated at the June 18 meeting of the Board of Supervisors. That will encourage continued dialog with staff and other community groups, to explore whether compromises can be reached.

We also recommend that the County sponsor a few working sessions with selected representatives of major community groups to discuss whether drafting can narrow the issues in dispute and to work toward a consensus.

1. SUMMARY

Part 2. Stewards Support Sleepy Hollow Draft Ordinance

Part 3. First Amend the CountyWide Plan, Then Adopt a Balanced Ordinance

3.1 Prepare Supplement to 2007 EIR

3.2 A Temporary Ordinance is Bad Policy With Unintended Consequences

Part 4 A Nobel Prize winner Recommends Cooperative Community Action
To Protect Fisheries

Part 5 Requests to Improve the Stream Ordinance

5.1 Establish Stream Setback of 35 Feet From Top of Bank

5.2 Limit Setbacks for Ephemeral Streams

5.3 Grandfather as Exempt All Existing Homes and Structures,
in Their Current Condition

5.4 Delete Retroactive Mapping and Additional Setbacks

Part 6 Exemptions for Small Home Projects

6.1 Allow All Exemptions "Without Further Determination"

6.2 Do Not Require Land Use Permit for Small Project
Exempt From Stream Permit, or Buildable Under Tier 1

6.3 Grandfather as Exempt All Existing Structures

6.4 Exempt Replacement of Existing Structures, With No Footprint

Expansion

6.5 Apply the Tree Ordinance in the SCA; Don't Mess With the Drafting

6.6 Vegetation Removal Needs Common Sense Guidelines

6.7 Exempt Fences With Wildlife-Friendly Designs

6.8 Exempt 120 Square Foot Basket in Previously Disturbed Areas

Part 7 Tier 1 Permits Should Be Easy and Cheap

- 7.1 Allow the Owner to Hire the Site Assessment Professional
- 7.2 Site Assessment Impacts Should be Substantial and Measurable
- 7.3 Development Standards Must Be Feasible and Reasonable
- 7.4 SMP's Should Be Enforced Only After Board Approval On Public

Notice

- 7.5 Tier 1 Permit for 500 Square Foot Addition
- Part 8 Recognize That Tier 2 permits Will Be Used
Only By Professional Contractors For Large Projects

2 . STEWARDS SUPPORT SLEEPY HOLLOW DRAFT ORDINANCE.

We support the redrafted stream ordinance prepared by Sleepy Hollow Homeowners Association, and recommend its application to all neighborhoods with developed housing in the City Centered Corridor, as mapped in the CountyWide Plan.

Many of Sleepy Hollow's suggestions should be adopted in the Rural Inland Corridor, for those neighborhoods with existing development and small parcels (1 acre or smaller) proposed for new or re-development.

3. FIRST AMEND THE COUNTYWIDE PLAN, THEN ADOPT A BALANCED ORDINANCE.

3.1 Prepare Supplement to the 2007 EIR.

We recommend the Board consider a fast and efficient process, which could be completed in 6 months, certainly less than 1 year:

First prepare an Addendum or Supplement to the EIR for the 2007 CountyWide Plan BIO-4, similar to the process now being used for the Housing Element SEIR. The SEIR would be limited to the Inland Rural Corridor, specifically the developed properties for 3 miles on either side of Sir Francis Drake Blvd and the villages outlined in the San Geronimo Community Plan. This SEIR would be based on the 2010 Salmon Enhancement Plan (SEP) and 2009 Existing Conditions Report (ECR), with some additional expert reports.

The Supplement would adopt current science and allow CWPlan amendments which would conform the stream ordinance to the practical reality of existing developed neighborhoods, which SEP recognized. The San Geronimo Valley has already been extensively studied by MMWD in its annual fish counts since the 1990's. The County paid over \$300,000 for 600 pages of reports on the SG Valley, prepared by experts at Stillwater Sciences and Prunuske Chatham.

If requested by Sleepy Hollow, Tam Valley, Greenbrae, Kentfield, and Kent Woodlands, the SEIR could also cover the developed neighborhoods of the City-Centered Corridor.

The SEIR could have a 60-day period for public comment. (An Addendum to the EIR would not require public comment.) Only those comments which apply to physical environmental impacts must be addressed. CEQA does not require the County to agree with all the policy issue comments. If court review is sought, the court must uphold the SEIR if there is substantial evidence to support it.

Second, draft an Amendment to CWPlan BIO-4 and a stream ordinance. Schedule Planning Commission meeting agenda and vote on these two documents on the same date. Schedule Board of Supervisor meeting agenda and vote on these two documents on the same date.

The balanced approach and speed with which the County tackles these issues would provide evidence of the County's good faith to the Court of Appeal and the trial court in the Spawn litigation. The ordinance would satisfy the goals of CDA staff-- that the ordinance should be Clear, Simple, Affordable, and Effective (CASE).

Well before the 2014 election cycle, the county and homeowners could move ahead with a stream protection program that integrates education and restoration projects, with regulations that enjoy homeowner support and offer meaningful environmental benefits.

The Board of Supervisors would demonstrate their ability and resolve to get it done right. The stream ordinance could become a model for cities in Marin and for other counties.

3.2 A Temporary Ordinance Is Bad Policy With Unintended Consequences.

There have been discussions of adopting a "temporary" ordinance that would give in to all Spawn's demands and reject homeowners requests. There would be an empty promise to later look at amending the CountyWide Plan, and possibly revising the stream ordinance in the future.

This flawed process would not cure the defects in the CountyWide Plan, and will lead to widespread civil disobedience by homeowners. A black market for home improvements will develop. No one will apply for permits, so County staff will not have the opportunity to educate owners about construction materials and methods which are good practices.

Do the County Supervisors really want to encourage creekside families to shut off access to their properties, so fish research and creek restoration projects come to a halt? Failing to give the homeowner control over the use of his property gives the homeowner no reason to support implementation of creek programs. If stream protection is such an important policy, it can be effective only if it is accepted by homeowners.

We respectfully ask the Board to consider that the homes in the San Geronimo Valley which are now mapped within the SCA area hold only 26% of the San Geronimo watershed acreage. The remaining 76% of the acres with streams are exempt from

the draft ordinance, because they are government agencies, public utilities, or agriculture. (MMWD and County Open Space District are the two largest land owners, with 39% of the acreage within the SCA area.)

Adopting this ordinance would place 100% of the stream conservation burdens on 26% of the land. The 834 private family homes within the SCA constitute 60% of the housing stock on the SG Valley.

4. A NOBEL PRIZE WINNER RECOMMENDS COOPERATIVE COMMUNITY ACTION TO PROTECT FISHERIES.

Dr. Elinor Ostrom won the 2009 Nobel Prize in Economic Sciences for her study of the protection of fisheries and other "common pool resources".

Dr. Ostrom found that community-based cooperative actions, motivated by positive incentives, succeed in protecting natural resources for generations. Uniform regulations, with the same rules for different local conditions, imposed top-down by a central authority, do not succeed. Source: Dr. Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press, 1990).

5. REQUESTS TO IMPROVE THE STREAM ORDINANCE

We denote with * asterisk those changes that may or may not require Amendment to the 2007 CountyWide Plan.

Section numbers refer to the May 17 draft SCA Ordinance approved May 13, 2013 by the Planning Commission.

5.1 Establish Stream Setback of 35 Feet From Top of Bank.

*Request: Establish a 35-foot stream setback in section 22.33.030 B. 2. "The SCA setback shall be 35 feet landward from the top of bank, for those areas of the Inland Rural Corridor which are outlined as villages in the San Geronimo Valley Community Plan, or are located within 3 miles on either side of Sir Francis Drake Boulevard in the San Geronimo Valley."

For residents on the Valley floor in San Geronimo, their average lot size is 100 feet by 100 feet. The draft ordinance establishes a setback of 100 feet from the creek, plus an additional 50 feet from the edge of the trees. This 150 feet would make every homesite completely unusable.

The 2010 Salmon Enhancement Plan report (SEP) recommends a reasonable buffer of 35 feet on parcels that are already developed and on parcels proposed for new or re-development. (Page 2-21 and 2-22.) SEP recognizes that San Geronimo Valley is constrained by existing development. "In areas where people are already living, this [35-foot] zone is the key area to focus riparian enhancement activities."

SEP notes that 100 feet is recommended by some scientific literature, the

CountyWide Plan, and other local governments. When we read the literature cited by the SEP and the 2009 ECR, we see that the 100 foot proposal comes from studies of pristine wilderness and large swaths of public forest. SEP suggests a 100-foot area could be encouraged with willing private landowners or for public lands.

SEP concludes that 35 feet would be adequate to protect riparian function and habitat:

- filters sediment,
- provides shade (MMWD research shows an 80% tree shade canopy over SG valley fish-bearing creeks),
- provides natural bank stabilization,
- allows construction of 3:1 slope in creek restoration, and
- allows changes in streams and runoff patterns, "without jeopardizing structures, gardens, or other infrastructure."

The SEP recommendation is supported by another expert, Dr. Mark Jennings, who specifically rejects the additional setback of "50 feet landward from the outer edge of woody riparian vegetation associated with the stream . . ." (Section 22.33.030 B. 2. a. page 2.) Dr. Jennings concludes that measuring the stream setback from trees is not scientifically justified in Marin county where rainfall is abundant and many trees grow in areas not close to any stream. (Dr. Jennings' letter was filed with the Planning Commission and will be submitted to the Board of Supervisors.)

As a practical matter, on most forested lots in the San Geronimo Valley, it would be impossible to measure the 50 foot setback--from the last leaf on the last tree? Our forest climbs continuously from the Valley floor to the MMWD water reservoirs--there is no "edge" of the woods.

The 35 foot setback is supported by science, is suited to actual conditions in the SG Valley, is easy to measure, and provides "bright line" guidance for homeowners who want to cooperate in stream conservation.

5.2 Limit Setbacks for Ephemeral Streams.

The proposed ordinance and the CountyWide Plan define an "ephemeral stream" as a watercourse that carries only surface runoff and flows when it rains. (See definition page 12.) There is not a single parcel in Marin County which does not have at least one ephemeral stream during January and February storms.

The Planning Commission recognized this problem and suggested the setback apply only to those ephemerals that are mapped, and that have 100 feet of riparian vegetation along the stream. (Section 22.33.030 B. 3. page 3.) SG Valley Planning Group suggests the ephemeral protections be limited to those streams which connect into fish-bearing creeks. However, the problem remains that the County has not yet determined where these ephemerals are located. Most are not mapped at all. (See below section **5.4 No Retroactive Mapping of Streams.**)

Spawn is concerned that ephemeral streams are like "capillaries" that help water flow. The SEP report said ephemeral streams provide stabilization and filtration functions (SEP page 2-22), and recommends they be addressed by storm water disconnection and retention. (SEP pages 2-46 and 2-47.)

Dr. Jennings concludes the designation of "ephemeral streams" should be dropped. Over 40 years of science on "perennial" streams and "intermittent" streams has designated measurable physical and biological attributes. But there is no scientific basis for further protections of plant or animal wildlife near surface runoff that flows only when it rains.

The County's biologist testified April 1, 2013 to the Planning Commission that ephemeral streams flow for such a short time, there is no opportunity for plant or animal species to become dependent on them as habitat.

**Request: Change section 22.33.030 B.3. page 3 to read: "For any ephemeral stream, the SCA setback shall be 20 feet from top of bank, but only if:

(1) the ephemeral stream is accurately mapped on County maps as of the effective date of this Chapter;

(2) there is riparian vegetation that extends along the stream for a length of 100 feet or more as determined by a qualified biologist or natural resources specialist paid by the County; and

(3) the ephemeral stream drains directly into a stream that is habitat for anadromous fish."

5.3 Grandfather as Exempt All Existing Homes and Structures, in Their Current Condition.

*Request: Change section 22.63.020 A. 1. (page 5) to read: "The provisions of this Chapter apply to development within the Stream Conservation Area as described in Chapter 22.33 (Stream Protection) ; provided development shall not mean or include any building or structure existing as the effective date of this Chapter. "

*Request: Exempt from stream permits under sections 22.63.020 B. 1. g. and B. 2. a. all existing structures in their current condition: "Maintenance, accessibility retrofit, and repair of any structure, building, water supply and septic facilities that existed prior to the effective date of this Chapter, whether or not such structures, buildings or facilities are or were permitted or legal non-conforming."

*Request: Delete the condition of "permitted or legal-conforming" as applied to all existing buildings and structures, for purposes of exemptions, Tier 1 Permits, and Tier 2 Permits.

Request: The County should encourage people to preserve their exemptions by taking photos of their existing buildings and structures. For that reason, the trigger date for the grandfather exemption should be the effective date of the ordinance, not February 25, 2013, before adequate notice was received by 3,600 property owners. There is no evidence people have rushed to build new houses or cut down forests

since February.

Since 2008, we have been promised that the stream ordinance would not require removal of existing homes within the setback, and that structures located near creeks would continue in use. Instead, the Planning Commission draft would use the stream ordinance as a tool to enforce other Code permitting regulations. The Board of Supervisors should reject this bureaucratic power grab; it is not necessary to the purpose of riparian habitat preservation.

The draft ordinance does not protect existing homes and structures, although these should be given a true exemption. The only existing buildings that are exempt are those which are "permitted or legally non-conforming structures, water supply, and septic facilities that existed prior to February 25, 2013." (Section 22.63.020 B. 1. page 6) Otherwise, the stream setback and permit requirements apply to "All structures, regardless of whether the work requires a building or grading permit. . . ." (Section 22.63.020 A. I. a. page 5)

If an existing home has a single missing permit, the house is not grandfathered as "exempt". The family would be required to submit a stream permit application, professional site assessment, and proof of no adverse impacts on the riparian habitat.

Many of our creekside homes have been occupied for 50 years. Did the family (or a previous owner) install a hot water heater without a building permit? Did the trash enclosure pass design review? Was the 7-foot fence granted a variance? If not, the family must do expensive Code work and apply for other permits, before the house can be grandfathered as exempt under the stream ordinance.

Second units are an important source of low cost housing. In the San Geronimo Valley there are over 200 backyard cottages, garage conversions, and downstairs apartments that provide low-rent homes for college students, home health care workers, and retirees. Many of these are not fully permitted because compliance can cost \$50,000 or more.

We are pleased that the draft ordinance now allows second units within the stream setback to apply for full permitted status. (See section 22.56.050 page 19.) Over time, this may encourage owners to seek second unit permits for their existing housing. But this is not related to stream habitat protection, and should be left for another day, with an appropriate procedure that considers the economics of affordable housing.

We understand that planning professionals may consider that a building without a permit does not "legally exist". There are some environmental extremists who would advocate tearing down all family homes near creeks; non-permitted status would give them an excuse to file complaints for home removal.

However, the stream ordinance and the CountyWide Plan cannot deny reality. Over 3,600 families live near the streams. We are not going away.

Please consider the unintended consequences unless ALL existing buildings and structures are grandfathered as exempt:

----Requiring other permits for building, design, and use as a condition to stream exemption has no beneficial effect on salmon or riparian habitat.

----Under the County's system of complaint-based enforcement, the stream ordinance will become a mechanism for neighbors and special interest groups to target certain people for harassment. This victims would most likely be families living in the oldest homes, and tenants in low cost second units. These are people without the money to pay for expensive upgrades and enforcement costs.

----The stream ordinance should not be a cash machine for County fees, fines and penalties. The public purpose of healthy creeks is best served by engaging property owners in pro-active steps to protect stream habitat.

Please do not trivialize the importance of stream protection, by linking it to minor Code enforcement mechanisms. Every existing house and structure should be grandfathered exempt from stream permits. Some owners may need to apply for other permits, or other owners may not have the money to pay for Code enforcement work required by the County. Leave this to other Code sections; we already have plenty of regulations.

5.4 Delete Retroactive Mapping and Additional Setbacks

The ordinance would allow the County to add streams or move streams on the map at any time. It would also give County staff the power to require an additional setback if "necessary". These sections should be changed because they set traps for homeowners who reasonably rely on county maps published at the time they purchase their properties or when they make home improvements.

Request: Section 22.33.020 A. page 1 should be changed to read: " The SCA consist of the stream itself between the tops of the banks and a strip of land extending laterally outward from the top of both banks to the widths defined in Section 22.33.030 B. The SCA extends along those perennial, intermittent, and ephemeral streams identified in the SCA data and map that is published by the Marin Community Development Agency on the effective date of this Chapter. At any time, a property owner may request the County to correct errors in the stream map with respect to the owner's property. Neither the County nor any other person or group has standing to change the stream map with respect to a property owned by another person.

Request: The same changes should be made in the definition of Stream Conservation Area in section 22.130.030 page 12.

Request: Delete sections 22.33.030 B. 1.d. and 2.b., which would allow the County to require an additional setback if necessary to protect riparian resources and woody

vegetation that extends beyond the specific SCA setback.

Reasons: The County cannot use the excuse of Spawn litigation to rush adoption of stream regulations, without identifying the streams and properties it is regulating. CDA staff says, "Oh, don't worry, we'll send a notice when we later add the owner's property to the stream setback area."

The "SURPRISE!" factor would make buying a house or improving a home in Marin County high risk behavior. People rely on existing maps to make long term investments in homes and borrowing on 30-year mortgages. Stream setbacks will reduce the value of properties. If the buyer searches the records and determines where his stream setback is located, he must be able to rely on the certainty of current County maps. The county should not later add a stream or move a stream, unless the owner himself discovers the map is in error.

Similarly, if the present owner of a home builds an addition or improvement, he should not later be subject to "GOTCHA", by Spawn or the County informing him the improvement is now within a stream setback and subject to permits or removal.

We also object to the County later imposing an "additional setback" whenever the CDA staff thinks it is "necessary". This is an invitation to expensive litigation, because Spawn or some other self-appointed group could file requests for additional setbacks, regardless of the setback measured by the ordinance. Then the homeowner must hire biologists and hydrologists to testify at Planning Commission hearings and court cases. Will the County pay the owner's fees for experts and lawyers to defend against this taking?

6. EXEMPTIONS FOR SMALL HOME PROJECTS.

The ordinance should give homeowners a basket of clear broad exemptions, for which no prior determination by County staff is necessary. Because the stream ordinance is such an intrusive invasion of privacy and taking of property values, it is important for popular acceptance that people understand the County is not imposing life-style choices for them.

Do not trivialize the important policy of stream protection by over-regulating minor home improvements. It will encourage disrespect for the law, will not provide measurable benefit to fish or wildlife, and impose costs and delays for young families and seniors on fixed incomes.

6.1 Allow All Exemptions "Without Further Determination".

Follow the model language of the 2011 Tree Ordinance, wisely crafted by the Board of Supervisors. Instead of providing documents for pre-construction bureaucratic review, just recommend that the owner take photos and preserve documents in the event someone later questions his exemption. (For example, see Tree Ordinance section 22.62.040, Development Code page IV-70.)

Delete and Replace: Delete stream ordinance section 22.63.020 B. 2. pages 6-7, and replace with:

"It is recommended that a property owner document the exemptions listed in this section with photographs, site illustrations, state or local fire personnel, and/or a licensed contractor. "

The county should publicly encourage people to take photos now of their existing buildings and structures. For that reason, the trigger date for the exemptions should be the effective date of the ordinance, not February 25, 2013, when no one in the county knew this law might apply to their property. There is no evidence of people rushing to build new houses or clear forests since February.

6.2 Do Not Require Land Use Permit for the Small Project Exempt From Stream Permit, or Buildable Under Tier 1.

We are disappointed and, frankly baffled, that the county gives with one hand (small home projects exempt from stream permits), but takes away with the other hand--by requiring Land Use Permits for ordinary home improvements that do not now require a Land Use Permit, under the existing Code. See Section 22.06.050 page 13.

For example, the homeowner can maintain and replace landscaping without a stream permit (under section 22.63.020 B. 1. g. page 6), but if she uses a drip irrigation system, she must now apply for a Land Use Permit (under section 22.06.050 page 13.) This makes no sense and offers no meaningful protection to riparian wildlife.

Look at the silly little things that would suddenly require a Land Use Permit, even though they could be done with a stream exemption or a Tier 1 Stream permit: installing a garden footpath without grading, interior remodeling that changes the outside color of the house, putting up a kid's swing set less than 15 feet in height.

Request: Delete the following language from section 22.06.050, Exemptions from Land Use Permits, on page 13: "The exemptions do not apply to development proposed in a Stream Conservation Area. See Chapter 22.33 and Chapter 22.63."

Request: Change section 22.63.020 B. 1. h. on page 6 to exempt from stream ordinance: "Maintenance or replacement of landscaping, including irrigation lines.

6.3 Grandfather As Exempt All Existing Structures

Change section 22.63.020 1. g. on page 6 to grant full exemption for: "Maintenance, accessibility retrofit, and repair of all buildings, improvements, and structures, water supply, and septic facilities that existed before the effective date of this Chapter.

6.4 Exempt Replacement of Existing Structures, With No Footprint Expansion

The exemption of grandfathered structures is meaningful only if they can be replaced as they deteriorate. Roofs, garden sheds, and wood decks, in particular, need to be replaced as they age.

Request: Change section 22.63.020 B. 2. a (on page 7) to exempt without prior determination:

"Replacement of all buildings, improvements, and structures, water supply and septic facilities that existed before the effective date of this Chapter, provided the replacement does not expand the footprint within the stream setback or result in the removal of more than 50% of the woody riparian vegetation without the mitigation described in [Part 6.6 below].

6.5 Apply the Tree Ordinance in the SCA; Don't Mess With the Drafting

Request: Combine sections 22.63.020 B.1. c. and 2.c. (pages 6 - 7) with respect to trees, so there is exempt from the stream ordinance without further determination:

" Tree removal that is exempt or is permitted under the County Tree Ordinance, Chapters 22.27 or 22.62; provided nothing herein prohibits the owner from complying with applicable state law on fire prevention or fire insurance requirements."

Request: Delete requirement for obtaining a Tier 1 Stream Permit for removal of protected or heritage trees, under section 22.63.030 (page 7).

The Supervisors adopted a Tree Ordinance in 2011, after much political attention, weeks of public comment, and carefully crafted compromises. (See Development Code Chapter 22.27 page III-43, and Chapter 22.62 page IV-69.) Spawn never sued to upset the tree ordinance.

There is no reason now to re-draft the tree ordinance. It bans the removal of any heritage tree without a tree permit, and limits the removal of two "protected trees" per year. There are exemptions for fire safety, public nuisance, infected pathogens, etc.

San Geronimo Valley and other areas in the SCA were excluded from the 2011 Tree Ordinance, with the promise we would be covered by it once the stream ordinance is adopted. It is now time for the county to deliver on its promise.

Do not require us to obtain two different permits for tree removal--one under the stream ordinance, and the second under the tree ordinance. Do not apply two sets of regulations with two different standards.

The County-Wide Plan designates SG Valley as Very High Fire Risk (Map 2-15). We are also in the Urban-Wildland Interface Zone (Map 2-13), for which the California Resources Code section 4291 mandates a 100-foot defensible space around each structure. California Government Code sections 51175 and 51182 partially preempt local regulation which would interfere with property owners' rights and duties with respect to fire insurance contracts.

6.6 Vegetation Removal Needs Common Sense Guidelines.

The same concerns about fire safety should also inform vegetation removal. Fires are spread by woody under brush and dry grass. The fire may start from or spread to

either a vacant lot or a developed lot--fire knows no boundaries.

Not all "native" vegetation has the same riparian value. Poison oak is native, but it is invasive, chokes out other natives, and is toxic to humans.

Not all non-natives are bad. Many Mediterranean climate plants provide good riparian habitat and grow well without summer water.

The county should not be in the business of designing backyard gardens. We are addressing what should be a 35-foot setback on a small lot of about 100 feet by 100 feet, in the San Geronimo villages that are already developed with houses and streets.

Request: Combine sections 22.63.020 B.1. c. and 2. c. into a single section that exempts without determination:

"Vegetation removal or trimming on a developed lot or a vacant lot, for the purpose of protecting life or property from fire hazard, public nuisance, or any other threat to public health and safety. Vegetation that is dead, invasive, or exotic may also be removed under this exemption. Clearing of less than 50% of the native woody vegetation within the stream setback on any parcel for any other purpose is exempt, provided it shall be mitigated by planting riparian vegetation within the stream setback on the owner's site or on another stream setback area and provided that native plants are preferred, if appropriate to the site and the owner's use of his land.

6.7 Exempt Fences With Wildlife-Friendly Designs

Children, dogs, and gardens need fences. We already have a County fence ordinance that limits to 6 feet. So the only concern of the stream ordinance should be is wildlife access to the creeks.

Dr. Jennings letter suggests fences can be designed which are wildlife friendly in materials, height and spacing.

Request: Change section 22.63.020 B.1. to exempt:

" New fences, and repair or replacement of fences existing on the effective date of this Chapter, provided they are designed in materials, height, spacing, and location not to block or completely prevent access of wildlife to the streams or the adjacent riparian habitat. Exempt fences include any fence within or on the perimeter of a previously disturbed area."

6.8 Exempt 120 Square Foot Basket in Previously Disturbed Areas.

The Planning Commission and Spawn spent several hours wrestling over the exemption for development in previously disturbed areas. (Although the time for public comment was closed, Spawn representatives were permitted to repeatedly address the Commission on April 1 and May 13, and carried on a dialogue about this and other sections. No other interest groups were allowed to speak.)

Spawn voiced one legitimate concern: If a previously disturbed area consisted of pervious or porous materials (such as a lawn or garden), storm runoff from new impervious materials should be dispersed over pervious areas.

The Commission seemed more concerned about micro-managing the use of family backyards. For example, should a garden shed be okay, but not a shed with an electrical outlet for wood working? The staff seemed concerned about using the stream ordinance as a tool to enforce Building Permit requirements.

Stewards recommend: Simply create a basket of 120 square feet that can be developed for any purpose, as an exemption from the stream permit, without a prior determination by County staff. Get the county out of deciding what each family can use its 120 square foot exemption for--as long as storm water runoff is dispersed and vegetation removal is mitigated, let the family install a carport, or an art studio, or a kids' playhouse.

Request: Revise section 22.63.030 B. 1. b. so it exempts without determination: "Development activities pursuant to Section 22.63.020 A. 1. located within previously disturbed areas. ^ Addition of a cumulative total of 120 square feet of impervious surface in a previously disturbed area, provided that the improvement is located at least 20 feet from the top of the stream bank, does not result in the removal of ^ more than 50% of the woody riparian vegetation and such removal is mitigated pursuant to [Part 6.6 above] . and disperses storm water runoff over a pervious area (such as a lawn, garden, or pervious pavers).

7. TIER 1 PERMITS SHOULD BE EASY AND CHEAP

CDA staff originally intended to encourage homeowners to bring their Tier 1 projects to the counter for ministerial approval. Staff intended to use the Tier 1 permit process to educate homeowners and small contractors about good construction practices, methods and materials that protect streams.

Unfortunately, Tier 1 Permits are now drafted to be so expensive and set such high standards that no one will bother to apply for a Tier 1 Permit. If the project does not fit within one of the exemptions, the owner will just do it without a permit.

Request: The Tier 1 Permit Fee Should not exceed \$150. The Site Assessment professional should not be allowed to charge more than \$200, unless the homeowner consents.

***7.1 Allow the Owner to Hire the Site Assessment Professional.**

Do not force the owner to open his door to a professional whose fees and loyalty are controlled by the County. The owner will justifiably fear that anything the inspector sees will be reported as a Code complaint (whether or not related to the specific project.) The owner must be able to negotiate and cap the scope of work and the fees. The county could maintain a list of qualified professionals , so there is

assurance of high standards.

***7.2 Site Assessment Impacts Should Be Substantial and Measurable**

In the May 13 draft, the project is not eligible for a Tier 1 permit if it "would result in adverse impacts to hydraulic capacity, stream or riparian habitat acreage, value or function; or water quality." (Section 22.63.030 page 8. See also section 22.63.030 B. 4. pages 8-9.) That means the project can have no adverse impacts at all. None.

Every human activity has some impact on the environment. Even the professional walking the property for the site assessment may trample weeds or step on a spider. We recognize this standard is in the CountyWide Plan and it should be amended for Tier 1 permits, if there is any hope of getting homeowners to cooperate for small projects.

We recommend adoption of the standard: "substantial measurable adverse impacts. .
."

7.3 Development Standards Must be Reasonable and Feasible

The Tier 1 permit must comply with "Development Standards" (under Section 22.63.030 B., page 8). Not once in this text do the words "feasible" or "reasonable" or "cost effective" appear. No consideration is given to whether the pursuit of excellence is affordable to the owner who is paying for it, or even whether it is within the scope of engineering possibilities.

Removed vegetation must be replaced by "natives" with the same structure and species as the removed vegetation. Can we give some thought to improving the environment, not just replicating the problems that caused creekbank collapse? We suggest replacement with riparian vegetation that promotes water filtration and creek bank stabilization.

7.4 Standard Management Practices Should be Enforced Only After Board Approval on Public Notice

The CDA is supposed to prepare Standard Management Practices (SMP's) and each Tier 1 project must comply before final inspection. Apparently, CDA will be relying on nameless outside professional firms to draft the SMP's, which may or may not be revised periodically.

This is a recipe for bureaucratic overreach, outdated construction manuals, and the whims of then-current administrators. Public comment should be accepted before SMP's are adopted. The Supervisors should take responsibility for the final product, after hearing from the taxpayers and property owners.

7.5 Create Basket for Up To 500 Square Foot Additions

The Tier 1 permit should be available for a home addition of up to 500 square feet

within the stream setback. This is necessary because so many of our homes average 1500 square feet, have old kitchens, only one bathroom for growing families, and are sited on lots measuring 100 feet by 100 feet. Contrary to Spawn's assertions, no one is going to build a Walmart parking lot.

The 500 square foot "basket" should apply to all buildings and structures that exist on the effective date of the ordinance. (See section 22.63.030 A. 1. page 7.) There should be no condition that the existing building be "permitted or legal non-conforming" in order to qualify for a Tier 1 stream permit. See **Part 5.3** above.

8. RECOGNIZE THAT TIER 2 PERMITS WILL BE USED ONLY BY PROFESSIONAL CONTRACTORS FOR LARGE PROJECTS.

The high development standards, multiple expert reports, and on site mitigation required for a Tier 2 Permit will be affordable and feasible only for professional contractors working on a new house or a major remodel.

Please recognize that Tier 2 will not provide a realistic alternate permit process for the average homeowner.

That is why broad clear exemptions in Section 22.63.020 and easy cheap Tier 21 Permits in section 22.63.030 are so important for homeowner acceptance of this ordinance, and to channel future home improvements into the best practices for healthy streams.

From: [Lai, Thomas](#)
To: [Thorsen, Suzanne](#)
Subject: FW: Stream Ordinance
Date: Monday, June 10, 2013 9:23:38 AM

Hi Suzanne,

Please include this email in the record. Also, I informed Laura Chariton that we will get her comments into the BOS packet if she sends it in by the end of today.

-Tom

From: Adams, Susan
Sent: Saturday, June 08, 2013 6:42 PM
To: Lai, Thomas; Crawford, Brian
Subject: Fwd: Stream Ordinance

FYI

Sent from my iPad

Begin forwarded message:

From: Steve Rehder <rehder@hummbirdlandscape.com>
Date: June 8, 2013, 3:58:23 PM PDT
To: <sadams@marincounty.org>
Subject: Stream Ordinance

Susan, my wife and I are strongly urging you to adopt the following sensible improvements to the upcoming stream ordinance decision you must vote on.

We are twenty two year residents in woodacre and have become very concerned, worried and fearful of the proposed stream ordinance and other issues effecting our home and our lives here in Marin.

As our elected official, vote to adopt the following .

- **A 35 foot setback on perennial and seasonal streams only**
- **Elimination of so called “ephemeral streams”**
- **All activities proposed to require Tier 1 permits shall be Exempt**
- **Voluntary actions (with tax break incentives) instead of institutional control**
- **Grandfather all existing property improvements**
- **A "reasonable and scientifically based" stream ordinance that: *Protects stream habitat AND Protects the rights of property owners***

Steven Rehder, Legay Kirkland

WARREN & PEGGY GLASS III

10 Meadow Lane, Novato, California 94947 415-898-1379

June 10, 2013

Marin County Board of Supervisors
C/o Community Development Agency
3501 Civic Center Drive, Suite 308
San Rafael, California 94903

RE: STREAM CONSERVATION AREA ORDINANCE

Good Morning,

I strongly feel that the government and a small group called conservationists are taking advantage of existing rules and regulations that were originally designed to help save salmon, real year-round streams, etc., to unnecessarily expand their scope of work, area of authority and limit people's property rights as they existed when they purchased their land.

Right now I can build a 299 square-foot barn or building with no water or electrical and certain set-backs without a permit. With the proposed expansion of the ordinance I will have to pay a fee to apply for the restricted use. In short, government is taking away a permitted use of my property without paying for it and then charging me a fee(s) to apply for a request to use this portion of my property.

At the very least the proposed ordinance needs to be changed to not automatically include all the "streams" listed on whatever "blue line" map(s) that are being used. People's property rights and uses are being taken away without payment and this must not be taken lightly. Drainage ditches or other similar storm water paths should not be included in this ordinance. A ditch that runs during and for a few days after a rain storm should not be included in this ordinance. It is ridiculous to label this a "stream": a drainage ditch that comes down the valley into a quarter-mile culvert then an open ditch for eighteen feet and then back to a culvert for another forty feet before opening back up into a ditch.

Because I have more property than another person is not a good reason to take 100 feet of control on my property and only 25 feet of someone with less property. The ditch and small streams can be easily protected with 25 feet of control area. There is no need for government to take another 75 feet just because I have more property and it might not be as noticeable to me. Please change the proposed ordinance to set the controlled area to 25 feet for everyone.

WARREN & PEGGY GLASS III

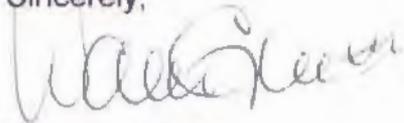
10 Meadow Lane, Novato, California 94947 415-898-1379

Page two 06-10-13

Another item that needs to be addressed and clarified in this ordinance is that building permit applications for hillside solar, additions, detached buildings, patios and driveways, etc. should not be delayed or have added fees just because the parcel has a portion of the property covered by the Stream Conservation area.

In short, please modify the ordinance to exclude drainage ditches of any kind, to modify the control distance to 25 feet for all properties, especially on the less important ditches and streams, and to not delay issuing permits or charge additional fees for applications to use our property for a use that was permitted prior to the ordinance.

Sincerely,



Warren Glass



Peggy Glass

Watershed Alliance of Marin

446 Panoramic Hwy.
Mill Valley, CA 94941
(415) 388-7060

June 10, 2013

Via Email

Marin County Board of Supervisors
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

Re: Comments on the Draft Stream Conservation Area Ordinance for Marin County

Dear Board of Supervisors:

I write on behalf of many watershed groups in Marin county and myself to comment on the County of Marin's Draft Stream Conservation Area (SCA) ordinance.

First, we applaud SPAWN's efforts as well as that of your County staff to comply with the many federal and state laws which not only influence, but indeed determine outcomes with respect to listed endangered species, coho salmon and a threatened one, steelhead.

My review of the Draft Ordinance proposed for the County shows it to be inadequate under California Environmental Quality Act (CEQA) Guidelines, §15162 and NEPA. Much of the ordinance language comes from the 2007 Countywide Plan, and therefore, is at least six to eight years old. There are intervening circumstances, listed below, that would trigger the (CEQA) and National Environmental Protection Agency (NEPA) review.

These intervening circumstances include: documented accelerating climate change impacts and new data; accelerated sea level rise predictions; more recent habitat degradation from land development; loss of habitat connectivity and contiguity; impacts on biodiversity; impacts from CO2 accumulations in the atmosphere; degradation of estuarine habitats; degraded water quality; reduced food availability for species; federally and state listed Endangered Species Act species data and newer listed species recovery plans from the State of California Department of Fish and Wildlife and the United States Department of Fish and Wildlife as well as the 2009 Arroyo Corte Madera del Presidio Habitat Assessment by the California Department of Fish and Game; changes in water quality permitting; Clean Water Act listed pollution impacted waters in Marin County; new TMDL and NPDES permit levels for creeks and watercourses; California State Water Board resolution 2008-0026; USDA Conservation Buffer policies and the San

Watershed Alliance of Marin

446 Panoramic Hwy.
Mill Valley, CA 94941
(415) 388-7060

Francisco Regional Water Quality Control Board buffer report updates; Storm Water Run off mitigations, any habitat species and vegetation losses from 8 years of development and any other changes in regulations affecting water quality, species populations and habitat, ocean and climate change impacts that have occurred within the time period. Further impacts include: effective buffer area ratios based on slope, vegetative cover, critical habitat, biodiversity and soil types.

According to the County, an assessment of the potential environmental effects associated with a new SCA ordinance has not occurred because no environmental review or impact assessments on the new ordinance have occurred. Therefore with respect to a new SCA ordinance, potential new, cumulative and significant impacts associated with a new ordinance may occur, particularly in relation to lot size determining setbacks and twenty feet in the City Centered Corridor even though much of that land is in Semi-Rural Zoning. Therefore we are opposed to a twenty-foot setback as a minimum as being too small to be effective in protecting resources and we are opposed to the lot size designation as the primary driver for determining setbacks. The current iteration of the ordinance may also impact municipalities with greater setbacks negatively where Mill Valley has thirty feet and the County will have only twenty in the same watershed and lessening of Mill Valley's standards could apply.

These potential significant impacts on the environment include but are not limited to: Federally listed endangered and threatened species protections and their species recovery plans, critical habitat, hydrology, geomorphology, biotic resources, vegetative cover, native trees and vegetation, sediment deposition in tidal wetlands, water quality, cultural resources, and ecosystem services. The ordinance is woefully inadequate in addressing these impacts, particularly in critical habitat. The requisites within the ordinance may also cause unanticipated impacts from climate change, sea level rise, CO₂ increases and accumulations in the atmosphere, loss of or alteration of and causing damage to ecosystem services, critical habitat, etc. The ordinance fails to fully disclose, analyze and mitigate the ordinance's potentially significant impacts. The County cannot approve the ordinance until an adequate EIR is prepared and circulated for public review and comment.

Further, substantial evidence shows that to protect residents' health and safety, the County needs to increase setbacks for water quality, flood control, critical habitat, soil stability, and erosion prevention. The ordinance must mitigate at least 2:1 in order to achieve a net gain in riparian ecosystem services, habitat, continuity and congruity and in compliance with state and federal mandates. We are also asking for greater incentives for: native plant

Watershed Alliance of Marin

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restoration, removal of structures, and removal of impermeable surfaces in the SCA.

The Watershed Alliance of Marin wants to preserve and enhance the environmental resources of riparian zones, natural resources, recover salmon populations, recover threatened and endangered species, biodiversity and streams. We have grave concerns about the environmental, health and safety impacts that result from poor land use planning and a significantly diminished Stream and Riparian Zone setback including potential environmentally detrimental projects contrary to recommendations in the Final CCC Coho Recovery Plan and the National Marine Fisheries Service Steelhead Recovery Plans. Therefore, the Watershed Alliance of Marin has a strong interest in enforcing environmental laws to protect the Marin County's natural resources and the long-term public health of its communities.

We hope you will create stronger protections that are based on the SPAWN scientist letter and state and federal policies and set an example for creating a future for biodiversity and health in Marin County.

Your consideration is deeply appreciated.

Sincerely,
Laura Chariton,
Master of Arts in Riparian Policy and Restoration,
Director Watershed Alliance of Marin

From: [Patterson, Diane](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraits, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Stream ordinance
Date: Tuesday, June 11, 2013 9:38:49 AM

Attached is a Streamside Conservation email I received in my email box. This is from a County resident. Please forward as you deem appropriate.

Diane

From: Cyndi Cady [mailto:CCady@delta.org]
Sent: Tuesday, June 11, 2013 9:31 AM
To: Adams, Susan; Arnold, Judy; Kinsey, Steven; Rice, Katie; Sears, Kathrin; Patterson, Diane
Subject: Stream ordinance

I am writing to ask for the following modifications to the stream conservation ordinance. I believe its current form is unnecessarily restrictive, and is not based on accurate science; also, some of the setback descriptions are quite vague.

Please revise the ordinance by:

1. Changing setbacks to 35 feet, as recommended by scientists. The current draft imposes a 150 foot setback which in some cases would encompass entire lots, or even multiple lots. I would also like a more specific definition of "top of bank" or "riparian area"...this is vague and open to interpretation which could make the setback even more restrictive.
2. Limit protections for ephemeral streams to 20 foot setback. Some of these are literally MAN MADE drainage ditches that are erroneously labeled. Apply the setback only to accurately mapped streams that actually drain directly into fish-bearing creeks and have 100 feet of riparian vegetation.
3. Exempt from stream permits all existing homes, structures, improvements and disturbed areas. Apply this grandfather exemption to ALL existing homes, whether now permitted or partially unpermitted. Do NOT use stream protection as a tool for County code enforcements.
4. For grandfathered existing structures, create broad exemptions for improvements, remodels, replacements and additions (up to 500 square feet increased footprint) with no stream permits required.
5. Reduce permit fees and eliminate expert reports. Allow the homeowner to hire his/her own professional for site assessments, if required.
6. Limit stream setbacks to areas accurately mapped when the ordinance takes effect. Give fair notice so owners can correct mapping errors. Do not allow County or private environmental groups to add or change stream locations on further maps.

I also want to say this:

Those of us who live in this valley are by and large excellent stewards of the land. We care deeply for our fish and other wildlife. In recent years, SPAWN has gone from a respected organization to a bunch of bullies who seem to unrealistically want all human habitat removed from the creeks.

The variations in salmon population are FAR more likely to have been caused by ocean conditions and water flow, not the existence of structures near the creek, some of which have been in existence when the salmon were more populous. Ask any valley old-timer, and they will tell you, it was the reduction in water levels in the creeks that corresponded with the decline of the fish...not existence of the homes and the valley residents who have been living along the creeks for decades.

Please do not succumb to the questionable science and this harshly restrictive proposal engineered by SPAWN. It is unfair and goes against the rights, desires, and needs of your constituents, while providing only nominal, if any, protection for our fish.

Sincerely,
Cynthia A. Cady
Woodacre

The information contained in this email message and any attachments is confidential and intended only for the addressee(s). If you are not an addressee, you may not copy or disclose the information, or act upon it, and you should delete it entirely from your email system. Please notify the sender that you received this email in error.

From: [David Lanatti](#)
To: [Thorsen, Suzanne](#)
Subject: Stream Conservation Area Ordinance
Date: Tuesday, June 11, 2013 9:49:12 AM

David Lanatti

5360 CHILENO VALLEY RD.
(LAGUNA DE SAN ANTONIO)
PETALUMA, CA, 94952

June 11, 2013

MARIN COUNTY SUPERVISORS
CIVIC CENTER
ADMINISTRATION BUILDING,
SUPERVISORS CHAMBERS, ROOM 330
SAN RAFAEL, CA. 94903

Dear Friend,

As a fourth generation Marin County rancher, I feel that I have a great deal of field observation experience regarding the natural outdoor environment, and as a person who is over 50, I also have a great deal of political observation experience.

I have always been concerned about the natural environment, and when I was younger and more naïve , I voted many times in favor of measures that were presented as being protective of clean air and water.

To my consternation, many of those measures have resulted in financial hardship for average working people, and not to the petrochemical industrialists who are most likely the cause of most of the worlds environmental problems today.

I am not comfortable with the thought of new regulations and fees being imposed on county residents, simply because some unknown group believes it would be good for the environment.

I have not received any information about scientific evidence that would justify any new restrictions or regulations. For far too long, citizens have relied on the government to do what is best, and assumed that our representatives are honest, and well informed about all aspects of an issue before making a decision.

I do not agree with any of the proposed amendments to county code, nor do I believe the proposed Stream Conservation Area Ordinance is necessary for the protection of wildlife, including fish, or the protection or improvement of the natural outdoor environment.

I believe this proposal is another attempt in an ongoing effort to erode private property owners rights, and impose socialist ideals on citizens who are protected from such impositions by the United States Constitution, and The Bill Of Rights.

Please read The Bill Of Rights, articles 4 through 10, which guarantee each citizens right to due process in regards to private property issues.

Thank you.

Sincerely,

Mr. David Lanatti

From: [Patterson, Diane](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraitas, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Request: Stream Conservation Area Ordinance
Date: Tuesday, June 11, 2013 1:07:03 PM

Attached is a Streamside Conservation email received in my email box. Please forward as you deem appropriate.

Diane

From: Susan Halfaker [mailto:smhalfaker@gmail.com]
Sent: Tuesday, June 11, 2013 1:06 PM
To: Adams, Susan; Arnold, Judy; Kinsey, Steven; Rice, Katie; Sears, Kathrin; Patterson, Diane
Cc: Diane Henderson
Subject: Request: Stream Conservation Area Ordinance

Dear Supervisors Adams, Arnold, Kinsey, Rice, Sears, and Clerk of the Board Diane Patterson,

Regarding your consideration of the upcoming Stream Conservation Area Ordinance I want to register my concern that adoption of the Ordinance as written will adversely impact property my brother and I own that has been in our family since the 1930's when my great grandfather Anthony Parente purchased it. The property consists of two parcels (Assessor's Parcel Numbers 038-053-17 and 038-061-14) and borders a seasonal stream which only runs in the winter. I live in San Diego now but have always had plans of coming back to Marin and building a house on this family property where I can live out the rest of my life.

I have attached below a letter written on my family's behalf by our land use planner to the Marin County Planning Commission which details our concerns further for your consideration:

May 7, 2013

Marin County Planning Commission
c/o Suzanne Thorsen, Planner
Marin County Community Development Agency
3501 Civic Center Drive, Room 308
San Rafael, CA 94903

Subject: Proposed Stream Conservation Area Ordinance

Dear Members of the Planning Commission:

I am writing this letter on behalf of M & MH LP, the owners of Assessor's Parcel Numbers 038-053-17 and 038-061-14. The subject properties are located on Ranch Road, on the Tiburon Peninsula in unincorporated Marin County. The subject parcels are contiguous and undeveloped; parcel no. 038-061-14 is largely inundated and zoned Ocean; my clients anticipate development of parcel 038-053-17 consistent with the property's residential zoning. Both parcels have been in their family for several generations.

According to the *Stream Conservation Buffer* exhibit attached to the *Stream Conservation Area Ordinance Staff Report to the Planning Commission*, the subject properties will be subject to a 100 foot conservation area setback, which encompasses all of both parcels, with the exception of a tiny wedge of land at the southerly portion of the property. Because the setback covers essentially the entire property, adherence to the Stream Conservation Area Ordinance would result in no development potential for the property.

An attachment to the staff report entitled *Frequently Asked Questions* states "A taking occurs when a property loses economically viable uses. While the ordinance establishes setbacks and requirements for stream protection in accordance with the Countywide Plan, it also allows ongoing use/maintenance as a matter of right and establishes permit procedures for new development where alternatives aren't feasible."

County Planning staff has acknowledged that the proposed *Stream Conservation Area Ordinance* would result in a buffer area designation that encompasses essentially all of my clients' property, prohibiting development of the parcels. Staff has indicated that although development is not allowed within such designated areas, the ordinance does allow the property owners (at some future time) to request special consideration to allow development of the property. Adoption of the ordinance as proposed would only allow development subject to discretionary approval, with no guarantee that the Review Authority would find it appropriate to allow development within the designated Stream Conservation Buffer.

The proposed ordinance will result in essentially the entirety of my clients' property being restricted to conservation area setback, with no guarantee of future development. As the proposed ordinance would leave my clients with no guarantee of an economically viable use of their property, adoption of the ordinance as currently proposed would result in a taking.

We hereby request that Assessor's Parcel Numbers 038-053-17 and 038-061-14 not be included in the proposed Stream Conservation Area Ordinance.

Sincerely,

Diane M. Henderson, AICP

Due to the unique nature of our property, the fact that the stream it borders only runs in the winter time, and the lack of a guarantee that we can build on it as currently zoned should the revisions to the Stream Conservation Area Ordinance be adopted, I would again request that parcels 038-053-17 and 038-061-14 be excluded from the newly proposed ordinance.

Thank you for your collective consideration of this request,

Susan DiGrazia Halfaker

M&MH, LP

From: jj.olson@comcast.net
To: [Adams, Susan](#); [Arnold, Judy](#); [Kinsey, Steven](#); [Rice, Katie](#); [Sears, Kathrin](#); kpatterson@co.marin.ca.us; [Thorsen, Suzanne](#)
Cc: [jennifer_olson](#); [Jennifer Olson](#)
Subject: Stream Conservation Area Ordinance-Board Of Supervisors Meeting - June 18, 2013
Date: Tuesday, June 11, 2013 3:08:42 PM

To: Marin County Supervisors:
Susan Adams
Judy Arnold
Steve Kinsey
Katie Rice
Kathrin Sears
Diane Patterson, Clerk of the Board
Suzanne Thorsen, Marin Community Development Agency

RE: Stream Conservation Ordinance: June 18 Board of Supervisors Meeting

Dear Marin County Supervisors and Suzanne Thorsen, Community Development Agency

I have attended many of the SCA meetings and found them very informative and at the same time very disturbing with all the legalities and restrictions of the SCA ordinance, county regulations, etc. Along with all of that we have the never-ending legal threats from SPAWN that are now holding hostage the County of Marin, the San Geronimo residents and any SCA impacted area. The SPAWN have made it their mission to continue to bully and threaten with unwarranted lawsuits which is bringing about this SCA Ordinance.

I have reviewed the SCA proposed ordinance and it is so vague and confusing for anyone but lawyers and County professional property planners to understand the impact this will place upon our homes. I know there are many issues involved in creating the Stream Conservation Ordinance; however, I feel that my personal property: my land and my home will now have restrictions on my own use of what I do in my own back yard. Why are you (County of Marin/Planning Division) restricting the use of my home? Will we be receiving a tax abatement based on the loss of our land and its use?? There has been not one thing mentioned in all the planning that is fair to the home owner who just happens to live near a stream – This is not fair!!!! This ordinance will affect property values on all homes in the SCA impacted areas.

Why are the property owners bearing the entire burden of the stream ordinance? I feel the County of Marin is putting into place a complex ordinance that will essentially be holding us all hostage without any regard for our property rights as legal owners of our homes and land because we happen to have a stream on our property.

What if in the near future the salmon made a total recovery in spawning numbers in the valley, as has been documented by the scientific community, the drop in salmon has occurred due to changes in the ocean (possibly Global warming) and little to do with our SG valley creek run off or the few new homes built in the valley. The MMWD damns built on Mt. Tam have had an impact on our creeks as well. Looking into the future, if this SCA ordinance is approved, this means that our valley and the unincorporated parts of the county under the SCA would be under this very strict and **permanent** zoning SCA ordinance - Are we (Marin County) moving too fast and pushing forward with the SCA ordinance? Can this ordinance be put on hold to see what the next few years may bring with the salmon population??

Or more reasonable ordinances put into place that we can all live with until we know more about the impacts of our creeks and water ways.

- Why does the set back have to be 150 feet, why can it not be 35 feet??

- Exempt the “grandfathered” existing structures and disturbed areas with no stream permits required.
- Allow improvements as needed without changing the “foot print” of the home/structures.
- Allow maintenance to stream riparian area if needed for fire control safety, erosion from flood damage, etc.
- Ephemeral streams that are currently not on the map should not be included in the SCA ordinance at all.
- Reduce permit fees pertaining to any SCA ordinance area.

Remember we are people who WANT to protect the Salmon in our neighborhood

Looking into the near future and with regards to SPAWN, if the salmon population did recover in our SG valley, what reason would they then have to exist! My heart goes out to the valley property owners who can no longer build their dream home or their place of retirement due to the building moratorium. Their property has become worthless to them, it is just not right!! In the same way our properties will drop in value due to the restraints that are put on to our properties. I have already noticed real estate ads in the valley advertising: "No Stream Encumbrance!!"

Twenty-two years ago we bought our property because of the beautiful little stream near our vegetable garden, it is still beautiful, but it saddens me to think, anyone purchasing our property in the distant future will not feel the same about our stream. How very sad. And it makes me angry! I have lived in West Marin for over 45 years and love the area. However, I know it is increasingly difficult to maintain a life here if we are constantly being bombarded with these types of ordinances and issues. I really feel that we are getting these SCA ordinances pushed upon us without due diligence when it comes to enacting these **permanent regulations** in our county!!

I do appreciate all that the County does in protecting our community and our homes!! We just need to be reasonable and do our due diligence with the SCA ordinance. We all want to be sure West Marin stays the jewel that it is in our county.

Jennifer Olson
Lagunitas Resident

June 11, 2013

Marin County Board of Supervisors
Attn: Diane Patterson, Clerk of the Board
3501 Civic Center Drive, Room 329
San Rafael, CA 94903

Re: Stream Conservation

Dear Supervisors,

My family – Lafranchi’s, Roger’s, and Dolcini’s – have been tenants and owners of ranchland in Nicasio for well over 100 years. And I continue that legacy with ownership of ranch property on Halleck creek. I recall as a young child seeing salmon in Halleck creek each fall. I never saw the salmon in any intermittent or ephemeral stream because frankly those streams were always dry during salmon runs.

Those runs stopped when the Marin Municipal Water District dammed Nicasio creek and Marin County quarried gravel from Halleck creek. So I am quite shocked that the Board, through the stream conservation ordinance, contemplates taking control of substantial amounts of my property in a futile effort to revive the salmon runs. My ancestors and I have proven good stewards and it is only the actions by the MMWD and the County that created problems. Yet the County is not proposing to ameliorate any of its problematic actions; rather it intends to impose this law on me and others that neither ameliorate nor rectify the existing issues created by the County. So I would suggest that all properties upstream from Nicasio dam be excluded from the proposed ordinance. I highly doubt you will have the courage to make such a rational decision.

In addition, I suggest the following changes to the law.

- 1) Setbacks should NOT BE proportional to property size, increasing as lot size increases. It is commonsense that many homes on ½ acre lots will have more impact on a stream than one home on 60 acres. If anything, setbacks should be inversely related to property size. The proposed setbacks allow the County control of more

property on larger parcels simply because it is readily available to be taken without compensation.

- 2) Set backs should be measured from the height of 100 year flood levels, not stream banks which are thousands of years old. Halleck Creek, for example, is about 20 feet wide after the most torrential rains, yet its banks are 300 or 400 feet more apart. What happens beyond the actual creek is immaterial to fish.
- 3) Ephemeral streams should be excluded. By definition, these streams last a very short time. They are essentially runoff and may change with any particular storm. Their regulation constitutes another attempt by Marin to control property for no valid reason and without compensation.
- 4) All existing structures should be grandfather regardless of existing permits. Many structures on my property were built before there was even such a thing as 'permits'.
- 5) Only streams accurately mapped right now should be covered under this ordinance and no streams may be added or changed by the county or at the request of any outside groups. Property owners deserve the right to know what is covered under the law and not be subject to continual second-guessing by the county or others.
- 6) Permit fees reduced to the minimum to cover county expenses only and property owners should be allowed to hire their own experts.
- 7) All decisions regarding this SCO by any County Staff member must be appealable to the Board of Supervisors.

As a long-term landowner, my incentive is to steward the property in the most responsible manner. I hope you will allow me and similar landowners the latitude to exercise that stewardship without undue influence from essentially disinterested third parties.

Sincerely,

Bruce E. Lafranchi

From: [BOS](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraitses, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Opinion - draft Stream Conservation Area Ordinance
Date: Thursday, June 13, 2013 7:04:29 AM

This message was received through the email address link for sending one email to all Supervisors. Please forward as you deem appropriate.

-----Original Message-----

From: bill sutton [<mailto:info@action.seaturtles.org>]
Sent: Wednesday, June 12, 2013 7:38 PM
To: BOS
Subject: Opinion - draft Stream Conservation Area Ordinance

Dear Marin County Board of Supervisors,

Once again Marin is sucked into the political disaster that SPAWN has created. The proposed Stream Conservation Ordinance is a lose-lose proposition. I can't help but wonder why SPAWN continues to push their unilateral agenda. Who does this help if their actions hurt the salmon, homeowners, and the environment? I have come to the conclusion that like all aggressive corporations, SPAWN's only true motive is profit. Why else would they try to portray San Geronimo, the only community in Marin that has managed to maintain a population of Coho, as pro-development? Without a "sky is falling" approach, they lose their out-of-town donations and would be forced to deal with the situation in a realistic manner. The reality is that our fry and smolt count has risen every year since the real disaster of the 2005 flood.

A good environmental group works for solutions that are practical, long term, self-sustaining, and self-monitoring. Their bottom line goal should be a viable population of salmon not a viable profit stream. If SPAWN had followed these ideals they could have had more projects then they could have hoped to complete, but then Turtle Island would not be the large and profitable corporation it is... with 2.2 million in assets according to 2011 tax return.

bill sutton

woodacre, CA 94973

From: [Carrie Monohan](#)
To: [Adams, Susan](#); [Rice, Katie](#); [Sears, Kathrin](#); [Arnold, Judy](#); [Kinsey, Steven](#)
Cc: [Thorsen, Suzanne](#)
Subject: Stream Conservation Area Ordinance Comments
Date: Friday, June 14, 2013 12:53:52 PM
Attachments: [Stream Conservation Area Ordinance Comments Dr. Monohan.pdf](#)

Dear Marin County Board of Supervisors,

Please find an attached letter of my comments for the Stream Conservation Area Ordinance.

Best Regards,
Carrie Monohan



6/14/2013

To the Marin County Board of Supervisors,

RE: Proposed Stream Conservation Ordinance for the San Geronimo Valley inadequate protection of salmonid habitat and riparian buffer function

My name is Carrie Monohan, I am a forest hydrologist with a PhD in Forest Resources and Hydrology. My dissertation was on riparian buffer function and habitat for salmon from the University of Washington as part of the Center for Streamside Studies. I completed my dissertation in 2004 and have 10 years of professional experience in the field of watershed hydrology and water quality, I am currently working as the Science Director for a non-profit in the Sierra Nevada, called The Sierra Fund, I am also Adjunct Professor at Chico State University since 2010 and am the chair committee member for 6 master student thesis that relate to watershed ecology, hydrology, and water quality.

I am writing about the proposed Stream Conservation Ordinance for the San Geronimo Valley, part of the Lagunitas Creek watershed, home to the largest wild population of Endangered Central California Coast (CCC) coho salmon and the second largest population of Threatened CCC Steelhead. I have reviewed the Marin County draft ordinance, as well as the Stillwater Sciences (2009) report, San Geronimo Valley Existing Conditions Report, commissioned by Marin County Public Works and created as part of Marin County's Salmon Enhancement Plan [SEP] (2010).

According to the Marine County adopted Salmon Enhancement Plan [SEP], *“(h)ealthy riparian habitat is fundamental to well-functioning streams. It keeps water cool and clean, protects streambanks from erosion, moderates flood flows, and provides roots and wood that are vital to creating the diverse habitat that salmonids and many other aquatic creatures need. The SEP states that “(p)rotecting what works is the most effective and efficient conservation tool. In San Geronimo Valley, this includes keeping existing riparian habitat intact, maintaining streamflows, preventing fine sediments from degrading spawning areas, and protecting areas that provide excellent habitat or opportunities for significant restoration”*. Yet at the same time, the SEP acknowledges that *“(i)n San Geronimo Valley, riparian habitat has been impacted by many years of development. The ECR identified an insufficient number of trees over 12 inches in diameter to supply woody debris and complex root structures for instream habitat, declining density and continuity of riparian vegetation, and the displacement of native vegetation with invasive and ornamental plants”*. It therefore follows that priority actions should include those that both protect existing habitat and restore degraded habitat in order to achieve recovery goals.

The SEP recommends the protection and enhancement of riparian habitat as a high priority, critically urgent action that would have a strong effect on salmon populations within the

watershed. *“Riparian habitat with dense, native, mature vegetation is vital to creating and maintaining high quality habitat for salmonids in San Geronimo Valley. Shade helps to maintain the cool water temperatures that salmon and steelhead need to thrive. Cooler water holds more oxygen. Leaves dropping into the streams are a major food source for the aquatic insects that in turn feed fish. Large wood, in the form of downed dead or live trees, traps and sorts gravels used for spawning, redirects flows to form deeper pools, and provides shelter. During high winter storm flows, densely vegetated banks and floodplains dissipate energy and provide safe havens for fish by creating low-velocity areas.*

Although this Plan is focused on steelhead and salmon, riparian habitat is critical for many other wildlife species. It connects upland habitats to water sources and provides travel corridors, cover, and food. Many species spend much of their lives in or close to riparian habitat. Over 135 species of California birds and 90 species of mammals, reptiles, invertebrates, and amphibians either completely depend upon riparian habitats or use them preferentially at some stage of their life history (RHJV 2009).

Healthy riparian habitat also provides many benefits for people. Grasses, other herbaceous plants, and low shrubs filter fine sediment, nutrients, and other pollutants from runoff before it enters streams. Trees, with their extensive, deep root structures hold banks in place to protect property from erosion. Vegetated banks slow and hold water to reduce flooding and increase recharge into the stream during the summer months.”

1) I agree with the conclusions of the Marine County Salmon Enhancement Plan [SEP] regarding the importance of intact, unfragmented riparian habitat to salmonids. Vegetated buffers along streams are a necessary part of healthy streams. These zones are important natural biofilters, protecting aquatic environments from polluted surface runoff, excessive sedimentation, and erosion. They supply shelter and food for many aquatic animals, including endangered coho salmon, threatened steelhead trout, and their prey species and shade that is an important part of stream temperature regulation. Both coho salmon and steelhead trout require cold water and a few degrees of warming can have sublethal and lethal impacts on both species. When riparian zones are damaged by construction, agriculture or silviculture, biological restoration can take place, usually by human intervention in erosion control and revegetation. The SEP states that *“(t)o support a naturally regenerating riparian forest and a sustainable source of large woody debris 100 feet or more is recommended by the scientific literature and by many other local and state governments for the conifer and hardwood riparian forests that naturally occur in San Geronimo Valley.”* The view taken by the SEP is consistent with similar studies throughout the country.

Current studies indicate that parcels that are in the 100-foot buffer along streams in the San Geronimo Valley have already lost a significant amount of riparian habitat and thus provide limited ecological functions necessary for coho salmon survival and recovery. In environments that have a patchwork of habitat, or refugia, stream systems are at risk of reaching a “tipping point” in terms of loss of habitat such that the stream no longer supports sustainable populations of salmonids and successful regeneration of fry.

2) In my opinion, further development in areas that have a patchwork of riparian habitat due to development within the 100-ft buffer along streams (areas without contiguous riparian buffer strips) can lead to cumulative impacts that can decimate salmonid populations.

The current Stream Conservation Ordinance does not consider cumulative impacts of areas that are in danger of reaching a critical tipping point for salmonid protection because the current ordinance does not require mitigation for 500 sq ft additions to existing structures, allows new development on 205 parcels in the San Geronimo Valley located inside the 100-ft streamside buffer area, and allows accessory structures (sheds) up to 120 sq. ft to be constructed without mitigation.

- The current draft ordinance, will allow 500 sq ft additions to existing structures. In *just* San Geronimo Valley, which currently has 955 developed parcels, this could result in 477,500 sq ft. (955 X 500) of loss of current or potential riparian habitat.
- Further, the ordinance allows new development on 205 parcels in the San Geronimo Valley located inside the 100-ft streamside buffer area. Using the average home size in Marin, the structures alone would result in a loss of current or potential riparian habitat of over 1,000,000 square feet (205 X 2800 sq. ft). This figure is a conservative estimate, since it does NOT include all the additional lost habitat associated with building a home (driveways, walkways, patios, sheds, required defensible fire break space, etc.).
- This ordinance allows accessory structures (sheds) up to 120 sq. ft to be constructed without mitigation. Just in the San Geronimo Valley, these structures alone would result in the loss of current or potential riparian habitat of 139,200 square feet (1160 x 120). This also does not include the additional loss of habitat necessary for a required defensible fire break space around structures.

The SEP highlighted the threat of increase in impervious area. *“Total impervious area (TIA) in the SCA ranges from 7.3% along the North Fork of San Geronimo Creek to 20.8% along Montezuma Creek in representative study reaches (ECR Section 3.3.2). This measurement of impervious area estimates the amount of riparian habitat that has been replaced by hard, impervious structures, such as buildings and driveways, and is an indicator of development impacts to riparian zone health and functioning. However, TIA underestimates the amount of riparian habitat lost because lawns, landscaping, vegetable gardens, and outbuildings are not included in the TIA analysis, yet they all can have significant impacts on the riparian zone.*

A recent analysis was conducted by Marin County to supplement the ECR riparian vegetation survey with quantitative data on land use and cover within the SCA (ECR Appendix G). The study was limited to 29 parcels where landowners gave permission for access. The parcels included equestrian centers, the Marin Municipal Water District (MMWD) pump station, large residential and undeveloped property. Even in this sample of parcels with less development than typical in the San Geronimo SCA, 12% of the SCA area surveyed was covered with buildings,

decks, pools, driveways, and other impervious structures—above the 10% percent imperviousness associated with decline in stream habitat quality (Center for Watershed Protection 1998). Another 25% of the SCA area was in lawn, bare earth, and nonnative vegetation. The average riparian canopy width was 44 feet, and, in most cases, it ended abruptly with not even isolated riparian trees in the remaining width of the SCA, well below the proposed target of an 80-150 ft wide woody riparian zone with 75% cover.”

3) In my opinion, the potential loss of habitat and increase in impervious area resulting from actions permitted by the draft ordinance are incompatible with the conservation objectives and will be detrimental to the long term survival of salmon within the watershed.

The mitigation required in the current draft SCA ordinance is inadequate to prevent additional loss of habitat for the following reasons:

1. Riparian vegetation is very narrowly defined in the ordinance so that it only includes species dependant on a high water table. According to the Stillwater Sciences Existing Conditions Report, most of the vegetation it identified as occurring in the riparian zone do not meet this narrow definition and thus will not require mitigation if it is removed. Two common species not protected for example, California bay laurel and redwood trees, both common in the SCA.
2. Mitigation is not required if it is determined the area is already disturbed. According to the Stillwater Sciences Existing Conditions Report, most of the 100 foot buffer area in the San Geronimo Valley meets this criterion, thus no mitigation will be required for new development, seriously impacting the already diminished functions that the existing patchwork of streamside buffers provide.

4) The ordinance is not protective of riparian buffers around ephemeral streams. The draft ordinance only provides for the 100-foot setback if 100 feet of riparian vegetation is present. Based on my experience, this will exempt a significant portion of ephemeral stream habitat which may have intermittent riparian habitat, yet still provide great benefits to salmonids. As such, this is inadequate for the continued protection of these listed species.

Ephemeral streams can be defined as those channels with a distinct stream bed and bank that carry water only for a short period of time during and briefly after storms (Roy et al 2009). That is, their channels lie above the water table and depend directly on precipitation rather than on snow melt, springs or other sources (U.S. Geological Survey). However, even when ephemeral streams do not have visible flow, they may continue to flow below the surface. This area (the hyporheic zone) between the stream channel and the alluvial groundwater is important to the physical, chemical, and biological integrity of the above-ground portion of the stream. A stream reach that lacks water at all times on the surface may continue to have a thriving hyporheic zone (Levick et al 2008).

Ephemeral streams perform similar ecological and hydrological functions as perennial streams

by moving water, nutrients and sediment throughout the watershed. They may carry juvenile salmonids when they flow, and can provide important temporary rearing habitat and refugia for juvenile salmonids (Reid & Zimmer 1994). Juvenile salmonids can move into ephemeral streams when they flow, releasing density dependence and stored nutrients, at the same time creating more rearing habitat. For example, 10% of juvenile coho salmon rearing in main channel of Carnation Creek during summer, moved into intermittent tributaries and ephemeral swamps in autumn 1983 (Brown & Hartman 1988).

Ephemeral streams play a key role in the ecology of their respective watersheds and in the growth and survival of juvenile salmonids.

- Ephemeral streams deliver nutrients, detrital material and invertebrates downstream to perennial salmonid rearing locations.
- They are sources of large woody debris – the critical rearing habitat for many juvenile salmonids.
- The biogeochemical functions of ephemeral streams include cycling of elements and compounds, removal of imported elements and compounds, particulate detention, and organic matter transport. These functions influence water quality, sediment deposition, nutrient availability, and biotic functions, all of which are affected directly and indirectly by land-use and land-cover change (Levick et al 2008)
- Stream energy dissipation is important for the prevention of channel erosion and increased sediment loads that can degrade water quality. High midwinter discharges in association with unstable debris can dislocate juvenile coho salmon overwintering in the main channel (Tschaplinski & Hartman 1983). By providing channel and stream bank roughness through standing or downed material, vegetation can influence flow velocities, flow depths, bank and flood plain erosion, and sediment transport and deposition, and can be a major factor contributing both to channel stability and to channel instability (e.g. Heede 1985). Vegetation along the stream bank stabilizes the soil through the reinforcing nature of their roots.
- Ephemeral stream vegetation also provides leaf litter, and food and cover for wildlife. In some cases, vegetation can intercept rainfall, preventing it from infiltrating into the soil, and influencing the local water balance and ecosystem processes (Owens et al. 2006, Miller 2005).
- The existence of off-channel winter habitat may reduce variation in coho salmon smolt production and reduce the effect of single catastrophic events such as debris torrents within the main channel (Brown & Hartman 1988).

Small stream and headwater habitats, including ephemeral streams, are vital parts of the biological integrity of U.S. waterways. The disturbance or loss of ephemeral streams has dramatic physical, biological, and chemical impacts, which are evident from the uplands to the riparian areas and stream courses of the watershed (Levick et al 2008).

In general, an increase in impermeable surface area and channelization can:

- lead to high discharges through ephemeral streams after storm events, which in turn can contribute to wash out juvenile salmon rearing in the mainstem (and may also erode suitable rearing habitat [and urban property] further downstream).
- alter channel characteristics (e.g., channel shape and depth) and organic matter input which can affect the ability of streams to cycle materials. Because small streams have high surface-area to volume ratios, they are often able to take up and process nutrients at higher rates than larger perennial streams (Pinay et al. 2002) and are important for maintaining downstream water quality.
- lead to increased sediment loading from loss of natural stabilizing riparian habitat along ephemeral stream banks which can lead to fish mortality, but also reduce habitat quality and availability of invertebrate food sources Clinnick (1985).
- lead to contamination from septic tanks and other sources of organic pollutants and heavy metals which can be transported downstream and into groundwater, and lead to eutrophication, presence of harmful pathogens, and massive fish die offs.
- Lead to loss of source areas for large woody debris which contributes to essential rearing habitat for juvenile salmonids along perennial reaches.

Riparian buffers are useful management tools to protect stream habitat from anthropogenic threats. Yet to be most effective, buffers must extend along all streams, including intermittent and ephemeral channels (Wenger & Fowler 2000). The effectiveness of a network of buffers is directly related to its extent; governments that do not apply buffers to certain classes of streams should be aware that such exemptions reduce benefits substantially (Wenger 1999).

In summary, I do not agree with the conclusions of the County that this ordinance will adequately protect salmonids in San Geronimo or in Marin County. The County must reconsider critical aspects of the ordinance to more adequately protect against the incremental loss of habitat from development in the stream conservation area. In my opinion, development without protection of remaining riparian areas could cause a decline in salmonid populations, particularly if it reduces the overall habitat in the watershed below the levels necessary for salmonids to survive. I am not aware that the County has considered the cumulative effects of the proposed ordinance.

Yours sincerely,



Carrie Monohan, Ph.D.
Adjunct Professor at Chico State
Department of Geologic and Environmental Sciences and
Science Director
The Sierra Fund

From: [BOS](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraits, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Stream County Ordinance
Date: Friday, June 14, 2013 12:48:17 PM

This message was received through the email address link for sending one email to all Supervisors.
Please forward as you deem appropriate.

From: c.fallingstar@gmail.com [mailto:c.fallingstar@gmail.com]
Sent: Friday, June 14, 2013 12:15 PM
To: BOS
Subject: Stream County Ordinance

Cerridwen Fallingstar would like information about:

As French Philosopher Pascal Bruckner puts it, there are "Two ecologies: one rational, the other nonsensical; one that broadens our outlook while the other narrows it; one democratic, the other totalitarian." Sadly Spawn has moved to the totalitarian end of the equation. I am the home owner at 330 Meadow Way, San Geronimo. I care deeply about the salmon, and would be willing to sacrifice financially to protect them, though I have nothing to spare. I would be willing for my property to be worth less, to protect the salmon. My septic system works perfectly; if it did not I would replace it. I have lived here since 1986, and have taken my stewardship seriously, never using pesticides or insecticides which could wash into the stream.

But there is nothing in stopping property owners from constructing or expanding (within reason) their homes that will help the fish.

If you really want to save the salmon, how about a petition to ban all toxic chemicals (such as weed and insect killers) from the area? How about fixing all the failing septic systems? That would actually help.

The collapse of the salmon population (since rebounded some, not enough) of 2008-09 came after Spawn removed the artificial dams/ponds in the creek where the young fry gathered to stay cool and out of the reach of predators. Maybe connected, maybe not. I believe that Spawn wants to help and do the right thing. But they are being dishonest with all this 'real estate development' nonsense. The valley is almost built out. The few remaining lots having houses built on them will not affect the fish one way or another, nor will modest improvements to the homes which remain.

It's easy to take on a few aging hippie home-owners, though that will accomplish nothing. It would be hard to restrain the corporations--farming, fishing, logging--which have actually brought the salmon to this point.

And everyone wants an easy 'fix'--even if it doesn't fix anything.

Preventing any building within 100 feet of the banks will save the fish just like searching old ladies in wheelchairs at the airport will prevent another 9/11.

Placing onerous permitting requirements--already insanely difficult and prohibitively expensive in Marin county--on the mostly extremely environmentally conscious and conscientious home-owners of the San Geronimo Valley--is an imaginary solution to a real problem.

Please don't settle for scapegoats rather than solutions.

From: [BOS](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraitses, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: marin creeks ordinance
Date: Friday, June 14, 2013 10:25:25 AM

Please forward this email as you deem appropriate.

From: deborahlagunitas@gmail.com [mailto:deborahlagunitas@gmail.com]
Sent: Friday, June 14, 2013 10:08 AM
To: BOS
Subject: marin creeks ordinance

deborah hamilton would like information about:

I'm a Marin County high school graduate who has lived in Lagunitas since 1972; I love Marin. I am very much opposed to SPAWN & Mr. Steiner's policies which tend to be more about him & raising money than about protecting salmon. I am opposed to the ordinance his organization proposes and urge you to vote against it. I think existing homes should be grandfathered in, and that he should be held to the same standards as the rest of us. Why was he allowed to construct a redwood septic tank on his Lagunitas property recently? Why is he allowed to take over the old house(s) in Tocaloma which surely must be stirring up Lagunitas creek? Please do not approve the proposed countywide creeks ordinance. Thank you.



Friends of Corte Madera Creek Watershed

P.O. Box 415 • Larkspur • California 94977

info@friendsofcortemaderacreek.org (415) 456-5052 www.friendsofcortemaderacreek.org

June 15, 2013

Marin County Board of Supervisors
Supervisor Judy Arnold, President
3501 Civic Center Drive,
San Rafael, CA 94903

RE: Stream Conservation Area Ordinance

Dear Members of the Board:

Friends of Corte Madera Creek Watershed supports approval of the SCA ordinance as recommended by staff to improve protection for our creeks. Although protective measures would ideally be based on a scientific rationale such as flow regime and the specific resources being protected, rather than arbitrary setbacks, we appreciate the constraints created by an obligation to implement the 2007 Countywide Plan programs and policies and look forward to a best effort within those parameters.

We commented earlier to the Planning Commission with recommendations that have not been incorporated into the final document. This is disappointing, but we realize that county staff has been under pressure from affected parties with differing points of view and, in trying to develop a measure that would pass muster with competing interests, compromise has been necessary.

A major concern we have is the urgent need for a workable SCA to protect coho habitat. For this reason we urge you to approve the proposed ordinance to enable increased protection for streams that support this endangered species. Further we would recommend that if the county's resources for outreach and implementation efforts are limited that the first, and immediate, focus should be on waterways supporting coho habitat.

Thank you for this opportunity to comment. We look forward to continuing to work with County staff to improve the water quality and habitat value of our creeks.

Sincerely,

Sandra Guldman
President, Friends of Corte Madera Creek Watershed

c: Tom Lai (email)
Suzanne Thorsen (email)



Marin Audubon Society

P.O. BOX 599 | MILL VALLEY, CA 94942-0599 | MARINAUDUBON.ORG

June 14, 2013

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

RE: STREAM ORDINANCE for June 18 Board Meeting

Dear Chairman Arnold and Supervisors:

Marin Audubon strongly supports adoption of the stream protection ordinance. The proposed ordinance reflects stream and creek protection policies that are in the Countywide Plan (CWP) and that were approved by the Board of Supervisors in 2007. Any weakening of policies from the CWP, or failing to follow through with memorializing them in an ordinance, would be a violation of the trust of the public and would place Marin's invaluable stream resources at continued risk from impacts of development.

We consider provisions of the ordinance to be minimum necessary to protect stream resources while, at the same time, allowing for development of properties by owners. While some provisions of the ordinance are not ideal, they are a step forward. They will better protect water quality and the many fish, bird and other wildlife species that depend on Marin's riparian and in-stream habitats.

We emphasize the importance of including ephemeral streams with the minimum buffer because of their value to water quality and flood protection, and of maintaining the stated setbacks to protect streams and riparian vegetation. These provisions have been vetted during public review of both the CWP and Stream Ordinance.

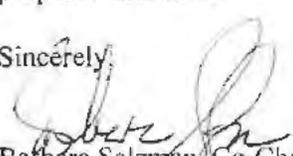
Having said this, we request that a few changes be made to better reflect resource protection policies in the CWP:

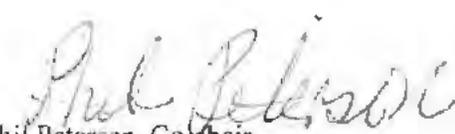
Site assessments should be a required to:

- confirm the presence of sensitive biological resources (BIO-4.1 fifth bullet). This should include, in particular, special status wildlife, e.g. Red-legged frog, Western Pond Turtle, that depend on riparian habitats. It also should be noted that if these sensitive biological resources are present, additional setback may be required to accommodate their habitat needs.
- "Unless waived, the qualified professional (preparing the Assessment) shall be hired by Marin County...and paid for by the applicant..." as stated in CWP policy BIO-4.g.

Thank you for considering our recommendations. In the interest of the public, we urge you to adopt the proposed ordinance.

Sincerely,


Barbara Salzman, Co-Chair
Conservation Committee


Phil Peterson, Co-chair
Conservation Committee



Protecting Marin Since 1934

June 14, 2013

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

Subject: Stream Conservation Ordinance

Dear President Arnold and Supervisors:

The Marin Conservation League commends the County for undertaking the development of a Stream Conservation Area (SCA) ordinance to implement the 2007 Countywide Plan. We appreciate the thoughtful and even-handed way in which staff worked with the community to respond to the numerous questions and concerns.

We urge your Board to adopt the ordinance. We also urge the Board to adopt a strong implementation strategy. Merely passing an ordinance is not enough. Protection of riparian resources requires proactive efforts to ensure compliance with the SCA and with other applicable ordinances and restrictions. A compliance strategy should include complete updated mapping of all categories of streams, a fee structure that does not discourage compliance, a broad public outreach program and enforcement. Achieving these objectives will require the county to have adequate trained staff.

An effective outreach program would provide incentives to property owners to preserve and enhance their creeks. This might include an expanded version of the existing landowner assistance program, providing free consultations and assistance to property owners who volunteer to improve their creeks, similar to successful programs by water districts to encourage conservation.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "David Schnapf".

David Schnapf
President, Marin Conservation League

PHONE: 415 485.6257
FAX: 415 485.6259

EMAIL: ncl@marinconservationleague.org
WEB: marinconservationleague.org

ADDRESS: 175 N. Redwood Dr., Ste. 1:35
San Rafael, CA 94903-1977



Marin County Stream Conservation Area Ordinance



San Geronimo Valley Stewards

Stream Ordinance Materials from San Geronimo Valley Stewards

To: Marin County Board of Supervisors

From: San Geronimo Valley Stewards

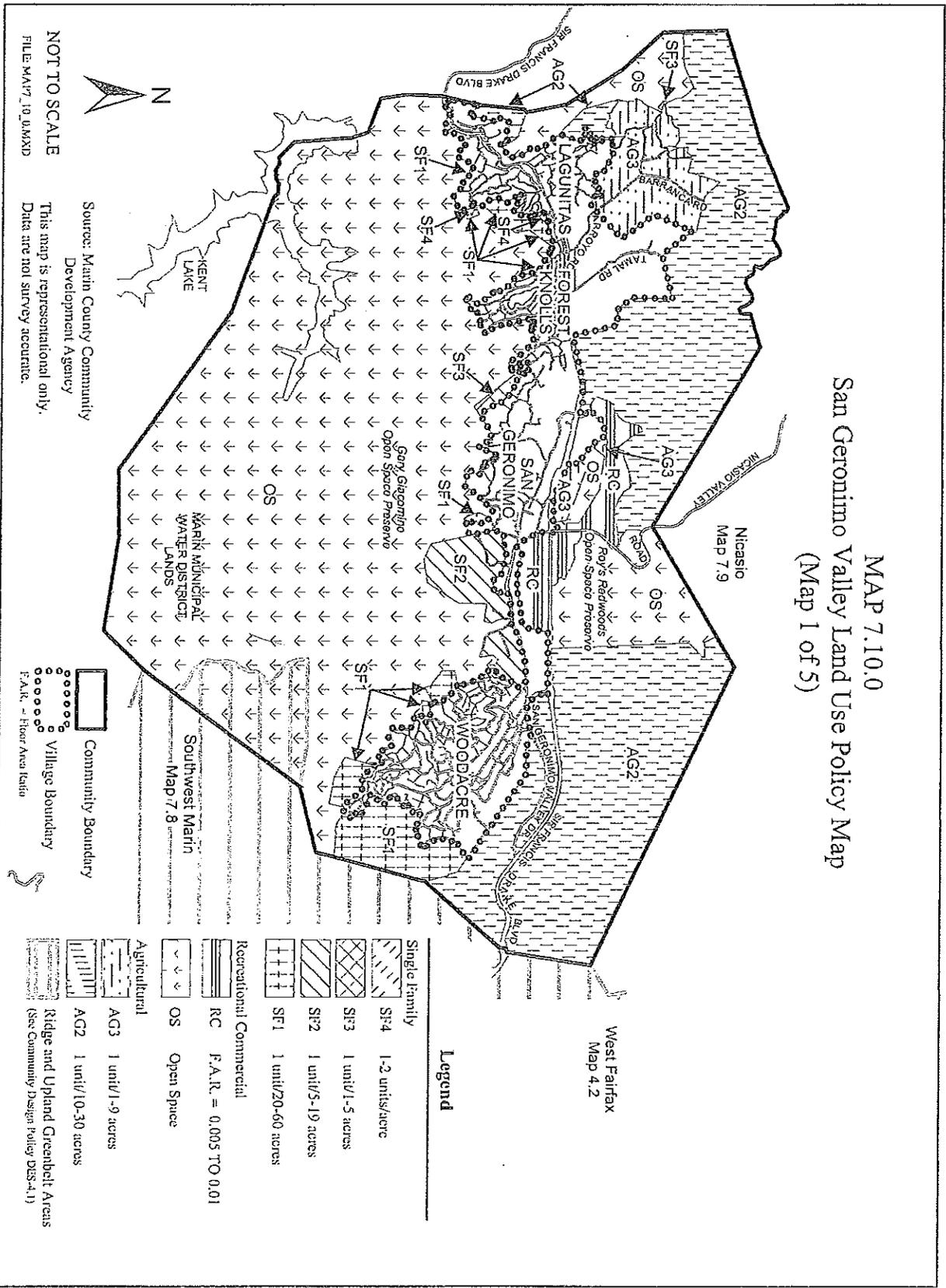
Enclosed are materials for the June 18, 2013 meeting on the 1:30 pm Agenda.

1. San Geronimo Valley -- Map of Villages in Community Plan, Fire Risk Maps, Analysis of Valley Parcels and Acreage in the SCA
 2. Salmon Enhancement Plan (SEP) Feb 2010 pages 2- 21, 22, 27, 28 recommending 35 foot setback, and regarding vacant parcels within SCA
 3. Dr. Mark Jennings letter May 6, 2013 re ephemeral streams, 35 foot setback, vegetation mitigation, and fences
 4. Dr. Ostrum Wins Nobel Prize for Fisheries Management
 5. San Geronimo Valley Stewards Requests to Amend Countywide Plan and Change Stream Ordinance
 6. Photos of streams in San Geronimo Valley
 7. Mr. Figari Corrects Ephemeral Stream Map in Woodacre
 8. Urban Trend for Second (Accessory) Units as Low Cost Housing (Wall Street Journal June 4, 2013)
 9. Statements of Steve Tognini August 2010 and Dec 2011, Re SG Valley conditions, the SEP and ECR reports, redwood forest, and trees.
 10. Statement of Steve Tognini Re Ephemeral Water Flows
 11. Statement of Steve Tognini Challenging SPAWN's "Science" as Misleading
-

Village Areas of
San Geronimo Valley

2007 Marin
County wide Plan

MAP 7.10.0
San Geronimo Valley Land Use Policy Map
(Map 1 of 5)



NOT TO SCALE
FILE MA17_10_A.MXD

Source: Marin County Community
Development Agency
This map is representational only.
Data are not survey accurate.

Community Boundary
Village Boundary
F.A.R. - Floor Area Ratio

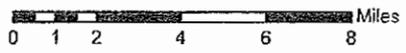
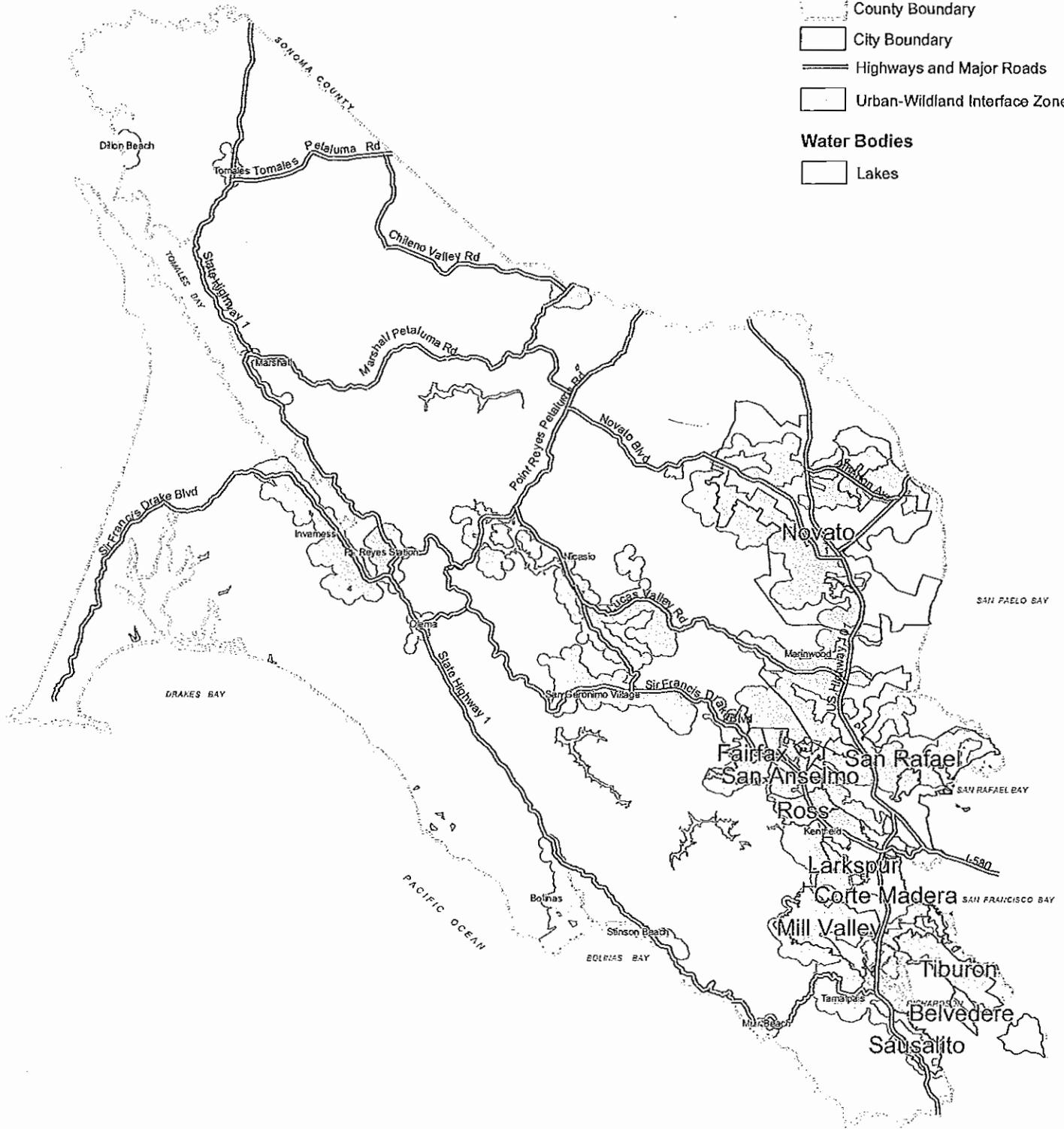
Legend

	Single Family SF4	1-2 units/acre
	SF3	1 unit/1-5 acres
	SF2	1 unit/5-19 acres
	SF1	1 unit/20-60 acres
	Recreational Commercial RC	F.A.R. = 0.005 TO 0.01
	OS	Open Space
	Agricultural AG3	1 unit/1-9 acres
	AG2	1 unit/10-30 acres
	Ridge and Upland Greenbelt Areas	(See Community Design Policy DCS-4.1)

MAP 2-13 URBAN-WILDLAND INTERFACE ZONE

Legend

-  County Boundary
 -  City Boundary
 -  Highways and Major Roads
 -  Urban-Wildland Interface Zone
- Water Bodies**
-  Lakes



THIS MAP WAS DEVELOPED FOR GENERAL PLAN PURPOSES. THE COUNTY OF MARIN IS NOT RESPONSIBLE OR LIABLE FOR USE OF THIS MAP BEYOND ITS INTENDED PURPOSE.

SOURCE: Marin County Fire Department, November 2004.



P.O. Box 276
Lagunitas, CA 94938

JANUARY 19, 2010

*DO YOU LIVE OR OWN PROPERTY
IN THE SAN GERONIMO VALLEY?*

SALMON PLAN EFFECT ON VALLEY PARCELS AND ACREAGE

Very interesting results when we look at the Assessor's Parcel Numbers (APN's) and map in the San Geronimo Valley watershed, and how much land would be covered by the Stream Conservation Area (SCA) and the proposed Salmon Enhancement Plan (SEP).

Sixty percent of the parcels in the Valley are completely or partially within the SCA-- that is, within 100 feet of any creek, stream, seasonal or perennial flow, or natural uplands drainage. These parcels represent 90% of the Valley acreage. The Valley is one big pond in the winter.

Of this acreage, about 39% is owned by two public agencies--Marin Open Space District and Marin Municipal Water District. Within this vast publicly-owned land, it should be possible to accomplish stream conservation and salmon enhancement projects, without adverse effect upon homeowners.

There are 228 privately owned unimproved parcels (no houses) located within the SCA. The SEP would ban all building within 35 feet of any stream, and would severely restrict building within 100 feet on both sides of any stream. Yet these 228 parcels comprise only 6% of the total 243,870,438 *Sq FT* of the SCA. A few landowners with small holdings would bear the burden for the entire Valley.

The Valley has 1,372 privately owned parcels which are improved with 1,236 single family homes and 135 multi-family residences. (Most multi-family residences in the Valley are small "second units" attached to a house. There are very few apartment buildings in the Valley.) The second units are an important supply of affordable housing for the community and the Valley economy. Marin has determined that affordable housing is one of the 10 most important policy goals of the 2007 Marin county Wide Plan (CWP).

Of the 1,372 parcels improved with homes and second units, 834 parcels are within the SCA. That means that 60% of Valley housing would be directly impacted by adoption of a Salmon Enhancement Plan which restricts activities within the SCA (100 feet on both sides of any creek or stream).

Please see the complete analysis of Assessor's parcel maps, attached.

Here is profile to the SCA, Based on the Salmon Enhancement Plan, Appendix D "SCA parcels included in moratorium" (Page D-1 - Page D-6) cross referenced with the County of Marin Assessors Tax Profile Database.

Total # of parcels impacted by SCA in the San Geronimo Valley = 1,182 (this includes two parcels located in Fairfax and 5 parcels in Nicasio Valley)

These parcels represent:

- 60% of the parcels in the San Geronimo Valley
- 90% of the Land Area of the San Geronimo Valley

In terms of who has the biggest pieces of the SCA pie they are:

Public Entities = 38% (so far, there are other agencies with small land areas that are still listed under private owners)

Marin County Open Space District: 27%

Marin Municipal Water District: 12%

Largest Private Owners = 35%

FITZPATRICK MARIE A C/O GEORGE FLANDERS	10%
SKYWALKER PROPERTIES LTD	10%
SPIRIT ROCK MEDITATION CENTER	7%
NEW PRODUCT RESEARCH & DEVELOPMENT CORP	4%
NATIONAL GOLF OPERATING PARTNERSHIP	3%
FITCH RANCH LLC	1%

Other Private Owners = 27%

This is spread out over 966 owners (more actually because couples or investment groups are counted as one owner)

The profile of the San Geronimo Valley parcels in terms of types of lots looks like this:

Use Code	Vacant Parcels	In SCA		Not SCA		Total		
		# of Parcels	Land Area	# of Parcels	Land Area	# of Parcels	Land Area	
10	Single Family Residential	228	14,624,730	214	5,818,002	442	20,442,732	6% <i>Single Family Lot Land Area in SCA compared to total watershed Land Area</i>
20	Multiple Family Residential	2	-	2	-	4	-	
30	Rural	8	43,073,870	3	57,064	11	43,130,934	
32	Agricultural Preserve Contract	3	25,184,214			3	25,184,214	
50	Commercial	4	87,124	2	-	6	87,124	
60	Subject to exemption	2	22,500	2	34,263	4	56,763	
		247	82,992,438	223	5,909,329	470	88,901,767	23% of the Parcels
		53%	93%	47%	7%	100%	100%	34% of the Land Area

Use Code	Improved Parcels	In SCA		Not SCA		Total		
		# of Parcels	Land Area	# of Parcels	Land Area	# of Parcels	Land Area	
11	Single Family Residential	744	30,354,628	492	13,197,197	1236	43,551,825	70% of the Parcels 30% of the Land Area
21	Multiple Family Residential	90	3,327,258	45	935,391	135	4,262,649	
31	Rural	2	4,082,443			2	4,082,443	
	Agricultural Preserve Contract	2	2,273,831			2	2,273,831	
51	Commercial	21	7,751,534	10	177,796	31	7,929,330	
61	Subject to exemption	5	17,853,527	2	86,410	7	17,939,937	
		864	65,643,221	549	14,396,794	1413	80,040,015	
		61%	82%	39%	18%	100%	100%	

Use Code	Other	In SCA		Not SCA		Total		
		# of Parcels	Land Area	# of Parcels	Land Area	# of Parcels	Land Area	
15	Common Area Parcel	2	396,395	1	2,426	3	398,821	7% of the Parcels 36% of the Land Area
80	Non-taxable	72	94,838,384	64	210,059	136	95,048,443	
90	Valued by S.B.E.	2	-			2	-	
		76	95,234,779	65	212,485	141	95,447,264	
		54%	100%	46%	0%	100%	100%	

	In SCA		Not SCA		Total	
	# of Parcels	Land Area	# of Parcels	Land Area	# of Parcels	Land Area
Grand Total	1,187	243,870,438	837	20,518,608	2,024	264,389,046
	59%	92%	41%	8%	100%	100%

When the above information is listed just by those parcels in the SCA and sorted by largest land area the list looks like this:

In SCA

Use Code	Vacant Parcels		# of Parcels	Land Area		
80	Other	Non-taxable	72	94,838,384	39%	67%
30	Vacant Parcels	Rural	8	43,073,870	18%	
11	Improved Parcels	Single Family Residential	744	30,354,628	12%	
32	Vacant Parcels	Agricultural Preserve Contract	3	25,184,214	10%	
61	Improved Parcels	Subject to exemption	5	17,853,527	7%	
10	Vacant Parcels	Single Family Residential	228	14,624,730	6%	
51	Improved Parcels	Commercial	21	7,751,534	3%	
31	Improved Parcels	Rural	2	4,082,443	2%	
21	Improved Parcels	Multiple Family Residential	90	3,327,258	1%	
33	Improved Parcels	Agricultural Preserve Contract	2	2,273,831	1%	
15	Other	Common Area Parcel	2	396,395	0%	
50	Vacant Parcels	Commercial	4	87,124	0%	
60	Vacant Parcels	Subject to exemption	2	22,500	0%	
20	Vacant Parcels	Multiple Family Residential	2	-	0%	
90	Other	Valued by S.B.E.	2	-	0%	
Grand Total			1,187	243,870,438	100%	

SAN GERONIMO VALLEY SALMON ENHANCEMENT PLAN



A Guidance Document

Prepared for

Marin County Department of Public Works

Prepared by

Prunuske Chatham, Inc.

with assistance from
Stillwater Sciences

February 9, 2010

Measure	Provisions
	<p>this chapter if the lot is zoned A, A-2, RA, H1, O-A, RR, RE, R1, R2, C-1, A-P, or VCR, including all combined zoning districts.</p> <p>(Ord. 3491 Exh. A (part), 2008; Ord. 3380 Exh. B (part), 2003)</p>

A **minimum** 35-foot buffer is recommended to guide enhancement on parcels that are already developed and to guide enhancement of riparian habitat on parcels proposed for new or re-development. On larger parcels, a wider buffer may be needed to protect the existing riparian forest. This buffer is measured from the edge of the creek bed or active channel and provides the following benefits

- protects water quality,
- preserves riparian vegetation,
- allows for restoration where riparian vegetation is patchy or non-existent,
- allow natural stream adjustments and protects property from erosion,
- supports stormwater infiltration

The Department of Fish and Game defines the active channel level as the "elevation delineating the highest water level that has been maintained for a sufficient period of time to leave evidence on the landscape." (DFG 2003). In the field, it can be determined by one or more of the following indicators:

- *The point where cleanly scoured rocks and gravel transition to smaller-sized particles such as silt and sand, or directly to terrestrial vegetation*
- *A break in rooted vegetation or moss growth on rocks along stream margins*
- *Natural line impressed on the bank*
- *Shelving or terracing*
- *Changes in soil character*
- *Natural vegetation changes from predominantly aquatic to predominantly terrestrial*

To support a naturally regenerating riparian forest and a sustainable source of large woody debris 100 feet or more is recommended by the scientific literature and by many other local and state governments for the conifer and hardwood riparian forests that naturally occur in San Geronimo Valley (Appendix E). Such a buffer is called for in the Countywide Plan, with certain practical exceptions, as noted above. Because of existing development in San Geronimo Valley, it is critical to protect existing habitat and promote the restoration of wider and more diverse riparian forests on public lands or with willing, private landowners. Valley residents can markedly improve the diversity and connectivity of these riparian buffers through voluntary actions.

Function of the 35-foot buffer

In areas constrained by existing development or on small vacant lots, a minimum 35-foot buffer from the active channel to new construction can ensure the protection or enhancement of riparian vegetation or function. The buffer can make a crucial contribution to filtering most sediment

and sediment-attached pollutants, while also providing shade and natural bank stabilization (Figure 2). Trees growing within the buffer would eventually contribute to large wood in the stream as they mature and fall over. Based on measurements of mainstem San Geronimo Creek and major tributaries collected as part of this planning process (ECR, Appendix A), a 35 ft buffer would allow construction of a 3:1 slope in most reaches as part of stream stabilization and restoration projects. It would also allow natural erosion processes as the stream adjusts to changes in the watershed and runoff patterns without jeopardizing structures, gardens, or other infrastructure. In areas where people are already living, this zone is the key area to focus riparian enhancement activities.

An undisturbed buffer is most critical along perennial and intermittent streams in the Valley. Steep, ephemeral, first order streams also play a crucial role in stabilization, infiltration, and filtration functions necessary to protect downstream habitat. Protection of these functions is addressed in Recommendation 12.

Reduce invasive plant populations overall and discourage planting certain species in SCA.

The ECR identifies English ivy, Himalayan blackberry, and French broom, all rated as having a high negative ecological impact on native plant communities, as common in the riparian shrub layer. Periwinkle or vinca, ranked as a moderate threat to native communities, represented 37% of the herbaceous cover in the sites sampled (ECR Section 3.6.1). Cherry plums were found near Montezuma Creek and Forest Knolls, but they are considered a limited threat according to the California Invasive Plant Council. Giant reed (*Arundo donax*), a highly invasive riparian species, also occurs in the watershed. Guidelines for removing exotic invasive plants are included in Appendix I.

Design streambank rehabilitation to maximize riparian vegetation function and success.

Gently-sloped banks and inset floodplains where appropriate and feasible facilitate the establishment of native riparian vegetation (Recommendations 7 and 11). When banks are sloped back to a gentler slope, the top of bank moves landward. County planners should have the option to preserve the landward SCA boundary at the location that existed before work begins as an incentive to encourage the most effective restoration



*Biotechnical bank stabilization using gently-sloped banks and a small, inset floodplain protected with a willow wall. The floodplain and bank were later planted with native plants.
Photo by Prunuske Chatham, Inc.*

Scientific reasoning:

New development and improvements on already developed parcels in the SCA have the potential to diminish riparian habitat and function through direct removal of native vegetation, an increase in the area of hardened surfaces and subsequent reduction in the capacity of riparian soils to hold and slowly release water. Development next to the stream can also increase the amount of sediment, nutrients, and other pollutants generated close to the waterways. See Recommendation 1 for a discussion of the importance of protecting riparian habitat in San Geronimo Valley.

The amount of impervious area, especially effective or connected impervious area, is strongly correlated to degraded stream condition (ECR, Section 2.3). Connected impervious area speeds rainfall from rooftops, driveways, and streets along with sediment, spilled oil, brake dust, and many other pollutants, and then delivers the polluted water directly into storm drains or streams. Percent imperviousness over 10% is associated with unstable banks, decline in physical habitat, and the disappearance of sensitive fish and insects (Center for Watershed Protection, 1998). The percent cover of impervious surface in the SCA study reaches ranges from 7-21% (ECR Section 3.3.2). Montezuma Creek with 21% and Woodacre Creek with 19% had the highest percentages.

Potential future impacts of development along streams include the need to harden banks to protect property as the stream channel changes over time, the removal of diseased or aging trees for safety reasons, and failing septic systems.

The quality of summer rearing habitat is dependent upon sufficient streamflow to maintain pool connectivity, low water temperatures, and sufficient dissolved oxygen levels. Water supply wells adjacent to creeks have been shown to lower the groundwater table and locally impact summer streamflows, especially in drought years (PCI 2006). Riparian pumps lower pool levels during critical summer conditions.

Recommendation 3 addresses all riparian, hydrologic function, and water quality targets. Retention of trees close to streams would ultimately contribute towards achieving the channel bed form and food availability targets.

Description:

Preliminary analysis based on data provided by the Marin County Assessors office indicates there are 203 unimproved single-family residential parcels that include portions of the SCA in San Geronimo Valley. Of those, 58 are wholly in the SCA. Of the 203 parcels,

approximately 108 cannot contain 3,000 sq. feet¹ of development outside of the SCA. The analysis does not consider additional restrictions such as inadequate percolation for septic systems or lack of access that would reduce the total number of buildable parcels. Building within the SCA may be permitted if the entire parcel is within the SCA providing that development does not adversely alter hydraulic capacity; cause a net loss in habitat acreage, value, or function; or degrade water quality. (CWP, Policy Bio-4.1).

In addition, replacement, repair and maintenance of existing permitted or legal nonconforming structures within their existing footprint can occur in the SCA. The following guidelines should be used to select and shape projects that have minimal impact on salmonid habitat, and to guide any ordinances that may be drafted to implement the policies of the 2007 CWP. Where policies for these guidelines or portions of them have been adopted in the CWP, the policy or program number is indicated. The Conceptual Plans in Appendix H demonstrates development that complies with these guidelines.

Maintain a vegetated riparian buffer

The Plan recommends enhancement occur within a minimum 35-ft riparian buffer for new development and re-development to protect riparian and instream functions, and to safeguard structures from erosion and flooding. See Recommendation 2.

Retain native riparian trees and shrubs within the remaining SCA (BIO-4.f, 4.i)

As mandated in the County's Native Tree Preservation and Protection Ordinance, native trees and shrubs should be retained within the remaining SCA unless they are an immediate threat to human safety (Marin County Code, Chapter 22.27). The Plan recommends that the threat determination within the SCA be made by a professional, third-party assessment. Trees smaller than the thresholds identified in the Tree Ordinance are also important to protect along streams because they will eventually maintain the canopy cover as existing larger trees mature and die.

¹ The 3000 sq. ft. estimate is based on 2000 sq.ft home, 500 sq.ft. septic system, and 500 sq.ft. driveway.

Rana Resources
P.O. Box 2185
Davis, CA 95617-2185
(530) 753-2727

#16,604
May 06, 2013

To: Marin County Board of Supervisors
Marin County Planning Commission
Marin Community Development Agency

Re: RECOMMENDATIONS FOR THE DRAFT MARIN STREAM CONSERVATION AREA
ORDINANCE (May 01, 2013).

Dear Supervisor's:

I am writing this letter with regards to your recommendations for the draft Marin Stream Conservation Area [=SCA] ordinance (01 May 2013). I am a consulting fish and wildlife biologist who has worked in government and private industry for the past 27 years dealing with research, management, and conservation issues regarding listed fishes, amphibians, and reptiles in California. I hold B.S., M.S., and Ph.D. degrees in wildlife and fisheries science and have published over 100 peer-reviewed, scientific papers including those that deal with steelhead (*Oncorhynchus mykiss*), coho salmon (*O. kisutch*), and California red-legged frogs (*Rana draytonii*).

Overall, I find that much of the draft SCA ordinance is a well thought out and up-to-date document that will do much to ensure the continued survival and potential recovery of salmon and trout, as well as native amphibians and aquatic reptiles in the San Geronimo Valley. However, there are a few items that raise concerns regarding their scientific justification for protecting fish and wildlife resources. My comments are as follows.

1). The designation of "ephemeral streams" should be dropped. Over the past 40+ years, agencies and academia have worked together to justify what constitutes "perennial streams" and "intermittent streams" and have come up with measureable physical and biological attributes to justify these jurisdictional designations. For example stream channel profiles, soil types, riparian plants, the length of time that water is present, etc., are all currently used to determine jurisdictional stream channels and wetlands. Your definition that ephemeral streams are based on a "watercourse that carries only surface runoff and flows during and immediately after periods of precipitation" (and would subsequently be mapped for protection) cannot be justified on any rational scientific basis. The only criteria stated is flowing water over a loosely defined period of time. As a scientist, this is too subjective to denote areas requiring further protection. Based on my extensive field experience in the Bay Area, one could find water flowing for a week or two in a wide variety of natural and artificial habitats depending on the amount of rainfall during this time period. This is especially true during periods of extensive downpours. Such habitats would include ruderal fields, tire ruts along dirt roads, low points at the edges of

buildings, etc. None of these areas justifies an added layer of specific protection for fish and wildlife habitat.

2). The SCA should be allowed to be narrowed to 35 feet (denoted from the top of the bank) with mitigations for the removal of ruderal vegetation [i.e.: introduced weedy species growing in fields, along roadways, in waste places, etc.]. The proposal to have the SCA based on a distance from the nearest band of riparian trees or vegetation is not scientifically justified in Marin County where rainfall is abundant and riparian vegetation grows in many places that are not close to intermittent or permanent streams (e.g., coastal redwood (*Sequoia sempervirens*) trees, willows (*Salix* spp.), and introduced Himalayan blackberries (*Rubus discolor*) bushes).

3). The footprint of any development (for example, second units or home additions) could be expanded, provided however, that it should be mitigated in kind with native vegetation planted in an area equal to the size of the development. Because you are removing ruderal vegetation at the development footprint and then replacing ruderal vegetation elsewhere as mitigation near the area of development, this is not a net loss of habitat. In fact, if the mitigation area is selected adjacent to a currently present riparian area, then the planting and establishment of native vegetation would enhance wildlife habitat. This is because native vegetation provides a much better food source for many invertebrates that are consumed by fish and wildlife species. Thus, if you replace ruderal vegetation with the proper vegetation native to the area, one should increase the amount of invertebrate food resources available for creatures like juvenile salmon, terrestrial salamanders, tree frogs, lizards, and birds.

4). The SCA should create incentives for replacing currently toxic roadways, or areas of old junk piles, or exotic vegetation with items like concrete or artificial rock paving stones (for paved or dirt roads), native plants and trees. The most important outcome of this is to replace anything toxic or impervious with exactly the same amount of area of porous or pervious structures, or native vegetation. If impervious structures must remain, then there should be connectivity for water to flow into a nearby stream course. One possible way for this to occur is for future development of sites to enter into agreements for acquiring areas of mitigation elsewhere within the same drainage that have already been completed (but not credited for the work being done), or have not been previously contemplated, but could be done more economically. This would also allow for greater focusing of enhancing currently degraded upland habitats in the most sensitive areas within the San Geronimo Valley.

5). The SCA should encourage (not prohibit) the removal of introduced trees (such as bluegum (*Eucalyptus globulus*)) and replacement with native trees, even within the SCA protection zone. This will keep the introduced species from spreading and as mentioned previously, increase the native invertebrate food supply for fish and wildlife resources. It would also decrease the potential fire hazard by bluegum trees, especially dead ones. An individual could also receive or

sell mitigation "credits" to another for the removal and replacement of such introduced trees with suitable native trees.

6). The SCA should allow for the cutting or mowing of brush and other low lying vegetation to within 20 feet of any natural drainage channel (where one can see a top of bank) that is not mapped as intermittent or perennial by the County. This would allow land owners flexibility to maintain their fields and lessen potential fire hazards by accumulation of woody plant material.

7). The SCA should define what is meant by: "New fences that do not restrict wildlife access to streams and the adjacent riparian habitat." What are they referring to by wildlife--birds, deer, raccoons, mice, turtles, lizards, frogs, or salamanders? Fences differ in kind and some are barriers to certain wildlife species depending on the materials used (e.g., wooden boards or metal mesh), height, or spacing under the bottom. Perhaps it is better to state: "New fences that are designed in materials, height and spacing so as not to block wildlife (such as salamanders, frogs, turtles, lizards, mice, raccoons, or deer) from access to streams and the adjacent habitat."

Thank you for allowing me the opportunity to comment on your draft SCA. Please feel free to contact me if you have any questions.

Sincerely,



Mark R. Jennings
President and Fisheries Biologist/Herpetologist

MARK R. JENNINGS, Ph.D.
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EDUCATION

Ph.D., Wildlife and Fisheries Science, The University of Arizona, 1986
M.S., Natural Resources, Humboldt State University, 1981
B.S., Fisheries, Humboldt State University, 1978

AREAS OF EXPERTISE

Herpetology, amphibian ecology, conservation, special status species studies

PROFESSIONAL EXPERIENCE

Associate Herpetologist and Fisheries Biologist, Live Oak Associates, Inc., 1999-Present
Assistant, Agricultural Experiment Station, University of California, Davis, 1995-1998
Assistant Adjunct Professor, University of California, Santa Barbara, 1993-2002
President, Herpetologist and Fisheries Biologist, Rana Resources, 1988-Present
Research Associate, Department of Herpetology, California Academy of Sciences, 1987-Present
Associate Aquatic Biologist and Herpetologist, H. T. Harvey & Associates, 1990-2000
Principal Research Associate, Cal Poly San Luis Obispo, 1994-1997
Research Fish and Wildlife Biologist, U.S. Geological Survey, 1992-1999
Research Fisheries Biologist, U.S. Fish and Wildlife Service, 1986-1990
Biologist, Harding Lawson Associates, 1985-1986

QUALIFICATIONS

I am a versatile ecologist, with specialties in both herpetology and fisheries biology. I have worked extensively with a wide variety of fishes, amphibians, and reptiles throughout California including the tidewater goby, chinook salmon, steelhead, coastal cutthroat trout, California tiger salamander, Santa Cruz long-toed salamander, arroyo toad, California red-legged frog, mountain yellow-legged frog, western pond turtle, San Francisco garter snake, and giant garter snake. As a Research Associate with the California Academy of Sciences, I conducted a 6-year study of the status of third category (species of special concern) amphibians and reptiles in the state for the California Department of Fish and Game. The report included recommendations for changes in listing status as warranted and opportunities for future research and has been widely cited in scientific publications, agency reports, and environmental impact studies.

I have performed literally hundreds of endangered species surveys for several environmental consulting firms in California and Arizona during the past 20 years. In doing so, I have conducted more than 250 protocol visual surveys for California red-legged frogs in the Bay Area, Central Coast, Sierra Nevada foothills, and the San Joaquin Valley. Major clients include: Anteon Corporation; California Department of Fish and Game; California Department of Parks and Recreation; California Department of Water Resources; CH2M Hill, Inc.; CH2M Hill Constructors, Inc.; EDAW; Environmental Collaborative; Huffman and Associates, Inc.; LFR Levine-Fricke; Montecito Water District; Mosaic Associates LLC; Municipal Water District of Southern California; Olberding Environmental, Inc.; PG&E; Santa Clara Valley Water District; Sycamore Associates LLC; University of California at Santa Cruz; U.S. Forest Service; and Zander Associates. I have also conducted extensive research on the species. This work has resulted in over 20 peer-reviewed, scientific publications that deal with this frog.

Since 1980, I have published over 105 peer-reviewed scientific papers, of which 80 deal with the field of herpetology and 25 deal with the field of fisheries biology. During my career, I have received awards from scientific societies for my publications and work in amphibian conservation. I have also produced the penultimate drafts of the recovery plans for the Santa Cruz long-toed salamander and arroyo toad for the U.S. Fish and Wildlife Service. Additionally, I have peer-reviewed dozens of manuscripts, environmental impact reports, and endangered species petitions for scientific journals, biological consulting firms, and state and federal agencies. I maintain an active speaking schedule having given over 150 official presentations on various herpetological topics to a wide variety of scientific and lay audiences over the past 25 years—everything from keynote presentations at scientific meetings, to discussions at society-sponsored workshops, to talks at local meetings of the Audubon Society.

Dr. Ostrum Wins Nobel Prize for Fisheries Management

Dr. Elinor Ostrum was awarded the 2009 Nobel Prize in Economics for studying the protection of fisheries and other "common pool resources".

She found that community-based cooperative actions, motivated by positive incentives, succeed in protecting natural resources.

Uniform government regulations imposed by a central authority fail.

Dr. Ostrum's principles for successful community management of fisheries and common pool resources:

1. Clearly define physical boundaries of the resource.
2. Rules are related to local physical conditions, and labor, material and money available.
3. Individuals affected by the rules can participate in modifying the rules.
4. The resource is monitored by the community or by people accountable to the community.
5. There is a scale of graduated sanctions for violations, depending on the seriousness of the violation.
6. Conflicts can be resolved fast and at low cost.
7. The rights of individuals to organize their own institutions is not challenged by the government.
8. For large resources, communities may organize in multiple layers of nested organizations.

Source: Dr. Elinor Ostrum, Governing the Commons: The Evolution of Institutions for Collective Action, (Cambridge University Press, 1990)

San Geronimo Valley Stewards Requests to Amend CountyWide Plan and Change Stream Ordinance

From : peggycreeks@comcast.net

Thu, Jun 13, 2013 01:07 PM

Subject : San Geronimo Valley Stewards Requests to Amend CountyWide Plan and Change Stream Ordinance

To : Peggy Sheneman <peggycreeks@comcast.net>

San Geronimo Valley Stewards respectfully submits these requests and analysis to be included in the CDA staff report for the June 18, 2013 meeting of the Board of Supervisors. SGV Stewards will also deliver to the Board and staff before June 18 other materials in support of our comments.

We request the Board allow us 10 minutes time for a power point presentation and general comments.

We request that the period for PUBLIC COMMENT be held OPEN, and not be terminated at the June 18 meeting of the Board of Supervisors. That will encourage continued dialog with staff and other community groups, to explore whether compromises can be reached.

We also recommend that the County sponsor a few working sessions with selected representatives of major community groups to discuss whether drafting can narrow the issues in dispute and to work toward a consensus.

1. SUMMARY

- Part 2. Stewards Support Sleepy Hollow Draft Ordinance
- Part 3. First Amend the CountyWide Plan, Then Adopt a Balanced Ordinance
 - 3.1 Prepare Supplement to 2007 EIR
 - 3.2 A Temporary Ordinance is Bad Policy With Unintended Consequences
- Part 4 A Nobel Prize winner Recommends Cooperative Community Action To Protect Fisheries
- Part 5 Requests to Improve the Stream Ordinance
 - 5.1 Establish Stream Setback of 35 Feet From Top of Bank
 - 5.2 Limit Setbacks for Ephemeral Streams
 - 5.3 Grandfather as Exempt All Existing Homes and Structures, In Their Current Condition
 - 5.4 Delete Retroactive Mapping and Additional Setbacks
- Part 6 Exemptions for Small Home Projects
 - 6.1 Allow All Exemptions "Without Further Determination"
 - 6.2 Do Not Require Land Use Permit for Small Project Exempt From Stream Permit, or Buildable Under Tier 1
 - 6.3 Grandfather as Exempt All Existing Structures
 - 6.4 Exempt Replacement of Existing Structures, With No Footprint Expansion
 - 6.5 Apply the Tree Ordinance in the SCA; Don't Mess With the Drafting
 - 6.6 Vegetation Removal Needs Common Sense Guidelines
 - 6.7 Exempt Fences With Wildlife-Friendly Designs
 - 6.8 Exempt 120 Square Foot Basket in Previously Disturbed Areas
- Part 7 Tier 1 Permits Should Be Easy and Cheap
 - 7.1 Allow the Owner to Hire the Site Assessment Professional
 - 7.2 Site Assessment Impacts Should be Substantial and Measurable
 - 7.3 Development Standards Must Be Feasible and Reasonable

- 7.4 SMP's Should Be Enforced Only After Board Approval On Public Notice
- 7.5 Tier 1 Permit for 500 Square Foot Addition
- Part 8 Recognize That Tier 2 permits Will Be Used
Only By Professional Contractors For Large Projects

2 . STEWARDS SUPPORT SLEEPY HOLLOW DRAFT ORDINANCE.

We support the redrafted stream ordinance prepared by Sleepy Hollow Homeowners Association, and recommend its application to all neighborhoods with developed housing in the City Centered Corridor, as mapped in the CountyWide Plan.

Many of Sleepy Hollow's suggestions should be adopted in the Rural Inland Corridor, for those neighborhoods with existing development and small parcels (1 acre or smaller) proposed for new or re-development.

3. FIRST AMEND THE COUNTYWIDE PLAN, THEN ADOPT A BALANCED ORDINANCE.

3.1 Prepare Supplement to the 2007 EIR.

We recommend the Board consider a fast and efficient process, which could be completed in 6 months, certainly less than 1 year:

First prepare an Addendum or Supplement to the EIR for the 2007 CountyWide Plan BIO-4, similar to the process now being used for the Housing Element SEIR. The SEIR would be limited to the Inland Rural Corridor, specifically the developed properties for 3 miles on either side of Sir Francis Drake Blvd and the villages outlined in the San Geronimo Community Plan. This SEIR would be based on the 2010 Salmon Enhancement Plan (SEP) and 2009 Existing Conditions Report (ECR), with some additional expert reports.

The Supplement would adopt current science and allow CWPlan amendments which would conform the stream ordinance to the practical reality of existing developed neighborhoods, which SEP recognized. The San Geronimo Valley has already been extensively studied by MMWD in its annual fish counts since the 1990's. The County paid over \$300,000 for 600 pages of reports on the SG Valley, prepared by experts at Stillwater Sciences and Prunuske Chatham.

If requested by Sleepy Hollow, Tam Valley, Greenbrae, Kentfield, and Kent Woodlands, the SEIR could also cover the developed neighborhoods of the City-Centered Corridor.

The SEIR could have a 60-day period for public comment. (An Addendum to the EIR would not require public comment.) Only those comments which apply to physical environmental impacts must be addressed. CEQA does not require the County to agree with all the policy issue comments. If court review is sought, the court must uphold the SEIR if there is substantial evidence to support it.

Second, draft an Amendment to CWPlan BIO-4 and a stream ordinance. Schedule Planning Commission meeting agenda and vote on these two documents on the same date. Schedule Board of Supervisor meeting agenda and vote on these two documents on the same date.

The balanced approach and speed with which the County tackles these issues would provide evidence of the County's good faith to the Court of Appeal and the trial court in the Spawn litigation. The ordinance would satisfy the goals of CDA staff-- that the ordinance should be Clear, Simple, Affordable, and Effective (CASE).

Well before the 2014 election cycle, the county and homeowners could move ahead with a stream protection program that integrates education and restoration projects, with regulations that enjoy homeowner support and offer meaningful environmental benefits.

The Board of Supervisors would demonstrate their ability and resolve to get it done right. The stream ordinance could become a model for cities in Marin and for other counties.

3.2 A Temporary Ordinance Is Bad Policy With Unintended Consequences.

There have been discussions of adopting a "temporary" ordinance that would give in to all Spawn's demands and reject homeowners requests. There would be an empty promise to later look at amending the CountyWide Plan, and possibly revising the stream ordinance in the future.

This flawed process would not cure the defects in the CountyWide Plan, and will lead to widespread civil disobedience by homeowners. A black market for home improvements will develop. No one will apply for permits, so County staff will not have the opportunity to educate owners about construction materials and methods which are good practices.

Do the County Supervisors really want to encourage creekside families to shut off access to their properties, so fish research and creek restoration projects come to a halt? Failing to give the homeowner control over the use of his property gives the homeowner no reason to support implementation of creek programs. If stream protection is such an important policy, it can be effective only if it is accepted by homeowners.

We respectfully ask the Board to consider that the homes in the San Geronimo Valley which are now mapped within the SCA area hold only 26% of the San Geronimo watershed acreage. The remaining 76% of the acres with streams are exempt from the draft ordinance, because they are government agencies, public utilities, or agriculture. (MMWD and County Open Space District are the two largest land owners, with 39% of the acreage within the SCA area.)

Adopting this ordinance would place 100% of the stream conservation burdens on 26% of the land. The 834 private family homes within the SCA constitute 60% of the housing stock on the SG Valley.

4. A NOBEL PRIZE WINNER RECOMMENDS COOPERATIVE COMMUNITY ACTION TO PROTECT FISHERIES.

Dr. Elinor Ostrom won the 2009 Nobel Prize in Economic Sciences for her study of the protection of fisheries and other "common pool resources".

Dr. Ostrom found that community-based cooperative actions, motivated by positive incentives, succeed in protecting natural resources for generations. Uniform regulations, with the same rules for different local conditions, imposed top-down by a central authority, do not succeed. Source: Dr. Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge University Press, 1990).

5. REQUESTS TO IMPROVE THE STREAM ORDINANCE

We denote with * asterisk those changes that may or may not require Amendment to the 2007 CountyWide Plan. Section numbers refer to the May 17 draft SCA Ordinance approved May 13, 2013 by the Planning Commission.

5.1 Establish Stream Setback of 35 Feet From Top of Bank.

*Request: Establish a 35-foot stream setback in section 22.33.030 B. 2. "The SCA setback shall be 35 feet landward from the top of bank, for those areas of the Inland Rural Corridor which are outlined as villages in the San Geronimo Valley Community Plan, or are located within 3 miles on either side of Sir Francis Drake Boulevard in the San Geronimo Valley."

For residents on the Valley floor in San Geronimo, their average lot size is 100 feet by 100 feet. The draft ordinance establishes a setback of 100 feet from the creek, plus an additional 50 feet from the edge of the trees. This 150 feet would make every homesite completely unusable.

The 2010 Salmon Enhancement Plan report (SEP) recommends a reasonable buffer of 35 feet on parcels that are already developed and on parcels proposed for new or re-development. (Page 2-21 and 2-22.) SEP recognizes that San Geronimo Valley is constrained by existing development. "In areas where people are already living, this [35-foot] zone is the key area to focus riparian enhancement activities."

SEP notes that 100 feet is recommended by some scientific literature, the CountyWide Plan, and other local

governments. When we read the literature cited by the SEP and the 2009 ECR, we see that the 100 foot proposal comes from studies of pristine wilderness and large swaths of public forest. SEP suggests a 100-foot area could be encouraged with willing private landowners or for public lands.

SEP concludes that 35 feet would be adequate to protect riparian function and habitat:

- filters sediment,
- provides shade (MMWD research shows an 80% tree shade canopy over SG valley fish-bearing creeks),
- provides natural bank stabilization,
- allows construction of 3:1 slope in creek restoration, and
- allows changes in streams and runoff patterns, "without jeopardizing structures, gardens, or other infrastructure."

The SEP recommendation is supported by another expert, Dr. Mark Jennings, who specifically rejects the additional setback of "50 feet landward from the outer edge of woody riparian vegetation associated with the stream . . ." (Section 22.33.030 B. 2. a. page 2.) Dr. Jennings concludes that measuring the stream setback from trees is not scientifically justified in Marin county where rainfall is abundant and many trees grow in areas not close to any stream. (Dr. Jennings' letter was filed with the Planning Commission and will be submitted to the Board of Supervisors.)

As a practical matter, on most forested lots in the San Geronimo Valley, it would be impossible to measure the 50 foot setback--from the last leaf on the last tree? Our forest climbs continuously from the Valley floor to the MMWD water reservoirs--there is no "edge" of the woods.

The 35 foot setback is supported by science, is suited to actual conditions in the SG Valley, is easy to measure, and provides "bright line" guidance for homeowners who want to cooperate in stream conservation.

5.2 Limit Setbacks for Ephemeral Streams.

The proposed ordinance and the CountyWide Plan define an "ephemeral stream" as a watercourse that carries only surface runoff and flows when it rains. (See definition page 12.) There is not a single parcel in Marin County which does not have at least one ephemeral stream during January and February storms.

The Planning Commission recognized this problem and suggested the setback apply only to those ephemerals that are mapped, and that have 100 feet of riparian vegetation along the stream. (Section 22.33.030 B. 3. page 3.) SG Valley Planning Group suggests the ephemeral protections be limited to those streams which connect into fish-bearing creeks. However, the problem remains that the County has not yet determined where these ephemerals are located. Most are not mapped at all. (See below section **5.4 No Retroactive Mapping of Streams.**)

Spawn is concerned that ephemeral streams are like "capillaries" that help water flow. The SEP report said ephemeral streams provide stabilization and filtration functions (SEP page 2-22), and recommends they be addressed by storm water disconnection and retention. (SEP pages 2-46 and 2-47.)

Dr. Jennings concludes the designation of "ephemeral streams" should be dropped. Over 40 years of science on "perennial" streams and "intermittent" streams has designated measurable physical and biological attributes. But there is no scientific basis for further protections of plant or animal wildlife near surface runoff that flows only when it rains.

The County's biologist testified April 1, 2013 to the Planning Commission that ephemeral streams flow for such a short time, there is no opportunity for plant or animal species to become dependent on them as habitat.

****Request:** Change section 22.33.030 B.3. page 3 to read: "For any ephemeral stream, the SCA setback shall be 20 feet from top of bank, but only if:

- (1) the ephemeral stream is accurately mapped on County maps as of the effective date of this Chapter;
- (2) there is riparian vegetation that extends along the stream for a length of 100 feet or more as determined by a qualified biologist or natural resources specialist paid by the County; and
- (3) the ephemeral stream drains directly into a stream that is habitat for anadromous fish."

5.3 Grandfather as Exempt All Existing Homes and Structures, in Their Current Condition.

*Request: Change section 22.63.020 A. 1. (page 5) to read: "The provisions of this Chapter apply to development within the Stream Conservation Area as described in Chapter 22.33 (Stream Protection) ; provided development shall not mean or include any building or structure existing as the effective date of this Chapter. "

*Request: Exempt from stream permits under sections 22.63.020 B. 1. g. and B. 2. a. all existing structures in their current condition: "Maintenance, accessibility retrofit, and repair of any structure, building, water supply and septic facilities that existed prior to the effective date of this Chapter, whether or not such structures, buildings or facilities are or were permitted or legal non-conforming."

*Request: Delete the condition of "permitted or legal-conforming" as applied to all existing buildings and structures, for purposes of exemptions, Tier 1 Permits, and Tier 2 Permits.

Request: The County should encourage people to preserve their exemptions by taking photos of their existing buildings and structures. For that reason, the trigger date for the grandfather exemption should be the effective date of the ordinance, not February 25, 2013, before adequate notice was received by 3,600 property owners. There is no evidence people have rushed to build new houses or cut down forests since February.

Since 2008, we have been promised that the stream ordinance would not require removal of existing homes within the setback, and that structures located near creeks would continue in use. Instead, the Planning Commission draft would use the stream ordinance as a tool to enforce other Code permitting regulations. The Board of Supervisors should reject this bureaucratic power grab; it is not necessary to the purpose of riparian habitat preservation.

The draft ordinance does not protect existing homes and structures, although these should be given a true exemption. The only existing buildings that are exempt are those which are "permitted or legally non-conforming structures, water supply, and septic facilities that existed prior to February 25, 2013." (Section 22.63.020 B. 1. page 6) Otherwise, the stream setback and permit requirements apply to "All structures, regardless of whether the work requires a building or grading permit. . ." (Section 22.63.020 A. 1. a. page 5)

If an existing home has a single missing permit, the house is not grandfathered as "exempt". The family would be required to submit a stream permit application, professional site assessment, and proof of no adverse impacts on the riparian habitat.

Many of our creekside homes have been occupied for 50 years. Did the family (or a previous owner) install a hot water heater without a building permit? Did the trash enclosure pass design review? Was the 7-foot fence granted a variance? If not, the family must do expensive Code work and apply for other permits, before the house can be grandfathered as exempt under the stream ordinance.

Second units are an important source of low cost housing. In the San Geronimo Valley there are over 200 backyard cottages, garage conversions, and downstairs apartments that provide low-rent homes for college students, home health care workers, and retirees. Many of these are not fully permitted because compliance can cost \$50,000 or more.

We are pleased that the draft ordinance now allows second units within the stream setback to apply for full permitted status. (See section 22.56.050 page 19.) Over time, this may encourage owners to seek second unit permits for their existing housing. But this is not related to stream habitat protection, and should be left for another day, with an appropriate procedure that considers the economics of affordable housing.

We understand that planning professionals may consider that a building without a permit does not "legally exist". There are some environmental extremists who would advocate tearing down all family homes near creeks; non-permitted status would give them an excuse to file complaints for home removal.

However, the stream ordinance and the CountyWide Plan cannot deny reality. Over 3,600 families live near the streams. We are not going away.

Please consider the unintended consequences unless ALL existing buildings and structures are grandfathered as exempt:

-----Requiring other permits for building, design, and use as a condition to stream exemption has no beneficial effect on salmon or riparian habitat.

-----Under the County's system of complaint-based enforcement, the stream ordinance will become a mechanism for neighbors and special interest groups to target certain people for harassment. This victims would most likely be families living in the oldest homes, and tenants in low cost second units. These are people without the money to pay for expensive upgrades and enforcement costs.

-----The stream ordinance should not be a cash machine for County fees, fines and penalties. The public purpose of healthy creeks is best served by engaging property owners in pro-active steps to protect stream habitat.

Please do not trivialize the importance of stream protection, by linking it to minor Code enforcement mechanisms. Every existing house and structure should be grandfathered exempt from stream permits. Some owners may need to apply for other permits, or other owners may not have the money to pay for Code enforcement work required by the County. Leave this to other Code sections; we already have plenty of regulations.

5.4 Delete Retroactive Mapping and Additional Setbacks

The ordinance would allow the County to add streams or move streams on the map at any time. It would also give County staff the power to require an additional setback if "necessary". These sections should be changed because they set traps for homeowners who reasonably rely on county maps published at the time they purchase their properties or when they make home improvements.

Request: Section 22.33.020 A. page 1 should be changed to read: " The SCA consist of the stream itself between the tops of the banks and a strip of land extending laterally outward from the top of both banks to the widths defined in Section 22.33.030 B. The SCA extends along those perennial, intermittent, and ephemeral streams identified in the SCA data and map that is published by the Marin Community Development Agency on the effective date of this Chapter. At any time, a property owner may request the County to correct errors in the stream map with respect to the owner's property. Neither the County nor any other person or group has standing to change the stream map with respect to a property owned by another person.

Request: The same changes should be made in the definition of Stream Conservation Area in section 22.130.030 page 12.

Request: Delete sections 22.33.030 B. 1.d. and 2.b., which would allow the County to require an additional setback if necessary to protect riparian resources and woody vegetation that extends beyond the specific SCA setback.

Reasons: The County cannot use the excuse of Spawn litigation to rush adoption of stream regulations, without identifying the streams and properties it is regulating. CDA staff says, "Oh, don't worry, we'll send a notice when we later add the owner's property to the stream setback area."

The "SURPRISE!" factor would make buying a house or improving a home in Marin County high risk behavior. People rely on existing maps to make long term investments in homes and borrowing on 30-year mortgages. Stream setbacks will reduce the value of properties. If the buyer searches the records and determines where his stream setback is located, he must be able to rely on the certainty of current County maps. The county should not later add a stream or move a stream, unless the owner himself discovers the map is in error.

Similarly, if the present owner of a home builds an addition or improvement, he should not later be subject to "GOTCHA", by Spawn or the County informing him the improvement is now within a stream setback and subject to permits or removal.

We also object to the County later imposing an "additional setback" whenever the CDA staff thinks it is "necessary". This is an invitation to expensive litigation, because Spawn or some other self-appointed group could file requests for additional setbacks, regardless of the setback measured by the ordinance. Then the homeowner must hire biologists and hydrologists to testify at Planning Commission hearings and court cases. Will the County pay the owner's fees for experts and lawyers to defend against this taking?

6. EXEMPTIONS FOR SMALL HOME PROJECTS.

The ordinance should give homeowners a basket of clear broad exemptions, for which no prior determination by County staff is necessary. Because the stream ordinance is such an intrusive invasion of privacy and taking of property values, it is important for popular acceptance that people understand the County is not imposing life-style choices for them.

Do not trivialize the important policy of stream protection by over-regulating minor home improvements. It will encourage disrespect for the law, will not provide measurable benefit to fish or wildlife, and impose costs and delays for young families and seniors on fixed incomes.

6.1 Allow All Exemptions "Without Further Determination".

Follow the model language of the 2011 Tree Ordinance, wisely crafted by the Board of Supervisors. Instead of providing documents for pre-construction bureaucratic review, just recommend that the owner take photos and preserve documents in the event someone later questions his exemption. (For example, see Tree Ordinance section 22.62.040, Development Code page IV-70.)

Delete and Replace: Delete stream ordinance section 22.63.020 B. 2. pages 6-7, and replace with:

"It is recommended that a property owner document the exemptions listed in this section with photographs, site illustrations, state or local fire personnel, and/or a licensed contractor. "

The county should publicly encourage people to take photos now of their existing buildings and structures. For that reason, the trigger date for the exemptions should be the effective date of the ordinance, not February 25, 2013, when no one in the county knew this law might apply to their property. There is no evidence of people rushing to build new houses or clear forests since February.

6.2 Do Not Require Land Use Permit for the Small Project Exempt From Stream Permit, or Buildable Under Tier 1.

We are disappointed and, frankly baffled, that the county gives with one hand (small home projects exempt from stream permits), but takes away with the other hand--by requiring Land Use Permits for ordinary home improvements that do not now require a Land Use Permit, under the existing Code. See Section 22.06.050 page 13.

For example, the homeowner can maintain and replace landscaping without a stream permit (under section 22.63.020 B. 1. g. page 6), but if she uses a drip irrigation system, she must now apply for a Land Use Permit (under section 22.06.050 page 13.) This makes no sense and offers no meaningful protection to riparian wildlife.

Look at the silly little things that would suddenly require a Land Use Permit, even though they could be done with a stream exemption or a Tier 1 Stream permit: installing a garden footpath without grading, interior remodeling that changes the outside color of the house, putting up a kid's swing set less than 15 feet in height.

Request: Delete the following language from section 22.06.050, Exemptions from Land Use Permits, on page 13: "The exemptions do not apply to development proposed in a Stream Conservation Area. See Chapter 22.33 and Chapter 22.63."

Request: Change section 22.63.020 B. 1. h. on page 6 to exempt from stream ordinance: "Maintenance or replacement of landscaping, including irrigation lines."

6.3 Grandfather As Exempt All Existing Structures

Change section 22.63.020 1. g. on page 6 to grant full exemption for: "Maintenance, accessibility retrofit, and repair of all buildings, improvements, and structures, water supply, and septic facilities that existed before the effective date of this Chapter."

6.4 Exempt Replacement of Existing Structures, With No Footprint Expansion

The exemption of grandfathered structures is meaningful only if they can be replaced as they deteriorate. Roofs, garden sheds, and wood decks, in particular, need to be replaced as they age.

Request: Change section 22.63.020 B. 2. a (on page 7) to exempt without prior determination: "Replacement of all buildings, improvements, and structures, water supply and septic facilities that existed before the effective date of this Chapter , provided the replacement does not expand the footprint within the stream setback or result in the removal of more than 50% of the woody riparian vegetation without the mitigation described in [Part 6.6 below]."

6.5 Apply the Tree Ordinance in the SCA; Don't Mess With the Drafting

Request: Combine sections 22.63.020 B.1. c. and 2.c. (pages 6 - 7) with respect to trees, so there is exempt from the stream ordinance without further determination:

" Tree removal that is exempt or is permitted under the County Tree Ordinance, Chapters 22.27 or 22.62; provided nothing herein prohibits the owner from complying with applicable state law on fire prevention or fire insurance requirements."

Request: Delete requirement for obtaining a Tier 1 Stream Permit for removal of protected or heritage trees, under section 22.63.030 (page 7).

The Supervisors adopted a Tree Ordinance in 2011, after much political attention, weeks of public comment, and carefully crafted compromises. (See Development Code Chapter 22.27 page III-43, and Chapter 22.62 page IV-69.) Spawn never sued to upset the tree ordinance.

There is no reason now to re-draft the tree ordinance. It bans the removal of any heritage tree without a tree permit, and limits the removal of two "protected trees" per year. There are exemptions for fire safety, public nuisance, infected pathogens, etc.

San Geronimo Valley and other areas in the SCA were excluded from the 2011 Tree Ordinance, with the promise we would be covered by it once the stream ordinance is adopted. It is now time for the county to deliver on its promise.

Do not require us to obtain two different permits for tree removal--one under the stream ordinance, and the second under the tree ordinance. Do not apply two sets of regulations with two different standards.

The County-Wide Plan designates SG Valley as Very High Fire Risk (Map 2-15). We are also in the Urban-Wildland Interface Zone (Map 2-13), for which the California Resources Code section 4291 mandates a 100-foot defensible space around each structure. California Government Code sections 51175 and 51182 partially preempt local regulation which would interfere with property owners' rights and duties with respect to fire insurance contracts.

6.6 Vegetation Removal Needs Common Sense Guidelines.

The same concerns about fire safety should also inform vegetation removal. Fires are spread by woody underbrush and dry grass. The fire may start from or spread to either a vacant lot or a developed lot--fire knows no boundaries.

Not all "native" vegetation has the same riparian value. Poison oak is native, but it is invasive, chokes out other natives, and is toxic to humans.

Not all non-natives are bad. Many Mediterranean climate plants provide good riparian habitat and grow well

without summer water.

The county should not be in the business of designing backyard gardens. We are addressing what should be a 35-foot setback on a small lot of about 100 feet by 100 feet, in the San Geronimo villages that are already developed with houses and streets.

Request: Combine sections 22.63.020 B.1. c. and 2. c. into a single section that exempts without determination: "Vegetation removal or trimming on a developed lot or a vacant lot, for the purpose of protecting life or property from fire hazard, public nuisance, or any other threat to public health and safety. Vegetation that is dead, invasive, or exotic may also be removed under this exemption. Clearing of less than 50% of the native woody vegetation within the stream setback on any parcel for any other purpose is exempt, provided it shall be mitigated by planting riparian vegetation within the stream setback on the owner's site or on another stream setback area and provided that native plants are preferred, if appropriate to the site and the owner's use of his land.

6.7 Exempt Fences With Wildlife-Friendly Designs

Children, dogs, and gardens need fences. We already have a County fence ordinance that limits to 6 feet. So the only concern of the stream ordinance should be is wildlife access to the creeks.

Dr. Jennings letter suggests fences can be designed which are wildlife friendly in materials, height and spacing.

Request: Change section 22.63.020 B.1. to exempt:
" New fences, and repair or replacement of fences existing on the effective date of this Chapter, provided they are designed in materials, height, spacing, and location not to block or completely prevent access of wildlife to the streams or the adjacent riparian habitat. Exempt fences include any fence within or on the perimeter of a previously disturbed area."

6.8 Exempt 120 Square Foot Basket in Previously Disturbed Areas.

The Planning Commission and Spawn spent several hours wrestling over the exemption for development in previously disturbed areas. (Although the time for public comment was closed, Spawn representatives were permitted to repeatedly address the Commission on April 1 and May 13, and carried on a dialogue about this and other sections. No other interest groups were allowed to speak.)

Spawn voiced one legitimate concern: If a previously disturbed area consisted of pervious or porous materials (such as a lawn or garden), storm runoff from new impervious materials should be dispersed over pervious areas.

The Commission seemed more concerned about micro-managing the use of family backyards. For example, should a garden shed be okay, but not a shed with an electrical outlet for wood working? The staff seemed concerned about using the stream ordinance as a tool to enforce Building Permit requirements.

Stewards recommend: Simply create a basket of 120 square feet that can be developed for any purpose, as an exemption from the stream permit, without a prior determination by County staff. Get the county out of deciding what each family can use its 120 square foot exemption for--as long as storm water runoff is dispersed and vegetation removal is mitigated, let the family install a carport, or an art studio, or a kids' playhouse.

Request: Revise section 22.63.030 B. 1. b. so it exempts without determination: "Development activities pursuant to Section 22.63.020 A. 1. located within previously disturbed areas. ^ Addition of a cumulative total of 120 square feet of impervious surface in a previously disturbed area, provided that the improvement is located at least 20 feet from the top of the stream bank, does not result in the removal of ^ more than 50% of the woody riparian vegetation and such removal is mitigated pursuant to [Part 6.6 above] , and disperses storm water runoff over a pervious area (such as a lawn, garden, or pervious pavers).

7. TIER 1 PERMITS SHOULD BE EASY AND CHEAP

CDA staff originally intended to encourage homeowners to bring their Tier 1 projects to the counter for

ministerial approval. Staff intended to use the Tier 1 permit process to educate homeowners and small contractors about good construction practices, methods and materials that protect streams.

Unfortunately, Tier 1 Permits are now drafted to be so expensive and set such high standards that no one will bother to apply for a Tier 1 Permit. If the project does not fit within one of the exemptions, the owner will just do it without a permit.

Request: The Tier 1 Permit Fee Should not exceed \$150. The Site Assessment professional should not be allowed to charge more than \$200, unless the homeowner consents.

***7.1 Allow the Owner to Hire the Site Assessment Professional.**

Do not force the owner to open his door to a professional whose fees and loyalty are controlled by the County. The owner will justifiably fear that anything the inspector sees will be reported as a Code complaint (whether or not related to the specific project.) The owner must be able to negotiate and cap the scope of work and the fees. The county could maintain a list of qualified professionals , so there is assurance of high standards.

***7.2 Site Assessment Impacts Should Be Substantial and Measurable**

In the May 13 draft, the project is not eligible for a Tier 1 permit if it "would result in adverse impacts to hydraulic capacity, stream or riparian habitat acreage, value or function; or water quality." (Section 22.63.030 page 8. See also section 22.63.030 B. 4. pages 8-9.) That means the project can have no adverse impacts at all. None.

Every human activity has some impact on the environment. Even the professional walking the property for the site assessment may trample weeds or step on a spider. We recognize this standard is in the CountyWide Plan and it should be amended for Tier 1 permits, if there is any hope of getting homeowners to cooperate for small projects.

We recommend adoption of the standard: "substantial measurable adverse impacts. . ."

7.3 Development Standards Must be Reasonable and Feasible

The Tier 1 permit must comply with "Development Standards" (under Section 22.63.030 B., page 8). Not once in this text do the words "feasible" or "reasonable" or "cost effective" appear. No consideration is given to whether the pursuit of excellence is affordable to the owner who is paying for it, or even whether it is within the scope of engineering possibilities.

Removed vegetation must be replaced by "natives" with the same structure and species as the removed vegetation. Can we give some thought to improving the environment, not just replicating the problems that caused creekbank collapse? We suggest replacement with riparian vegetation that promotes water filtration and creek bank stabilization.

7.4 Standard Management Practices Should be Enforced Only After Board Approval on Public Notice

The CDA is supposed to prepare Standard Management Practices (SMP's) and each Tier 1 project must comply before final inspection. Apparently, CDA will be relying on nameless outside professional firms to draft the SMP's, which may or may not be revised periodically.

This is a recipe for bureaucratic overreach, outdated construction manuals, and the whims of then-current administrators. Public comment should be accepted before SMP's are adopted. The Supervisors should take responsibility for the final product, after hearing from the taxpayers and property owners.

7.5 Create Basket for Up To 500 Square Foot Additions

The Tier 1 permit should be available for a home addition of up to 500 square feet within the stream setback. This is necessary because so many of our homes average 1500 square feet, have old kitchens, only one

bathroom for growing families, and are sited on lots measuring 100 feet by 100 feet. Contrary to Spawn's assertions, no one is going to build a Walmart parking lot.

The 500 square foot "basket" should apply to all buildings and structures that exist on the effective date of the ordinance. (See section 22.63.030 A. 1. page 7.) There should be no condition that the existing building be "permitted or legal non-conforming" in order to qualify for a Tier 1 stream permit. See **Part 5.3** above.

8. RECOGNIZE THAT TIER 2 PERMITS WILL BE USED ONLY BY PROFESSIONAL CONTRACTORS FOR LARGE PROJECTS.

The high development standards, multiple expert reports, and on site mitigation required for a Tier 2 Permit will be affordable and feasible only for professional contractors working on a new house or a major remodel.

Please recognize that Tier 2 will not provide a realistic alternate permit process for the average homeowner.

That is why broad clear exemptions in Section 22.63.020 and easy cheap Tier 21 Permits in section 22.63.030 are so important for homeowner acceptance of this ordinance, and to channel future home improvements into the best practices for healthy streams.

Photos of Streams in San Geronimo Valley

To: Marin County Planning Commission
Marin County Community Development Agency

From: San Geronimo Valley Stewards
Peggy Sheneman 488-4426
Denis Poggio 488-9549

Attached are photographs taken during the week of March 20, 2013.

The locations are in Forest Knolls in the San Geronimo Valley.

The streams pictured are small tributaries of Montezuma Creek.



Seasonal Stream within 10 feet of
Deck and fence.

3



Photo taken from creek bank,
Looking up at riparian vegetation and disturbed area.
Rocks placed on creek bank for stabilization.



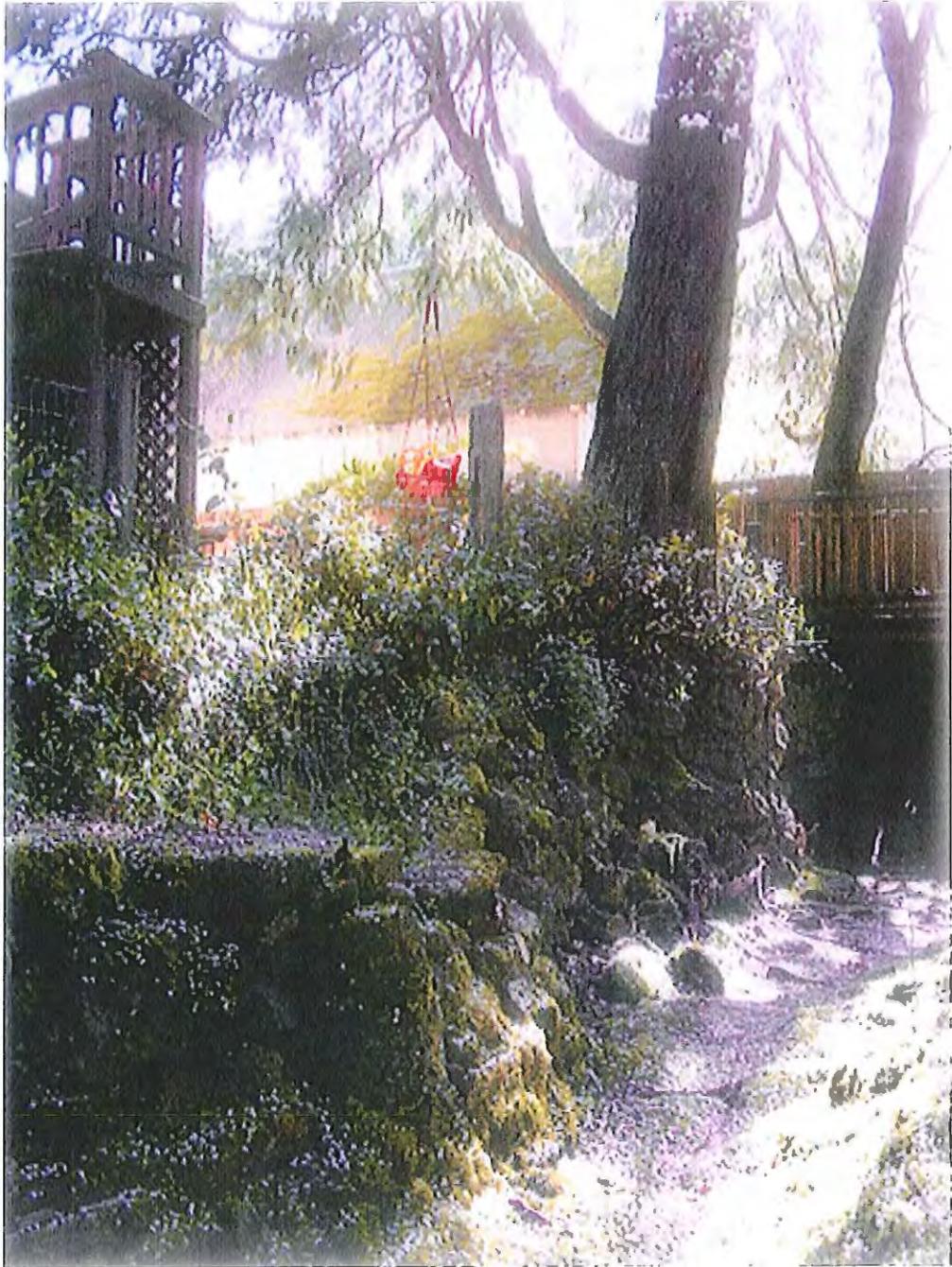
Seasonal stream.

Since 1982, the highest water level
is 6 feet below top of bank, even in
heavy rains.

Note pin oak and blackberry vegetation.



Dry ephemeral stream
within 10 feet of house.



Dry Ephemeral stream with
bridge crossing and disturbed area
and creek enhancement

Mr. Figari corrects stream map in Woodacre

From: "Robert M. Figari" <figari@well.com>
Subject: SCA 1 Scott St/correct non-existent stream
Date: April 17, 2013 2:36:02 PM PDT
To: sthorsen@marincounty.org

Dear Suzanne,

Thank you for taking the time to speak with me about this issue today on the phone. This email includes a pdf file containing our requests and background information and photos to substantiate our requests.

In a nutshell, we would appreciate a correction of your Stream Conservation Buffer map which currently shows a stream running parallel to Scott St into Woodacre Creek. There is no stream. We would also request that our parcel/lot be removed from the SCA based upon this information.

I'd be happy to help you in your research of our little area so that you can arrive at a true representation of the area's water runoff flow. Please let me know if I can help in any way.

Hopefully the document attached will allow you to quickly amend your maps and remove us from the SCA.

Thank you for all your hard work.

Here is the pdf attachment:

Yours truly,

Bob Figari

Robert M. Figari
POB 263

Woodacre, CA 94973
415.488.4966 h
415.259.8153 cell
figari@well.com

Robert & Christine Figari
P.O. Box 263
Woodacre, CA 94973

April 17, 2013

Suzanne Thorsen
Planner
Marin County Community Development Agency
sthorsen@marincounty.org

Re:

1. Request for removal of Parcel #172-071-22 from Stream Conservation Area
2. Request to correct Stream Conservation Buffer map showing non-existent stream

We request that our property at 1 Scott St., Woodacre, CA (Parcel#172-071-22) be removed from the Stream Conservation Area.

We also request that you correct the Stream Conservation Buffer map which currently indicates a stream (blue line) off Scott St. where there is no stream and hasn't been for many, many years.

Parcel/Lot Configuration Information

Our property is currently included in the SCA as shown here:

Parcel Number	172-071-22
Situs Address	1 SCOTT ST WOODACRE, 94973
Stream Conservation Area Setback	100 feet (Additional setback may be required)
See Map	Click Here 172-071-22

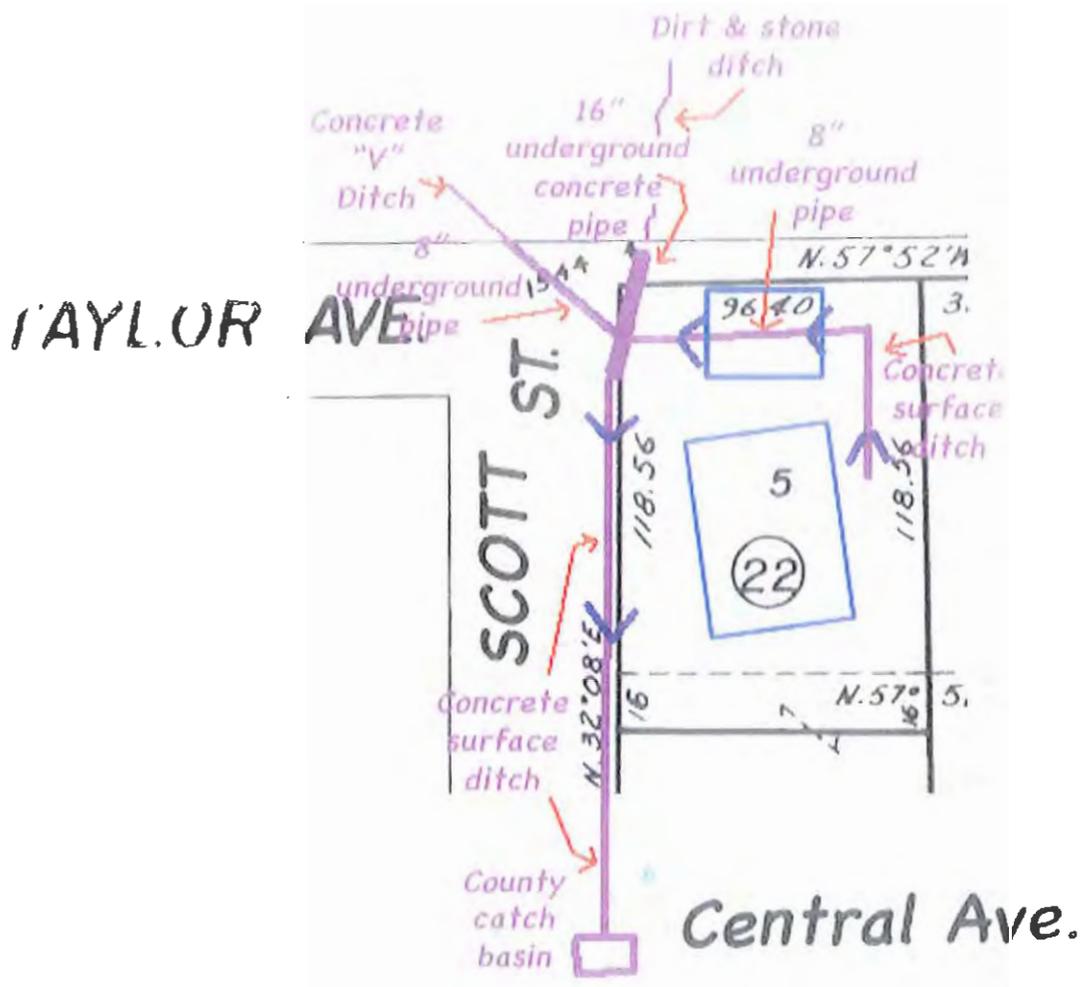
Our home was built in the 1950s and is about 1900 square feet (including the separate garage). It sits on a lot approximately 100 feet wide/deep (East from Scott St.) by 120 feet long (South along Scott St.).

The lot is totally disturbed "cut and fill" lot with the cut from a steep hill to the East and the fill (upon which the house sits) banking to Scott St. in the West. This is roughly illustrated in Google Earth photo below:



Parcel/lot runoff control information

Our parcel/lot was graded and improved when built in the 1950s for runoff from the hillside at the back of our parcel/lot to travel to the north end of parcel/lot, cross under driveway and tie in with concrete ditch that connects to a county catch basin at corner of Scott and Central.



The runoff from our next door neighbor to the north on Taylor flows down their dirt/stone ditch into our underground concrete pipe. Some of the runoff from their next door neighbor on Taylor flows into a "V" ditch which flows into an underground pipe that joins our 16" concrete pipe.

The following photo is a street view from Google Earth. I've added illustrations to show where the underground pipes run and where the concrete surface ditch runs.



Note the concrete surface ditch:



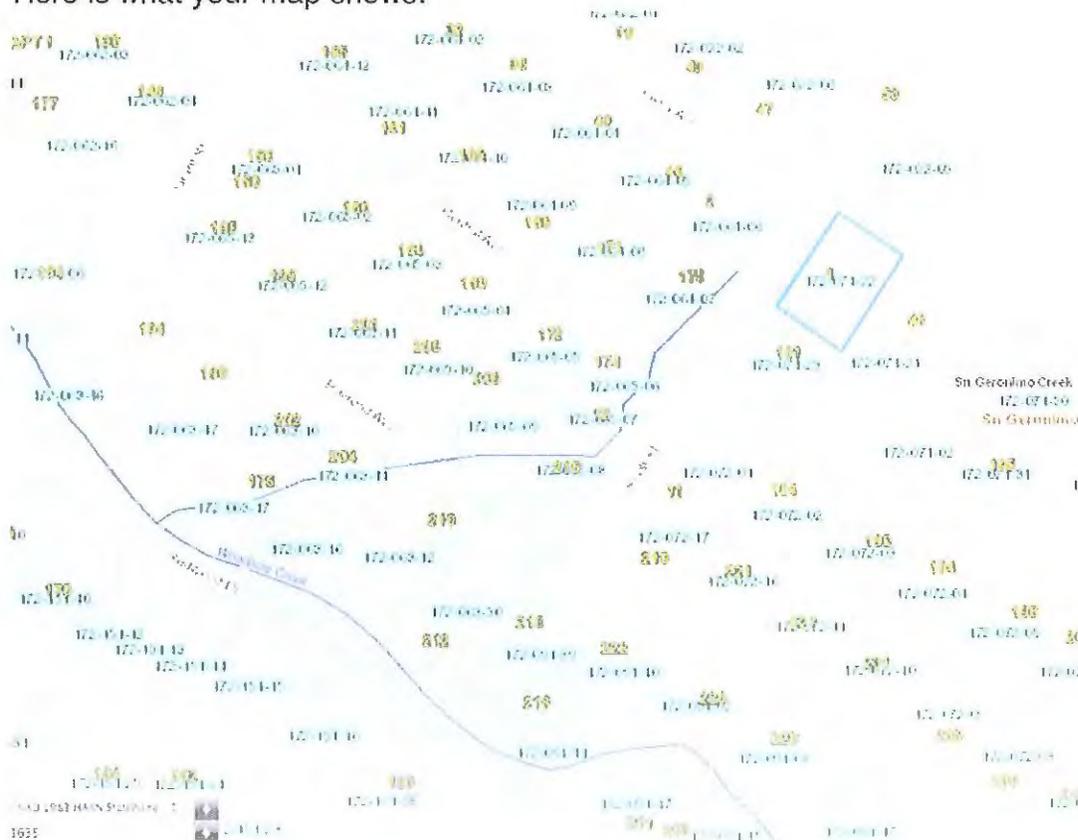
Note the flow of runoff to the county catch basin:



Non-existent stream information

Your Stream Conservation Buffer map (hydrology view) shows a non-existent stream which caused our Scott St. area to be mistakenly included in the SCA.

Here is what your map shows:



At some point in the distant past, there was probably a stream where it is shown, but currently there is none. If there were a stream it would be flowing through the living rooms of 2 Scott Street and the house at Scott and Central.

Here is a Google Earth view of 2 Scott St. which is directly across the street from the concrete surface ditch on our parcel:



This is where your map shows a stream starting. Clearly, there is no stream.

Here is another Google Earth view from where Scott St. meets Taylor Ave. The house on the right is 2 Scott St. (same as above). Our parcel/lot is to the left where you see the concrete surface ditch that flows along the concrete wall down to the county catch basin at Scott and Central. Again, there is no stream.



Your map shows the stream crossing Central Ave near the intersection of Scott. Here is another Google Earth view from the county catch basin and looking down Central to where the stream should be:



As you can see, there is no stream running over the street. There is also no stream running through the above mentioned properties.

Conclusion:

We believe the map is in complete error. Perhaps there was once a stream prior to the 1930-50s development of this small area, but there is clearly none now. In fact, most of the runoff flows down the other side of Scott St. along the aforementioned system of pipes and concrete ditches until it enter the county catch basin.

Please correct your map to show no stream flowing from the top of Scott St. and take our parcel/lot out of the SCA.

If I can help you with any other analysis or photos, just let me know.

Please advise me your receipt of this document, respond to my requests and keep me informed of any pertinent information about these requests.

Yours truly,

Robert M. Figari
figari@well.com
415.488.4966

FROM PAGE ONE

The Latest Urban Trend: Less Elbow Room

BY CONOR DOUGHERTY

VANCOUVER, British Columbia—To get a sense of how America will pack more people into its cities, head north to an alley that runs behind Peter-sham Avenue here. That's where Ajay Kumar built a \$300,000, Moroccan-themed cottage that sits in his backyard and will soon be occupied by his parents.

Mr. Kumar's "laneway house" is part of a broader plan that encourages Vancouver homeowners to add rental units in their basements, attics and backyards. The hope is to reduce sky-high housing costs and increase population density throughout the city—including the single-family-home neighborhoods like Mr. Kumar's that surround the city's towering downtown.

Cities across the U.S. and Canada are liberalizing their zoning codes to allow multiple dwellings

on a single lot. Planners like these "accessory units" because they steer growth to developed land and infrastructure, reducing the cost of city services. Such housing can allow seniors to live near their children. And the dwellings are smaller and cheaper—helping cities create more affordable housing.

Few cities have gone as far as Vancouver, which has seen real-estate prices soar after an influx of domestic and foreign buyers. In many U.S. cities, citizens might not tolerate changing the rules to boost population density. But other places, including those with high real-estate prices and housing shortages, are encouraging accessory units despite resistance from some residents.

"These units are one front in a giant war for how our cities are going to grow," says Alan Durning, executive director of the Sightline Institute, a

Please turn to page A12

Living Together

Multigenerational households as a percentage of all households in the U.S.



Source: Census Bureau
The Wall Street Journal

Continued from Page One
Seattle think tank.

Late last year Salt Lake City passed an ordinance to allow accessory units within a half mile of the city's two dozen light-rail stations. Washington, D.C.'s planning department is recommending giving owners that already have an accessory structure in place the right to rent them out without seeking zoning approval, as they must now. Seattle has allowed backyard cottages since 2009, and homeowners have applied to build 168 of them.

Several Silicon Valley cities, looking to increase the stock of affordable housing, have used a combination of measures to encourage single-family homeowners to build rental units. Those include reducing permit fees, increasing the allowed square footage and getting rid of administrative steps such as the public hearing process. Hillsborough has permitted 117 accessory units since 2003, while Los Altos Hills has permitted 68.

Businesses are entering the market. Advantis Credit Union in Portland, Ore., late last year started marketing mortgages that allow homeowners to build accessory units. Home builders such as Lennar Corp. have started marketing "multigenerational" homes that have separate quarters for a family member. In Berkeley, Calif., a company called New Avenue was founded to help people design, finance and build accessory units.

Of course, an idea that seems desirable to urban planners and builders enrages many homeowners who see new dwellings

popping up in their neighborhoods. After the college town of Missoula, Mont., voted in May to allow accessory units in single-family home neighborhoods, Myra Shults, 71 years old, was concerned it would lead to scant parking and noisier streets, reducing her home's value in the process. "I just think the whole character of the neighborhood will change," says Ms. Shults, a retired lawyer. She says she moved to her neighborhood to live among other single-family homeowners "and now that's going away."

U.S. cities used to be more compact. But by the 1920s, Americans were fleeing urban neighborhoods for leafy suburbs—a movement that accelerated after World War II as the country built more freeways and pulled up urban streetcar lines.

Single-family neighborhoods have become less dense over the years—a function of an aging population and falling household sizes, says Robert Bruegmann, a professor emeritus of architecture and urban planning at the University of Illinois at Chicago. As children leave for college and jobs, many seniors find themselves in homes too big for their needs. The generation behind them, meantime, continues to have fewer children—reducing its need for space.

Cities have seen a small revival recently. From July 2011 to July 2012, 24 of the nation's 51 metropolitan areas with more than one million residents saw their cities grow faster than their suburbs. That was true of just eight metro areas from 2000 to 2010.

With a temperate climate and links to growing economies in Asia, Vancouver has all the affordability and space problems that most U.S. cities have and then some. Its real-estate prices have become unhinged from its local economy. A typical home in the city cost 721,500 Canadian dollars in March, or about US\$696,000, up 25% from March 2007, according to an index compiled by the Real Estate Board of Greater Vancouver. U.S. prices fell around 26% over the same period.

While Vancouver prices have eased over the past year, they remain well out of reach for many residents. The city's median income was about C\$47,000 in 2006, the latest data available.

Prices have been affected by an inflow of investors and speculators—many from Asia—buying homes and condominiums. A recent study by Bing Thom Architects found that roughly half of Vancouver's downtown condominiums aren't occupied by the owners.

During the past two decades, Vancouver's main approach to add housing has been to go up, constructing scores of down-

Vancouver has all the affordability and space problems that most U.S. cities have—and then some.

town condo towers. Recently the city has started rezoning arterial

streets to allow more compact row houses.

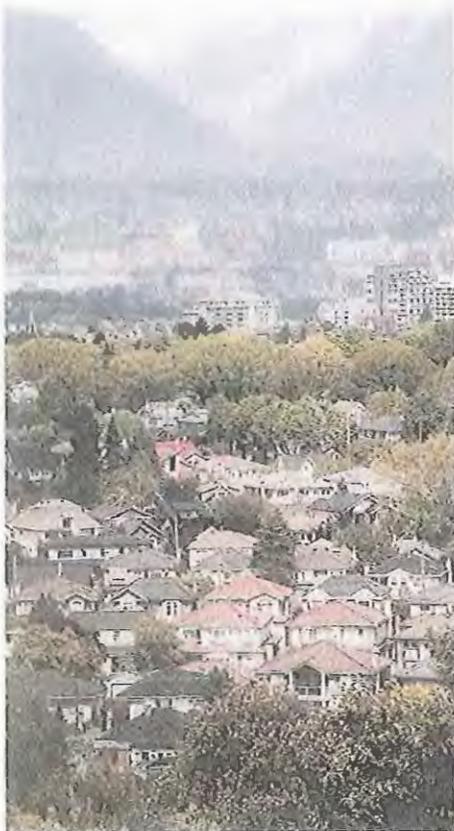
The city took a step toward increasing density in single-family neighborhoods in the 1980s, when it first allowed basement suites. Since 2009, it has reduced the amount of time it takes to get a permit for basement apartments and permitted laneway homes like Mr. Kumar's throughout the city.

Some 500 laneway homes have been built. In addition, about a third of the city's new single-family homes now are built with a rental suite in the home, up from 5% in 2000. With basement suites and laneway homes, "on paper, they have effectively tripled the density of a single-family home," says Andy Yan, a planner at Bing Thom Architects.

The growth of laneway housing has created a cottage industry, literally, of manufacturers like Jake Fry of Smallworks. To keep costs down, he designs his homes from one of 14 models that buyers can customize. He has the frames built an hour-and-a-half outside of town in a truss and wall panel factory. This allows him to put the home up in a week; it takes another two months to finish the interiors and landscaping.

Mr. Fry also has developed tricks for squeezing his homes under the city's 750-square-foot limit for laneway homes, such as installing skinny appliances and building bookshelf walls. The entrance to closets are just under five feet high. At that height, their inwards don't count against the city's square-footage limit.

"You have to treat the house like a sailboat," he says.



Architecture: Cooper for The Wolf Street; Interior: F33

Vancouver is encouraging its residents to pack more housing into existing space with dwellings like 'laneway homes,' such as Tania Clarke's two-story cottage, center and right

Mr. Fry's clients include Tania Clarke, a 31-year-old who grew up in Vancouver but can't afford a home in the city. So Ms. Clarke's parents took out a mortgage on their house; she and her husband used the proceeds to build a two-story, \$300,000 cottage. It sits about 20 feet from Ms. Clarke's childhood bedroom, in what was once her mother's garden.

"How often do you get to design your own house?" says Ms. Clarke, who works at a local botanical garden and supplements her income by selling clothing that she sews in a home office that converts to a garage.

Ms. Clarke's house is a temple of efficient living, with touches such as a squat coffee table whose folding legs transform it into a dinner table. Living close requires compromise. Ms. Clarke sometimes has to sleep with earplugs on nights when her husband continues playing video games after she has gone to bed.

The couple usually keeps the blinds in their living room shut. They say they are tired of pedestrians looking in at them.

Ms. Clarke's neighbor, Amber Paul, doesn't mind the new unit. While the home casts a shadow on her backyard, she says it adds some life to an alleyway that is full of trash cans and electric poles. "It's a more friendly face on the lane than a double-car garage," she says.

Ms. Paul is familiar with Ms. Clarke's situation: She lives in her parents' home with her husband and two daughters. Her parents stay in a suite below.

A dozen blocks away, Ronald Hatch also lives next to a laneway home, and he hates it. Mr. Hatch, 73, a retired literature professor, says the two-story home shades his backyard, reducing his raspberry crop. With a window peering down on them, he and his wife feel like they are being watched when they sit at a round table in the yard.

"You're having your lunch on a sunny day and the first thing you see is a laneway house staring at you," says Mr. Hatch, who has tried to block out the view by adding three feet of lattice-work atop his fence.

On Long Island, Suburbs Already Embrace 'Add-On' Apartments

Cities around the U.S. are liberalizing their zoning codes to allow more basement apartments, backyard cottages and the like. But many of the suburbs on New York's Long Island have allowed add-on apartments for decades.

Babylon, about 45 miles east of New York City, today has 3,226 accessory apartments after legalizing the units in 1979. That is just a sliver of the households in a township that has about 213,000 people. But the apartments—which aren't allowed in basements—have become an integral part of the housing mix, says Timothy Besemer, a lifetime resident and the town's chief building inspector. They help keep families together, he says.

Babylon has issued an average of 150 permits a year for the past three years. Those numbers don't include the numerous add-on apartments that homeowners built without the town's permission so that their property taxes won't go up. Mr. Besemer says his best guess is that for every five legal units, there is one illegal one. He adds that the town is ag-

gressive about going after them.

The legal two-bedroom apartment that sits above Tom and Sue Daniels's house illustrates the varying roles an accessory unit can take on over the years. The main house was built in 1959, and Mrs. Daniels's mother raised four children there. The accessory apartment was built in 1987 to house the aging mother after Mr. and Mrs. Daniels moved into the main house.

After Mrs. Daniels's mother died in 2007, the Danielses rented out the apartment. The tenant moved out just before superstorm Sandy last year. It was fortuitous timing, because the downstairs was damaged and the Danielses moved into the upstairs apartment, where they remain today.

Repairs to the main house should be done in about a month and the Danielses will need a new tenant when they move back into it again. They already have one in mind: Their son plans to move back home from Brooklyn.

"It's coming back around to family," Mr. Daniels says.

—Conor Dougherty

A Response to High Prices

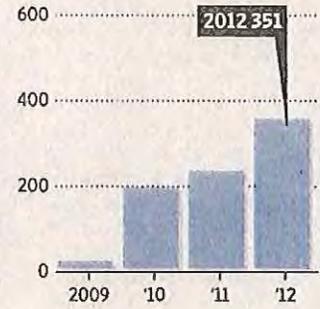
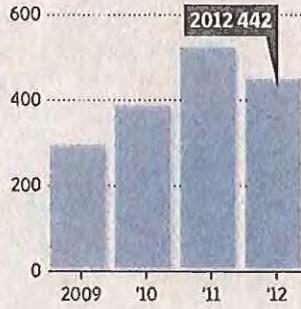
As home prices have increased in Vancouver, British Columbia...

...people have turned to alternatives, such as rental suites or building small 'laneway homes' in their backyards.

Typical single-family home price*

Permits issued for secondary suites

Permits issued for 'laneway homes'



*For March in the given year; C\$100,000 = \$96,420 at current exchange rate
Sources: Real Estate Board of Greater Vancouver (prices); City of Vancouver

Statement of Steve Tognini Re Studies of SG Valley conditions

August 6, 2010

STATEMENT OF STEVE TOGNINI RE: STUDIES OF SG VALLEY CONDITIONS

1. My name is Steve Tognini and I live in Forest Knolls, in a house located within 35 feet of Montezuma Creek.

1.1 Based on the scientific evidence and reports I have read, the proposed vegetation ordinance, which would prohibit the removal of all trees, shrubs and herbaceous plants close to creeks, cannot be supported by the evidence concerning salmon habitat in the San Geronimo Valley. There is no scientific evidence that the exemptions and changes requested by Valley homeowners would cause significant harm to salmon.

1.2 None of the studies cited in the Existing Conditions Report have surveyed the biological conditions of the 49 miles of uplands tributary streams which this ordinance would regulate, or considered the environmental impact of restricting the management of trees brush, or herbaceous plants along the steep slopes of the uplands streams. Putting regulatory obstacles in the way of vegetation management would increase the risk of fires and floods, which can have significant adverse impacts on fish and the Valley ecosystem.

1.3 As to the fish-bearing channels of the major creeks, the scientific studies and research conducted in the San Geronimo Valley show that tree canopy and water temperatures are well within the typical range for salmon in a subwatershed of this valleys size and complexity (MMWD 2006). The research shows that sediment and scouring are not limiting factors in our SG Valley. Various studies also state that one of the primary reasons for the loss of vegetation on the stream banks was the 2006 New Years Day flood, the 1982 flood, and similar annual floods that cause vegetation loss. My personal experience indicates the ordinance needs to exempt emergency tree

removal during severe winter flooding conditions.

2. My Background. I am currently employed as the Assistant Chief Engineer for Kaiser Hospital facilities in Oakland, California. I served as an engineer in the United States Navy and hold a bachelor's degree in Economics and Business Administration from University of the Pacific. I serve on the Lagunitas Creek Technical Advisory Committee as a representative of San Geronimo Valley Stewards. This Statement is my own and is not made on behalf of Kaiser or Lagunitas Creek TAC.

3. Reports and Sources I Reviewed.

3.1 I have read the reports and studies on which the Salmon Enhancement Plan, the Existing Conditions report and the proposed vegetation ordinance are based.

3.2 I have read and refer to the San Geronimo Valley Salmon Enhancement Plan dated February 9, 2010 ("SEP"), a consultant's report prepared by Prunske Chatham, Inc., entitled "A Guidance Document". The Marin County Board of Supervisors "accepted" the SEP as complete on February 10, 2010, but the SEP has not been adopted as County policy or as findings of fact.

3.3 I have read and refer to the San Geronimo Valley Salmon Enhancement Plan Existing Conditions report dated January 2009 ("ECR") prepared by Stillwater Sciences. The ECR is cited in the SEP as the factual basis for many of the SEP conclusions and recommendations. The ECR is marked on the front cover "FINAL - Closed for Public Comment".

3.4 When I first learned of the ECR in September, 2009, I spoke with Liz Lewis who is the Principal Planner for the Watershed Program of the Marin County Department of Public Works, and I asked why there was no notice given to residents of the San Geronimo Valley that the ECR was available for public comment before the comment period closed. Ms. Lewis informed me that the County only released the report to a handful of people.

3.5 I have read and refer to the Lagunitas Limiting Factors Analysis dated March 2008 ("LFA") prepared by Stillwater Sciences. The LFA is cited in the ECR and the SEP as a factual source.

3.6 The ECR (pages 6-1 to 6-17) lists about 150 data compilations, on which the ECR is based. Most of these 150 sources are available on the internet in complete or summary form, and I have reviewed all 150 reports.

3.7 However, only 27 of the 150 reports are based on research conducted in the San Geronimo Valley. Of these 27 SG Valley data sets, 13 are the annual fish count reports produced since 1988 by Marin Municipal Water District. <http://www.KRISweb.com>. Also

there are some 14 studies that were conducted in the SG Valley. Other than sediment studies there is no research or direct observation of vegetation, habitat and bio-metrics concerning the salmon habitat in the 50 out of 60 miles of tributaries and streams in the San Geronimo Valley above the 2% grade. Some conclusions in the ECR and recommendations in the SEP are based on research conducted in colder northern climates such as Alaska and Washington. The ECR also relies on research from Australia and other ecological systems different from the wet cold winter/dry summer ("Mediterranean") climate of the San Geronimo Valley.

3.8 The LFA acknowledges on page 23 that evidence for temperature limitations on juvenal coho salmon abundance in the Lagunitas watershed is lacking. Few studies exist in Mediterranean climates regarding large woody debris in fish-bearing streams. (ECR page 3-50.)

4. Tree Canopy and Water Temperature. Riparian vegetation is relevant for salmon habitat because shade protects fish from the sun and predators, keeps water temperatures cool and provides food source habitat.

4.1 SG Valley tree canopy was measured at 81% density in September 2006, according to a California Department of Fish & Game survey. (ECR page 2-19.) Mr. Ettlinger of Marin Municipal Water District reported that tree canopy increased slightly from 2003 to 2006, and ranged overall from 63% to 70%. The riparian corridor along the major fish-bearing streams is described as "well shaded". (ECR page 3-49.)

4.2 Stillwater Sciences conducted a plant survey in the SG Valley in August 2008, after many plants had died back at the end of the summer. The survey described vegetation by species and type, but did not estimate tree canopy density. Stillwater chose to survey a limited number of sites, all of which are below a 2% grade, such as the golf course or a parking lot where little tree canopy could be expected. (ECR pages A-7 to A-10.)

4.3 At its July 12, 2010 hearing, the Marin County Planning commission asked whether tree canopy was declining. There is no evidence of a decline in tree canopy, which is the primary way a stream is shaded. Attached is the response I received from Mr. Ettlinger of MMWD on July 14, 2010 explaining the distinction between total creekbank cover and stream shading.

4.4 Attached are some aerial photographs of the San Geronimo Valley in the 1960's and 1970's, obtained from the Marin Historical Society. They show wide swaths of the valley and hillsides had no tree cover at that time. A person walking or driving through the SG Valley today would see the results of people planting trees, and forests naturally spreading, over the past 40 to 50 years. The shade over creeks has definitely increased since these photos were taken. Compare the attached July 21, 2010 Marin Independent Journal photograph of the densely wooded hillside in Woodacre.

4.5 All of the tree canopy and water temperature studies cited in the ECR were measured at a few locations in major fish-bearing streams along the Valley floor. The research sites do not include any of the 49 miles of streams and gullies which rise up from the Valley floor to steep grades on the hillsides.

4.6 For water temperatures, the ECR relies on data provided by SPAWN employees. It concludes "measured water temperatures do not exceed lethal or critical thresholds for salmonids." (ECR page 2-16.) Also, "water temperature does not appear to be a strongly limiting factor at present . . ." based on SPAWN data through 2008. (ECR page 2-16.)

While SPAWN observed that some summer water temperatures could exceed optimal ranges for fish trapped in still pools over the summer (ECR Page 2-16), SPAWN has actively sought out and moved salmon out of the still pools each summer and into cooler locations along the main creeks.

4.7 The EPA and other authorities conclude that "moderate temperature fluctuations can be tolerated as long as the incipient lethal temperature is not exceeded for long periods. . . . optimum temperatures are neither necessary nor realistic at all times to maintain viable fish populations." (ECR page 2-5.) SG Valley summer water temperatures are consistent in line with this science. When measured at still pools such as the Ink Wells or the MMWD water treatment plant, temperatures occasionally spike for a few days each summer, but are well within tolerable range. (See water temperature surveys in KRIS website, Exhibit Tab 21.)

5. Flooding, Scouring and Sediment. Stillwater sciences studied creek scouring and sediment because both can adversely effect fish emergence. Neither of these conditions were identified as limiting factors in the SGV.

5.1 While some sedimentation is taking place, as is normal in a watershed, the percentage of fish hatching is acceptable to populate the remaining SGV creeks and not a limiting factor. "Results from the redd scour and emergence trapping field studies indicate that downstream transport of sediment is not currently affecting the coho salmon population." (LFA page 62.)

5.2 In the San Geronimo Valley creeks, Stillwater Sciences found that oxygen O₂ generally meets minimum requirements for salmon at the main stem creeks and in tributary sampling locations. (ECR page 3-22.) Turbidity is generally below sub-lethal levels. (ECR page 3-23.) Metals traces may be naturally occurring. (ECR pages 3-24 to 3-25.) SG Valley stream conditions "were significantly better than at other sampled watersheds in the Bay Area." (ECR page 3-25.)

5.3 Sediment is highly variable in response to storm intensity. (ECR page 3-35.) But, in general, San Geronimo Creek sediment is decreasing. (ECR page 3-49.)

5.4 The ECR at page 2-8 concluded that ". . .once development within an urban basin

has proceeded to a certain point, most of the sediment entering the channel does so from within the channel as opposed to hill slope erosion." It is reasonable to conclude that reducing sediment in the major fish-bearing streams on the Valley floor does not depend on preserving every shrub and herbaceous plant on the hillsides.

5.5 Flooding caused by spring storms pose the greatest limiting factor for salmon. Flash floods and sudden drenching rains can wash young salmon out of the watershed. (LFA page 30) The reason for flashy streams and flash floods has not been determined. (ECR page 3-16.)

5.6 SG Valley experienced two major deluges in the winter of 1982 and New Years Day 2006. The ECR describes these floods as "re-setting events" which changed vegetation and aquatic ecology. (ECR pages 3-5 and 3-16 at Exhibit Tab 18.) The New Years Day 2006 flood had a dramatic impact on salmon habitat quality, loss of pools, woody debris, and stream cover. (ECR page 3-49.)

5.7 My personal experience with the New Years 2006 flood are described in my Statement in Exhibit Tab 3. Most winters bring at least one or two severe rain and wind storms to the SG Valley. During such a winter storm, and for the week or two weeks afterward, the Valley roads are impassable, electric power and telephone lines are not functioning, and people are trapped in their homes. In these situations, we cannot hire an arborist, nor can we apply to the County for a tree removal permit. It is important that any stream ordinance for the SG Valley anticipate and expressly exempt emergency removal of trees which can cause flooding and can endanger human life and homes, as well as destroy the salmon.

6. Uplands Tributaries and Ephemeral Streams.

6.1 In the SG Valley, there are 49 miles of uplands tributaries traversing the hillsides. These tributaries include seasonal, intermittent, and ephemeral streams, some quite small which fill with water only a few days each year in the rain.

6.2 The slope grade increases quite steeply once you leave the Valley floor, with most uplands tributaries having 12 % to 20% slope grade and higher (ECR map on page 3-37.)

6.3 Coho salmon cannot swim up a grade steeper than 4% and steelhead trout are limited at about 8% grade.

6.4 The Valley floor also contains about 6 miles of alluvial (loose soil) tributaries creeks which flow into floodplains or drain into the 5 miles of major fish-bearing creeks. (MMWD, Stetson Engineers, 2002, page 7.)

6.5 All the research studies cited in the ECR and the LFA were conducted in these 11

miles of creeks which flow along the SG Valley floor. The slopes of the areas studied were below the 2% grade. (ECR page 2-21.)

6.6 An ephemeral stream can be described as a watercourse which flows only when it rains. Ephemeral streams can be identified only through field investigations. There is no geological survey map or land satellite photo which has identified the ephemeral streams in the SG Valley. Indeed, there has been no study at all of ephemeral streams in the SG Valley.

6.7 The ECR acknowledges the complete lack of data concerning the uplands tributary streams of the SG Valley. Trees on small creek tributaries were not counted or measured (page 3-27). Tree density graphs do not include the small creek tributaries where the trees are located (page 3-29). In stream habitat data from San Geronimo Creek tributaries have not been reported. (page 3-48). There is a data gap on woody debris and tributary habitat (page 3-58).

6.8 An example of the lack of data for uplands streams can be found in the ECR description of Montezuma Creek. My house is located at the end of the street, as the last home before Montezuma Creek climbs steeply up a canyon to the ridgetop. The ECR states that Montezuma Creek has a low tree density and tree size. (ECR pages 3-27, 3-28, 4-34, 3-46). In fact the tree density of Montezuma Creek is among the highest in the SG Valley with hundreds of large trees. It is considered the creek most closely resembling a pre-Columbian forest stream. Montezuma Creek is densely lined with 175-foot tall redwood trees. My one half acre parcel along Montezuma Creek contains about 70 redwood trees, 35 of which are more than 24 inches in diameter at breast height.

6.9 There is no scientific evidence that salmon would suffer significant harm if people were allowed to continue to manage brush and herbaceous vegetation along uplands tributaries or ephemeral streams.

6.10 There is evidence that the gullies and canyons of the uplands tributaries pose particular fire risks. Flames travel uphill, and the steep gullies of seasonal streams become fire chimneys, where people can be come trapped and it is difficult to get fire equipment to the ignition site. Fire authorities advise that 100 feet or more of defensible space clearance is necessary for homes located on hillsides, as compared to 30 feet to 50 feet for some flat land areas. (See Exhibit Tabs 4, 5, 6, 7, 8, and 9.)

6.11 The brush and tall grasses along seasonal and ephemeral creeks dry out by June each year, and become high risk ignition sites in July through October each year. Marin County has already experienced grass fires in June and July 2010. There is nothing to show it is essential for salmon survival to continue these fire hazards along the uplands tributaries or ephemeral streams.

6.12 The steep slopes of these uplands gullies and canyons also make them prime

candidates for flooding, as fallen trees and other debris clog the narrow channels during a heavy rain. Living on Montezuma Creek, with a steep grade of over 20%, I have experienced flash floods and debris avalanches caused by dead and fallen trees in the winter rains.

6.13 The ECR acknowledges that floods cause significant environmental harm to the stream habitat for aquatic life. Nevertheless, there has been no comprehensive environmental report of what the unintended consequences may be of prohibiting landowners along steep uplands streams from cutting dangerous or diseased trees, or taking other steps to protect against floods.

Respectfully Submitted,

Steve Tognini
380 Montezuma Avenue
P O Box 231
Forest Knolls, CA 94923

SGV ECR on Tree Canopy and Bank Cover

From : pshene@comcast.net

Wed Jul 14 2010 4:36:42 PM

Subject : SGV ECR on Tree Canopy and Bank Cover

To : Marin Planning Commission <dstratton@co.marin.ca.us>, Tom Lai <tlai@co.marin.ca.us>, Katherine Mindel Jones <kmjones@co.marin.ca.us>, Kent Julin <kjulin@co.marin.ca.us>

Cc : eettlinger@marinwater.org, Steve Tognini <steve.tognini@kp.org>

To: Marin County Planning Commission
Attention: Debra Stratton

Marin County Community Development Agency
Tom Lai and Katherin Mindel Jones

Marin County Fire Department
Attn: Kent Julin

cc: Eric Ettliger

From: San Geronimo Valley Stewards
Peggy Sheneman and Steve Tognini

We wish to respond to questions raised by Planning Commissioners on July 12, 2010 concerning the San Geronimo Valley vegetation ordinance. Commissioners asked whether the tree canopy or shade from riparian vegetation was decreasing over time so as to be a serious problem for salmon habitat.

The Valley Stewards cited in our July 12 Presentation evidence from the January 2009 Existing Conditions Report (ECR) gathered by California Department of Fish & Game in September 2006 that tree canopy density was about 81% in the fish-bearing streams on the Valley floor. (See pages 2-19, and 3-52 of Tab 19.)

The ECR also describes a 2008 report from Mr. Eric Ettliger that tree canopy cover increased slightly from 2003 to 2006, and ranged overall from 63% to 70%. (Tab 19, page 3-49.) The Ettliger Report is cited on page 2-18 of the ECR but does not appear online and we cannot locate a copy.

We asked Mr. Ettliger about the distinction between tree canopy and bank vegetation cover, and below is his reply.

*Attachment to Statement of Steve Tognini
Re: Studies of SGV Valley Conditions*

"Eric Ettlinger"
<eettlinger@marinwater.org>
07/14/2010 08:44 AM

To Steve Tognini/CA/KAIPERM@Kaiperm
cc "Gregory Andrew" <gandrew@marinwater.org>,
"Mike Swezy" <mswezy@marinwater.org>, "Tom
Cronin" <tcronin@marinwater.org>,
<robcarson@tomalesbaywatershed.org>
Subject San Geronimo Existing Conditions Report

Hi Steve.

I looked over page 2-18 in the Existing Conditions Report and the conditions documented for bank vegetation are accurate, based on our 2006 report. Bank vegetation declined from 1998 to 2006, but you are correct that the significance of that observation is not necessarily a decrease in stream shading. Declining bank vegetation would likely result in decreased bank stability and increased erosion into the creek, as well as decreasing fish cover and shading along the stream margins. But the primary way the stream is shaded is through canopy cover, and during the brief period when we measured canopy cover, we observed a slight increase.

One confounding factor is that we measured bank vegetation over a longer period than canopy cover. From 1998 to 2003 tree cover on the banks decreased from 47% to 35%. There was only a slight change in tree cover by the next survey in 2006. So one could infer that since tree cover on the banks decreased between 1998 and 2003, canopy cover also decreased. But we did not measure canopy cover prior to 2003, so we can't say for sure. I don't know if Stillwater Sciences made the same connection between tree cover and stream shading to arrive at the "significance" statement on page 2-18, or if they were confounding total bank cover with stream shading.

I hope that answers your question.

Cheers,
Eric

~~~~~  
Eric Ettlinger, Aquatic Ecologist  
Marin Municipal Water District  
220 Nellen Ave, Corte Madera,  
CA 94925 (415) 945-1193  
~~~~~>))))> ~~~~~>))))>

Fire, medic service tax boost hits ballot

If approved, rates would go up over 50% in two districts that haven't seen increase since 1994

By Nels Johnson
Marin Independent Journal

BOLSTERED BY a public opinion poll indicating a "good chance of success," county officials are moving ahead with ballot measures boosting fire and paramedic taxes in West Marin by 50 percent.

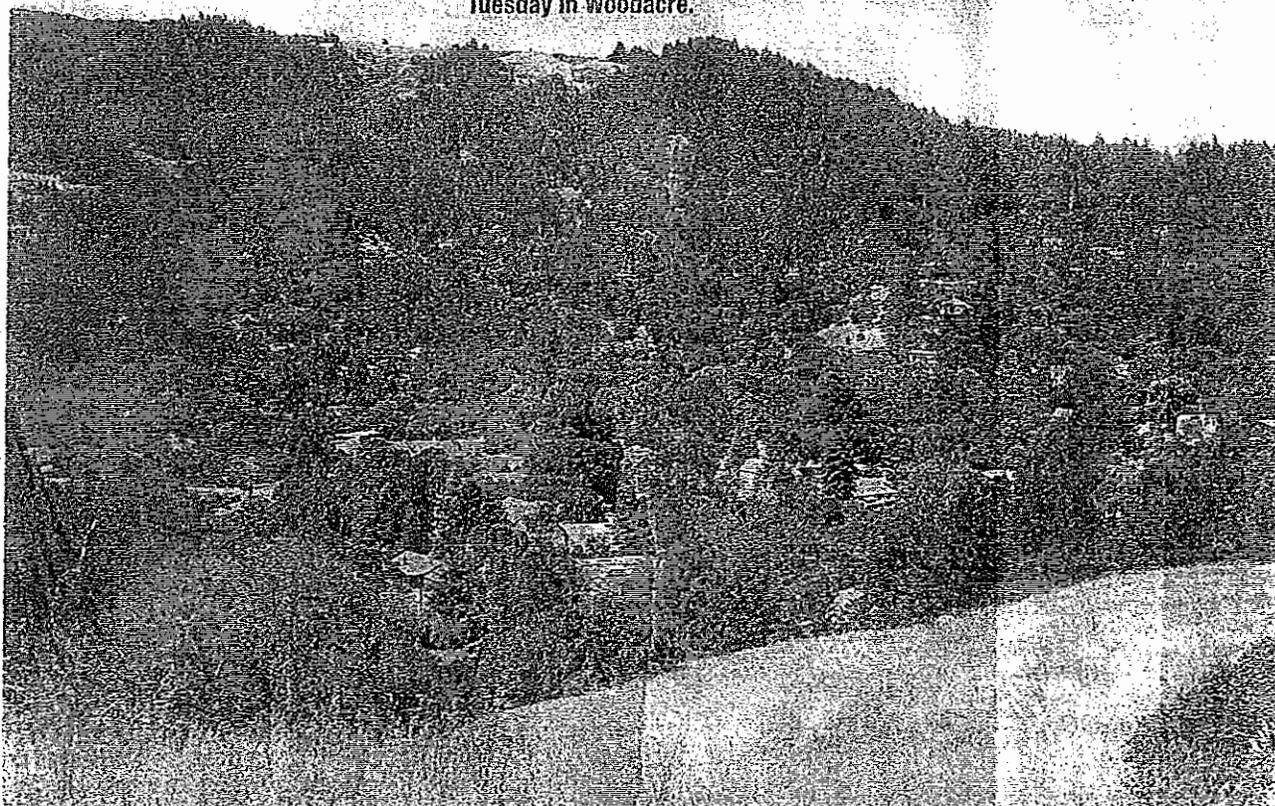
Headed for the ballot is a measure increasing fire protection taxes in County Service Area 31, where the levy now stands at \$76 per parcel in a 445-square-mile area including the San Geronimo Valley,

See **BALLOT**, page A2

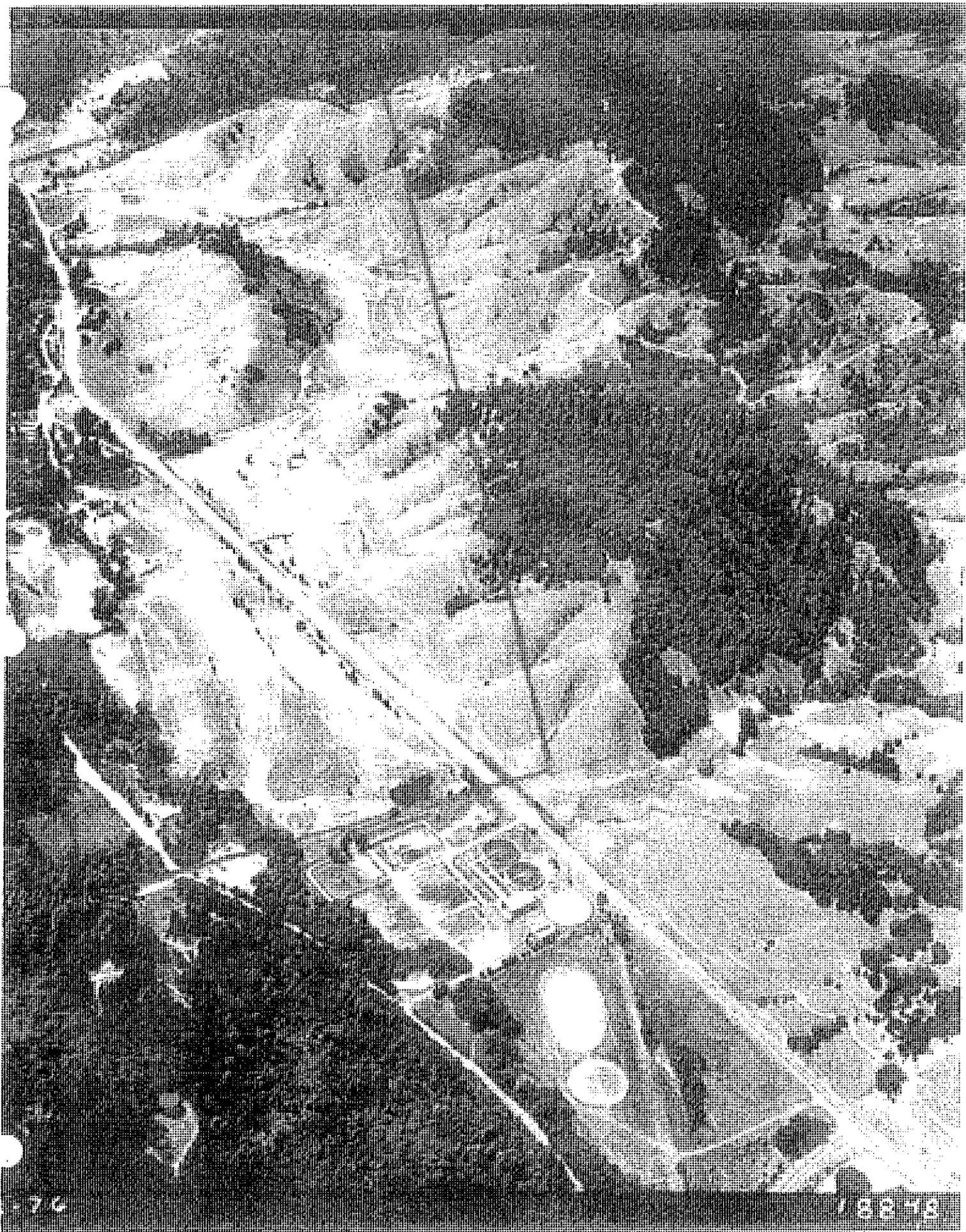


IJ photos/Frankie Frost

Marin County Fire Department engineer Graham Groneman (left) and engineer/paramedic Bret McTigue climb into the back of their ambulance Tuesday in Woodacre.



Houses nestle on a densely wooded hillside in Woodacre, one of several areas that may see a large tax increase for fire and paramedic services if a November ballot measure is approved by voters.



1964

**To: Marin County Board of Supervisors
Marin Community Development Agency**

**REPORT ON SAN GERONIMO REDWOOD FOREST, AND OBJECTION TO TREE ORDINANCE,
BY STEVE TOGNINI**

For the December 13, 2011 Agenda of the Board of Supervisors, San Geronimo Valley Stewards respectfully requests you consider this Report and objection to the proposed amendments to the Community Development Code (draft September 2011). We refer to proposed Chapter 22.27, Chapter 22.62, and Article VIII definition of "Protected Tree and Heritage Tree".

I live on Montezuma Creek in Forest Knolls with my wife and daughter. Our house is located about 35 feet from Montezuma Creek.

On my half acre I have counted 98 redwood trees. Most are 160 feet tall and over 24 inches in diameter.

During the 2005-06 New Year's storm, a debris avalanch reached our doorstep. Much of my yard was covered with mud and debris, including trees and tree stumps from fallen redwoods. In the nine years I have lived at this address three trees 160 ft. tall have fallen within 100 ft of my home and can be viewed.

Research and Sources for This Report.

I have read the California Central Coast Salmon Recovery Plan (draft published March 2010) produced by National Oceanic and Atmospheric Administration (NOAA), and the research cited in the NOAA plan.

I sit on the Lagunitas Technical Advisory Committee (Lagunitas TAC) as a representative of San Geronimo Valley Stewards. I have attended most meetings over the past 18 months and read the scientific data about our watershed that is shared for these meetings.

Recently, I have read several monographs and research papers produced by forestry

management specialists working with the Save the Redwood League, a respected conservation group.

I have read the Feb 9, 2010 consultant's report entitled "San Geronimo Valley Salmon Enhancement Plan" (SEP), as well as the Existing Conditions Report (ECR) dated January 2009, and the Lagunitas Limiting Factors Analysis (LFA) dated March 2008, on which the SEP is based.

The SEP, ECR and LFA list about 150 data compilations, most of which are available on the internet in complete form or as abstracts. I have read all 150. However, only 27 of the 150 are based on research conducted in the San Geronimo Valley.

Much of the SG Valley data comes from the annual fish counts and other reports produced since 1988 by Marin Municipal Water District, which I have read.

[THIS IS MOVED TO CONCLUSION--SEE"REQUESTED CHANGES". Redwood forest property owners establishing old growth conditions on their land are exempt from permit fees and discretionary review. [DELETE FROM HERE]

Redwood Forests Should Be Managed for All Species, Not Merely for One Fish.

Many species of plants and animals have developed over many years under old growth conditions in the redwood forests. "Managing forests to maintain biological diversity grew out of the recognition that it would be virtually impossible to try to maintain stable populations of all plant and animal species by managing for each species on an individual basis" (Peter C Passof, UC ext).

Without those diverse conditions, some species, such as the marbled murrelet cannot adapt (Gregory A Giusti 2004 UC ext).

For various reasons the number of Coho salmon have dwindled in the Lagunitas watershed, which is at the very southern end of their range. Returning the forest to old growth conditions will aid in the recovery of the wildlife including the Coho Salmon in the West Marin. Restoration thinning of the redwood forest is a well documented and utilized strategy for returning forests to old growth conditions.

The proposed tree ordinance would make unaffordable or illegal the actions that should be taken on some properties to promote the health of our redwood forests.

Marin 2007 Countywide Plan Fails to Address Redwood Forests.

Many unincorporated parts of Marin, that would be governed by this tree ordinance, are redwood forests. Mill Valley, Larkspur, Corte Madera, San Geronimo Valley, and coastal West Marin all have large swaths of land with dense forests of redwood trees, growing very close together.

I was surprised to learn that neither the Natural Systems & Agriculture element nor the Tree Preservation section in the 2007 CWP address the existing conditions in Marin County redwood forests. The CWP does address riparian habitat , stream conservation

area, and Oak woodlands.

The 2007 Marin Countywide Plan should be revised to address the many unique attributes of redwood forests in a manner that is easily understood and that will allow for both wildlife and people to mutually thrive.

Redwoods Must Be Managed and some areas thinned As They Recover From Logging.

Our SG Valley forests were last logged about 80 years ago. A redwood grows about 2 feet each year, so our trees are now about 160 feet tall.

An old growth forest typically has on average 32 trees per acre, twelve inches in diameter and above (Gregory A Giusti, 2004, UC ext.). The Marin County redwood forests have as many as 200 trees per acre, so our forests have a higher biomass from what nature intended.

Once the coastal redwood is cut, it does not die but typically will grow stump shoots from the remaining roots or stumps that become new Redwood trees. These stumps shoots grow into the redwood tree "cathedrals" people are accustomed to seeing in Marin and is the primary means for regrowing redwood trees for the timber industry. Some eighty percent of today's redwoods have been grown utilizing this method (Dr. Herbert G. Baker).

This root stump phenomena "leads to a heavily overstocked young forest" (Leslie M Reid), such as exists in Marin County.

When mature Redwoods, several hundred years old, fall for natural reasons, the stump shoots will have grown out from the sides of the tree or its roots while the tree is living. However, the mature old growth tree would have been 10 to 20 feet in diameter, so that the shoots would be over 20 feet apart from each other.

In contrast, a logged tree that was three feet in diameter will put up shoots but the shoots will grow close together. (Peter C Passof, UC ext.). The emerging trees will remain smaller in diameter for a longer period of time than those in a natural setting. They will break branches off close neighboring trees or the tops may break off during storms, creating a hazard when the branches fall.

Eventually, competition within the group of clustered trees will cause the less dominant trees to fall. Trees hundreds of feet tall will fall in residential neighborhoods unless proper redwood forest management practices are in place.

Experts Recommend Restoration Thinning of Redwoods.

There is no mechanism to confidently predict when a redwood will fall. However, management practices exist that allow selective thinning, in order to avoid the hazards inherent in an overstocked redwood environment.

Restoration thinning should be implemented starting ten years after a forest has been logged, in order to direct the new growth towards that of an old growth forest (Joe McBride, Save The Redwood League). Sanitation techniques are used to clear diseased

trees in an effort to prevent the disease spreading.

"The fewer the trees, the larger they grow." (Christopher R Keyes, Save The Redwood League).

The Marin County redwood forest has not received restoration thinning and the density of trees in the forest is high.

Also, the forest is now evenly aged, about 80 to 90 years old, and the canopy has closed off light to the understory.

In a natural unlogged forest, large trees would fall, creating space and light for younger trees. Property owners with large stands can replicate this process through selective thinning.

Thinning techniques are also recognized as a method to separate the canopy and trees which slows fire spreading from one tree to the next.

Redwood Trees Absorb Large Amounts of Water, Diverting Runoff That Could Otherwise Feed Streams.

Large redwood trees (about 250 feet tall) will absorb up to 8,000 gallons of water. (Edward C Stone,1965.)

In a watershed with an abundance of trees many gallons of water are held by the trees that otherwise would have made its way into the mainstem creeks during critically hot summer months. In contrast, in logged forests where all the trees were removed from the alluvial basin, conditions resembling a swamp have developed.

The correct amount of trees has a significant affect on forest quality.

Naturally Occurring Features of Lagunitas Watershed Impact Salmon Life Cycle.

Coho Salmon in the Lagunitas watershed are slowly recovering their numbers after two years of poor ocean conditions combined with the calamitous flood of New Years 2005-06.

The NOAA report describes the Lagunitas watershed as about 109 square miles of West Marin, running from Inverness south to the Golden Gate, and from Ignacio west to the Pacific. The San Geronimo Valley is about 9 square miles, which is 10% of the total land mass of the Lagunitas watershed.

The number of fish that return to the watershed is typically determined by how many Coho spawn return from the previous season. If the conditions in the ocean do not encourage salmon survival, or if the fish are too small when they migrate out of the watershed, many of the fish that leave the watershed do not return.

The Coho Salmon in the Lagunitas watershed are at the southern-most end of their range. In many urban areas of the southern range, the fish have ceased to exist. The Lagunitas watershed is modest in size, but it is nearly pristine(SFRQB). It is currently

producing the most stable population of Coho in the southern range.

The Lagunitas watershed has a short but sometimes intense rainy season. Our salmon will run up the creeks later in the year than the salmon in the more northern watersheds along the Pacific coast.

When it rains is just as important as how much it rains. If it rains early in the winter, roughly 50% of the Lagunitas watershed salmon spawn in the San Geronimo Valley. If the rains are late in the season, the fish spawn in Lagunitas Creek.

During the summer months, most of the tributaries that serve the mainstem San Geronimo creeks and Lagunitas Creek are dry. The tributaries therefore do not affect the summertime mainstem water quality or the fish.

Factors Which Limit Capacity of Creeks to Support Numbers of Fish.

The Lagunitas watershed can support 7,000 juvenile Coho each year that will migrate out to the ocean. More than 30,000 juvenile fish have been counted in some past years. However, most of those fish die off until the optimal carrying capacity of 7,000 has been achieved.

One condition adversely affecting juvenile numbers is the heavy spring storms that wash the newly emerged fish out of their nests and towards Tomales Bay.

Another limiting factor is MMWD's operation of dams that restrict access to spawning grounds. Fifty percent of the watershed is now located behind the MMWD dams. The dammed off watershed was a formerly productive spawning ground.

Much of the restoration work that taxpayer dollars have paid for over the past 20 years have been attempts to increase the carrying capacity of the streams. MMWD has installed logs into the creeks to provide shelter during the storms and habitat for the rest of the year.

The Department of Public Works has removed culverts, replacing them with clear span bridges (at a cost of about \$500,000 for each culvert). It is hoped the new bridges will help Salmon during the storms by providing off channel areas for young fish to escape during high water events, as well as by providing easier access to tributaries for returning salmon.

When sediment below seven millimeters enters the creek it can either trap the emerging fish in their nests(reds) or keep fresh water from passing through the nest. Reduced sediment can increase the number of fish that will emerge from the nests.

Coho lay approximately 2000 eggs. Agencies count how many fish migrate back into the ocean and then extrapolate back to estimate the percentage of fish that emerge from the salmon nests(reds).

Homeowners Must Be Proactive and Plan for the Future.

Homeowners in the San Geronimo Valley have been told that our mere existence in the San Geronimo Valley somehow endangers salmon. While there could be human activities that are obviously detrimental to the creeks and fish, most of the families in the valley do their very best to live an environmentally gracious life.

It is our careful conservative lifestyle, and good stewardship of the land, that has allowed the salmon, redwoods and wildlife survive here, while species are dying out in other parts of the Bay Area.

When considering a tree preservation ordinance the County must consider not only the existing conditions in the redwood forest, but also the conditions that will exist in the future. Trees that are safe for our families today may not be safe as years pass.

Today the previously logged forest averages 160 feet tall. In fifty years those same trees will reach 250 feet tall. The process of dominant trees competing will result in very tall trees will falling down in residential neighborhoods.

If citizens can not reasonably, affordable, maintain these trees and the forest, the County becomes responsible for the hazardous conditions that will emerge. We cannot predict when a tree will fall and therefore trees must be thinned proactively which will also duplicate the conditions of a true old growth forest.

Tree Canopy Shade

The riparian environment that surrounds the creeks in the SGV, the County-designated Stream Conservation Area (SCA), have become a focus of public debate. The benefits of the riparian environment as well as the tree shade on the creeks seem to drive the conversations at the County level.

There is no evidence that the tree canopy in the 9-mile San Geronimo Valley (or the entire 109-mile Lagunitas watershed) is declining.

Indeed, aerial photos demonstrate a dramatic increase in the number of trees from photos taken in the 1940's to 1960's. Most of these trees were planted by humans as landscaping.

Even the 12,000 acres of forest surrounding Kent Lake, which burned to bare ground in the fire of 1945, have re-grown and are now dense woodland.

San Geronimo Valley tree canopy was measured at 81% density in September 2006 by a California Department of Fish & Game survey. (ECR page 2-19.) Mr. Ettinger of Marin Municipal Water District reports that tree canopy increased from 2003 to 2006, and ranged overall from 63% to 70%. He described the riparian corridor along major fish-bearing streams as "well-shaded." ECR page 3-49.)

Is There a Cause/Effect between Tree Shade and Water Temperatures for Fish?

Some people have become convinced that the water temperatures in the creeks can get

too hot for the Coho to thrive during the hottest summer days and that preserving the tree canopy will help reduce the water temperature.

The temperature and water flow in the watershed are continuously monitored at a few spots in the watershed and the values can be viewed through an available USGS website. In some years the water is too warm for a few days and in other years it may be warm for a month.

When the water is too warm in Lagunitas Creek below the dams the expectation is that MMWD will observe this condition and release water flow from the dams to cool the stream temperature. There are no dam release controls possible for the water in the San Geronimo Creek.

Suggesting that inadequate tree canopy is the primary cause of warm water temperature lacks scientific support. MMWD informed the Lagunitas Technical Advisory Committee that water temperature in the watershed is more affected by the ambient air temperature than sunlight penetrating the canopy.

It is probable that the majority of the energy warming the creeks is fundamentally a naturally occurring condition and there is no evidence that, if some portion is due to human activities, what proportion that may be.

About seventy percent of the upland tributaries to the mainstem creeks are naturally dry throughout the summer months. Therefore, tree canopy over the upland tributaries cannot effect water temperature for fish located in the Valley floor mainstem creeks. Allowing property owners to manage their land in these upland tributary areas will have no affect on water temperature for fish.

Conclusion and Requested Changes.

The goal of saving wildlife is complex but must be achieved by restoring the old growth redwood forest. Achieving that goal means that many forest properties will need to be thinned while on other properties the growth of the forest will need to be encouraged.

The County should support the local citizens who live in the forest in achieving that goal. Erecting financial obstacles and time consuming permit requirements is contrary to restoration goals and will not save endangered species.

We request the proposed ordinance be changed, so that owners of developed residential lots located in a redwood forest are exempt from permit fees and discretionary review, if they are implementing a multi-year plan to establish and rejuvenate old growth forest conditions on their property.

In the short term, if the County sees some litigation advantage to quickly adopting a tree ordinance, then:

-- the exemption to remove two trees per year must apply to every home, including those within the SCA;

--the diseased/damaged trees exemptions should be clear objective standards, that do

not require homeowners to go to extraordinary lengths to save every tree at untold cost;

--do not require prior CDA approval or an arborist report for diseased/damaged tree removals; a letter from a licensed tree removal contractor should suffice;

--exemptions should include tree removals required by insurance companies, trees that interfere with septic, trees that block sunlight and views, and emergencies such as storms and disasters; and

--fees should be reduced to about \$100 for a permit, a tree replanting fee, and any appeal.

In the long term, the County should adopt an inter-disciplinary approach that combines the expertise of forestry management, fire prevention, flood protection and abatement, rejuvenation of old growth redwood forests, and homeowner protections.

The long term plan must involve the government agencies and institutions which are the large landowners in West Marin and unincorporated areas of Marin. The small lots of homeowners are a tiny piece of the picture.

There should be special exemptions and exceptions for single family homes which are already developed.

We live in the valley and take good care of our land. The support people who live in the forest will be imperative for the success of the forest restoration.

Respectfully submitted,

SAN GERONIMO VALLEY STEWARDS

By:

Steve Tognini

phone: 510-867-4844 Cell email: Steve.tognini@KP.org

P O Box 231, 380 Montezuma

Forest Knolls CA 94933

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Ephemeral Water Flows, by Steve Tognini

June 14, 2013

In Marin County ephemeral waters flow between 2 days and 5 days per year, which is why most ephemerals do not have riparian habitat or a stream channel. In 2011-12 ephemerals flowed for two days.

In contrast, Pacific Northwest and East Coast ephemerals can flow more than 50 days per year and many have developed riparian habitat and a stream channel.

The benefits of Marin ephemeral streams are the input of nutrients or detritus (organic compounds) and invertebrate drift, but not sediment. Sediment under 7 millimeters smothers salmon eggs.

When ephemerals are flowing in Marin County:

- San Geronimo Creek will experience as much as 1,800 cubic feet per second water flow.
- Lagunitas Creek will experience as much as 4,000 cubic feet per second water flow.

Fish are swimming for their lives in this water regime. The water is muddy, there is little light and they cannot see their food source. Food is a secondary concern when flooding in the watershed is occurring.

Also, while food is entering the creeks, the food and hundreds of tons of sediment end up in Tomales Bay within 3 hours. These conditions persist for several days after storms have ceased. Whatever positive food benefits the ephemerals provide are far outweighed by the short duration that food exists in the creeks.

The ephemeral water flows in Marin are distinctly different from ephemerals in many other areas. They occur infrequently and are of very short duration, contributing intense water flow in our watersheds.

Many organizations wish to treat the ephemerals in Marin in a similar fashion to very different ephemerals in other regions, in order to give the water flows in Marin excessive buffer protections. Describing environmental conditions in the San Geronimo Valley out of context is common practice and misrepresents existing conditions.

When ephemeral streams are flowing in Marin it is an indication that watershed damage is occurring. Flooding is taking place, landslides occur as well as debris avalanches, trees are falling, creek banks are failing, and hundreds of tons of sediment are moving into Tomales Bay. The fish and their eggs are washed into Tomales Bay as well.

Because of these unique conditions ephemeral water flows in Marin do not warrant the same buffer protection as flows in other areas.

Respectfully Submitted,

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on behalf of San Geronimo Valley Stewards
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Statement of Steve Tognini Challenging SPAWN's Misleading "Science"

My name is Steve Tognini and I live in Forest Knolls. My house is less than 50 feet from Montezuma Creek, which is a tributary of San Geronimo Creek.

I have read SPAWN's paid advertisement (Marin IJ June 6, 2013) from 100 scientists, advocating the stream ordinance. It appears the scientists who loaned their names did not check SPAWN's "facts". I have also reviewed other statements by SPAWN supporting the stream ordinance.

My Background

I am currently employed as the Assistant Chief Engineer for Kaiser Hospitals in Oakland, California. I served as an engineer in the United States Navy, and hold a bachelor's degree in Economic and Business Administration from University of the Pacific.

I serve on the Lagunitas Creek Technical Advisory Committee as a representative of San Geronimo Valley Stewards. I have attended most meetings over the past 3 years, and have read the scientific data about our watershed that is shared for those meetings.

This statement is my own and is not made on behalf of Kaiser Hospitals or the Lagunitas TAC.

Reports and Sources I Reviewed

I have studied the 2009 Existing Conditions Report (ECR) and the 2010 Salmon Enhancement Plan (SEP). The ECR and SEP total 600 pages, cost Marin County \$300,000 in expert fees, and were supervised by an "advisory committee" selected by SPAWN and County officials.

I have also read:

- the fish counts and biologist reports from Marin Municipal Water District;
- the March 2008 Lagunitas Limiting Factors Analysis (LFA) on which the SEP is based; and
- about 150 data compilations listed in the SEP, ECR, and LFA, most of which are available on the internet.

1. Development of Family Homes Is Not the Cause of Salmon Decline.

Many houses in the SG Valley were built in the 1920's as summer cabins, when salmon runs were massive. Marin Municipal Water District (MMWD) built dams in the 1950's and 1980's that reduced spawning grounds by 60%.

A severe storm in January 2006 washed out the salmon redds (nests), and interrupted two life cycles. Bad ocean conditions in 2006-08 affected all Pacific basin fish. This is the finding of San Francisco Regional Water Quality Control Board (SFRWQB) and MMWD.

Coho salmon have recovered to a 17 year average. MMWD counted 500 adults in winter 2012-13, and almost 250 redds. According to Greg Andrew, the Fishery Program Manager for MMWD, this does not mean their

recovery is complete, but it is a huge improvement over what SPAWN described as an "extinction vortex."

2. Total Impervious Area for the San Geronimo Valley and Lagunitas Watershed is Low By All Standards.

SEP found total impervious area (hard surfaces such as roads) is 4.5% SG Valley.

However, the SEP report over-estimated total impervious area (TIA). The Valley TIA should be about 3.5%. SEP was wrong to assume 250 miles of roads with average width of 35 feet plus sidewalks. Actual roads are 36 miles (per Marin County Dept of Public Works), with average width of 17 feet and no sidewalks.

In the scientists' letter, Spawn selected a few stream reaches with hard surfaces of 7% to 20% and did not include areas of the stream in open space areas. We learned in high school biology that the sample you choose will determine the result. If you study 2 acres of the elementary school playground, you will come up with a high impervious measurement.

SEP found most of the residential tributary reaches in the had less than 10% TIA. The largest culprits for TIA are roads and utilities, not homes and landscaped yards. Please read the Existing Conditions Report (ECR) section 3-9 to 3-14 to appreciate the interaction of TIA among various drainage basins.

3. Tree Canopy and Creekbank Vegetation.

ECR states that the SG Valley is "far from urban." Spawn complains of "high urbanization" based on select locations where riparian vegetation cannot exist-- the MMWD water treatment plant, the golf course, and a public swimming pool. (Although it clearly helps drainage and filtration, family home landscaping is not classified as riparian vegetation.)

San Geronimo Creek tree shade canopy was measured at 81% in Sept 2006 by a California Fish and Wildlife Dept survey. The MMWD fish surveys measure 60% to 70% tree shade canopy over the fish-bearing main stem creek.

SEP found that SG Valley vegetation is comparable to other Northern California fish habitats. Aerial photos of the 1940's and current Google Earth images show tree canopy over our streams and general vegetation has easily tripled in the past 60 years.

There is a relationship between shade canopy and water temperature. The temperature of water in the streams is also effected by release from the MMWD dams. ECR found that water temperatures in the San Geronimo Valley are well within the tolerable range for coho. Lagunitas Coho have adapted to warmer water conditions that their Northern counterparts.

Please see section 4 of my August 6, 2010 statement submitted to the Board of Supervisors for its consideration of the proposed Riparian Vegetation Ordinance (which was not adopted). Also, please see my statement of December 2011 regarding the proposed tree ordinance (which was adopted).

When the tree ordinance was adopted in 2011, it excluded the trees within the SCA of San Geronimo Valley. We were promised by the Board and County staff that, once a Countywide stream ordinance is passed, the Tree Ordinance would be amended to apply within the SCA.

4. Current Development and Future Build Out in SG Valley.

SPAWN has suggested there is a rush to build large houses and home additions. From 1999 to 2013, only 44 permits were granted for home additions or improvements -- including properties owned by SPAWN or Mr. Steiner. In the same period exactly 65 new homes were built -- 8 of them for affordable housing.

SPAWN projects 1 million square feet of impervious area could be added to the San Geronimo Valley under the proposed stream ordinance. SPAWN's hypothetical assumes a house would be constructed on every vacant lot, and that every existing home would expand by 500 square feet.

SPAWN's numbers appear high by about 33%. First, consider the 95 buildable vacant lots in the SG Valley.

There are 203 unimproved residential parcels which are either fully or partially within the SCA. (SEP pages 2-27 and 2-28.) Of these, 108 lots are too small to support development.

That leaves 95 vacant parcels within the SCA of SG Valley that could potentially support a house. Some of these 95 lots may not percolate for septic or may not have road access. Assume a 3000 square foot house (2 stories), with a 1500 square foot impervious area. (We assume that any new home would follow County staff recommendations to make the driveway and patio of porous materials.)

Next, consider the existing development of 855 homes, multi-family residences, and small commercial businesses within the SCA. (Information per County Assessor's report.) Under the stream ordinance, each could potentially add 500 square feet (cumulative total) with a Tier 1 permit, and each could convert 120 square feet of previously disturbed garden area by installing a garden shed, gazebo, or deck.

Maximum potential build out of 672,600 square feet within the SCA over the next several decades might be possible -- but only if all 95 vacant lots construct a house, and if all 855 existing homes install 120 square feet of improvements plus 500 square feet of additions. Not the 1 million square feet Spawn estimates.

However, for the sake of discussion, recall Spawn's hypothetical 1 million square feet. It would add 0.38 % more impervious area within the SCA--not statistically significant for the total 243 million square feet in the SCA.

5. SEP Recommends Setback of 35 Feet, Not 150 Feet.

SEP recommends a 35 foot stream setback for existing homes and for new or re-development on vacant lots. In the villages of SG Valley, the average home is 1500 square feet on a 100' by 100' lot. Many homes were built decades ago within 10 feet of the creek. SEP and the ECR determine that 35 feet is adequate for water quality and filtration, riparian vegetation, and creekbank slope stabilization.

SEP and ECR source documents indicate the 100 foot idea came from studies of wild rivers in pristine wilderness. The SEP recommends a 100 foot setback only for public lands, open forests, and willing landowners on large parcels.

SEP does not discuss the CountyWide Plan "goal" of an additional 50-foot setback from the edge of the woody riparian vegetation that is associated with the creek. How do we measure this in a dense forest? The last leaf on the last tree? In my neighborhood, there would be no "edge" of the forest until I walked one mile uphill to the shoreline of Kent Lake.

6. Apply Common Sense Limitations On Ephemeral Streams.

"Ephemeral Stream" is defined in the CountyWide Plan as "A watercourse that carries only surface runoff and flows during and immediately after periods of precipitation." The definition should be changed and the protection should be limited for surface rain runoffs. All of Marin County becomes an "ephemeral stream" in a winter storm.

Please see my June 14, 2013 Statement on "Ephemeral Water Flows", and refer to section 6 my August 6, 2010 Statement.

Because ephemerals exist for only a few days a year, riparian habitat typically does not exist. So there is no justification of habitat protection to impose a 100 foot (or 150 foot) setback around every ephemeral.

Most ephemerals are not mapped, so their "discovery" later would be an unwelcome surprise for the homeowner and could cloud title to property.

SGV Stewards ask the County to limit ephemerals to those which are (1) currently mapped, (2) have riparian vegetation for continuous 100 feet, and (3) drain directly into a salmon bearing stream. A 20 foot setback should be adequate for ephemeral functions of stabilization and filtration identified by SEP. (SEP page 2-22 and Recommendation #12.)

7. The Burden of This Ordinance Falls Family Homeowners and a Small Portion of SCA Land.

If SPAWN uses litigation to force this ordinance, 3,600 homes in Marin County will suffer invasion of privacy, loss of home values, and clouds on title. SPAWN dismiss this "inconvenience" as essential for the survival of salmon.

In the SG Valley, 243 million square feet of land is mapped within the SCA. But only 22% of this SCA land (about 55 million square feet) is owned by individuals and used as homes, multi-unit residences and small commercial businesses. (Assessor's parcel maps).

Therefore, only 22% of SCA land would be controlled by the ordinance.

If 150 foot setbacks and ephemeral stream regulations are vital to species survival, why is 78% of the SCA land excluded from the ordinance? Because the 78% is owned by the government (MMWD or Open Space), exempt as agriculture, or has special zoning. No plan is likely to succeed if the entire burden applied to only 22% of the land.

8. Voluntary homeowner Cooperation Is Essential.

The scientists got one thing right: Their letter states that recovery of the salmon will happen only "as the result of many small positive actions" by homeowners. Spawn's extreme positions, refusal to listen to families who live on the creeks, spying on neighbors, and filing legal complaints make people afraid. Homeowners are now posting "no trespassing" signs along creeks and denying access for salmon research and restoration projects.

Rules for the sake of rules do not work. Dr. Elinor Ostrum won the 2009 Nobel Prize in Economic Sciences for her study of protecting fisheries. She found that community-based cooperative actions, motivated by positive incentives, succeed. Uniform regulations imposed by the government fail.

We urge the Board of Supervisors to take the time to amend the Countywide Plan, so West Marin can have a balanced stream ordinance that delivers real benefits for the environment and rewards voluntary compliance.

Respectfully submitted,

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From: [Todd Steiner](#)
To: [Adams, Susan](#); [Rice, Katie](#); [Sears, Kathrin](#); [Arnold, Judy](#); [Kinsey, Steven](#)
Cc: [Lai, Thomas](#); [Thorsen, Suzanne](#)
Subject: SCA Ordinance: "The portion of the US at risk for flooding, including areas along rivers, will grow between 40 and 45 percent by the end of the century."
Date: Friday, June 14, 2013 8:07:31 AM
Attachments: [FEMA Climate Change Report AECOM 2013-06-11.pdf](#)
[ATT00001.htm](#)
[ATT00002.htm](#)
[ATT00003.htm](#)
[ATT00004.htm](#)

"The portion of the US at risk for flooding, including coastal regions and areas along rivers, will grow between 40 and 45 percent by the end of the century."

Dear Supervisors,

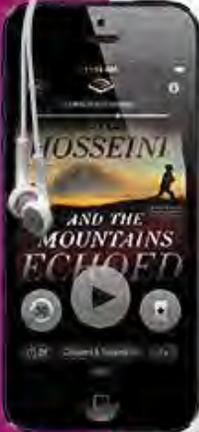
I hope you will consider this new report (attached) and summarized in news story below in determining the distance new development should be set back from streams in the new Stream Conservation Area (SCA) in your deliberations concerning the draft SCA ordinance currently under discussion.

Sincerely,

Todd Steiner

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The advertisement features a smartphone on the left displaying an audiobook player interface for the title "MOSSEINI AND THE MOUNTAINS ECHOED". The phone screen shows a play button, volume controls, and a progress bar. To the right of the phone, the Audible logo is displayed above the text "Download a free audiobook today". At the bottom right, there is an orange button with the text "LEARN MORE".

Median Projected Percent Change in Special Flood Hazard Area for 2100 Over Current Conditions





The **IMPACT** *of* **CLIMATE CHANGE**
and **Population Growth**

on the National Flood Insurance Program
through 2100

prepared for

Federal Insurance and Mitigation Administration
Federal Emergency Management Agency

prepared by

AECOM

in association with

Michael Baker Jr., Inc.
Deloitte Consulting, LLP

June 2013

Executive Summary

Origin and Purpose of the Study

This Climate Change Study was recommended by the *Government Accountability Office* (GAO) to assess the likely influence of climate change on the National Flood Insurance Program (NFIP). The recommendation further stated that FEMA should use assessments from the *United States Climate Change Science Program* (US CCSP) and the *Intergovernmental Panel on Climate Change* (IPCC) in conducting the analysis, rather than undertaking any independent climate modeling effort. The GAO recommendation was stated as follows (directed to both FEMA and the U.S. Department of Agriculture):

We recommend that the Secretary of Agriculture and the Secretary of Homeland Security direct the Administrator of the Risk Management Agency and the Under Secretary for Emergency Preparedness to analyze the potential long-term implications of climate change for the Federal Crop Insurance Corporation and the National Flood Insurance Program and report their findings to the Congress. This analysis should use forthcoming assessments from the Climate Change Science Program and the Intergovernmental Panel on Climate Change to establish sound estimates of expected future conditions. Key components of this analysis may include: (1) realistic scenarios of future losses under anticipated climatic conditions and expected exposure levels, including both potential budgetary implications and consequences for continued operation, and (2) potential mitigation options that each program might use to reduce their exposure to loss.

The GAO recommendation addressed “climate change” in general terms, indicating that FEMA should perform a comprehensive analysis of potential changes in precipitation intensity and patterns, coastal storms, sea level rise, and other natural processes affecting both riverine and coastal flooding.

Aspects of the Study

- *Scope of the Effort* – The climate change and population growth impact assessment considered all 50 states and U.S. territories. However, since the concern is impact on the NFIP as a whole, it was recognized that not all national regions have the same relative significance. A detailed region-by-region assessment of climate change was not intended. Primary attention was to be given to areas of greatest population and largest inventory of at-risk properties. The study considered climate change and population growth projections through the year 2100, with interim estimates at 20-year intervals, or epochs.
- *Source Data* – It was not within the scope of the study to perform any new or independent climate research or climate modeling. Instead, the findings and source materials of the US CCSP and the IPCC (Fourth Assessment Report) were

relied upon to the greatest extent possible, with other necessary information, such as population projections, based upon the work of authoritative sources, especially official government sources where available.

- *Measures of Flood Hazards* – The NFIP characterizes the flood hazard at any place, in part, by the floodwater surface elevation having a 1% chance of being equaled or exceeded in any given year. This elevation is identified as the *Base Flood Elevation* (BFE) and is the primary basis for flood insurance and floodplain management requirements within communities participating in the NFIP. Areas of higher risk associated with coastal wave action are identified where appropriate. In addition to the BFE, the community flood hazards are also characterized by the 10%, 2%, and 0.2% annual chance water levels. The sources of flooding include precipitation runoff in riverine areas throughout the nation's interior and coastal storm effects on all U.S. coastlines. Areas affected by the BFE are identified as lying within the *Special Flood Hazard Area* (SFHA) and are usually denoted as being within AE and VE Zones on flood insurance rate maps.

Technical Approach

The technical engineering approach for this study was based on the fact that the BFE and other flood factors are statistical or probabilistic in nature. Consequently, a probabilistic approach was used in which a range of climate changes was considered. In general, the climate factors of interest include both the *frequency* and the *intensity* of storms that influence flooding. In riverine areas, intensity is primarily associated with the amount of rainfall during storm episodes, whereas in coastal areas, storm intensity is primarily characterized by winds and pressures that produce large waves and storm surge. The riverine and coastal approaches are briefly summarized below. All engineering analyses were based on equal consideration of three greenhouse gas emissions scenarios: A2, A1B, and B2. These scenarios, as defined in Appendix A.3, depend upon assumed population growth, and represent a balanced range between low and high climate change impact.

The report is a scoping-level study and as such, the results can be further enhanced as new and more robust climate change predictions become available. The study gives a first order prediction of the impact of climate change and population growth on the NFIP.

Riverine Flooding – Changes in riverine BFEs may be caused by regionally varying increases or decreases in precipitation frequency and quantity as the controlling storms become more or less frequent, and more or less intense. Riverine floods also depend upon the rate of runoff from a watershed, and so depend upon factors such as urbanization (promoting more rapid and abundant runoff from a particular storm), which, in turn, depends upon changes in population and population distribution patterns.

The approach taken in the study was based on well-established methods of riverine hydrology, chiefly the concept of a *regression equation* to relate flood discharges to watershed or basin characteristics. Watershed characteristics that are commonly represented in a regression model include such things as drainage area, channel slope, percentage of impervious area, and storage area. In order to incorporate climate change into the approach, this study expanded the list of candidate regression factors to include a set of *extreme climate indices* reported in climate model projections. These several indices include such factors as the annual maximum five-day precipitation (R5D), the number of days per year with rainfall exceeding 10 mm (R10), the maximum number of consecutive dry days (CDD) per year, the total number of frost days (FD) per year, and so forth. In order to establish which indices are significant, and to establish appropriate regression relationships incorporating those indices, regression analyses were performed with data taken from 2,357 stream gage stations across the United States. The flood discharges at these stations were not affected by regulation from flood detention structures upstream of the gages. The analysis determined the relative statistical importance of each climate index in explaining the variability of unregulated stream flows, and led to specification of simple expressions from which stream flow can be estimated for given values of the indices. Then, using climate modeling results through the year 2100, stream flow response was determined accordingly. The projected future discharges from this analysis do not reflect the effects of constructing flood detention structures to mitigate the future impacts of climate change.

In addition to changes in climate, there will be changes in population. Those changes influence riverine flooding since developed land promotes more rapid runoff. Consequently, projected changes in population are used to estimate changes in basin impervious area, one of the non-climate regression factors. Other factors such as drainage area and channel slope do not, of course, change with changing climate. There are a number of different population assumptions that could be assumed; the population assumptions used in this study were consistent with the assumptions made in the basic emissions scenarios used in the climate modeling.

The regression equations provide estimates of stream flow. From projected changes in flow, the study estimated the associated changes in flood depths and in floodplain areas. Taken together, these changes in the BFE and SFHA are the key factors needed to complete the financial and insurance assessment portion of the study.

Coastal Flooding: Sea Level Rise – The important flood mechanisms are quite different in coastal regions, and include both gradual sea level rise (SLR) and the effects of storms. The consideration of SLR in this study is broadly similar to an earlier FEMA study (1991) of the impact of SLR, but based upon more recent

projections. Projections of the rate of global SLR (the *eustatic* rise) are available from climate studies and are adjusted to account for local variability along U.S. coastlines. *Relative* SLR may also be partly caused by regional land subsidence, which must be separately considered.

For this study, the U.S. coast was divided into 13 zones in such a way that the projected SLR within each zone is approximately uniform. Associated with SLR is the likelihood of enhanced long-term shoreline erosion and recession, which is a significant process since its effect may be to move the coastal SFHA substantially inland by 2100.

The SLR estimates used in the study were based upon the recent work of Vermeer and Rahmstorf (2009) which is widely quoted in the recent literature. Depending upon the emissions scenario being considered, they estimated that the global rise at 2100 would average approximately 1.2 meters (4 feet) over the three emissions scenarios adopted here, with still higher levels possible owing to variability or uncertainty of the estimates. It has been noted by Nicholls, et al. (2010), however, that while these projections are a pragmatic range of possibility, it is unlikely that values in the upper portion of the range will actually occur. The study team recognizes the presence of uncertainty inherent to the SLR projections applied in this study, yet considers the projections used appropriate given the agreement found in existing climate science literature that the range of sea level increases applied are possible. In addition, the average eustatic sea level increase applied in the study is approximately consistent with the conclusion made by the U.S. Global Change Research Program's Synthesis and Assessment Product 4.1, which states: "thoughtful precaution suggests that a global sea level rise of 1 meter to the year 2100 should be considered for future planning and policy decisions" (CCSP, 2009). The range of SLR projections applied in the study could be revisited following release of Assessment Report 5 from the Intergovernmental Panel on Climate Change.

Coastal Flooding: Storms – As with riverine flooding, coastal flood hazards depend upon both storm frequency and intensity. The most significant coastal flood hazard, nationally, is associated with tropical storms and hurricanes. In this study, the influence of changes in tropical storm and hurricane frequency was accounted for in a straightforward manner, based upon data taken from existing coastal flood insurance studies on a county basis. Flood stage-frequency curves taken from the existing FEMA flood studies were adjusted for both projected changes in storm frequency and projected changes in storm intensity. A similar approach was used in other areas such as the Pacific Coast where the flood mechanisms are somewhat different from those of hurricane regions.

As with riverine flooding, it was necessary to estimate the change in the affected SFHA. For coastal regions, this was done in two ways. In the first, it was assumed that existing shorelines would be maintained through 2100, despite sea level rise and erosive forces tending to cause shoreline recession. In the second, similar to the assumption made in FEMA's 1991 sea level rise study, it was assumed that shorelines will retreat so as to compensate for sea level rise.

The Monte Carlo Approach –The general statistical computational approach for both riverine and coastal areas was based on Monte Carlo simulations drawn from a range of projected possibilities. The approach involves random sampling of that range for each parameter of interest. Each sample represents a possible future, with the entirety of the computations giving an estimate of the range of uncertainty or variability in the future estimates. The median values were taken to be the projections of interest for subsequent interpretation.

Demographic Analysis

The engineering analysis was followed by a demographic analysis to determine the projected population, number of insurance policies, and related factors within flood hazard areas through 2100. This work was based on county-level data, developed from Census Block and other data, including insurance and loss data. Existing SFHA information was projected forward according to the engineering findings, as were population densities, numbers of structures, numbers of policies, and other parameters, categorized according to flood hazard zone.

Insurance and Economic Aspects

The insurance and economic analyses were based on the information generated as described above. The growth in the number of policies estimated for the program was based on the growth in overall population and on the change in the percentage of the population within the riverine and coastal floodplain areas. It is noted, then, that part of the economic projections are independent of climate change, and will occur owing to normal population growth during the century.

The results were developed from county-based demographic information, and then aggregated to the national level. As with the engineering evaluations, the results should not be interpreted as plausible projections at the local level owing to the inherent variability introduced by the methodology. Results at the national scale, however, are deemed representative within the fundamental assumptions of the technical approach and the present limitations of climate projections.

The ratio of number of current policies to the current population was determined (the concentration factor) separately for riverine and coastal areas inside and outside the floodplains. In addition to the concentration factor, the proportions of policies within

different categories were also determined (e.g., policies at “grandfathered” rates). The future populations within and outside the floodplains were estimated based on the results of the climate change analysis, and were further subdivided into components due to population growth and to floodplain area growth. Assuming constant concentration factors and other simple proportionalities, future policy counts were estimated. The program premium at each future epoch was estimated by multiplying the policy counts by current average premiums, considered separately by:

- County;
- Subsidized or actuarially rated risks; and
- Riverine floodplain, coastal floodplain, riverine non-floodplain, and coastal non-floodplain.

The economic analysis first developed a baseline loss cost at the county level, based on an assumed average distribution of structure types and heights relative to the BFE. At each future epoch, future loss cost was determined by accounting for the shift in the location of structures relative to the BFE. The shift in the BFE was based on the percentage change in floodplain depth determined by the climate change analysis and the average floodplain depth of the county.

At each future epoch, policies added incrementally since the prior epoch were added at the new risk classification or at the prior risk classification if they resulted from population growth. At each epoch, the overall indicated change in loss cost was weighted based on the amount of premium at each risk classification.

From these analyses, results are presented tabularly by epoch for growth in policies and premiums; changes in premiums by risk classification; changes in loss cost by risk classification; and changes in risk classification and loss cost under different rebuild assumptions.

General Findings

For the riverine environment, the typical 1% annual chance floodplain area nationally is projected to grow by about 45%, with very large regional variations. The 45% growth rate is a median estimate implying there is a 50% chance of this occurring. Floodplain areas in the Northwest and around the Great Lakes region may increase more, while areas through the central portions of the country and along the Gulf of Mexico are expected to increase somewhat less. No significant decreases in floodplain depth or area are anticipated for any region of the nation at the median estimates; median flood flows may increase even in areas that are expected to become drier on average. Within typical developed areas of primary interest for the NFIP, approximately 30% of these increases in flood discharge, SFHA, and base floodplain depth may be attributed to normal population growth, while approximately

70% of the changes may be attributed to the influence of climate change. The implication is that on a national basis approximately 30% of the 45% (or 13.5%) growth in the 1% annual chance floodplain is due solely to population growth and would occur even if there is no climate change. Conversely, approximately 70% of the 45% (or 31.5%) growth in the 1% annual chance floodplain is due solely to climate change and would occur even if there is no population growth. The split is highly variable from place to place, and so should not be taken as a definitive value; the relative importance of population growth will be much less in undeveloped areas, but will be greater than the national average in densely populated centers.

For the coastal environment, under the assumption of a fixed shoreline, the typical increase in the coastal SFHA is projected to also be about 55% by the year 2100, again with very wide regional variability. The 55% increase is a median estimate so there is a 50-percent chance of this occurring. The subsequent projections in this section are all median estimates implying there is a 50% chance of them occurring. The typical increase may be less along the Pacific Coast and more for portions of the Gulf of Mexico and the Atlantic coasts. Under the receding shoreline assumption, negligible change in the coastal SFHA is projected. This is due to the fact that recession serves to reduce the size of the SFHA and so reduces chronic exposure. The sporadic losses incurred during recession are also accounted for in the analysis.

Nationally, considering riverine and coastal floods together, the average increase in the SFHA by the year 2100 is projected to be about 40% or 45%, according to whether coastal recession is assumed or is not assumed.

For the economic analysis under the assumption of a receding shoreline, the total number of NFIP insurance policies was projected to increase by approximately 80% by 2100. The number of riverine policies may increase by about 100%, and the number of coastal policies may increase by approximately 60%. The increase in the number of policies is due in part to normal population growth and in part to the effect of climate change on the size of the SFHA.

The average loss cost per policy in today's dollars under this assumption may increase approximately 50% by the year 2100, with cumulative increases of about 10% to 15% through the year 2020 and 20% to 40% through the year 2080.

Average premium per policy for the receding shoreline scenario are projected to increase as much as 40% in today's U.S. dollars by the year 2100 in order to offset the projected increase in loss cost.

Under the assumption of a fixed shoreline, the total number of NFIP policies may increase by approximately 100% by the year 2100, with number of riverine policies increasing by about 80% and the number of coastal policies increase by as much as

130%. The greater number of coastal policies is the result of the enlargement of the SFHA caused by sea level rise.

The average loss cost per policy under this assumption may increase approximately 90% by the year 2100, with cumulative increases of about 10% to 15% through the year 2020 and 20% to 60% through the year 2080.

Average premium per policy for the fixed shoreline scenario would increase as much as 70% in today's U.S. dollars by the year 2100 in order to offset the projected increase in loss cost, corresponding to a cumulative increase of about 0.6% per year.

Organization of the Report

Section 1 of the report presents a general introduction regarding the study approach, while Sections 2 and 3 discuss the engineering methodology. Major findings (projections for the riverine and coastal environments) are presented graphically in Section 4 using national maps, while the economic and insurance analyses are discussed in Section 5. Section 6 provides a somewhat more detailed summary of the generalized findings than is presented in this Executive Summary, as well as a list of technical issues that should be considered and addressed in any future refinement of the work.

June 17, 2013

Board of Supervisors
Civic Center
San Rafael, CA

Hand Delivered:

Dear Supervisor:

Due to the WiFi in your chamber, I am unable to attend the 1:30 hearing on the proposed SCA/Flood Control Ordinance. You may have noticed my distress on prior attempts to speak in person at Open Time. I deeply regret this disenfranchisement; some of us are road-kill in the push to technical progress.

However, I do wish to comment on this proposal prior to your action. Therefore, I am delivering a one page Comment, attached. I request that my Comment be entered into the record of the June 18, 2013, hearing.

Thank you for your attention.

Garril Page
70 Fawn Drive
San Anselmo, CA 94960

Comment on Proposed SCA and Flood Control Ordinance

1. Factual Basis

- a.) you have no legally defensible data on how many properties are affected nor the degree to which properties may be affected;
- b.) as a result of (a.) above, you cannot quantify the benefits versus the costs of this proposed ordinance;
- c.) it may be years before you have adequate maps and information needed to defend your vote on this punitive ordinance;
- d.) legal vulnerability is expensive, an expense shared by all tax-payers in a County already restive at perceived Supervisorial fiscal excess;
- e.) CEQA claims used to exempt this SCA proposal are not borne out by contravening County actions taken since adoption of the 2007 CWP .

2. Limitations of Consultants

- a.) they are employees who are selected and paid using contractual agreements which have defined and often pre-determined, outcomes;
- b.) information used to bolster consultants studies may be based on generic, non-local and therefore, irrelevant data;
- c.) clients may not be not knowledgeable enough to reject cherry-picked data that is used to conceal local truths;
- d.) clients may be complicit in accepting cherry-picked data over local evidence;
- e.) consultant reports rarely include evidence damaging to the client's goal, an omission that cloaks awareness of the client's liability.

3. Outcome of Enactment

- a.) continued staff abuses over which the Board has no control (staff stays when Supervisors leave office);
- b.) an increasingly encumbered County Code with no resolution of redundancies by out-of-County agencies and regulations, further burdening County residents;
- c.) frustration, lack of control and direction in addition to a 'taking' of property rights that will manifest in both non-compliance and future elections;
- d.) arguable ability to stave off extinction of species doomed by climate change.

Question: For aquatic environmental aid to cold-water fish species, the UC Davis study's Peter Moyle advocated releases of cool water from dams areas. Does that define 'flood control' detention basins as *fishy* ?

I urge you not to adopt this punitive proposal. The goal is sound; the tool broken.

From: [BOS](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraits, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Streeside Conservation Area Ordinance
Date: Monday, June 17, 2013 6:49:44 AM

This message was received through the email address link for sending one email to all Supervisors.
Please forward as you deem appropriate.

From: aterrass@gmail.com [<mailto:aterrass@gmail.com>]
Sent: Friday, June 14, 2013 11:00 PM
To: BOS
Subject: Streeside Conservation Area Ordinance

Adrienne Terrass would like information about:
June 14, 2013

Marin County Board of Supervisors
Marin County Civic Center
3501 Civic Center Drive, Rm. 329
San Rafael, CA 94901

Dear Marin County Supervisors,

Please exercise the will necessary to adopt the current draft SCA ordinance in spite of entrenched opposition. Despite significant shortcomings, it is a workable compromise in view of the complex nature of the issues and the intractable stances of the opposing factions. The ill-conceived court injunction which led to the current building moratorium in San Geronimo Valley has trapped citizens in an impasse over which they have no control, and particularly penalizes those who were negotiating the existing regulatory process when the moratorium took effect. It needs to end.

In addressing the issues, both environmentalists and property rights advocates have repeatedly exaggerated the potential negative effects of the proposed regulations, and much of the opposition is based on faulty understanding of the give and take nature of the regulatory process itself, as well as a great deal of fear and emotion. For instance, many people still seem not to realize that having a property which falls even entirely within an SCA does not mean categorically that no building can occur, but that the ordinance will govern the extent of what is permissible. The degree of misunderstanding and misinformation in circulation is precisely why the objective action of County government is called for to end the current stalemate immediately.

The points made in the June 10, 2013 letter from the San Geronimo Valley Planning Group warrant close attention to ensure the success of this ordinance, especially the establishment of a fully funded position in the CDA focusing on its implementation and dedicating funds for both that and related environmental mitigation.

Just as nature creates constant change, any environmental regulation must include a process of periodic review and revision to remain responsive to changing conditions, and this

ordinance is no exception in needing room to evolve. In its recent deliberations the Planning Commission repeatedly came upon issues contingent on possible future changes to the Countywide Plan and was thereby limited in its discretion to include various recommendations regarding the proposed ordinance. The Commissioners did an impressive job of raising and examining a wide array of hypotheticals and incorporating those changes which were allowed under their purview. However, a number of issues needed to be deferred to the next update of the CWP, and that will be the appropriate time to make any necessary revisions to this version of the SCA ordinance. In the meantime its adoption now will allow residents to get on with necessary endeavors related to maintaining their properties.

Thank you for your attention,

Adrienne Terrass and Aldo Tarigo
21 Barranca Rd., Lagunitas

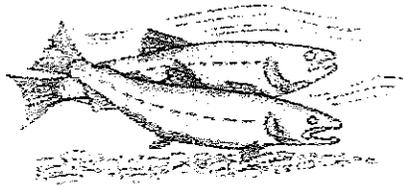
From: [BOS](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraitas, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Supervisor Kinsey's Position on Creekside Plan as stated in the Marin IJ
Date: Monday, June 17, 2013 6:50:16 AM

This message was received through the email address link for sending one email to all Supervisors.
Please forward as you deem appropriate.

From: pcarlone@hotmail.com [mailto:pcarlone@hotmail.com]
Sent: Sunday, June 16, 2013 10:28 PM
To: BOS
Subject: Supervisor Kinsey's Position on Creekside Plan as stated in the Marin IJ

Pat Carlone would like information about:

As a 30-year creekside resident in San Geronimo I commend Supervisor Kinsey for his position as stated today in the Marin IJ, specifically for saying, "outreach, education and incentives must take precedence over regulation." If we must have some level of regulation, why can't we do it, as he says, in a spirit of fairness and partnership with community instead of having policies dictated to us by outside interests, however well meaning? I urge the Board of Supervisors to support Supervisor Kinsey's position.



**San Geronimo Valley
Landowner Assistance
Program**

Recommendation Report
and
Information Packet
for

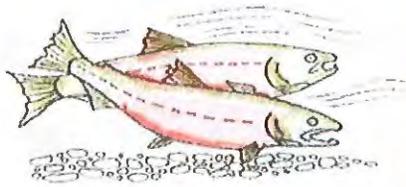
**San Geronimo Valley
Planning Group**

Comments:

The following LAP information was provided in a binder for each of the 40 participating San Geronimo Valley homeowners whose property is on a major creek.

Section 1 - This section is a property evaluation and recommendation report. The report shown is an actual recommendation with the property owners name removed. It is the result of a one on one, boots-on-the-ground, consultation arranged by the Planning Group between the owner and the consultant. As agreed at the outset, neither the Marin County Dept. of Public Works nor the Planning Group were present and did not participate in the individual property evaluations.

Sections 2 thru 9 - This information was provided from county, local and regional resources. A copy of all the information is on file with the Dept. of Public Works. It includes booklets, charts, graphs and maps. A complete copy of the information could be made available at your request.



San Geronimo
Valley
Landowner
Assistance
Program

Developed and managed by:

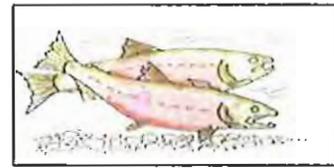
- ◆ Marin County Public Works
- ◆ San Geronimo Planning Group
- ◆ UC Cooperative Extension

Funding provided by:

- ◆ California State Coastal Conservancy
- ◆ California Department of Fish and Game

| | |
|----|---|
| 1 | Property Evaluation Recommendation Report |
| 2 | Salmon and Steelhead Life History |
| 3 | Planting Guidelines |
| 4 | Erosion Control |
| 5 | Stormwater Management |
| 6 | Rainwater Harvesting |
| 7 | Fire Safety Tips |
| 8 | Permitting Help |
| 9 | Useful Websites |
| 10 | Notes/Other |

San Geronimo Valley Landowner Assistance Program



Property Evaluation and Recommendation Report for:

Lagunitas

On August 30, 2011 a site assessment was conducted on your property as part of the San Geronimo Valley Landowner Assistance Program. This Program was designed to help you, the landowner, determine what can be done on your land to improve water quality and conditions for salmon in the watershed. It also provided an opportunity for you to ask questions specific to your land and share your concerns.

For properties adjacent to streams, instream habitat and riparian buffer conditions were evaluated. Stormwater management, both onsite and offsite derived water, was evaluated on all properties.

This document provides a summary of the assessment findings. In each section there is a short description of ideal conditions followed by details about your property. If applicable, suggestions for improving conditions are provided.

We have done our best to include specific recommendations and guidance based on your requests and property conditions. A variety of handouts and reference documents are provided to supplement this report and support you in your efforts to implement projects on your property.

Thank you for participating in the Landowner Assistance Program. It was inspirational to meet with you and experience the San Geronimo Valley community's deep concern and desire to help keep salmon in your creeks.

Best regards, Lauren Hammack

Overall assessment findings:

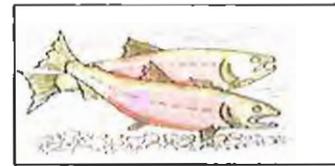
~~your~~ you have a beautiful spot up on the hill. The perennial springs are truly special and worth protecting – the cold water they produce during the dry summer months makes it down to mainstem San Geronimo Creek and helps maintain juvenile salmonid rearing habitat.

The main findings on your property are:

- The creeks are functioning very naturally. There is good contribution of large wood from the surrounding forest hillsides, and sediment is being stored in between the large, scouring flood events.
- The variety of native riparian and grassland plants on your property is remarkable. If possible, work on removing and managing the extent of the non-natives in the riparian zone (vinca and ivy).
- Manage the stormwater coming down the steep driveway and help it dissipate off to the road shoulder.



San Geronimo Valley Landowner Assistance Program



For the most part, your roof gutters and drain pipes dissipate water onto the hill slope away from the creek banks.

Recommendations:

An option for your site is to collect a portion of your roofwater runoff in roofwater harvesting tanks for summer garden irrigation use, or into rain gardens. For ideas and guidance see the booklet "Slow it. Spread it. Sink it." and several websites included in the packet. A rule of thumb for roofwater collection in the San Geronimo Valley is that for every 100 square feet of roof drained 2,500 gallons can be collected in an average rainfall year (44 inches). Your homesite has limited space for a tank, but you may be able to fit several smaller tanks (2-3000 gallon poly tanks behind the house or under the decks. Tanks under 5,000 gallons do not require a building permit.

A recommended plan of action to address the stormwater runoff down the upper driveway has been worked out with the project technical team, and will hopefully be implemented as part of the May 5th landowner workshop. The approach is to reduce the amount of water coming down the road by capturing it up on the hillside with diversion berms and infiltration swales, then rerouting the excess water into the creek's headwater swale. The small gully and headcut formed in the old fire road will be fixed with cuttings from nearby fir trees. If needed, excess runoff coming down the concrete driveway could be slowed and diverted to the vegetated road edge by installing rubber "speed bumps" at regular intervals.

Culvert maintenance is always problematic. Clearing the entrance prior to the start of the rainy season and checking it periodically throughout the winter is really all that can be done.

San Geronimo Valley Landowner Assistance Program



Recommendations:

There are no formal recommendations for improving your riparian and creek zones. Your property is in beautiful condition.

While not a high priority, removing the invasives along the streambanks and replanting/encouraging natives re-establishment is a long-term project for when you have time and energy.

From: [Todd Steiner](#)
To: [Thorsen, Suzanne](#)
Cc: [Deborah A. Sivas](#); [Michael Graf](#); [Andy Harris](#)
Subject: Documents for the STREAM CONSERVATION AREA Administrative Record EMAIL #1. 6/17/13
Date: Monday, June 17, 2013 10:48:46 AM
Attachments: [Stream Conservation Area Ordinance Comments Dr. Monohan.pdf](#)
[ATT00001.htm](#)
[SCIENTIST OPEN LETTER TO MARIN COUNTY BOARD OF SUPERVISORS-FINAL \(61713\).PDF](#)
[ATT00002.htm](#)

Hi Suzanne,

I will be submitting a series of documents for the STREAM CONSERVATION AREA Administrative Record in advance of the Marin Supervisor hearing on the issue on June 18, 2013. Please acknowledge receipt of the attached two documents.

1. A letter from Carrie Monohan, PhD dated June 14, 2013

SCIENTIST OPEN LETTER TO MARIN COUNTY BOARD OF SUPERVISORS
June 17, 2013

Wild coho salmon populations in California have undergone a ninety-percent decline since the 1940s. The causes of this decline, such as urbanization, dams, and logging operations are well known and documented. Central California Coast (CCC) coho salmon were listed by the US government as Threatened in 1997 and uplisted to Endangered status in 2005. The State of California listed the population north of San Francisco as endangered in 2002. In short, coho salmon are in danger of extinction throughout coastal California. Because of this, the Lagunitas Creek watershed is exceptionally important for its survival; it is one of the few watersheds that still supports a self-sustaining population of this iconic fish.

The Lagunitas Creek Watershed is listed as “critical habitat” for coho under the Endangered Species Act. As scientists concerned with the health and recovery of salmonid populations throughout California, we support increased habitat protections for coho in the Lagunitas Creek Watershed, which makes up approximately 10- 20% of the total current population of CCC coho salmon.

Lands in the lower reaches of the Lagunitas Creek watershed are relatively well protected (and include State Parks, National Parks and Recreation Areas, and County and Water District property) and maintain habitat values important to coho and other native species. But, 30-50 percent of spawning in the Lagunitas Creek Watershed occurs in the undammed headwaters of the tiny (10 square mile) San Geronimo Valley. Out-migration research has documented that as much of 1/3 of Lagunitas Creek coho rear in these headwater reaches annually.

Marin County’s San Geronimo Valley Existing Conditions Report (2009), prepared by Stillwater Sciences¹ as part of a Salmon Enhancement Plan, documented the percentage of impervious surface for seven reaches of Geronimo Creek at 7.3-20.8 per percent, with four of the reaches exceeding 15 percent. Furthermore, this study conducted detailed analysis on 17 parcels and demonstrated the limited amount of riparian habitat currently extant in this watershed: ten parcels had no intact riparian habitat, four had a width of less than 22 feet, and the remaining three had a width of 30, 36 and 92 feet (summarized in Table A2.2 of the report). This data demonstrates the relatively high level of urbanization that already threatens the survival of coho here.

¹ (available at http://www.spawnusa.org/cgi-files/0/pdfs/1254863223_County_of_Marin_Existing_Conditions_Report_2008.pdf)

The San Geronimo Valley continues to urbanize with new housing development trending toward larger houses, and development on existing parcels expanding with building additions and additional loss of riparian habitat. This affects coho salmon survival because the juveniles need cold clear streams with lots of riparian trees and in-stream woody debris for cover and minimal disturbance. Loss of current and potential riparian habitat and floodplains to development poses significant additional threats to the survival of coho here.

We appreciate that Marin County Supervisors are now considering a new Stream Conservation Ordinance. While the Marin County General Plan calls for no net loss of habitat, the current draft ordinance fails to come close to meeting this goal.

WE THE UNDERSIGNED, CALL ON MARIN COUNTY SUPERVISORS TO ENACT A STRONG ORDINANCE THAT INCLUDES THE FOLLOWING PROVISIONS THAT WILL HELP TO RESTORE COHO POPULATIONS:

1. Any development within 100-foot setback from creeks should be strongly discouraged. New development in this buffer that is allowed should require mitigation if new structures or activities reduce the potential for rehabilitation of riparian habitat, even if it is currently disturbed by lawns, patios, etc. A 2:1 or higher mitigation ratio is recommended to improve on current conditions that already include a significant loss of riparian habitat.
2. Ephemeral Tributaries to Salmon Streams should be protected with a 100-foot setback. Presently, the draft ordinance only provides for the 100-foot setback if 100 feet of “continuous” riparian vegetation is present, basically exempting a large percentage of important habitat, thus decreasing stream habitat for juvenile coho. We see no scientific basis for limiting protection only to ephemeral streams with “100 feet of continuous riparian vegetation.” A functioning network of ephemeral streams mitigates flooding and forms the headwaters without which mainstems could not support salmon.

We realize that these requested ordinances will inconvenience landowners, but without them, development in the Geronimo Valley will likely lead to extirpation of coho salmon from the watershed, making the recovery of coho salmon in the Lagunitas Creek watershed increasingly problematical.

The result will be further decline of coho salmon in California. The recovery of coho salmon as a viable species in California will only happen as the result of many small positive actions on many streams, especially by landowners who have chosen to live in coho watersheds. The proposed ordinances will provide significant help to one of the most important coho populations left. We would like to see Marin County be a

leader in coho salmon conservation, rather than just one more example of local government failing to protect local resources.

Sincerely yours,

(current list as of 23 May 2013)

| # | Name | Title | Affiliation *(listed for identification purposes only) |
|----|-------------------------|---|--|
| 1 | Peter Moyle | PhD, Professor | University of California at Davis* |
| 2 | John McCosker | PhD | |
| 3 | Sylvia Earle | PhD | |
| 4 | Alex Hearn | PhD, Director of Conservation Science | TIRN |
| 5 | Chris Pincetich | PhD, Outreach & Education Manager | TIRN |
| 6 | Leo Salas | PhD, Quantitative Ecologist | PRBO Conservation Science* |
| 7 | Tierney Thys | PhD, Director | Ocean Sunfish Research & Tagging Program* |
| 8 | Bruce Baldwin | PhD, Professor & Curator | UC Berkeley* |
| 9 | Bruce MacFarlane | PhD, Supervisory Research Fisheries Biologist [retired] | UC Santa Cruz* |
| 10 | Eric Chapman | BS, Staff Research Associate | UC Davis* |
| 11 | Judith Innes | PhD, Professor Emerita | UC Berkeley* |
| 12 | Cynthia LeDoux-Bloom | PhD, Fisheries Scientist | |
| 13 | Pedro Luis Janela Pinto | MSc/PhD Candidate | UC Berkeley* |
| 14 | Myfanwy Johnston | PhD Candidate | UC Davis* |
| 15 | Matt Stoecker | Principal Biologist | Stoecker Ecological, UCSB* |
| 16 | Jacob Katz | PhD, Director Salmon/Steelhead Initiatives | CalTrout* |
| 17 | David DeSante | PhD, President | Institute for Bird Populations* |
| 18 | Michelle LaRue | PhD, Research Fellow | University Minnesota* |
| 19 | Gary Grossman | PhD, Professor Animal Ecology | University of Georgia Athens* |
| 20 | Judith Weiss | PhD, Professor Biological Sciences | Rutgers University* |
| 21 | Pasan Samarasin | PhD Candidate | University of Toronto* |
| 22 | Michael Park | MS Conservation Medicine | Tufts University* |
| 23 | Gary Rennie | Analyst, Office of Ecosystem Protection | US EPA, New England* |
| 24 | John Mola | Graduate Student | Humboldt State University* |

| | | | |
|----|----------------------|--|--|
| 25 | Geoff Patton | PhD, Marine Biologist/Toxicologist | |
| 26 | Melanie Truan | PhD, Staff Research Associate | Museum of Wildlife, UC Davis* |
| 27 | Preston Brown | Intern, Invasive Fish Eradication | SPAWN |
| 28 | Michael Swift | PhD, Biology Dept. | St. Olaf College, MN* |
| 29 | Eric Huber | MS, PhD Candidate | UC Berkeley* |
| 30 | John Cooper | PhD | Cooper Environmental Research* |
| 31 | Shaye Wolf | PhD, Science Director | Climate Law Institute, Center for Biological Diversity* |
| 32 | Ruslan Grigoriev | Field Hydrologist | Virginia Tech University* |
| 33 | Patrick Lizon | Watershed Field Coordinator | VA Dept. Conservation & Recreation* |
| 34 | Courtney Collins | Graduate student | Georgia University, Odum School of Ecology* |
| 35 | Joseph Cech, Jr | PhD, Professor Emeritus | UC Davis* |
| 36 | John Szczepanski | PhD, Chief Fish Biologist | Coastal Vision LLC* |
| 37 | William Szelistowski | PhD, Associate Professor of Biology | Marine Science Eckerd College* |
| 38 | Richard Bailey | PhD, Executive Director | The Lake Merritt Institute* |
| 39 | Jamlynn Poletto | PhD Candidate | UC Davis* |
| 40 | Brian Waters | MS, Fisheries Scientist | Former President CALNEVA* |
| 41 | Todd Steiner | MS, Executive Director | TIRN |
| 42 | Adina Merenlender | Cooperative Extension Specialist | UC Berkeley* |
| 43 | Vincent Resh | PhD Professor, Dept. Env. Sci. Policy & Man. | UC Berkeley* |
| 44 | Emily Moran | PhD, postdoctoral researcher | ETH Zurich* |
| 45 | Sarah Frias Torres | PhD, Research Collaborator | Smithsonian Marine Station, Florida* |
| 46 | Kimberly Bolyard | PhD, Associate Professor, Dept. Biology | Bridgewater College, Virginia* |
| 47 | Nicholas Rosenstock | PhD Researcher | Lund University* |
| 48 | Cheryl Kassed | PhD, MSPH, Vice President | Maryland Alliance for Greenway Improvement and Conservation* |
| 49 | Ted Grantham | PhD, Postdoctoral Researcher | UC Davis* |
| 50 | William Webb | PhD, Adjunct Professor | De Anza College* |
| 51 | Jerry Smith | PhD, Ass. Professor Biology | San Jose State University* |
| 52 | Ellen Hines | PhD, Professor of Geography | Tiburon Center SFSU* |
| 53 | Peter Pyle | Biologist | Institute for Bird Populations, Point Reyes |

| | | | |
|----|--------------------|--|--|
| 54 | James Adams | PhD, [Former] Director | Station*
Ecological Services, PG&E* |
| 55 | Greg Cunningham | PhD, Associate Professor | St. John Fisher College* |
| 56 | David Inouye | PhD, Professor | University of Maryland* |
| 57 | Tim Duane | PhD, Professor Env
Sciences | UC Santa Cruz* |
| 58 | Kerry Nichols | PhD, Postdoctoral
Researcher | Stanford University* |
| 59 | Paola Bouley | MSc, PhD Candidate | |
| 60 | Reuven Walder | MSc | |
| 61 | Meredith Elliott | Senior Scientist | PRBO Conservation
Science* |
| 62 | Annie Lalancette | PhD Candidate | Concordia University* |
| 63 | Lucas Siegfried | MS, PhD Student | UC Davis* |
| 64 | Julie Day | Fishery Biologist | Pacific States Marine
Fisheries Commission* |
| 65 | Zeb Hogan | PhD, Ass. Res. Prof | U. Nevada, Reno* |
| 66 | Ayesha Gray | PhD, Restoration/Estuarine
Ecologist | Earth Design Consultants,
Inc. * |
| 67 | Laurel Collins | PhD, Geomorphologist | Watershed Sciences* |
| 68 | Norm Stacey | PhD Professor Emeritus | University of Alberta* |
| 69 | Jonathan Baskin | PhD Professor Emeritus | Cal State Poly. Uni.
Pomona* |
| 70 | Gianluca Polgar | PhD | U. Brunei, Dept. Biology* |
| 71 | Robert Rees Rofen | PhD, Director | Aquatic Research Institute* |
| 72 | Thomas Ihde | PhD, Fisheries Modeler | Versar, Inc* |
| 73 | Camm Swift | PhD, Emeritus, Section of
Fishes | LA County Nat Hist
Museum* |
| 74 | AM Sajina | PhD | Central Inland Fisheries
Research Institute, Kokata,
India* |
| 75 | Susan Levenson | Watershed Awareness
Coordinator | Friends of San Leandro
Creek* |
| 76 | Jon Rosenfield | Conservation Biologist | The Bay Institute* |
| 77 | Kevin Padian | PhD, Professor & Curator | UC Berkeley* |
| 78 | Morgan Bond | PhD, School of Aquatic &
Fishery Sciences | U. Washington* |
| 79 | George Brooks | PhD, Prof. Integrative
Biology | UC Berkeley* |
| 80 | Zahid Sharif Mirza | Scientist, | Fisheries Research &
Training Institute, Lahore,
Pakistan* |
| 81 | Yin-Ki Tam | PhD Candidate | National Taiwan of Ocean
University, and Technician
of Coastal Marine
Laboratory, Hong Kong
University of Science and
Technology* |

| | | | |
|-----|------------------------|--|---|
| 82 | Omkar Byadgi | PhD Scholar | National Pingtung University of Science and Technology* |
| 83 | Michelle Duong | MS | University of Queensland* |
| 84 | Raj Naresh Gopal | Senior Executive | National Fisheries Development Board, Hyderabad, India* |
| 85 | Denise Wilson | MS, Botany Curator | BLM* |
| 86 | Chien-Hsiung Wang | Professor | National Taiwan University* |
| 87 | William Resetarits, Jr | Professor of Biological Sciences | Texas Tech University* |
| 88 | Virginia White | Associate Professor | Riverside City College* |
| 89 | Dan Hasselman | PhD, Research Scientist | UC Santa Cruz* |
| 90 | Patrick Martin | PhD, Associate Prof. Ecology | Colorado State University* |
| 91 | Steven Oberbauer | PhD, Professor | Florida International University* |
| 92 | Jim Aborn | Environmental Specialist | UC Davis* |
| 93 | Jeff Vanderpham | PhD | Vanderpham Consulting* |
| 94 | Donatella del Piero | PhD, Dept. Life Sciences | University of Trieste, Italy* |
| 95 | Pranaya Kumar Parida | PhD, Assistant Professor | Fisheries Resources Management, College of Fisheries, Punjab, India* |
| 96 | Johannes Holmen | Environmental adviser | Multiconsult (private consulting company); also affiliated with the University of Oslo* |
| 97 | Tamara A. Newcomer | PhD Candidate in Environmental Science | University of Maryland* |
| 98 | Bronwyn Bleakley | PhD, Assistant Professor | Stonehill College* |
| 99 | Adam Schwindt | MS, PhD Candidate | Colorado State University* |
| 100 | Allison Mastalerz | Graduate Student | Biology Department, University of Cincinnati* |
| 101 | C. B. Halpern | PhD Research Professor | University of Washington* |
| 102 | Andres Santana | M.Sc. Environmental Management and Restoration | Organization for Tropical Studies* |
| 103 | Noel Wingers | Marine Biologist, MS Candidate | Loma Linda University* |
| 104 | Marcel Bigue | Marine Program Director | WildAid* |
| 105 | Laura Wright | Project Manager | Broward County Sea Turtle Conservation Program Nova Southeastern University* |
| 106 | Scott Veirs | PhD, President | Beam Reach Marine Science and Sustainability School* |
| 107 | Sarah E. Moffitt | PhD Candidate | University of California at Davis * |

| | | | |
|-----|-------------------|---|--|
| 108 | Christine May | PhD, Assistant Professor,
Dept. Biology | James Madison University* |
| 109 | John A Musick | Prof. Emeritus | Va Inst. Mar Sci. * |
| 110 | Ethan Mora | PhD Candidate | UC Davis* |
| 111 | Dan Swezey | PhD Candidate | Bodega Marine Laboratory* |
| 112 | Inez Devlin-Kelly | Professor & Levan Scholar | Bakersfield College, Dept.
Biological Sciences* |
| 113 | Peter Schulze | PhD, Professor of Biol. &
Env. Sci. | Austin College, Sherman,
TX* |
| 114 | Lance Morgan | PhD, President & CEO | Marine Conservation
Institute, CA* |
| 115 | Daniel Barshis | PhD, Assistant Project
Scientist | UC Santa Cruz* |
| 116 | John Kelly | PhD, Director of
Conservation Science | Audubon Canyon Ranch* |
| 117 | Jennifer Jones | BS, BA, Botanist | |
| 118 | Jacob Levenson | Marine Biologist, Director
of Outreach | Conserve. IO* |
| 119 | Carol Leonard | MS | Coastal Wildlife Club, Inc* |
| 120 | Susana Cardenas | PhD Candidate | UC Davis* |
| 121 | Steven Beissinger | PhD, Prof. Conservation
Biology | UC Berkeley* |
| 122 | Emily Miller | PhD Candidate | UC Davis* |
| 123 | Robert Johnson Jr | Scientist | |
| 124 | Gabriel Singer | PhD Candidate | UC Davis* |
| 125 | Karissa Kingery | Research Assistant | U. Washington* |
| 126 | Laura Chariton | MA Riparian Policy and
Restoration | Hutchins Institute* |
| 127 | Gail Seymour | Senior Environmental
Scientist, Supervisor | CA Dept. Fish & Wildlife* |
| 128 | K N Ninan | PhD, Chairperson | Center for Economics,
Environment & Society,
Bangalore, India* |
| 129 | David Newborn | PhD, Assistant Professor,
Dept. Agricultural &
Resource Economics | University of Maryland* |
| 130 | Deborah A Sivas | MS Ecology, JD, Luke W.
Cole Professor of
Environmental Law | Stanford University* |
| 131 | Emily Pepper | PhD Candidate | UC Davis* |
| 132 | Lewis AK Barnett | Graduate Student,
NMFS/Sea Grant
Population Dynamics
Fellow | UC Davis* |
| 133 | Colleen Lenihan | PhD | - |
| 134 | Katie Holzer | PhD Candidate in Ecology | UC Davis* |
| 135 | Andrea Schreier | PhD | UC Davis* |
| 136 | Rob Lusardi | Graduate student
researcher | UC Davis* |
| 137 | Shahla Farzan | PhD Student | UC Davis * |

| | | | |
|-----|---------------|--|---------------------------------------|
| 138 | John Williams | PhD | UC Davis* |
| 139 | Ryan Hill | Graduate Student, Ecology | UC Davis* |
| 140 | Kristen Weiss | PhD. Lecturer,
Environmental Studies
Program | University of Southern
California* |

From: [Todd Steiner](#)
To: [Thorsen, Suzanne](#)
Cc: [Deborah A. Sivas](#); [Michael Graf](#); [Andy Harris](#)
Subject: EMAIL #2. 6/17/13: Documents for the STREAM CONSERVATION AREA Administrative Record
Date: Monday, June 17, 2013 11:26:51 AM
Attachments: [SEP_FINAL_Feb_2010.pdf](#)
[ATT00001.htm](#)

Hi Suzanne,

I will be submitting a series of documents for the STREAM CONSERVATION AREA Administrative Record in advance of the Marin Supervisor hearing on the issue on June 18, 2013. Please acknowledge receipt of the attached following document:

1&2. San Geronimo Valley Salmon Enhancement Plan : Attached and available at <http://www.marinwatersheds.org/documents/SEPFINAL.pdf>

SAN GERONIMO VALLEY SALMON ENHANCEMENT PLAN



A Guidance Document

Prepared for

Marin County Department of Public Works

Prepared by

Prunuske Chatham, Inc.

with assistance from
Stillwater Sciences

February 9, 2010

Executive Summary

The Salmon Enhancement Plan presents science-based recommendations to improve and maintain habitat conditions that will support viable populations of salmon and steelhead trout in San Geronimo Valley. The Lagunitas Watershed, which includes San Geronimo Valley, is the largest and most stable population of the endangered coho salmon south of Fort Bragg and presents one of the best opportunities to preserve and restore coho in central California. In addition to coho salmon, San Geronimo also supports threatened steelhead trout and a fall run of Chinook salmon.

This Plan is not a regulatory document. It is not being presented to the County for approval. Any new policies or ordinances informed by the Plan would require a full public process and approval by the Board of Supervisors.

The Plan is based on four core strategies. The first is to **preserve and improve habitat conditions for all salmonid life stages that occur in San Geronimo Valley**. Other than collective efforts to address climate change and better care for ocean ecosystems, there is little Marin County and San Geronimo Valley residents can do to directly improve ocean conditions. However, residents can provide habitat that supports sufficient spawning, rearing, and over-wintering habitat to deliver healthy smolts into the ocean. The second core strategy is to **promote ecosystem resiliency through rehabilitating natural processes**. By protecting and restoring processes such as the delivery of sufficient quantities of cool, clean water and the development of diverse instream conditions, San Geronimo's fish and other wildlife will be better able to survive future environmental changes. The third strategy is to **correct and avoid activities that degrade habitat** wherever possible. In recognition that any measures to enhance habitat take place within a long-established community, the fourth core strategy is to **sustain the character and quality of life in San Geronimo Valley**.

The Plan process began in the summer of 2008 with the Existing Conditions Report (ECR) completed in February 2009 (Stillwater Sciences 2009a.) A Salmon Advisory Committee (SAC) and a Technical Advisory Committee (TAC) comprised of public agency representatives, technical experts, and watershed landowners was formed to guide the process. In addition, five public meetings were held in the San Geronimo Valley from August 2008 through October 2009. Substantial input was received from the San Geronimo Valley community and considered in the final draft. The Plan will be presented to the Marin County Board of Supervisors as a draft set of recommendations in February 2010 when the building moratorium is scheduled to end. The revised plan, as a planning feasibility study or guidance document, is exempt under the California Environmental Quality Act (CEQA). It is recommended that the County develop an implementation plan in conjunction with the community after the Board accepts this guidance document. The implementation plan, environmental compliance documents, and the necessary budget request would be presented to the Board of Supervisors at a

future date. Workshops and community outreach are planned following February's Board meeting.

The total estimated cost for implementation of the recommended measures by the County is approximately \$1,536,500. This amount includes costs to develop community outreach and landowner incentive programs, planning and monitoring but not actual construction of any proposed improvements. Many of these recommendations depend upon voluntary implementation by homeowners with support from Marin County and other agencies. Ideas for homeowner incentives include low-cost assessments from engineers and other technical experts, free green waste disposal for invasive plant material, and conservation corps work days to help with planting, relocating small structures away from streambanks, and other labor-intensive actions. Strategies for simplifying environmental compliance and suggestions for funding sources are also included. The Plan also includes recommendations for a monitoring strategy that would inform regular review and modification of the recommended actions.

The recommendations and scientific background in the Plan provide guidance for:

- Enhancing instream and riparian habitat, and the watershed conditions that support them
- Providing outreach and assistance to homeowners to encourage voluntary implementation of enhancement measures
- Design review, and land use permitting that support healthy streams
- Advancing long-term, collaborative stewardship of the Valley's natural resources
- Supporting state and federal coho population recovery efforts currently underway in this and other coastal watersheds
- Securing grant funding to assist homeowners, the County, and other agencies and organization in implementing enhancement projects

The ECR synthesized information on the biological and physical characteristics of the Valley and identified restoration and enhancement priorities. With the ECR as its scientific foundation, the Plan identifies the habitat elements needed for successful spawning and rearing of salmonids and summarizes the current state of the populations and their habitat. The Plan includes an evaluation of the Federal National Oceanic and Atmospheric Administration (NOAA) coho recovery team targets for spawner population and properly functioning conditions (PFC) to the existing and potentially restorable salmonid habitat in San Geronimo Creek and its tributaries is included. The Plan relies on the assumption that addressing coho habitat needs will also benefit steelhead trout and Chinook salmon as well as many other species of native wildlife.

The recommendations present prioritized actions to conserve, enhance, and monitor critical habitat elements and functions needed to support viable salmon and steelhead populations. They address four primary focus areas:

1) protect and restore riparian habitat;

2) enhance instream habitat structure through adding large woody debris, gently sloping back and planting eroding banks, and establishing inset floodplains where safe and feasible;

3) achieve and maintain high water quality;

4) achieve and maintain sufficient water quantity.

Recommendations, summarized in the table below, include watershed-wide, reach-scale and parcel based measures. Data gaps important for refining and implementing the recommendations are also identified.

Plan Recommendations

| Recommendation Focus | Salmonid Habitat Supported | | Recommendation | Priority |
|--------------------------------------|--|---|---|---------------|
| Applies to all | All salmonid life stages | 1 | Establish and support a community outreach process to guide implementation | High |
| Protect and restore riparian habitat | <p>Rearing Habitat: Tall, dense riparian vegetation keeps water cool, provides food in the form of nutrient input and detritus for insects that nourish fish and their prey, and contributes undercut roots and large pieces of wood to help create the habitat variety salmonids need to thrive. Riparian plants also help filter fine sediments and excessive nutrients from entering streams.</p> <p>Spawning Habitat: Trees and large branches that fall into streams help trap and sort gravel.</p> <p>Winter/Spring High Flow Habitat: Fallen wood and living plants on flooded stream terraces provide direct shelter for fish during storms and also help form pools.</p> | 2 | Protect and enhance the riparian corridor to create healthy, self-sustaining habitat. | High |
| | | 3 | Develop a riparian vegetation management strategy with fire officials to allow fire-safe practices while preserving riparian habitat. | Medium |
| | | 4 | Apply policies, regulations, and guidelines to protect salmonid habitat and the ecological functions that sustain it to all new development and redevelopment currently allowable in the SCA. | High |
| | | 5 | Consider conservation of key undeveloped streamside parcels through easements or purchase of fee title | Medium |
| | | 6 | Consider development of a process to promote the replacement, removal, and modification of unpermitted structures in the SCA that adversely effect fish habitat. | Medium - Low |
| Enhance instream habitat structure | <p>Rearing Habitat: Juvenile salmonids need a complex set of habitat features to provide optimal foraging and resting conditions; riffles to support aquatic insects; places under rocks, roots, undercut banks, or large pieces of wood to rest and hide from predators; and deep pools with cool water temperatures.</p> | 7 | Develop plan to increase channel complexity to improve habitat quantity, value, and resiliency for all life stages. | High |
| | | 8 | Promote removal of barriers to fish migration. | Medium - High |
| | | 9 | Promote instream gravel delivery and retention. | Medium |

| Recommendation Focus | Salmonid Habitat Supported | | Recommendation | Priority |
|---|--|----|--|---------------|
| | <p>Spawning Habitat: Salmonids need access to clean, pea-to-orange size gravel for successful spawning and hatching.</p> <p>Winter/Spring High Flow Habitat: Over-wintering fish need places with slower flowing water during storms. High-flow refugia are created by large pieces of wood, backwater areas where tributaries join the main stream, and low, vegetated terraces next to the stream channel.</p> | 10 | Minimize and reduce streambank armoring. | Medium - High |
| | | 11 | Develop an Instream Habitat Implementation Plan. | High |
| Achieve and maintain high water quality. | <p>All salmonid life stages: Salmon and steelhead need cool, well-oxygenated water to thrive. Excess levels of suspended particles in the water (i.e., turbidity or total suspended solids) can also cause stress, including reduced growth, feeding, and reproduction. Heavy metals, pharmaceuticals, and other chemicals can affect fish health and behavior, which in turn affects their ability to survive and reproduce.</p> <p>Spawning Habitat: Fine sediments can impair oxygen flow to eggs and impede the emergence of fry from the gravel. Cool water temperatures are also critical to the survival of the eggs.</p> | 12 | Promote increased watershed-wide stormwater retention and disconnection. | High |
| | | 13 | Develop a community-supported program to assist homeowners with addressing leaking septic systems. Give highest priority to systems within SCA and in reaches with higher nutrient levels. | Medium |
| | | 14 | Promote minimal usage and proper disposal of chemicals, nutrients, and toxic materials. | Medium |
| | | 15 | Reduce fine sediment delivery from roads and upland erosion. | Medium - High |
| Achieve and maintain sufficient water quantity. | <p>Rearing Habitat: Sufficient summer baseflow is elemental to fish survival. It is also key to maintaining water quality.</p> <p>Spawning Habitat: Salmonids need sufficient flows during spawning season to move up into the tributaries and again in the early summer when young fish begin their out-migration to the ocean.</p> | 16 | Protect and enhance summer streamflow. | High |
| Applies to all | All salmonid life stages | 17 | Develop and implement a coordinated monitoring program. | High |

From: [Todd Steiner](#)
To: [Thorsen, Suzanne](#)
Cc: [Deborah A. Sivas](#); [Michael Graf](#); [Andy Harris](#)
Subject: EMAIL #3. 6/17/13: Documents for the STREAM CONSERVATION AREA Administrative Record
Date: Monday, June 17, 2013 11:31:13 AM
Attachments: [TIRNSPAWN Legal Concerns FINAL 61713.pdf](#)
[ATT00001.htm](#)

Hi Suzanne,

Hi Suzanne,

I will be submitting a series of documents for the STREAM CONSERVATION AREA Administrative Record in advance of the Marin Supervisor hearing on the issue on June 18, 2013. Please acknowledge receipt of the attached following document:

1. A letter from Todd Steiner, Turtle Island Restoration Network



PO Box 370 • Forest Knolls, CA 94933

P: 415.663.8590 • F: 415.663.9534

www.SeaTurtles.org • www.SpawnUSA.org • www.GotMercury.org

June 17, 2013

Delivered Via Email

Dear Marin County Supervisors,

Turtle Island Restoration Network and the Salmon Protection and Watershed Network wishes to provide these summary comments in regards to the County's proposed adoption of a stream conservation ordinance designed to protect salmonids in Marin County and in the San Geronimo Valley. The San Geronimo watershed contains critical stream habitat used by coho salmon and steelhead for spawning and for migrating to and from the Pacific Ocean. These species are listed under the federal Endangered Species Act and considered Endangered. One of the greatest threats to their long-term viability is the future development of the watershed, particularly future building alongside streams, within riparian areas that provide shade, water quality regulation and habitat for these species.

The 2007 CountyWide Plan ("CWP") allows for development in the stream conservation area ("SCA") under a number of exceptions. The County has stated that this development will not have significant cumulative effects on salmonids due to the Plan's "no net loss" of habitat policy, and the County's continuing participation in the FishNet 4C program.

SPAWN has participated in the ordinance development process in the hope that the ordinance could clarify questions left unanswered by the CWP relating to how habitat loss will be avoided or how FishNet participation will avoid impacts from development. However, in our view, the proposed ordinance does not ensure that the CWP's objective of no net loss of habitat will be met. In fact, in several instances, as discussed below, the ordinance actually makes it less likely that habitat will be retained and significant effects avoided.

1. There is No CEQA Compliance For Adoption of the Ordinance.

The County has apparently elected to proceed with the ordinance approval without doing any review under the California Quality Act ("CEQA."). In our view, that is contrary to CEQA's requirements because the County's adoption of the ordinance is a "project" with the potential for significant environmental effects.

The County's position here may be that the ordinance is simply implementing the CWP, the impacts of which were already addressed in the CWP EIR. However, although the Environmental Impact Report ("EIR") for the CWP purported to analyze the impacts of full buildout under the land use designations of the CWP, including hundreds of vacant streamside parcels in the San Geronimo watershed in western Marin, it actually contained no information about how much habitat could be lost or how that lost habitat could be adequately mitigated. The County cannot rely on that lack of analysis to determine that the adoption of the ordinance will not have cumulative impacts to salmonids. Due to the moratorium, the adoption of the ordinance is the trigger that allows development to occur. The County has never conducted a cumulative impacts analysis for its regulatory program for development in SCAs.

In addition, the ordinance presents new information about how the County will regulate SCAs in the future, including allowing for exempted development, lesser protections for ephemeral streams and a mitigation scheme that in several respects will not be adequate to avoid habitat loss. These issues could not have been addressed by the CWP EIR because the regulatory policies are not in the CWP, and thus CEQA review was warranted.

2. The Ordinance Exempts Development in the SCA From Mitigation Requirements

The ordinance impacts 3,641 parcels throughout Marin and 1,160 parcels (955 developed and 205 vacant) in the San Geronimo Valley. The Ordinance proposes a 500 square foot addition and a 120 foot shed are allowed on currently developed parcels without any mitigation. In the San Geronimo Valley alone, this would allow 592,100 square feet (620 ft X 955 parcels) of additional development on currently developed lots.

The Ordinance further proposes to exempt incursions on "previously disturbed areas" and mitigate only when "native riparian vegetation" is removed, despite the fact that many parcels do not contain such vegetation. Even without full riparian vegetation, an undeveloped area still provides habitat and some of the ecological functions to some degree needed by salmonids. Yet no mitigation will be required for this loss, resulting in hundreds of thousands of additional square feet of development without mitigation.

The ordinance also exempts hundreds to thousands of acres agricultural lands from these rules. The staff report contained no information about how much habitat could be lost through this exemption.

3. The Ordinance Mitigation Does Not Avoid Loss of Habitat.

The staff reports identify that there are 727 undeveloped parcels in the County including 205 in the San Geronimo Watershed where development in the SCA would likely occur under the current Ordinance policies. The Ordinance proposes mitigation requirements to achieve "no net loss" of habitat, but this mitigation is grossly inadequate, as SPAWN as pointed out in prior comments.

For example, even as to loss of “riparian vegetation,” mitigation may be limited to high water table dependent species. The 2009 San Geronimo Valley Salmon Enhancement Plan (“SEP”) documented that much of the high water-table-dependent vegetation has been removed, but remaining facultative riparian species (bay, redwood, oak) perform the same critical ecological functions. However, the current Ordinance does not protect these this “facultative” riparian vegetation but instead only the water-table-dependent species.

The ordinance also exempts hundreds to thousands of acres agricultural lands from these rules. The staff report contained no information about how much habitat could be lost through this exemption.

In addition, the mitigation is itself inadequate. As SPAWN has stated in prior comments, there can be no substitute for the actual loss of riparian habitat, because that physical space along the stream is now gone. The ordinance does not clarify how the requirement to plant some trees repairs the permanent loss of stream habitat, where a development structure has been allowed to be located.

4. The Ordinance Does Not Protect the Majority of Ephemeral Streams

Ephemeral streams are waterways which flows briefly in direct response to precipitation. Ephemeral streams are important sources of water, nutrients, seeds, salmon spawning gravel, and organic matter for downstream systems and provide habitat for many species and their inclusion is important in watershed-based assessments. They are also sources of harmful sediment, pathogens and nutrients downstream to season and permanent creeks.

Vegetated buffer zones along ephemeral streams help to slow and dissipate energy of water during storm events that kill juvenile salmon and cause erosion of stream banks downstream in permanent and seasonal creeks, to which they flow. Furthermore vegetated buffers along ephemeral streams act as biofilters, reducing the amounts of excessive pathogens, nutrients and sediment that enters permanent and seasonal creeks.

Outside the San Geronimo Valley, the County has not even identified how many ephemeral streams exist and thus can not provide data on amount of habitat and loss of ecological function that will be lost by inadequate setbacks.

Conclusion

The proposed ordinance fails to meet the goals of the Countywide Plan to prevent loss of riparian habitat. It narrowly defines riparian vegetation to allowing for continued destruction of the ecological functions of the riparian buffer zone. As currently drafted, it allow for over one million square feet of additional construction inside the so-called Stream Conservation Area in the tiny San Geronimo Valley, which hosts the highest density of coho salmon in Marin County. The federal Coho Recovery Plan calls for actions in the Lagunitas Watershed to *“avoid new development within riparian zones and the 100 year flood plain”* and to *“adopt a policy of managed retreat to remove problematic structures and replace with native*

vegetation.” This ordinance fails to meet these recovery goals and is likely to allow development that will further harm the habitat of endangered coho salmon and prevent its recovery in the Lagunitas Watershed. Most of this future development would be allowed with no or inadequate mitigation. It is for these reasons, we encourage you to reject the current draft and encourage you to enact a science-based stream conservation ordinance.

Sincerely,

A handwritten signature in black ink that reads "Todd Steiner". The signature is written in a cursive, slightly slanted style.

Todd Steiner
Executive Director

From: [Todd Steiner](#)
To: [Thorsen, Suzanne](#)
Cc: [Deborah A. Sivas](#); [Michael Graf](#); [Andy Harris](#)
Subject: EMAIL #3: 6/17/13Documents for the STREAM CONSERVATION AREA Administrative Record
Date: Monday, June 17, 2013 11:44:06 AM

Hi Suzanne,

I will be submitting a series of documents for the STREAM CONSERVATION AREA Administrative Record in advance of the Marin Supervisor hearing on the issue on June 18, 2013. Please acknowledge receipt of the attached following document:

1. Central California Coast Coho Recovery Plan FINAL available at http://swr.nmfs.noaa.gov/recovery/coho/CCC_Coho_Recovery_Plan_FINAL_PLAN_031810.pdf
2. Appendix to San Geronimo Valley Salmon Enhancement Plan <http://www.marinwatersheds.org/documents/SEPAppendices.pdf>

Per my discussion with Thomas Lai, it is only necessary to submit the URL where the document can be found to be entered into the administrative record. Because these documents were too large to email, I am submitting the URL's only.

Thank you,

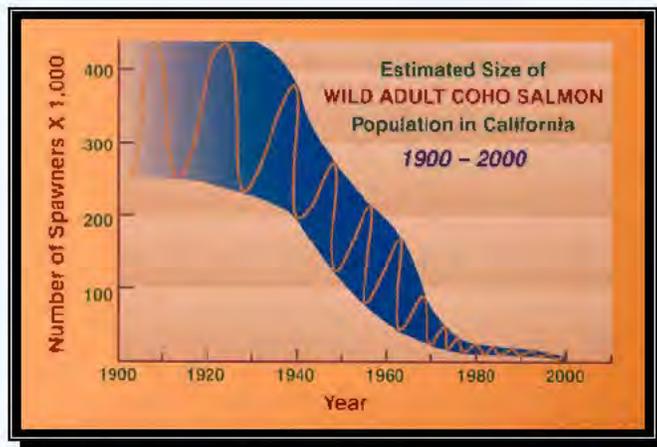
Todd

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Visit our Websites!
www.SeaTurtles.org
www.SpawnUSA.org
www.GotMercury.org
www.TIRN.net

RECOVERY PLAN

FOR THE EVOLUTIONARILY SIGNIFICANT UNIT OF CENTRAL CALIFORNIA COAST COHO SALMON



*Photo Courtesy: CCC coho salmon, Morgan Bond, SWFSC
Conceptual Model of the Extinction Vortex for California's Coho Salmon, Peter Moyle 2009*

PUBLIC DRAFT

Version: March 2010
Southwest Regional Office
National Marine Fisheries Service
Santa Rosa, CA



EXECUTIVE SUMMARY

CURRENT STATUS AND DISTRIBUTION: The known historical range of the Central California Coast (CCC) coho salmon Evolutionarily Significant Unit (ESU) extends from Punta Gorda in northern California south to Elkhorn Slough in Monterey County, California. The listed range extends from Punta Gorda south to the San Lorenzo River in Santa Cruz County, California. This species was listed as threatened with extinction on October 31, 1996 (61 FR 56138). Due to severe population declines its listing status was reclassified to endangered on June 28, 2005 (70 FR 37160). More recent studies are indicating a probable population collapse (McFarlane and Hayes 2008, in draft) across the species' range; increasing the likelihood of extinction. Only a few watersheds currently support more than remnant populations (e.g., Pudding Creek, Albion River, and Lagunitas Creek).

LIFE HISTORY AND HABITAT REQUIREMENTS: Coho salmon are anadromous fish and live in both the ocean and freshwater ecosystems where they exhibit distinctly different life stages (e.g., spawning, egg, alevin, summer rearing, winter rearing, smolt and ocean adult) with unique habitat requirements. Coho salmon spend approximately one year in freshwater and two years in the marine environment. They live approximately three years, and adults return to the streams where they were born, spawn, and then die after spawning. This species has a fairly rigid three year life history and fish of one year class rarely interbreed with fish from another year class. In the freshwater environment coho salmon require: (1) clean gravels for successful spawning and incubation; (2) adequate quantities of cool and well oxygenated water with complex deep pools for juvenile summer rearing; and (3) side-channels and alcoves and/or sufficient quantities of large woody debris for over-wintering habitat.

THREATS TO COHO SALMON: The factors adversely affecting this species are numerous and include both natural and human-made threats. Natural threats include disease, predation, droughts, and fluctuating ocean marine conditions. Human-made threats include habitat alterations such as water diversion, road building and maintenance, timber harvest, urbanization, flood control structures and practices and climate change. Generally, the greatest threats for coho salmon across the ESU come from three threat categories: (1) Roads and Railroads, and, particularly from the Russian River south, (2) Droughts, and (3) Residential and Commercial development. Logging and Wood Harvesting is a significant threat from the Russian River north. In certain watersheds, Channel Modification or Livestock Farming and Ranching posed significant threats to the species.

RECOVERY PLAN: When a species is listed as federally threatened or endangered under the Endangered Species Act (ESA), the listing agency must develop and implement a plan for the species' recovery. The final recovery plan was developed by the National Marine Fisheries Service (NMFS) Santa Rosa recovery team with assistance and input from scientists, co-managers, stakeholders, and others. The foundation of this recovery plan rests upon two NOAA Technical Memoranda prepared by a Technical Recovery Team (TRT) which was comprised of fishery scientists. The NOAA Memoranda described historical population structure and biological viability (Bjorkstedt *et al.* 2005, Spence *et al.* 2008) provided a rigorous scientific framework and numeric population viability goals and scenarios, which formed the basis for the recovery strategy.

The recovery team assessed current conditions and conducted a threats assessment for future threats for the freshwater and marine environments, including an analysis of the potential effects of climate change. Conditions and threats were assessed using The Nature Conservancy's Conservation Action Planning (CAP) protocol, one of several methods recommended in NMFS' (2007) Interim Recovery Planning Guidance for Threatened and Endangered Species. The recovery team endeavored to use the best available information to inform the assessments including information from California Department of Fish and Game habitat typing data, watershed assessments, public/private datasets, and many other sources of information and data.

RECOVERY STRATEGY: To focus recovery efforts and ensure proper prioritization, threat abatement and restoration and enhancement actions were developed for 28 of the 76 watersheds that historically maintained coho salmon. Within these 28 watersheds, subwatersheds were hierarchically prioritized. Subwatersheds with persisting populations were designated as Core areas. Protecting and restoring Core areas is essential for preventing the extinction of CCC coho salmon and Core areas are targeted for immediate threat abatement and enhancement and restoration actions. Areas outside of Core subwatersheds were designated Phase I or Phase II areas. Phase I areas are designated for necessary recovery actions to expand current populations. Phase II areas are designated for long-term recovery actions.

RECOVERY GOALS & OBJECTIVES: The overarching goal of this Recovery Plan is to prevent the extinction of wild CCC coho salmon and ensure their long term persistence in a viable, self sustaining, and eventually harvestable status across the ESU. Before NMFS considers downlisting or delisting CCC coho salmon, substantially higher numbers of returning adults and, successful spawning and rearing conditions in freshwater environments, are needed. To achieve these goals, it is critically important to preserve, enhance, and restore the species' existing habitats. Individual watersheds must have the capacity to support self-sustaining populations in the face of natural variation and conditions such as droughts, floods, variable ocean-rearing conditions, wildfires, and long-term climate change. Taken together, each watershed achieving a self-sustaining population contributes to a viable Diversity Stratum (groups of watersheds in ecologically similar environments), which in turn contributes to a viable ESU. NMFS has identified three objectives for the ultimate recovery of CCC coho salmon:

Objective 1: Prevent extinction by protecting habitats in Core Areas within identified focus populations. This will be accomplished by improving current conditions, and ameliorating existing and future threats;

Objective 2: Re-establish viable populations in the 28 prioritized watersheds (at a minimum) and within four of the five Diversity Strata by protecting, enhancing, and restoring habitats to properly functioning conditions, and by controlling and abating existing and future threats in all Core, Phase I and Phase II areas;

Objective 3: Implement standardized monitoring of coho salmon populations and their habitat across the CCC ESU. Standardization reduces uncertainty associated with habitat assessment methods and increases confidence in population estimates when evaluating effectiveness of recovery actions. Standardization will also improve accuracy when measuring progress towards downlisting and delisting criteria.

It is our hope that the information in this plan will facilitate further discussion on data resources and analysis, future threats and beneficial recovery actions, and will facilitate funding for high priority actions needed for CCC coho salmon. Working collaboratively with communities, organizations, and agencies to preserve our salmon heritage is our highest priority.

RECOVERY CRITERIA: Recovery criteria were developed to measure progress toward achieving recovery objectives. Recovery criteria measure progress toward achieving recovery objectives. Criteria must be “SMART”: specific, measurable, achievable, realistic and time-referenced. NMFS is proposing downlisting criteria for the transition between the endangered and threatened status, as well as delisting criteria, for the ESU. The specific criteria related to the status of populations, improvements in watershed conditions and the abatement of threats across the ESU must be met prior to downlisting or delisting. In addition, an analysis of threats pursuant to the five statutory listing factors in section 4 of the ESA will be necessary. Criteria are outlined in the following format in the recovery plan:

1. Downlisting and Delisting Recovery Criteria for Populations and ESU

- Population Level Criteria for Independent and Dependent Populations
- ESU Recovery Criteria for Delisting

2. Downlisting and Delisting Criteria for Watershed Health

3. Downlisting and Delisting Criteria for Threats (including an analysis of the listing factors)

Five Listing Factors

- Present or threatened destruction, modification, or curtailment of habitat or range
- Overutilization for commercial, recreational, scientific, or educational purposes
- Disease or predation
- Inadequacy of existing regulatory mechanisms
- Other natural and manmade factors affecting the species continued existence

A decision to delist a species must consider the biological performance of the populations (viability criteria), the threats that contributed to the species’ decline and listing under the ESA, and the future threats limiting their recovery.

RECOVERY ACTIONS: Recovery actions were developed for the ESU, Diversity Strata, and specific watersheds. The highest priority actions advocated to increase survival and improve the likelihood of recovery are:

- Finalize and implement the State Coastal Monitoring Plan. Implementation of the State Coastal Monitoring Plan (including development of an adaptive management and comprehensive database) is essential for evaluating the long-term viability of CCC coho salmon and their habitats as well as other species of listed salmonids in California;
- Focus restoration funds, notably the Pacific Coast Salmon Restoration Fund and California’s Fisheries Grant Restoration Program, to prioritize funding in Core areas and on activities that will increase the probability of freshwater survival;

- ❑ Promote restoration projects in over-wintering habitats such as alcoves, backchannels, off channel areas, and estuaries;
- ❑ Encourage appropriate agencies to secure funding for, and engage in, full enforcement of relevant laws, codes, regulations and ordinances protective of coho salmon and their habitats;
- ❑ Work with DFG to improve freshwater sport fishing regulations to minimize unintentional and unauthorized take, and incidental mortality, of CCC coho salmon by anglers during the CCC coho salmon migration period. This effort should include the development of appropriate low-flow closure thresholds (including consideration of emergency closure during adult migration beginning 2010), seasonal fishing closures, and angler outreach programs;
- ❑ Urge the California Board of Forestry to develop no-take rules and/or apply for a statewide Forestry Habitat Conservation Plan (HCP) and seek funding opportunities to support the effort;
- ❑ Assess and address the mechanisms driving forest conversions and provide incentives for sustainable forestry;
- ❑ Encourage forestry landowners to develop HCPs protective of coho salmon and their habitat;
- ❑ Improve coordination between the agencies, particularly the SWRCB, to effectively address seasons of diversion, off-stream reservoirs, and bypass flows fully protective of CCC coho salmon;
- ❑ Encourage counties to control forest conversions and prioritize development of rezoning and grading ordinances that are protective of CCC coho salmon and their habitats; and
- ❑ Finalize the Mendocino Redwood Company HCP.

ESTIMATED COSTS: Section 4(f) of the ESA requires recovery plans to include “estimates of the time required and the cost to carry out those measures needed to achieve the plan’s goal and to achieve intermediate steps toward that goal” (16 U.S.C. 1533(f)(1)(B)(iii)). NMFS estimates recovery for CCC coho salmon could take 50 to 100 years. The California Department of Fish and Game developed a State Coho Recovery Plan in 2004 and this Federal plan builds from the State Plan and contains many of the same recovery actions. The State of California conducted a comprehensive cost analysis for coho salmon recovery and estimated the total cost to achieve recovery for CCC coho salmon at between 3 billion dollars and 5 billion dollars (depending on Alternatives implemented) {DFG, 2004}. This estimate may under or over estimate the full cost of implementation, because not all costs could be quantified, and some costs may be incurred even without implementation of the plan. The State Coho Recovery Plan offered some recommendations that differ from those presented in this plan. The State Coho Recovery Plan presented costs in the simplest possible terms: the current cost of completing the action in 2004. It did not consider inflation or financing costs. Although there are differences between the State Coho Recovery Plan and the Federal CCC coho salmon recovery plan, NMFS will use the State cost estimates as they currently represent the best available information most relevant to the CCC coho salmon ESU. During the public comment period, we will further evaluate the cost analysis with assistance from the NMFS Science Center, NOAA Restoration Center and others including additional requests to the public for more precise cost estimates associated with restoration, monitoring and threat abatement.

Recovery of coho salmon will have significant costs, but will also provide economic benefits. Recovery actions undertaken for coho salmon will likely improve conditions for other listed salmon and steelhead, and also for a variety of aquatic and riparian species. Because of their direct and indirect economic value

as a resource for fishing, recreation and tourism related activities, each dollar spent on salmon recovery may generate significantly more dollars for local, state, Federal, and tribal economies. In other words, salmon recovery is best viewed not as a cost, but as an investment and opportunity to derive, diversify, and strengthen the economy.

APPENDIX A
Members of the San Geronimo Valley Enhancement Plan
Salmon Advisory Committee and Technical Advisory Committee

Salmon Advisory Committee:

Supervisor Steve Kinsey, County of Marin

Todd Steiner, Salmon Protection and Watershed Network (SPAWN)

Clarke Holland, Small landowner

John Fitzpatrick, Large landowner

Kit Crump, NOAA Restoration Center

Gail Seymour, California Department of Fish and Game

Mike Napolitano, San Francisco Bay Regional Water Quality Control Board

Paul Siri, Ocean Science Services, California State Coastal Conservancy

Technical Advisory Committee:

Greg Andrew, Marin Municipal Water District

Leslie Ferguson, San Francisco Bay Regional Water Quality Control Board

Brannon Ketcham, National Park Service, Point Reyes National Seashore

Richard Plant, Marin County Resource Conservation District

Additional technical support came from:

Mike Napolitano, San Francisco Bay Regional Water Quality Control Board

Paola Bouley, SPAWN

Chris Pincetich, SPAWN

Joe Pecharich, NOAA Fisheries Service

From: [Todd Steiner](#)
To: [Thorsen, Suzanne](#)
Cc: [Deborah A. Sivas](#); [Michael Graf](#); [Andy Harris](#)
Subject: EMAIL #4: 6/17/13Documents for the STREAM CONSERVATION AREA Administrative Record
Date: Monday, June 17, 2013 11:54:50 AM
Attachments: [1080. Wenger & Fowler 2000 Effective Riparian Buffers.pdf](#)
[ATT00001.htm](#)
[1079. Roy et al 2009. Intermittent streams urbanization.pdf](#)
[ATT00002.htm](#)
[1075. Wigington et al 2006 Coho salmon intermittent streams.pdf](#)
[ATT00003.htm](#)
[1071. Brown & Hartman 2011 Coho salmon minor tribs BC.pdf](#)
[ATT00004.htm](#)
[1072. Cummins & Wilzbach 2005 Inadequacy of fish bearing criterion for stream management.pdf](#)
[ATT00005.htm](#)
[1083. Wipfli & Gregovitch 2002 Export downstream to salmonid production Alaska.pdf](#)
[ATT00006.htm](#)
[1077. Levick et al 2008 Ephemeral streams in arid and semi arid USA.pdf](#)
[ATT00007.htm](#)
[1081. Wenger 1999 Riparian Buffer Science Review.pdf](#)
[ATT00008.htm](#)

Hi Suzanne,

I will be submitting a series of documents for the STREAM CONSERVATION AREA Administrative Record in advance of the Marin Supervisor hearing on the issue on June 18, 2013.

Please acknowledge receipt of the attached following eight documents which we base part of the analysis presented in various documents we have submitted:

Protecting Stream and River Corridors

Creating Effective Local Riparian Buffer Ordinances

by Seth J. Wenger and Laurie Fowler

Model Ordinance Included

Carl Vinson Institute of Government
The University of Georgia

Executive Summary

The purpose of this paper is to support the efforts of local governments in Georgia that have made policy decisions to develop riparian buffer programs. A riparian buffer is a strip of naturally vegetated land along a stream or river which is protected to maintain healthy aquatic ecosystems and to provide a range of other environmental, economic, and social benefits. These benefits are numerous:

- Trapping and removing sediment from runoff
- Stabilizing stream banks and reducing channel erosion
- Trapping and removing nutrients and contaminants
- Storing flood waters, thereby reducing property damage
- Maintaining habitat for fish and other aquatic organisms
- Providing terrestrial habitat
- Maintaining good water quality
- Improving aesthetics, thereby increasing property values
- Offering recreational and educational opportunities

Despite their importance, several barriers stand in the way of effective buffer ordinances. For one, the riparian buffer requirements imposed by state laws do not provide a uniform and effective system of protection. For another, concerns over property rights have led many local officials to shy away from ordinances, however beneficial, due to fears of “takings” lawsuits. This paper is intended to help local governments develop effective, comprehensive riparian buffer ordinances that, properly administered, will not generate takings claims. A model ordinance is included.

In a monograph published by the Institute of Ecology of the University of Georgia (Wenger 1999), the author provides a thorough analysis of scientific buffer research that is applicable to Georgia. That review determined that the most effective buffers are at least 30 meters or 100 feet wide, composed of native forest, and are applied to all streams, including very small ones. Ideally, the width of the buffer will vary based on local conditions such as slope, width of the floodplain, presence of wetlands, and other factors. Two variable-width formulas that incorporate such factors are presented. The first specifies a minimum width of 100 feet, while the second provides for a minimum width of 50 feet. For local governments that find a variable-width formula too cumbersome to administer, recommendations are also provided for a fixed width buffer of 100 feet. Other widths are possible and reasonable, but narrower buffers provide significantly less benefits, and no buffer under 50 feet can be considered very effective.

The following activities and structures are not appropriate within a riparian buffer:

- Land-disturbing activities, including construction
- Impervious surfaces
- Logging roads
- Mining
- Septic tank drain fields
- Application of pesticides and fertilizer
- Waste disposal sites
- Livestock

The 1999 study included a review of existing riparian buffer ordinances from Georgia and neighboring states. Among the local governments in Georgia that have passed effective buffer ordinances are Alpharetta, Douglas County, and Fulton County. These ordinances, together with selected buffer programs from a more thorough national review by other researchers in 1993, can provide guidance for other local governments in Georgia and are discussed in this paper. The study showed that a local buffer ordinance can take a number of different forms. For those local governments with zoning laws, an ordinance that creates a buffer overlay district is the best approach. The next best alternative is a stand-alone ordinance. Buffer protection could also be incorporated into a floodplain ordinance or an erosion and sedimentation control ordinance.

An effective riparian buffer ordinance will have the following characteristics:

1. It will meet the minimum standards for protection under the Georgia Planning Act and the Mountain and River Corridor Protection Act. A good buffer ordinance will not only adhere to state requirements, but will incorporate those requirements into a single set of local regulations, making it easy to administer.
2. It will provide for flexibility and variance procedures. In many cases, it is possible to slightly reduce the width of a portion of the buffer to accommodate the needs of a landowner while not significantly affecting buffer performance. This can be incorporated into an ordinance through rules for “minor exceptions” or “buffer averaging.” In extreme cases, a variance that significantly reduces the buffer width will need to be issued to provide regulatory relief to property owners. The buffer ordinance should include variance criteria and procedures that are stringent but fair.
3. It will provide an exception for existing land uses. In other words, properties are only affected by the buffer ordinance when they

change use—for example, when agricultural land is developed for residences.

4. It will provide exceptions for certain activities. Agriculture is traditionally outside the regulatory domain of local governments and may be exempted (although certain restrictions on pesticide and fertilizer application are appropriate). Forestry is acceptable within limits, although cutting within 50 feet of the stream should not be allowed. Structures such as boat ramps, which by their nature need to be on or near a stream, are also excepted.
5. It will include guidelines for buffer crossings, which should be minimized, and buffer restoration, which is sometimes necessary.

In administering a buffer ordinance, good communication with property owners is essential. This reduces the likelihood of opposition based on irrational fears and misunderstandings regarding the law. Proper enforcement is also a necessity, although previous experiences suggest that the enforcement burden need not be great. A simple and reliable system for determining buffer width—for those local governments with a variable-width ordinance—is also important. A model ordinance, an appendix to this paper, incorporates all of the provisions discussed here.

A buffer ordinance based on the recommendations contained in this paper and properly enforced should withstand any legal challenges based on property rights. One concern to local governments and land owners is the takings issue. Legally, a takings can occur when government regulates property to such a degree that little economic use is left to the landowner. However, a buffer ordinance will not usually preclude use of a property and will not necessarily reduce property values. In those cases where properties are severely impacted, the owner should receive a variance.

To analyze the impact of buffers on property rights, we examined the proportion of land parcels covered by buffers of various widths (50, 75, and 100 feet). The study showed that parcels of less than 1-2 acres can be significantly impacted by relatively narrow buffers. However, since parcels of this size or smaller have generally been dedicated to residential use and are unlikely to be converted to other uses, they are exempted from an ordinance. If they are not exempted, their owners would qualify for a variance. Large parcels of 70 acres or more usually lose less than 10 percent of their land area to buffers, a portion that should not significantly reduce their value (especially when the economic benefits of buffers are considered). Often,

Recommendations

Pass a riparian buffer ordinance based on the included model.

Develop a public information campaign explaining benefits and features of buffer ordinances.

Identify critical riparian areas in which existing land uses threaten water quality.

Identify wildlife areas, historic/prehistoric sites, and other areas meriting preservation.

Establish impervious surfaces limits.

Properly enforce erosion and sedimentation control statutes.

Amend existing floodplain ordinance to emphasize importance of limiting floodplain development and to prohibit certain activities harmful to water quality.

Set a 25 NTU turbidity standard.

the riparian zone is the least suitable area for development and is left wooded anyway. For example, a land cover analysis showed that in Cherokee County, a typical urbanizing county, over 89 percent of the area along streams is still forested.

Although riparian buffers can reduce the useful area of properties, they can also increase property values and provide other economic benefits. Properties near healthy, protected streams are worth more than properties located farther away or near unhealthy, aesthetically unpleasant waterways. Buffers protect water quality, which has immense economic value. By keeping sediment out of rivers, for example, buffers reduce the expenses of drinking water treatment plants. Clean streams and rivers are also valuable for recreation and tourism, and are vital factors in attracting new businesses and residents. Finally, protecting streams with buffers is a low-cost way to enhance the survival of endangered aquatic species. In short, riparian buffers are not only essential tools for environmental protection, they are also important factors in the long-term economic health of a community.

Urbanization affects the extent and hydrologic permanence of headwater streams in a midwestern US metropolitan area

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Abstract. Headwater streams dominate natural landscapes and provide essential functions for downstream waters. However, because of minimal legal protection, they often are piped or buried to accommodate urban growth. Urbanization also alters stream base flows. The combined impact of these factors on channel location is unknown. We assessed the effects of urbanization on the location and length of ephemeral, intermittent, and perennial streams. We randomly selected 150 of 6686 potential channel origins in Hamilton County (Cincinnati), Ohio, USA, for field assessments, and mapped 122 ephemeral, 74 intermittent, and 45 perennial flow origins in these channels. On average, 1:100,000- and 1:24,000-scale US Geological Survey maps underestimated channel length by 85% and 78%, respectively. Mean catchment areas for ephemeral and intermittent flow origins were smaller in forested (0.66 ha and 3.60 ha, respectively) than in urban areas (5.13 ha and 6.79 ha, respectively). These values indicate 93% and 46% county-wide losses of ephemeral and intermittent channel length, respectively, with urbanization. In contrast, the mean catchment area for perennial flow origins was larger in forested (48.12 ha) than in urban (31.22 ha) areas, resulting in a 22% gain in perennial channel length with urban development. Increased perennial channel length was partially explained by reduced forest cover, a result suggesting that reduced evapotranspiration can significantly increase stream base flows. Most variation (59-74%) in catchment area of ephemeral, intermittent, and perennial flow origins was explained by catchment relief, with higher relief corresponding to smaller catchments. Urbanization can decrease (e.g., via reduced infiltration) or increase (e.g., via lawn irrigation and septic tanks) the permanence of flows, thus confounding any overall effect of urban land cover on hydrologic permanence. Site-specific differences in physiography (e.g., bedrock, springs) and landscape management (e.g., stream impoundments) suggest that field surveys are necessary for accurate stream delineation. These results highlight the extensive effects of urbanization on the presence and hydrologic permanence of headwater streams, raise issues with current jurisdictional policy in the US, and emphasize the need to examine the cumulative effects of headwater stream loss on downstream ecosystems.

Key words: headwater streams, flow permanence, hydrology, urban, forest, ephemeral, intermittent, perennial, mapping.

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Coho salmon dependence on intermittent streams

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In February 2006, the US Supreme Court heard cases that may affect whether intermittent streams are jurisdictional waters under the Clean Water Act. In June 2006, however, the cases were remanded to the circuit court, leaving the status of intermittent streams uncertain once again. The presence of commercial species, such as coho salmon (*Oncorhynchus kisutch*), can be an important consideration when determining jurisdiction. These salmon spawn in the upper portions of Oregon coastal stream networks, where intermittent streams are common. In our study of a coastal Oregon watershed, we found that intermittent streams were an important source of coho salmon smolts. Residual pools in intermittent streams provided a means by which juvenile coho could survive during dry periods; smolts that overwintered in intermittent streams were larger than those from perennial streams. Movement of juvenile coho into intermittent tributaries from the mainstem was another way in which the fish exploited the habitat and illustrates the importance of maintaining accessibility for entire stream networks. Loss of intermittent stream habitat would have a negative effect on coho salmon populations in coastal drainages, including downstream navigable waters.

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Intermittent streams only flow during part of the year and are often under-appreciated as aquatic resources. In the western US, over 65% of total stream length is intermittent (Stoddard *et al.* 2005). Whether intermittent streams are included under the jurisdiction of the Clean Water Act (CWA) is not clear. Under the CWA, the definition of “waters of the United States” is vague, leading to substantial debate in the courts and federal agencies about the geographic scope of the statute (Downing *et al.* 2003). Until recently, regulatory interpretations were fairly broad, but a 2001 US Supreme Court ruling (*Solid Waste Agency of Northern Cook County v US Army Corps of Engineers*, 531 US 159 [2001]) re-emphasized the importance of a water body’s navigability and its “significant nexus” with navigable waters. In June 2006, the Court issued decisions in two additional cases (*United States v John Rapanos and June Carabell v United States Army Corps of Engineers and United States Environmental Protection Agency*, slip op, 547 US ___ [2006]) that concerned the jurisdictional status of non-navigable waters. An issue that remains unresolved is whether a tributary to a navigable waterbody must be perennial to be included, or whether it can be intermittent. Research documenting the impact of intermittent streams on interstate or foreign commerce in navigable waters, in particular, could influence whether such systems are protected under the CWA.

Pacific salmon are extremely important to the ecosystems and economies of the Pacific Northwest and support valuable commercial and recreational fisheries. Salmon populations have experienced major declines and local extinctions, due in part to loss of freshwater habitat (Lichatowich 1999; CENR 2000). Coastal coho salmon (*Oncorhynchus kisutch*), which use headwater areas where intermittent streams are common, have experienced declines similar to other Pacific salmon and have been the focus of major restoration efforts (Oregon Watershed Enhancement Board 2005). The potential importance of intermittent streams to coho and other salmonids has been documented (Everest 1973; Erman and Hawthorne 1976; Kralik and Sowerwine 1977; Cederholm and Scarlett 1982; Brown and Hartman 1988), but quantitative data are limited.

Coho salmon commonly have an 18-month freshwater life cycle. Adult coho return from the ocean in late fall, when streamflows increase, and spawn in the upper portions of coastal stream networks. Coho fry emerge in late winter and remain in these streams through the summer and winter before migrating (as smolts) to the ocean the following spring. Juvenile survival during winter flood events is one of the most important factors controlling smolt production (Nickelson *et al.* 1992). High streamflows can physically displace or fatally injure fish unable to find suitable, low-velocity refugia. Larger smolts tend to have higher ocean survival rates (Holtby *et al.* 1990). Thus, both the number and size of smolts affect the size and biomass of adult populations.

In this paper, we quantify the contributions of intermittent streams to coho salmon production in an Oregon coastal watershed. Specifically, we provide estimates of

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Contribution of Seasonally Flooded Lands and Minor Tributaries to the Production of Coho Salmon in Carnation Creek, British Columbia

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Contribution of Seasonally Flooded Lands and Minor Tributaries to the Production of Coho Salmon in Carnation Creek, British Columbia

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Abstract.—Ten percent of the juvenile coho salmon *Oncorhynchus kisutch* rearing in the main channel of Carnation Creek during the summer moved into intermittent tributaries and ephemeral swamps (off-channel winter habitats) during the autumn of 1983. The number of juveniles residing within specific off-channel sites during winter was governed by the magnitude of water levels associated with the first fall storms relative to the flooding levels required for adequate access to these sites ($P < 0.05$). Off-channel habitats contributed 15.3% of the watershed's coho salmon smolts in 1983 and 23.1% in 1984. A 25-year flood event ($65 \text{ m}^3/\text{s}$) occurred in January 1984 and may have reduced the main-channel contribution for that year. The inability of coho salmon smolts to emigrate from off-channel habitats and return to the main channel in spring may have reduced the off-channel contribution in 1983. April–May water levels were 37% below the 13-year mean water level in 1983 and 55% above it in 1984.

Within the Carnation Creek watershed in winter, juvenile coho salmon *Oncorhynchus kisutch* occupy both main-channel habitats (side pools, undercut banks, and debris piles) and off-channel habitats (ephemeral swamps and intermittent tributaries) that are isolated from the main channel during winter base flows (Bustard and Narver 1975; Tschaplinski and Hartman 1983; Brown 1987; Hartman and Brown 1987). The use of off-channel winter habitats by juvenile coho salmon has been documented in other Pacific Northwest watersheds (Skeesick 1970; Mason 1976; Peterson 1980; Cederholm and Scarlett 1982; Peterson and Reid 1984; Scarlett and Cederholm 1984). Juvenile coho salmon may use off-channel habitats as a refuge from adverse main-channel conditions, such as high discharge and large volumes of suspended sediment (Skeesick 1970). Such habitats may also provide juvenile coho salmon with an alternative to rearing in the main channel. Growth during winter has been documented for juvenile coho salmon occupying ephemeral swamps (Brown 1985).

In this study, we estimated the number of juvenile coho salmon using all known winter habitat sites located away from the main channel of Carnation Creek, and calculated the contributions of these habitats to the watershed's total production of coho salmon smolts. During the period of study (October 1982 to June 1984), differences in use and contribution were related to differences in environmental conditions. We assessed the relative

importance of off-channel and main-channel habitats for winter survival of coho salmon.

Study Area

Carnation Creek is a small stream (watershed area, 10 km^2 ; total length, 7.2 km; accessible length for anadromous fish, 3.2 km) flowing into Barkley Sound on the west coast of Vancouver Island. We studied coho salmon winter habitats on the flood plain, which forms a narrow strip 3 km long and covers an area of approximately 50 hectares. Here, the creek drops 21 m to sea level and has an average slope of 0.7%. Descriptions of the watershed and other research projects conducted within the watershed were given by Narver and Chamberlin (1976), Hartman (1982), and Brown (1987).

During November and December 1982, the flood plain was examined in detail and nine sites that were away from the main channel and contained juvenile coho salmon were delineated (Figure 1). These sites represented all the off-channel habitat available to juvenile coho salmon on the flood plain. The sites were described and divided into two habitat types by Brown (1987). Three sites were termed "intermittent tributaries" because they contained visibly flowing water all winter, but only isolated pools during the summer. Substrates within these three sites were sand and gravel. Six sites were termed "ephemeral swamps" because they contained water during winter base flows, but were completely dry in summer. Substrates within the ephemeral swamps were organic

Overview Article

The inadequacy of the fish-bearing criterion for stream management

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Abstract. Dependence on the fish-bearing and non-fish-bearing designation in determining the regulation of stream management is questioned. The importance of intermittent, ephemeral, and very small first order channels as suppliers of invertebrates and detritus to permanently flowing, receiving streams that support juvenile salmonids warrant their protection during timber harvest. Small gravel bed roads serve many of the same functions as the small intermittent and ephemeral headwater chan-

nels. Therefore, many could be managed like small stream channels and eligible for exclusion from road decommissioning actions. Among the invertebrates inhabiting headwater streams, many have specific adaptations to low and seasonal flows. Given these considerations, it is clear that criteria other than the presence or absence of juvenile salmonids need to be considered in managing forested watersheds.

Key words. Fishless streams; headwater streams; intermittent streams; functional groups; road decommissioning.

Introduction

As a guide for regulation and a target for watershed management, including timber harvest planning, the designation of fish and non-fish bearing streams is the antithesis of sound stream ecology. In the Pacific Northwest USA Forest Ecosystem Management Team (FEMAT, 1993) guidelines and the California Forest Practice Rules (CDF, 1998), for example, streams are divided into three classes: class 1 streams are “fish bearing”, Class 2 streams are “non-fish bearing” and class 3 streams are ephemeral (that is, not perennial). The rules apply to “no cut” riparian corridor widths by stream class. The width of the zone is defined in terms of site potential tree height at maturity, or expected height at maturity taken as ap-

proximately 200 years. The no cut riparian buffer prescribed by FEMAT (1993) is a maximum of 62 m (200 ft) along class 3 streams and twice that along class 1 and 2 streams. The California rules allow site-specific decisions on buffer width for class 3 streams and approximately 23–46 m (75–150 ft) and 15–31 m (50–100 ft) zones of selective harvest on class 1 and 2 streams respectively. The buffer width required is scaled to % slope, with the widest buffers set aside on slopes >50% (CDF 1998). These distinctions between management options for determining riparian buffer widths are all linked to the presence or absence of juvenile salmonids.

The ephemeral category used in forest practice rules encompasses both intermittent streams, which flow for a short period predictably every year when they receive surface runoff, and the less predictable ephemeral channels which carry water only in the wettest years, and are above the water table at all times (Gordon et al., 2004). The distinctions between the three classes are poorly defined in

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Export of invertebrates and detritus from fishless headwater streams in southeastern Alaska: implications for downstream salmonid production

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SUMMARY

1. We examined the export of invertebrates (aquatic and terrestrial) and coarse organic detritus from forested headwaters to aquatic habitats downstream in the coastal mountains of southeast Alaska, U.S.A. Fifty-two small streams (mean discharge range: 1.2–3.6 L s⁻¹), representing a geographic range throughout southeast Alaska, were sampled with 250- μ m nets either seasonally (April, July, September) or every 2 weeks throughout the year. Samples were used to assess the potential subsidy of energy from fishless headwaters to downstream systems containing fish.
2. Invertebrates of aquatic and terrestrial origin were both captured, with aquatic taxa making up 65–92% of the total. Baetidae, Chironomidae and Ostracoda were most numerous of the aquatic taxa (34, 16 and 8%, respectively), although Coleoptera (mostly Amphizoidae) contributed the greatest biomass (30%). Mites (Acarina) were the most numerous terrestrial taxon, while terrestrial Coleoptera accounted for most of the terrestrial invertebrate biomass.
3. Invertebrates and detritus were exported from headwaters throughout the year, averaging 163 mg invertebrate dry mass stream⁻¹ day⁻¹ and 10.4 g detritus stream⁻¹ day⁻¹, respectively. The amount of export was highly variable among streams and seasons (5–6000 individuals stream⁻¹ day⁻¹ and <1–22 individuals m³ water; <1–286 g detritus stream⁻¹ day⁻¹ and <0.1–1.7 g detritus m³ water). Delivery of invertebrates from headwaters to habitats with fish was estimated at 0.44 g dry mass m² year⁻¹. We estimate that every kilometre of salmonid-bearing stream could receive enough energy (prey and detritus) from fishless headwaters to support 100–2000 young-of-the-year (YOY) salmonids. These results illustrate that headwaters are source areas of aquatic and terrestrial invertebrates and detritus, linking upland ecosystems with habitats lower in the catchment.

Keywords: headwater streams, invertebrates, riparian, salmonids, subsidy

Introduction

Movements of prey and detritus among habitats can have strong influences on consumer resources, populations, food webs, community dynamics and ecosystem processes (Polis & Hurd, 1996; Polis, Anderson

& Holt, 1997; Nakano, Miyasaka & Kuhara, 1999). This movement across habitat boundaries often subsidises the recipient community, increasing its productivity and increasing the local population density of vertebrates and invertebrates (Rose & Polis, 1998; Wipfli, Hudson & Caouette, 1998; Nakano *et al.*, 1999). Polis *et al.* (1997) showed that primary productivity and consumer density (invertebrates and vertebrates) were 14 and up to 24 times greater, respectively, in terrestrial habitats receiving a detrital subsidy from a

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The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest



The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest

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USEPA, ORD, NERL
Las Vegas, Nevada

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U.S. Environmental Protection Agency
Office of Research and Development
Washington, DC 20460

Abstract

This report represents a state-of-the-art synthesis of current knowledge of the ecology and hydrology of ephemeral (dry washes) and intermittent streams in the American Southwest, and may have important bearing on establishing nexus to traditional navigable waters (TNW) and defining connectivity relative to the Clean Water Act. Ephemeral and intermittent streams make up approximately 59% of all streams in the United States (excluding Alaska), and over 81% in the arid and semi-arid Southwest (Arizona, New Mexico, Nevada, Utah, Colorado and California) according to the U.S. Geological Survey National Hydrography Dataset. They are often the headwaters or major tributaries of perennial streams in the Southwest. This comprehensive review of the present scientific understanding of the ecology and hydrology of ephemeral and intermittent streams will help place them in a watershed context, thereby highlighting their importance in maintaining water quality, overall watershed function or health, and provisioning of the essential human and biological requirements of clean water. Ephemeral and intermittent streams provide the same ecological and hydrological functions as perennial streams by moving water, nutrients, and sediment throughout the watershed. When functioning properly, these streams provide landscape hydrologic connections; stream energy dissipation during high-water flows to reduce erosion and improve water quality; surface and subsurface water storage and exchange; ground-water recharge and discharge; sediment transport, storage, and deposition to aid in floodplain maintenance and development; nutrient storage and cycling; wildlife habitat and migration corridors; support for vegetation communities to help stabilize stream banks and provide wildlife services; and water supply and water-quality filtering. They provide a wide array of ecological functions including forage, cover, nesting, and movement corridors for wildlife. Because of the relatively higher moisture content in arid and semi-arid region streams, vegetation and wildlife abundance and diversity in and near them is proportionally higher than in the surrounding uplands. In the rapidly developing southwest, land management decisions must employ a watershed-scale approach that addresses overall watershed function and water quality. Ephemeral and intermittent stream systems comprise a large portion of southwestern watersheds, and contribute to the hydrological, biogeochemical, and ecological health of a watershed. Given their importance and vast extent, it is concluded that an individual ephemeral or intermittent stream segment should not be examined in isolation. Consideration of the cumulative impacts from anthropogenic uses on these streams is critical in watershed-based assessments and land management decisions to maintain overall watershed health and water quality.

A REVIEW OF THE SCIENTIFIC LITERATURE ON RIPARIAN BUFFER WIDTH, EXTENT AND VEGETATION



Seth Wenger

for the

Office of Public Service & Outreach
Institute of Ecology
University of Georgia

Revised Version • March 5, 1999

EXECUTIVE SUMMARY

Many local governments in Georgia are developing riparian buffer protection plans and ordinances without the benefit of scientifically-based guidelines. To address this problem, over 140 articles and books were reviewed to establish a legally-defensible basis for determining riparian buffer width, extent and vegetation. This document presents the results of this review and proposes several simple formulae for buffer delineation that can be applied on a municipal or county-wide scale.

Sediment is the worst pollutant in many streams and rivers. Scientific research has shown that vegetative buffers are effective at trapping sediment from runoff and at reducing channel erosion. Studies have yielded a range of recommendations for buffer widths; buffers as narrow as 4.6 m (15 ft) have proven fairly effective in the short term, although wider buffers provide greater sediment control, especially on steeper slopes. Long-term studies suggest the need for much wider buffers. It appears that a 30 m (100 ft) buffer is sufficiently wide to trap sediments under most circumstances, although buffers should be extended for steeper slopes. An absolute minimum width would be 9 m (30 ft). To be most effective, buffers must extend along all streams, including intermittent and ephemeral channels. Buffers must be augmented by limits on impervious surfaces and strictly enforced on-site sediment controls. Both grassed and forested buffers are effective at trapping sediment, although forested buffers provide other benefits as well.

Buffers are short-term sinks for phosphorus, but over the long term their effectiveness is limited. In many cases phosphorus is attached to sediment or organic matter, so buffers sufficiently wide to control sediment should also provide adequate short-term phosphorus control. However, long-term management of phosphorus requires effective on-site management of its sources. Buffers can provide very good control of nitrogen, include nitrate. The widths necessary for reducing nitrate concentrations vary based on local hydrology, soil factors, slope and other variables. In most cases 30 m (100 ft) buffers should provide good control, and 15 m (50 ft)

buffers should be sufficient under many conditions. It is especially important to preserve wetlands, which are sites of high denitrification activity.

To maintain aquatic habitat, the literature indicates that 10-30 m (35-100 ft) native forested riparian buffers should be preserved or restored along all streams. This will provide stream temperature control and inputs of large woody debris and other organic matter necessary for aquatic organisms. While narrow buffers offer considerable habitat benefits to many species, protecting diverse terrestrial riparian wildlife communities requires some buffers of at least 100 meters (300 feet). To provide optimal habitat, native forest vegetation should be maintained or restored in all buffers.

A review of existing models for buffer width and effectiveness showed that none are appropriate for county-level buffer protection. Models were found to be either too data-intensive to be practical or else lacked verification and calibration. Potential variables for use in a buffer width formula were considered. Buffer slope and the presence of wetlands were determined to be the most important and useful factors in determining buffer width.

Three options for buffer guidelines were proposed. All are defensible given the scientific literature. The first provides the greatest level of protection for stream corridors, including good control of sediment and other contaminants, maintenance of quality aquatic habitat, and some minimal terrestrial wildlife habitat. The second option should also provide good protection under most circumstances, although severe storms, floods, or poor management of contaminant sources could more easily overwhelm the buffer.

Option One:

- Base width: 100 ft (30.5 m) plus 2 ft (0.61 m) per 1% of slope.
 - Extend to edge of floodplain.
 - Include adjacent wetlands. The buffer width is extended by the width of the wetlands, which guarantees that the entire wetland and an additional buffer are protected.
-

-
- Existing impervious surfaces in the riparian zone do not count toward buffer width (i.e., the width is extended by the width of the impervious surface, just as for wetlands).
 - Slopes over 25% do not count toward the width.
 - The buffer applies to all perennial and intermittent streams. These may

Option Two:

The same as Option One, except:

- Base width is 50 ft (15.2 m) plus 2 ft (0.61 m) per 1% of slope.
- Entire floodplain is not necessarily included in buffer, although potential sources of severe contamination should be excluded from the floodplain.
- Ephemeral streams are not included; affected streams are those that appear on US Geological Survey 1:24,000 topographic quadrangles. Alternatively, buffer can be applied to all perennial streams plus all intermittent streams of second order or larger

Option Three:

- Fixed buffer width of 100 ft.
- The buffer applies to all streams that appear on US Geological Survey 1:24,000 topographic quadrangles or, alternatively, all perennial streams plus all intermittent streams of second order or larger (as for Option Two).

For all options, buffer vegetation should consist of native forest. Restoration should be conducted when necessary and possible.

All major sources of contamination should be excluded from the buffer. These include construction resulting in major land disturbance, impervious surfaces, logging roads, mining activities, septic tank drain fields, agricultural fields, waste disposal sites, livestock, and clear cutting of forests. Application of pesticides and fertilizer should also be prohibited, except as may be needed for buffer restoration.

All of the buffer options described above will provide some habitat for many terrestrial wildlife species. To provide habitat for forest interior species, at least some riparian tracts of at least 300 ft width should also be preserved. Identification of these areas should be part of an overall, county-wide wildlife protection plan.

For riparian buffers to be most effective, some related issues must also be addressed. These include reducing impervious surfaces, managing pollutants on-site, and minimizing buffer gaps.

From: [Todd Steiner](#)
To: [Thorsen, Suzanne](#)
Cc: [Deborah A. Sivas](#); [Michael Graf](#); [Andy Harris](#); [alex hearn](#)
Subject: POWER POINT PRESENTATION to Board of Supervisors on June 18, 2013
Date: Monday, June 17, 2013 12:09:39 PM
Attachments: [20130617 Marin Board of Supervisors SCO.pptx](#)
[ATT00001.txt](#)

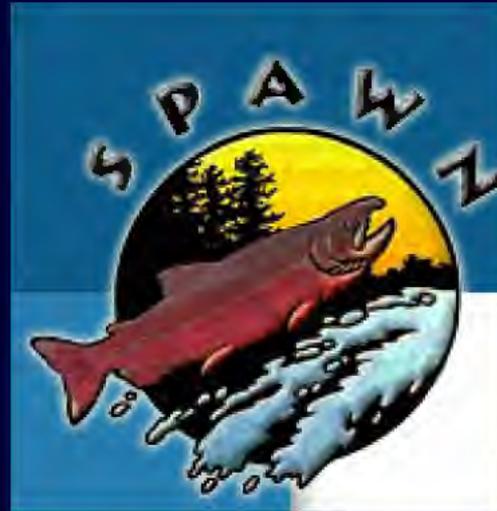
Hi Suzanne,

Attached please find the power point presentation to be presented to the Board of Supervisors on June 18, 2013. Please also include in the administrative record.\

Please let us know that this has been received and will available to present.

Thank you,

Todd Steiner



Improving Marin's *Draft* Stream Conservation Ordinance

Dr. Alex Hearn, PhD
Director of Conservation Science





An effective ordinance needs to:

- Be based on sound scientific data and strong public policy that provides incentives, rewarding residents for doing the right thing.
- Include mechanisms for conservation easements, and landowner education and assistance programs.
- Clearly identify what is allowed and what is not.
- Include adequate enforcement mechanisms to ensure compliance.

NMFS Coho Recovery Recommendations

Avoid new development within riparian zones and the 100 year flood plain.

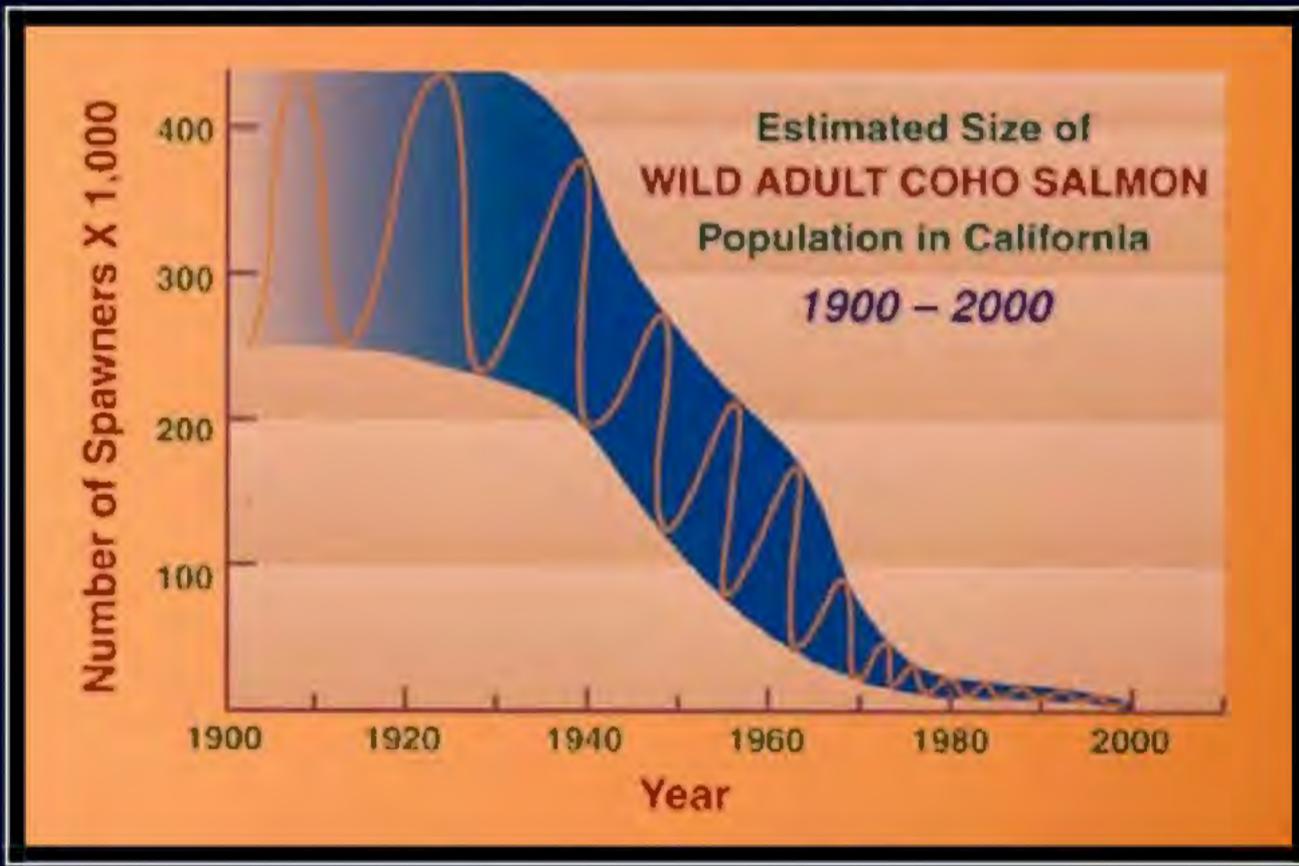
Adopt a policy of managed retreat to remove problematic structures and replace with native vegetation.



Coho “Extinction Vortex”

from: Federal Coho Recovery Plan

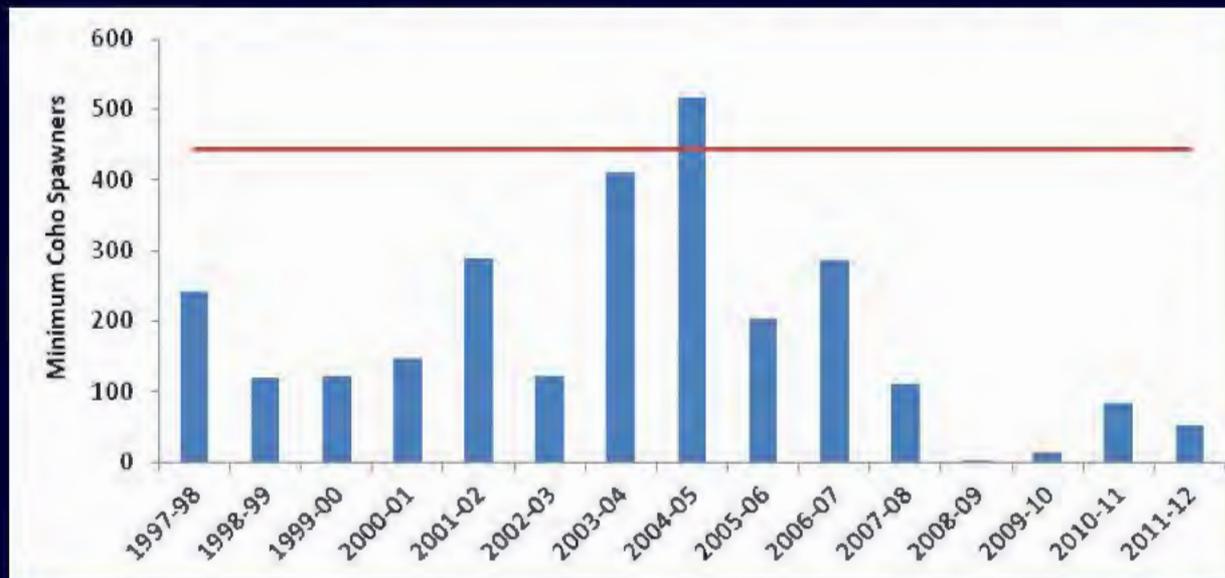
Data from Dr. Peter Moyle, UC Davis, 2009



Currently, coho salmon have a long way to recovery.

San Geronimo Valley ONLY

Target: 444 adult spawners (12-yr average) NMFS/SEP



*"The reports of my recovery have been
greatly exaggerated."*

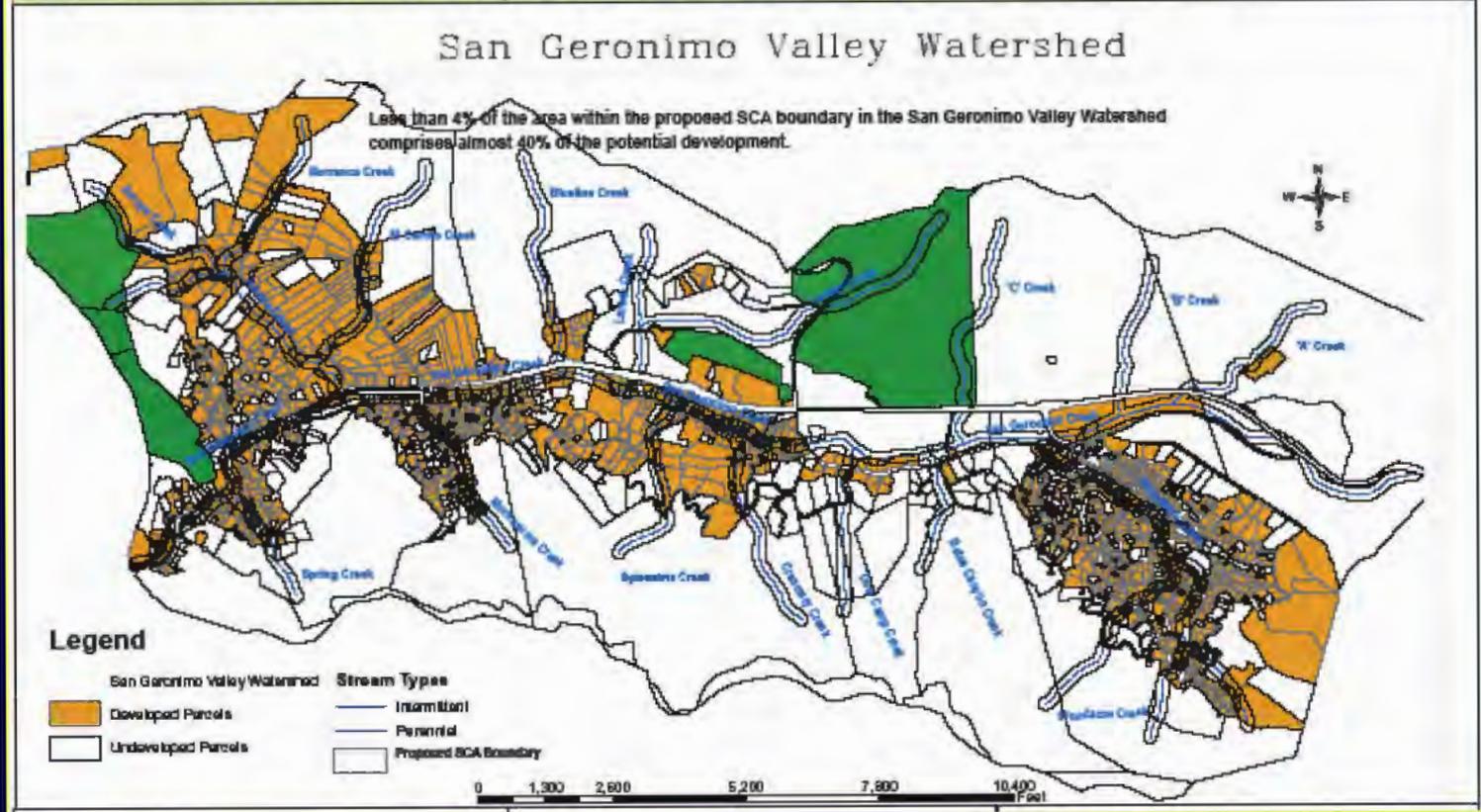
(modified from) Mark Twain

- Yes, Ocean Conditions Impact Yearly Variations in Populations Size

BUT

- When Population Reaches 10s-100s (as last several years), there is little to NO resilience to survive adverse natural conditions (ocean conditions, droughts, etc.)

How Will the Proposed SCA Affect Land Use?



- 1160 parcels in the 100 ft Stream Conservation Area
- 955 of the SCA parcels developed

A Strong SCA Ordinance Would Help Resolve Current Problems and Improve Property Values

- Flooding
- Creek Bank Failures
- Public Health
- Protect Endangered Salmon

Woodacre Creek • *Highly Impacted*



Issues with current Draft

- Development – no consideration of cumulative effects
- Increase in impervious surface
- No Mitigation of already impacted parcels
- Pollution
- Ephemeral Buffers

NMFS has ranked development in the SGV SCA as the highest threat to coho recovery.

| Lagunitas Creek Threats Across Targets | | Spawning Adults | Eggs | Summer Rearing Juveniles | Winter Rearing Juveniles | Smolts | Multiple Life Stages | | | Overall Threat Rank |
|--|--|-----------------|------|--------------------------|--------------------------|--------|----------------------|---|---|---------------------|
| Project-specific threats | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |
| 1 | Residential and Commercial Development | Medium | Low | High | High | Medium | Very High | | | High |
| 2 | Droughts | Medium | Low | High | Medium | Medium | Very High | | | High |
| 3 | Channel Modification | Medium | Low | Medium | High | Medium | High | | | High |
| 4 | Climate Change | Medium | Low | High | Medium | Medium | High | | | High |
| 5 | Roads and Railroads | Medium | Low | Medium | High | Medium | High | | | High |
| 6 | Water Diversion and Impoundment | Medium | Low | High | Medium | Medium | High | | | High |
| 7 | Livestock Farming and Ranching | Medium | Low | High | Medium | Medium | Medium | | | Medium |
| 8 | Agricultural Practices | Medium | Low | Medium | Medium | Medium | Medium | | | Medium |
| 9 | Fire and Fuel Management | Medium | Low | Medium | Medium | Medium | Medium | | | Medium |
| 10 | Logging and Wood Harvesting | Medium | Low | Medium | Medium | Medium | Medium | | | Medium |
| 11 | Recreational Areas and Activities | Medium | Low | Medium | Medium | Medium | Medium | | | Medium |
| 12 | Storms and Flooding | Medium | Low | Medium | Medium | Medium | Medium | | | Medium |
| 13 | Mining | Low | Low | Low | Medium | Low | - | | | Low |
| 14 | Hatcheries and Aquaculture | - | - | - | Low | Low | Low | | | Low |
| 15 | Disease, Predation, and Competition | Low | - | - | - | Low | - | | | Low |
| 16 | Fishing and Collecting | - | - | - | Low | Low | - | | | Low |
| Threat Status for Targets and Project | | High | Low | Very High | High | High | Very High | - | - | Very High |

Marin County's Salmon Enhancement Plan

- *“To support a naturally regenerating riparian forest and a sustainable source of large woody debris 100 feet or more is recommended by the scientific literature and by many other local and state governments for the conifer and hardwood riparian forests that naturally occur in San Geronimo Valley.”*

**“Modest” 500 sq ft additions to existing buildings.
... and an additional shed (120 sq ft)**

In San Geronimo Valley, 955 developed parcels @
620 sq ft is **592,100** sq ft.

- **Equivalent to two
Costco’s in the
SCA.**

CUMULATIVE EFFECT!



Modest Addition?

3 Car Garage In SCA of SG Creek and Arroyo Creek



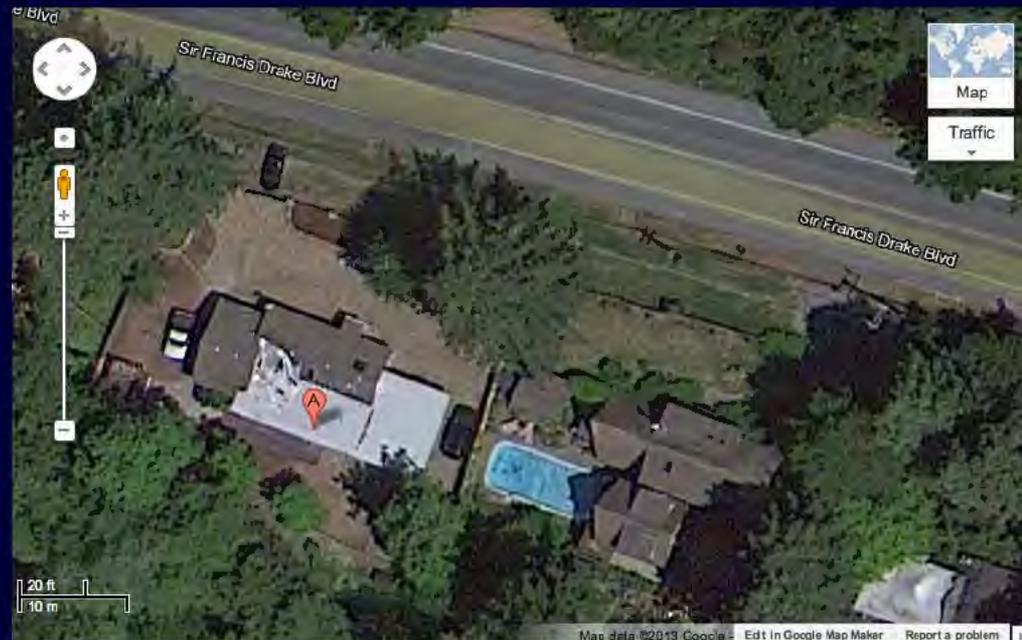
The SEP highlighted the threat of increase in impervious area

12% of the SCA area surveyed was covered with buildings, decks, pools, driveways, and other impervious structures—above the 10% percent imperviousness associated with decline in stream habitat quality (Center for Watershed Protection 1998).

Another 25% of the SCA area was in lawn, bare earth, and nonnative vegetation. The average riparian canopy width was 44 feet, and, in most cases, it ended abruptly with not even isolated riparian trees in the remaining width of the SCA, well below the proposed target of an 80-150 ft wide woody riparian zone with 75% cover.”

Current draft allows lawns to be replaced with buildings without mitigation.

While not equivalent to native riparian vegetation, lawns act as biofilters and mitigate flooding



Setbacks Prevent Flooding

The failure of prior stream protection Ordinances has resulted in flooding from improper setback and increase in impervious area that impacts:

- Private properties
- Public facilities
- Taxpayer dollars
- Endangered species

..... and likely to get worse
with climate change!



House Can Be Built Without Mitigation Because Riparian Vegetation Already Removed

*Undeveloped
"Cleared"
Parcel
Currently
"For Sale"*



“Rewarding” past poor practices, penalizing real stewardship

Unfortunately Most Parcels in SG Valley Have Already Removed Most Riparian Vegetation

--- Stillwater Sciences (2009) SGV Existing Conditions Report

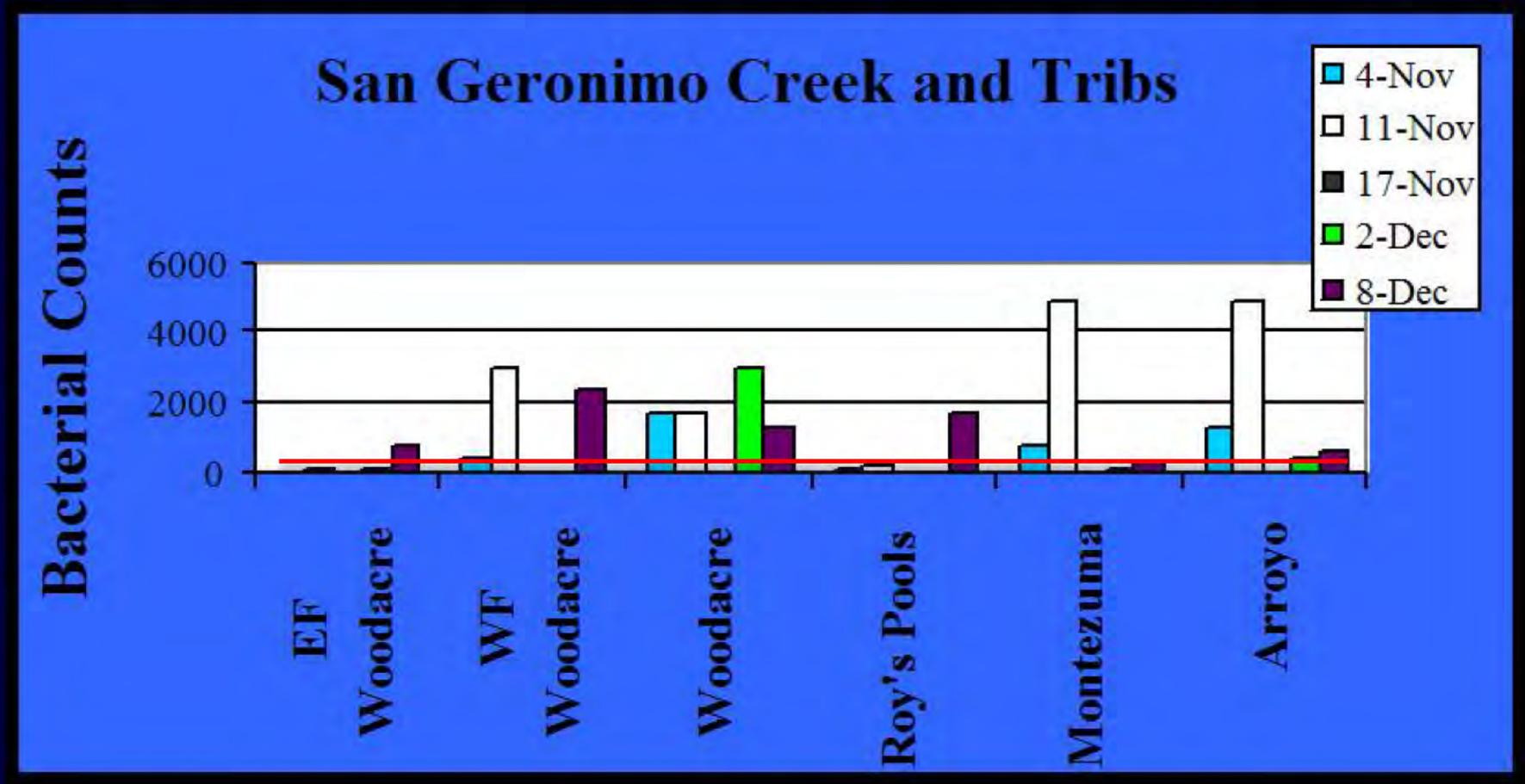
Ephemeral stream setbacks perform same functions as with perennial streams

Even when they are not flowing at the surface, key processes are going on underground



- Setbacks provide natural biofilters and prevent pollution
- They contribute to stream energy dissipation, stable banks and less erosion
- They reduce sediment loading when flow occurs

Lagunitas watershed is impaired for pathogens



The source is septic systems built too close to streams

Buffers Protect Public Health



Samuel P Taylor State Park.



- Riparian buffers are useful management tools to protect stream habitat from anthropogenic threats. Yet **to be most effective, buffers must extend along all streams**, including intermittent and ephemeral channels (Wenger & Fowler 2000).
- The effectiveness of a network of buffers is directly related to its extent; **governments that do not apply buffers to certain classes of streams should be aware that such exemptions reduce benefits substantially** (Wenger 1999).

SPAWN'S SCA Ordinance Goals

- Don't Repeat "Mistakes" of the Past ~100 yrs
 - Don't Blame Current Residents for Decades-old Past "Mistakes"
 - Create Real Incentives for "Managed Retreat" of Development in SCA*
 - Recover Endangered Salmon
 - Improve Property "Values"
- * US Coho Recovery Plan Action # LaC-A-23.2.1



An effective ordinance needs to:

- Be based on sound scientific data and strong public policy that provides incentives, rewarding residents for doing the right thing.
- Include mechanisms for conservation easements, and landowner education and assistance programs.
- Clearly identify what is allowed and what is not.
- Include adequate enforcement mechanisms to ensure compliance.

From: [Todd Steiner](#)
To: [Thorsen, Suzanne](#)
Cc: [Deborah A. Sivas](#); [Michael Graf](#); [Andy Harris](#)
Subject: EMAIL #5: 6/17/13Documents for the STREAM CONSERVATION AREA Administrative Record
Date: Monday, June 17, 2013 1:12:58 PM
Attachments: [op-ed 61613 Protecting our environmental legacy .pdf](#)
[ATT00001.htm](#)
[Spawn_IJ_12PG_SCEINTISTS Ad -FINAL \(PUBL JUNE 4, 2013\).pdf](#)
[ATT00002.htm](#)

Hi Suzanne,

I will be submitting a series of documents for the STREAM CONSERVATION AREA Administrative Record in advance of the Marin Supervisor hearing on the issue on June 18, 2013.

1. Marin Voice: Protecting our environmental legacy
http://www.marinij.com/opinion/ci_23464640/marin-voice-protecting-our-environmental-legacy

Marin Voice: Protecting our environmental legacy

By Todd Steiner and Alex Hearn Guest op-ed column

Posted: SUNDAY 06/16/2013 05:57:00 AM PDT

FOURTEEN YEARS AGO, Marin's Countywide Plan called for protecting streams and our iconic coho salmon.

Seven years ago, the county adopted a more environmentally conscious Countywide Plan, which recognized coho salmon's status as a federally listed endangered species, and called for no net loss of any additional streamside habitat.

While a general plan lays out the vision for the future, it must be followed by ordinances that implement and enforce this vision. Otherwise, it is worthless.

Fourteen years later, we are still waiting for an ordinance.

Limiting development near and protecting streamside habitat not only safeguards the magnificent coho salmon and steelhead trout, but it protects people too.

Flooding is already a problem in Marin. Scientists predict that global warming will cause worse, more frequent flooding here, so it only make sense for landowners (and society that shares the cost of disaster relief) to limit new development in harms way — like near streams. In the long run, protecting streamside habitat safeguards property and enhances property values.

Streamside buffers help protect human health. Samuel P. Taylor State Park now posts signs warning people to stay out of the Lagunitas Creek due to high fecal coliform levels.

The source of contamination is failing septic systems built near streams in the San Geronimo Valley.

Nonetheless, on any summer day you can see scores of kids splashing in the creek. Streamside buffers help to filter and keep water clean — another reason to expand well-vegetated adequate streamside setbacks.

Nine months ago, a Superior Court judge placed a temporary moratorium on all new development along streams in the San Geronimo Valley — until such time the county enacted a stream conservation ordinance — obliging it to act.

Unfortunately, in its haste to vacate the court-ordered moratorium, the county has produced a draft ordinance that doesn't prevent the loss of streamside habitat, and won't give coho salmon a fighting chance of survival.

Furthermore, it will neither protect property nor property values and has thus left scientists, environmentalists and property rights advocates all rejecting the current version.

Scientists have identified two major flaws in the current draft, and 140 have signed an open letter to Marin supervisors stating:
"Any development within 100-foot setback from creeks should be strongly discouraged. New development in this buffer that is allowed should require mitigation ..."

Furthermore, the letter criticizes the current draft's failure to adequately protect ephemeral streams.

Writing a good ordinance is not an easy task and should not be rushed. Passing an ordinance is also not about blaming current landowners for the societal mistakes of the past 150 years. The cost of correcting those mistakes should be shared by all Marin residents in order to protect the public trust and Marin's environmental legacy.

A good ordinance needs to be based on sound scientific data and strong public policy that provides incentives, rewarding residents for doing the right thing.

It should include mechanisms for conservation easements, and landowner education and assistance programs. It must clearly identify what is allowed and what is not. It needs adequate enforcement mechanisms to ensure compliance.

The current version does none of these things.

Passing a good ordinance will take courage, the kind Marin supervisors had nearly 40 years ago when they ended development along our ridgelines. At the time, many people were outraged, but years later almost everyone appreciates the wisdom in that controversial decision, and everyday Marin residents look up at our beautiful ridgelines with pride.

We ask Marin supervisors to reject the current version of the ordinance, and take the time to craft an effective, science-based ordinance that creates a comprehensive plan to protect Marin streams.

We ask for an ordinance that creates an environmental legacy that, 40 years from now, our children and grandchildren can say, it wasn't easy, but the past generation did the right thing — and that's why we can still enjoy watching coho salmon spawn in West Marin, as their kind has done for eons.

Todd Steiner is a wildlife biologist and executive director of the Turtle Island Restoration Network, an international environmental organization headquartered in Marin. The Salmon Protection and Watershed Network is a TIRN program. Alex Hearn is TIRN's conservation science director and a specialist in fish migration.

A CALL TO ACTION ON THE FATE OF MARIN COUNTY COHO SALMON AND CRITICAL STREAMSIDE HABITAT



A PROPOSAL BY LEADING SCIENTISTS TO INCREASE PROTECTIONS FOR THE ENDANGERED CENTRAL COAST CALIFORNIA COHO SALMON IN MARIN COUNTY, CA

WILD COHO SALMON POPULATIONS IN CALIFORNIA HAVE UNDERGONE A NINETY-PERCENT DECLINE SINCE THE 1940S. The causes of this decline, such as urbanization, dams, and logging operations are well known and documented. Central California Coast (CCC) coho salmon were listed by the US government as Threatened in 1997 and uplisted to Endangered status in 2005. The State of California listed the population north of San Francisco as endangered in 2002. In short, coho salmon are in danger of extinction throughout coastal California. Because of this, the Lagunitas Creek watershed is exceptionally important for its survival; it is one of the few watersheds that still supports a self-sustaining population of this iconic fish.

The Lagunitas Creek Watershed is listed as "critical habitat" for coho under the Endangered Species Act. As scientists concerned with the health and recovery of salmonid populations throughout California, we support increased habitat protections for coho in the Lagunitas Creek Watershed, which make up approximately 10-20 percent of the total current population of CCC coho salmon.

Lands in the lower reaches of the Lagunitas Creek watershed are relatively well protected (and include State Parks, National Parks and Recreation Areas, and County and Water District property) and maintain habitat values important to coho and other native species. But, 30-50 percent of spawning in the Lagunitas Creek Watershed occurs in the undammed headwaters of the tiny (10 square mile) San Geronimo Valley. Out-migration research has documented that as much of 1/3 of Lagunitas Creek coho rear in these headwater reaches annually.

Marin County's San Geronimo Valley Existing Conditions Report (2009), prepared by Stillwater Sciences as part of a Salmon Enhancement Plan, documented the percentage of impervious surface for seven reaches of Geronimo Creek at 7.3-20.8 percent, with four of the reaches exceeding 15 percent. Furthermore, this study conducted detailed analysis on 17 parcels and demonstrated the limited amount of riparian habitat currently extant in this watershed: ten parcels had no intact riparian habitat, four had a width of less than 22 feet, and the remaining three had a width of 30, 36 and 92 feet (summarized in Table A2.2 of the report). This data demonstrates the relatively high level of urbanization that already threatens the survival of coho here.

The San Geronimo Valley continues to urbanize with new housing development trending toward larger houses, and development on existing parcels expanding with building additions and additional loss of riparian habitat. This affects coho salmon survival because the juveniles need cold clear streams with lots of riparian trees and in-stream woody debris for

cover and minimal disturbance. Loss of current and potential riparian habitat and flood plains to development poses significant additional threats to the survival of coho here.

We appreciate that Marin County Supervisors are now considering a new Stream Conservation Ordinance. While the Marin County General Plan calls for no net loss of habitat, the current draft ordinance fails to come close to meeting this goal.

WE THE UNDERSIGNED, CALL ON MARIN COUNTY SUPERVISORS TO ENACT A STRONG ORDINANCE THAT INCLUDES THE FOLLOWING PROVISIONS THAT WILL HELP TO RESTORE COHO POPULATIONS:

1. Any development within the 100-foot setback from creeks should be strongly discouraged. New development in this buffer that is allowed should require mitigation if new structures or activities reduce the potential for rehabilitation of riparian habitat, even if it is currently disturbed by lawns, patios, etc. A 2:1 or higher mitigation ratio is recommended to improve on current conditions that already include a significant loss of riparian habitat.

2. Ephemeral Tributaries to Salmon Streams should be protected with a 100-foot setback. Presently, the draft ordinance only provides for the 100-foot setback if 100 feet of "continuous" riparian vegetation is present, basically exempting a large percentage of important habitat, thus decreasing stream habitat for juvenile coho. We see no scientific basis for limiting protection only to ephemeral streams with "100 feet of continuous riparian vegetation." A functioning network of ephemeral streams mitigates flooding and forms the headwaters without which mainstems could not support salmon.

We realize that these requested ordinances will inconvenience land-owners, but without them, development in the Geronimo Valley will likely lead to extirpation of coho salmon from the watershed, making the recovery of coho salmon in the Lagunitas Creek watershed increasingly problematical.

The result will be further decline of coho salmon in California. The recovery of coho salmon as a viable species in California will only happen as the result of many small positive actions on many streams, especially by landowners who have chosen to live in coho watersheds. The proposed ordinances will provide significant help to one of the most important coho populations left. We would like to see Marin County be a leader in coho salmon conservation, rather than just one more example of local government failing to protect local resources.

NEARLY 150 LEADING SCIENTISTS HAVE SIGNED THIS LETTER AS OF JUNE 1, INCLUDING:

PETER MOYLE, PHD, Professor, University of California at Davis*

JOHN MCCOSKER, PHD, Aquatic Ecologist

SYLVIA EARLE, PHD, National Geographic, Explorer-in-Residence*

STEVEN BEISSINGER, PHD, Professor, UC Berkeley*

KERRY NICHOLS, PHD, Postdoctoral Researcher, Stanford University*

BRUCE MACFARLANE, PHD, Research Fisheries Biologist [retired] UCSC*

VINCENT RESH, PHD, Professor, UC Berkeley*

ELEN HINES, PHD, Professor, Tiburon Center SFSU*

TIM DUANE, PHD, Professor Env Sciences, UC Santa Cruz*

LEO SALAS, PHD, Ecologist, PRBO Conservation Science*

JACOB KATZ, PHD, Director Salmon/Steelhead Initiatives, CalTrout*

DAVID DESANTE, PHD, President, Institute for Bird Populations*

SHAYE WOLF, PHD, Science Director, Center for Biological Diversity*

JON ROSENFELD, PHD, Conservation Biologist, The Bay Institute*

LANCE MORGAN, PHD, President, Marine Conservation Institute, CA*

JOHN KELLY, PHD, Director of Conservation Science, Audubon Canyon Ranch*

* Affiliations for identification purposes only.



www.spawnusa.org

Take Action Now! Visit www.spawnusa.org to send an email to Supervisors and help us save CA Coho Salmon from extinction.

From: [Todd Steiner](#)
To: [Thorsen, Suzanne](#)
Cc: [Deborah A. Sivas](#); [Michael Graf](#); [Andy Harris](#); [alex hearn](#); [Esmey Jimenez](#)
Subject: TWO MORE DOCUMENTS FOR BOARD: EMAIL #6: 6/17/13- Documents for the STREAM CONSERVATION AREA Administrative Record
Date: Monday, June 17, 2013 2:30:01 PM
Attachments: [Cover letter for petition.pdf](#)
[ATT00001.htm](#)
[Credo Coho Petition and Signatures .pdf](#)
[ATT00002.htm](#)

Hi Suzanne,

I forgot these two additional documents. Please acknowledge receipt of the attached following document:



PO Box 370 • Forest Knolls, CA 94933

P: 415.663.8590 • F: 415.663.9534

www.SeaTurtles.org • www.SpawnUSA.org • www.GotMercury.org

17 June 2013

TO: Marin County Supervisors

FR: SPAWN, a program of Turtle Island Restoration Network

RE: Attached Petition

Dear Supervisors,

The attached petition has been signed by over 2,000 individuals, showing local support in Marin County, as well as throughout the nation for a strong, effective, science-based ordinance to protect the habitat of critically endangered Central California Coast Coho Salmon.

Approximately ½ the signatories are from Marin County. These have been arranged by regions and zip code to facilitate identifying residents in your district.

The attached list was collected in the past 6 days. Please note the petition is still open and additional signatories are being added. We will provide you with additional signatories in the near future.

On behalf of all the signatories, we appreciate your consideration.

SAVE CALIFORNIA'S ENDANGERED COHO SALMON!

17 June 2013

TO: MARIN COUNTY BOARD OF SUPERVISORS

I urge you to strengthen Marin's proposed Streamside Conservation Area Ordinance to ensure protections for the critically endangered coho salmon that reside in the County's streams, and to expand their chances for recovery to sustainable population levels.

Why is this important?

Coho salmon are already critically endangered, but a new stream ordinance coming up for a vote in the next few weeks could bring them even closer to extinction.

The largest, most important population of this species resides in Marin County, CA. But as currently written, the new stream ordinance promotes real estate development without requiring any meaningful mitigation measures to protect this iconic endangered species. In fact, instead of supporting salmon restoration, it likely makes their survival more tenuous.

While Central California Coho salmon have disappeared from streams spanning their historic range, the San Geronimo Watershed supports one of the strongest remaining populations of this species of anywhere in California. Despite the need to protect this vital area, the proposed rules will allow more than 500,000 square feet of new development (the equivalent of two WalMart stores) inside the so-called 100-foot Stream Conservation Area on developed parcels within the tiny ten square miles of

the San Geronimo Watershed alone. To make matters worse, the ordinance also allows more than another 500,000 sq ft of new construction on undeveloped parcels.

The annual spawning runs of Marin's coho salmon have already dwindled by 90% of historic levels. A strong science-based stream ordinance may be the last chance to save this legacy species from what federal biologists have termed "an extinction vortex."

We can't continue to promote real estate development without considering how we can support and restore our important population of coho salmon before it's too late. We must take action now.

Sign my petition and let the Marin County Board of Supervisors know we want them to write an improved SCA ordinance that protects Marin County's critically endangered coho salmon from further habitat loss.

| First Name | Last Name | ZIP Code | Address |
|--|------------------|-----------------|---|
| South Marin: Sausalito, Mill Valley, Tiburon, and Belvedere. | | | |
| andy | harris | 94920 | Tiburon CA |
| Lorraine | Schneider | 94920 | 654 Hilary Dr Tiburon |
| rex | ranklyn | 94920 | 146 stewart dr tiburon |
| Karen | Nygren | 94920 | 22 Paseo Mirasol |
| Justine | Moody | 94920 | Bayshorr |
| Marjorie | McMorris | 94920 | Tiburon |
| Judith | Wilson | 94920 | 25 Rancho Drive |
| Michael | Jenkins | 94920 | PO Box 378 |
| Doug | Salzmann | 94920 | 122 Marinero Circle |
| Sally | Shannon | 94920 | 167 blackfield dr. |
| m. | canter | 94920 | 781 |
| RJ | Cavanagh | 94920 | 246 Cecilia way |
| Shawn | Lester | 94920 | tiburon |
| karen | rasmussen | 94920 | PO Box 1123, Bev Tiburon |
| Colleen | Mullin | 94920 | 57 Mercury Ave. |
| Lisa | Krausz | 94920 | 2211 mar east, tiburon, ca |
| susan | tracy | 94941 | Mill Valley, CA |
| Margaret | Schlachter | 94941 | 67 millay place |
| ingrid | woods | 94941 | 190 Ethel Avenue |
| annika | miller | 94941 | 25 buena vista |
| jennifer | petray | 94941 | 300 Monte Vista Ave. |
| Roberta E. | Newman | 94941 | 655 miller ave mill valley |
| Len | Pullan | 94941 | 331 Laurel Way |
| Kim | Maynard | 94941 | 12 Lomita Drive |
| Eileen | Siedman | 94941 | Mill Valley |
| Joanne | Williams | 94941 | 372 richardson way |
| Ann | Spake | 94941 | 604 Amaranth Blvd |
| Barbara | Bogard | 94941 | 40 Camino Alto |
| J | Deem | 94941 | 816 Chamberlain Ct. |
| Mitchell | Nemeth | 94941 | 300 Monte Vista Avenue, Mill Valley, CA |
| Warren | Gold | 94941 | 20 Sunnyside avenue, A274 |
| elizabeth | forster | 94941 | 654 Northern Avenue |
| Christina | Wyle | 94941 | 30 Ashford Ave |
| Sarah | Kass | 94941 | gg |
| t | d | 94941 | 28 Gomez Way |
| Madelaine | M | 94941 | 316 H Miller Ave |
| deborah | sciales | 94941 | 151gteenwood way |
| Barbara | Wilson | 94941 | 310 Marin Avenue |

| | | | |
|-----------|------------|-------|---|
| Jennifer | Lawson | 94941 | 17 Nelson Ave |
| Paul | Leonard | 94941 | 787 Miller Avenue |
| Carl | Bidleman | 94941 | 80 Rowan Way, Mill Valley,
CA |
| NAOMI | NEWMAN | 94941 | 550 Ralston Avenue |
| Caroline | Robinson | 94941 | 424 MARIN AVE |
| Jennifer | Helfrich | 94941 | Mill Valley |
| Lynne | Frame | 94941 | 20 Edgehill Rd |
| Kathy | Armbruster | 94941 | 53 Shell Rd |
| Mario | Barrios | 94941 | 20 Edgehill Road |
| Bruce | Armbruster | 94941 | 508 Pixie Trail |
| Nejat | Duzgunes | 94941 | 310 Tennessee Ave |
| Julie | Nicholas | 94941 | 336 Ethel Ave |
| Elizabeth | Jackson | 94941 | 26 Millside Lane |
| Monique | Winkler | 94941 | 60 Circle Ave. |
| Ruth | Downing | 94941 | 163 Tam Ave |
| Paul | A | 94941 | 175 Marguerite Ave, Mill
Valley CA |
| Ronna | Reed | 94941 | 20 Sunnyside Ave. #161 |
| jerry | frohmadar | 94941 | 38 Sunrise Ave |
| Paul | ONeil | 94941 | 114 Hazel Ave. |
| Abigail | Burton | 94941 | 113 Ricardo Rd. |
| Christina | Huggins | 94941 | 303 LaVerne Ave |
| Rae Ann | Gustafson | 94941 | 360 Jean Street |
| Arne | Leon | 94941 | 268 Lovell, Mill Valley |
| Richard | Jett | 94941 | 710 Cabin Drive |
| Tiffany | Rasmussen | 94941 | 651 Eastwood Way |
| charlotte | sanders | 94941 | 844 Chamberlain Ct. |
| Diane | Kaercher | 94941 | 400 Alta Vista Ave |
| Karen | Kieckhefer | 94941 | 655 Redwood Hwy., Ste. 255 |
| Mark | Swoiskin | 94941 | 2 Eucalyptus Knolls St |
| Eva | Libien | 94941 | 125-D Seminary Drive |
| Ronald | Skorupa | 94941 | 363 vbista linda |
| joseph | yarnell | 94941 | 1219 W. California Ave. |
| Pamela L. | Ashley | 94941 | 16 Sunrise Ave. |
| Stephen | Bogoff | 94941 | 12 Stanton way |
| carol | fraker | 94941 | 4 Carolyn Court |
| Clytee | Mills | 94941 | 70 Mirabel Avenue |
| Tristan | Celayeta | 94941 | 4105 Shelter Bay |
| Gillian | Wilkerson | 94941 | 7 Somerset Lane |
| Judy | Lichterman | 94941 | Mill valley |
| Darla | Farr | 94941 | 311 Miller Avenue Suite F,
Mill Valley, CA 94941 |

| | | | |
|--------------------|---------------|-------|------------------------------------|
| Terry | Grant | 94941 | 775 E. Blithedale Ave, PMB
225 |
| Dale | Komai | 94941 | 759 Marin Drive |
| Ann Sabra | Valdick | 94941 | 115 Shoreline Hwy |
| Honey | Green | 94941 | 16 Vasco Drive |
| Debbie | Friedman | 94941 | 530 Shoreline Hwy |
| Lori | Robinson | 94941 | 48 Hill St. |
| KIt | Everts | 94941 | p o box 834 |
| barbara | wornum | 94941 | 17 Plymouth Ave., Mill Valley |
| Jack | Bartlett | 94941 | 30 Ashford av |
| Gary | Klehr | 94941 | 775 E Blithedale Mill Valley
CA |
| Elanor | Cherier | 94941 | 18 Egret Way |
| Timothy | Green | 94941 | 40 Camino Alto, Mill Valley |
| Ronnie | Gilbert | 94941 | 700 Miller Ave. |
| Darla | Deme | 94941 | 1 Cottage Ave., Mill Valley,
CA |
| Patricia
Elaine | Mason | 94941 | 35 MILLER AVE. #221 |
| LOUIS | A YUVAN
IV | 94941 | 30 Hamilton Lane |
| Reed | Trencher | 94941 | 9 Maxwell Lane |
| Greg | Thomson | 94941 | 6 east dr |
| Liz | Dunkel | 94941 | 23 Lomita Drive, Mill Valley |
| Catherine | Moreno | 94941 | 215 Gibson Ave, Mill Valley,
CA |
| David | Robinett | 94941 | 9 Compton Circle |
| Anne | Connolly | 94941 | 54 Meadow Dr. |
| Alex | Grande | 94941 | 35 bay vista |
| Lauren | Ramsey | 94941 | 420 Median Way |
| Brendan | Murphy | 94941 | 100 Lovell ave |
| Ari | Burnham | 94941 | Miller ave |
| Sahar | Masud | 94941 | 3 stanton way, mill valley |
| Joel | Yanowitz | 94941 | 240 redwood mill valley ca |
| jane | chamberlin | 94941 | 358 Carrera Dr |
| Richard | Stewart | 94941 | 515 Lovell ave |
| Peggy | Rosen | 94941 | 14 Overhill rd |
| Francoise | Rothstein | 94941 | 280 lorin |
| mrs melissa | polick | 94941 | 119 Evergreen Avenue |
| Brian | Donohue | 94941 | 125 Eucalyptus Knoll |
| Madeleine | Bogdanov | 94941 | 816 Chamberlain Ct. |
| Susan | Stanger | 94941 | 64 Longfellow Road |
| Joan | Beavin | 94941 | 344 East Strawberry Drive |
| April | Starke | 94941 | 563 E. Blithedale,MV.CA |

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|-------------|-------------|-------|--------------------------------------|
| Stephen | Gregoire | 94941 | 38 miller ave. #535 |
| maria | muldaur | 94941 | 20 Fern way |
| Pamela | Herz | 94941 | 70 longfellow road |
| david | sulciner | 94941 | 5106 Shelter Bay Ave |
| Susan | Ruskin | 94941 | 102 Locust, Mill Valley CA |
| Judd | Williams | 94941 | 161 Marlin Ave. |
| Maxime | Perrey | 94941 | 374 ridgewood ave mill valley |
| Tristan | Conway | 94941 | 69 Marlin Ave |
| Nona | Dennis | 94941 | 530Ethel Ave |
| Robert | Chambers | 94941 | 80 monte CIMAS, Mill Valley |
| Roger | CRUMLEY | 94941 | 64 Valley Cir |
| Terry | Strauss | 94941 | 86 Lovell ave |
| Peter | ingram hill | 94942 | PO Box 1112 |
| Mary | Rezaian | 94942 | PO Box 201 |
| David | Yusem | 94942 | po box 630 |
| helen | salyers | 94965 | 152 Buchanan Ct. |
| Michael | Lyon | 94965 | 1709 bridgeway |
| McAllister | | | |
| mary | crowley | 94965 | 91 santa rosa ave. |
| joel | rudick | 94965 | 610 coloma |
| gary | ferber | 94965 | 215 Caledonia street |
| Joy | Turrini | 94965 | Sausalito |
| Susan | Head | 94965 | 3020 Bridgeway #297
Sausalito, Ca |
| Andr © | Cond © | 94965 | 1707 Bridgeway, Sausalito |
| Guy | | | |
| julie | Warren | 94965 | 15 Issaquah Dock |
| alison | johnston | 94965 | Box 454 |
| Elizabeth | Brawley | 94965 | 122 Santa Rosa |
| Marty | Krasney | 94965 | 87 Luncon |
| Michael | Cullen | 94965 | 609 Nevada Street |
| stephen | feinstein | 94965 | 309 4th Street |
| Mary | Naples | 94965 | 1413 Bridgeway |
| Stephen | Ward | 94965 | 769 Bridgeway |
| Marcy | Roth | 94965 | 7 Excelsior lane |
| Zohreh | Noorian | 94965 | Sausalito |
| James | Irving | 94965 | 10 A Dock |
| andy | rossi | 94965 | 256 Donahue St. |
| Philip | Quadrini | 94965 | 270 Currey Lane |
| Morgan | Pierce | 94965 | 543 sausalito |
| Jill | Miller | 94965 | 501 Bridgeway |
| christopher | banks | 94965 | Headlands Ct |
| David | R | 94965 | 5 Marion Ave. |

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|-----------|------------|-------|--------------------------------------|
| Curt | Wells | 94965 | 9 Yellow Ferry Dock |
| Wm Carey | Chenoweth | 94965 | 100 Locust St |
| Patricia | Hamilton | 94965 | 4 south forty pier |
| hillair | bell | 94965 | 139 Lincoln Dr |
| John | DuPerry | 94965 | Sausalito, CA |
| Evan Jane | Kriss | 94965 | 32 Arana circle |
| Marjorie | Creazzi | 94965 | 268 Donahue Street |
| Vivian | Lambert | 94965 | Muir Beach, CA |
| Gail | Falls | 94965 | 3020 Bridgeway |
| Marcia | Salmond | 94965 | 1601 Shoreline Hey |
| Deirdre | Carrigan | 94965 | 5 Marion Ave |
| Christine | Zecca | 94965 | 45 sunset way |
| lonna | richmond | 94965 | 11 Liberty Dock |
| Marti | Roush | 94965 | 172 San Carlos Ave. Sausalito,
CA |
| Patricia | Oneil | 94965 | 254 Woodward Avene |
| Adrianna | Dinihanian | 94965 | 58 Cloud View Rd |
| carla | berman | 94965 | 38 ross road |
| tavares | | | |
| Neil | Illiano | 94965 | 1601 Shoreline Highway |
| Qayyum | Johnson | 94965 | 1601 Shoreline Hwy |
| Lauren | Bouyea | 94965 | 300 Napa St. |
| gary | king | 94965 | 247 Gate Five Rd. |
| John | Shuey | 94965 | 403 Napa St, Sausalito |
| Susan | Sternau | 94965 | 261 Eden Roc |
| Maureen | Manley | 94965 | 21 Glen Ct. |
| Marisa | Nelson | 94965 | 243 San Carlos Avenue |
| Elise | Acosta | 94965 | Bayvista Cir |
| Ben | Panger | 94966 | po box 2407 |
| Peggy | hilden | 94966 | P. O. Box 1267 |
| Peter | Avildsen | 94966 | pob 1232 |
| Nini | White | 94966 | po 2598 |
| thomas | macey | | |

Central Marin: Corte Madera, San Quentin, Greenbrae, Larkspur,
Kentfield, Ross, San Anselmo, Fairfax, and San Rafael

| | | | |
|--------|-----------|-------|-------------------------|
| Katy | Biddle | 94901 | 8 Willow St. San Rafael |
| Dotty | LeMieux | 94901 | 4 Elford Street |
| Sharon | Barnett | 94901 | 4 Elford Street |
| Kevin | Stockmann | 94901 | 1566 4th st |
| elvis | johnson | 94901 | 41 Martens Blvd |

9
4
9 20 Green Way
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| | | | |
|-------------|-------------|-------|--------------------------------------|
| Melissa | Benson | 94901 | 155 Canal St. |
| Maeve | Murphy | 94901 | 26 Narragansett Cove |
| Alex | Vollmer | 94901 | 417 Woodland Ave. |
| Anne | Barker | 94901 | villa ave |
| John | Leydecker | 94901 | 78 Marina Blvd. |
| Sharon | McCarthy | 94901 | Third St |
| Deborah | Burckhardt | 94901 | ... |
| Nat | Vose | 94901 | 15 Briarwood Dr. |
| Jerry | Greenstein | 94901 | 1761 Lincoln Ave. |
| Renee | Baldocchi | 94901 | 1825 Lincoln Ave. |
| Sarah | Estes-Smith | 94901 | 515 D St., Apt 5, San Rafael,
CA, |
| Judi | Naue | 94901 | 204 Greenfield Ave. |
| Porter | Merriman | 94901 | 83 Bayo Vista Way |
| Christopher | Panny | 94901 | 236 Center |
| Kamila | Harkavy | 94901 | 369B Third St. #408 |
| David | Pittle | 94901 | 490 Canal Street |
| Marianne | Owens | 94901 | 35 Fairfax #29 - San Rafael
CA |
| Will | Boemer | 94901 | 19 Latham St. |
| Candace | Yoshida | 94901 | 516 Canal St #7 |
| Rebecca | Mauch | 94901 | 74 southern heights blvd |
| Aija | Karlsons | 94901 | 526 5th Ave. |
| Rebecca | Irwin | 94901 | STE 205 1101 5TH AVE |
| Ray | Gallo | 94901 | 418 Mission Ave. |
| John | Proctor | 94901 | 71 Bayo Vista Way, San
Rafael |
| James | Haig | 94901 | 103 Marin Street |
| Richard | Whittaker | 94901 | 1600 3rd St. #311 |
| Diana | Rushfeldt | 94901 | 83 chula vista drive |
| Helen | Bacon | 94901 | 424 Woodland Ave. |
| Suzanne | Nathans | 94901 | 6 B |
| Suzanne | Pinto | 94901 | 33 Marquard Ave |
| Michele | Rumsey | 94901 | 40 Clorinda Ave |
| Tamara | Bolinger | 94901 | 0 |
| Susan | bradford | 94901 | 16 Estates Ct, San Rafael |
| Matthew | Montfort | 94901 | 2118 5th ave |
| Liz | Gottlieb | 94901 | 31 Corte Mesa, San Rafael,
CA |
| Jarrold | Holt | 94901 | 5 Dolores St. |
| Scott | Jensen | 94901 | 16 Sirard Lane |
| Lisa | Chipkin | 94901 | 7 Espalda Ct |
| Michael | Dayton | 94901 | 123 Nantucket CV. |

| | | | |
|-----------|-----------|-------|---|
| william | Elsma | 94901 | 1606 3rd St, San Rafael, CA |
| June | Caminiti | 94901 | 55 Briarwood drive |
| Fred | Modugno | 94901 | Prospect |
| Neal | Cordova | 94901 | Porto Bello Drive |
| Sjoukje | Dekker | 94901 | 55 Culloden Park |
| Chris | Stanton | 94901 | 100 Bayo Vista Way, #12, San Rafael, CA |
| William | Schooling | 94901 | 340 Coleman dr San Rafael |
| Sue | Orloff | 94901 | 2258 5th ave |
| Miranda | Mallard | 94901 | 1841 2nd Street |
| Todd | Spina | 94901 | 40 Tampa Dr |
| David | Osinga | 94901 | 125 Knollwood Dr |
| Jared | Babula | 94901 | 47 Longwood Drive |
| Melissa | Linzer | 94901 | 73 Meadow Ave. |
| Russell | Thorp | 94901 | 40 Elizabeth Way |
| Christina | Bradley | 94901 | 119 woodland ave. |
| Barb | Evans | 94901 | Laurel Place |
| Roger | Stoll | 94901 | 165 solano st |
| hugh | clark | 94901 | 302 4thStreet Apt 227 San Rafael |
| Linda | Swaab | 94901 | 18 Latham St |
| Adrienne | Gyurcsik | 94901 | 20 Millwood Court |
| Rebecca | Haskell | 94901 | 124 Hillside Avenue |
| Iana | Jones | 94901 | 1135 grand ave 16, |
| John | Stanley | 94901 | 22 Valencia Ave |
| Susannah | Peskin | 94901 | 225 First St |
| Linda | Mitchell | 94901 | san rafael ave |
| barbara a | fess | 94901 | 453 Bret Harte Road |
| Cherie | Herzog | 94901 | 98 Jewell St San Rafael |
| Maureen | Bragdon | 94901 | 47 Bret Harte Ln. |
| Devon | Paoli | 94901 | 2146 Fifth Ave, San Rafael, Ca |
| sundara | jordan | 94901 | 1533 4th St, Apt. 5 |
| John | Berkenpas | 94901 | 15 Tilden Circle |
| Christine | McMasters | 94901 | 83 Billou Street, San Rafael |
| Elaine | Mont-Eton | 94901 | 29 narragansett cove |
| joanie | ciardelli | 94901 | 157 San Marino Dr |
| Diana | McBride | 94901 | 324 Coleman Dr., San Rafael, CA |
| Adam | schneider | 94901 | 9 gilbert street |
| tara | Endress | 94901 | 18 Rollingwood Dr. |
| Bernard | Offen | 94901 | 3 partridge dr |
| dolores | heeb | 94901 | 11 Meyer RD |
| will | noble | 94901 | 20 Greenwood Ave. |

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|----------------|------------------|-------|--------------------------------|----------------------|
| Esther | Kligman-Frey | 94901 | 323 California ave | |
| Katherine | Joiner | 94901 | 95 Convent Court | |
| Patricia | Dinkelspiel | 94901 | 118 AUBURN ST. SAN RAFAEL | |
| ELLIOT | ATLAS | 94901 | 1322 Lincoln Ave. | |
| Deborah | Peifer | 94901 | 9 F St. | |
| Michael | Talbot | 94901 | 5A Lovrll Ave. | |
| James | Marc | 94901 | 39 Estates Court | |
| Patricia | Shelley | 94901 | 14 willow street san rafael | |
| edmund | zimmerman | 94901 | 51 Woods Street | |
| Lisa | Gerick | 94901 | 68 Maywood Way, San Rafael, CA | |
| Joanne | Smaciarz | 94901 | 2450 5th Ave. | |
| Katlyn | Stranger | 94901 | 138 Mission Ave, San Rafael CA | |
| Sharon | Skolnick-Bagnoli | 94901 | | 54
CONVEN
T CT |
| Mark | Ederer | 94901 | 201d street | |
| Emanuela | Gay | 94903 | 1946 Las Gallinas, San Rafael | |
| Frank | Cox | 94903 | 33 San Pablo ave | |
| Cynthia | Decker | 94903 | 899 Northgate | |
| Kerry | Stanwyck | 94903 | 736 Tamarack Drive | |
| Anne-Christine | Strugnell | 94903 | 1601 Lucas Valley Rd | |
| Lori | Tompkins | 94903 | 120 N Redwood Dr | |
| Christine | Bassett | 94903 | 35 Mt Muir Ct | |
| Janice | Peterson | 94903 | 81 Mt. Rainier Dr. | |
| Greg | Killmaster | 94903 | 103 garden ave. | |
| Linda | Boccia | 94903 | 550 blackberry San Rafael | |
| Herve | Glon | 94903 | 63 Vendola Drive | |
| Sara | Gordon | 94903 | 335 North San Pedro Road | |
| Robin | VanTassell | 94903 | 1111 Idylberry Rd. | |
| Betty | Jordan | 94903 | 111 Waterford Terrace | |
| Stephen | Hollingsworth | 94903 | 200 Deer Valley Road Apt. 2G | |
| Marcine | Johnson | 94903 | 123 SURREY LANE | |
| JOAN | PETERSON | 94903 | 17 wellbrock hts | |
| Henry N | Hulter | 94903 | 1036 Los Gamos Rd | |
| Krupa | Shah | 94903 | 4 Linda Ave | |
| Patrice | Villars | 94903 | 1036 Los Gamos Rd | |
| David | Souza | 94903 | 455 Blackstone Drive | |

| | | | | |
|---------------|----------------|-------|---|--------------------|
| Lisa | Pena | 94903 | 910 adrian way san rafael ca | |
| L | Steese | 94903 | 219 Yosemite Rd, San Rafael,
CA | |
| Felix | Braendel | 94903 | 62 Lucas Park Dr | |
| John | Sames | 94903 | 46 Mt. Muir Ct. | |
| Susan | Berlin | 94903 | San Rafael | |
| Anne | Oklan | 94903 | 637 KERNBERRY DRIVE | |
| LOUIS J | PAINTER | 94903 | 110 Garden Avenue | |
| Kay | Tiemann | 94903 | 221 Mt. Shasta Drive | |
| Ellis | Nyerere Coyne | 94903 | | 67 Grande
Paseo |
| Courtney | Fischer | 94903 | 804 Rincon Way | |
| James | Calibjo | 94903 | 815 Appleberry Dr. | |
| John | Conley | 94903 | 30 Summerhill Way | |
| Susan | Kerstein | 94903 | 348 hickory lane | |
| judith | reichart | 94903 | Jeannette Prandi Way | |
| Ardella | Nathanael | 94903 | 574 Woodbine Drive | |
| Paul | Burks | 94903 | 11 Mount Darwin Court | |
| Lauren | Turner | 94903 | 1875 2nd Street | |
| Kate | Hedlund | 94903 | San Rafael | |
| Jeff | Grey | 94903 | 10 J. Prandi Way #1003 | |
| Barbara | Rozen | 94903 | 385 Las Colindas Rd | |
| Colin | Green | 94903 | 251 channing way #3 | |
| john | thies | 94903 | 613 Kernberry Drive | |
| Harry | Jackson | 94903 | 1289 Idylberry Road | |
| Claire | McDowell | 94903 | 1068A Los Gamos Road | |
| Barry | Taranto | 94903 | 1000 Bayhills Dr | |
| Dennis | Dougherty | 94903 | 613 kernberry drive | |
| margaret | jackson | 94903 | 165 Esmeyer Drive | |
| Marianne | Shaw | 94903 | 340 acadia lane | |
| shunko | jamvold | 94903 | 171 Merrydale Rd. #15 | |
| John | Potter | 94903 | 576 Wisteria Way | |
| Gwen | Sarandrea | 94903 | 195 Nova Albion Way #39 | |
| William | Callahan | 94903 | 684 Woodbine Drive | |
| Dana | Snyder | 94903 | 1200 Idylberry, San Rafael,
CA 94903 | |
| Joy | Dahlgren | 94903 | 10 Jeannette Prandi Way | |
| Gail | MacMillan | 94903 | 55 Forest Lane | |
| Mary | Poor | 94903 | 62 Lucas Park Drive | |
| Claudia | Sames | 94903 | 6 Edgehill Way | |
| John | Montgomer
y | 94903 | 1060 g Los gamos | |
| Anne
Marie | Lebas | 94903 | 757 Beechnut Ct | |

| | | | |
|----------|------------|-------|--|
| Justin | Barnett | 94903 | 221 Roundtree Way |
| Kris | Montgomery | 94903 | 170 Yosemite RD |
| Genevera | Wells | 94903 | 147 Golden Hinde Blvd. |
| Virginia | Mann | 94903 | 10 Jeannette Prandi Way |
| Carole | Landes | 94903 | 420 Peachstone Terrace |
| Duane | Johnson | 94903 | 1000 Bayhills Drive |
| Heather | Bowker | 94903 | 901 Appleberry Drive |
| carol | haagens | 94903 | 114 Birch Way |
| Terry | Young | 94904 | 7 Russell Ave |
| BERta | McDonnell | 94904 | 1133 S. Eliseo Dr. |
| Rebekah | Laros | 94904 | 32 Toussin |
| Bob | Rosenberg | 94904 | 10 Corte Solano |
| Laleh | Talebpour | 94904 | 76 |
| ucTina | Subar | 94904 | 76 Lucky Dr |
| Paul | Subar | 94904 | 336 bon air center |
| nancy | lamb | 94904 | 123 Kent Ave, Kentfield |
| Sarah | Thomson | 94904 | 19A Stadium Way |
| Kenneth | Ring | 94904 | 151 Murray Ave, Kentfield, CA |
| Diane | Wrona | 94904 | 28 Bretano Way |
| Mae | Stadler | 94904 | 1118 Sir Francis Drake Bd.,
#307, Kentfield, CA |
| Britt | Strader | 94904 | 65 Berens Dr/ Kentfield, CA |
| Scott | Merrick | 94904 | 235 laurel Grove avenue |
| Gilbert | smith | 94904 | 28 fern rd, Kentfield |
| jan | salas | 94904 | 655 S. Eliseo Dr |
| susan | olson | 94904 | 24 Corte Oriental, Greenbrae,
CA |
| Bill | Lindner | 94904 | 367 via casitas |
| marta | larue | 94904 | 27 Gregory Place |
| william | Davey | 94904 | 588S Eliseo #24 greenbrae, Ca. |
| Linda | Medeiros | 94904 | 43 Briar Road |
| Terrie | Burns | 94904 | 115 stetson ave |
| patricia | klein | 94904 | 32 Toussin Ave. |
| Vesela | Simic | 94904 | 129 Greenbrae Boardwalk,
Greenbrae |
| Martha | Jarocki | 94912 | po box 3517 |
| peter | garner | 94912 | PO Box 11821, San Rafael,
CA |
| Larry | Boggs | 94913 | Sugawa |
| Tal | Kinnersly | 94913 | POB 4282 San Rafael CA |
| Laura88 | Suen | 94913 | p o box 4190, San Rafael |
| charles | falk | 94915 | PO box 150525 |
| Judith | Gottesman | 94915 | PO Box 150297 |

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|-------------|-----------|-------|--|
| Elizabeth | Curtis | 94915 | PO Box 150458 |
| Wencil | Storek | 94915 | PO Box 150601 |
| L | Brown | 94925 | 145 Town Center #662, Corte Madera |
| Sophie | de Vries | 94925 | 22 Mariner Green Drive |
| Samantha | Kannry | 94925 | 181 Birch Ave |
| Rita | Emami | 94925 | 7 Willow Ave. |
| Jody | Kaylor | 94925 | 10 Westward Dr. |
| Janet | Sherwood | 94925 | 3 Simon Ranch Road |
| Dave | Thibodeau | 94925 | 31 Mohawk Ave Corte Madera CA |
| Douglas | Kelley | 94925 | 18 Diamond Head Psge |
| Sandra | Steele | 94925 | 145 Town Center |
| Bonnie | Burkart | 94925 | 33 Wildflower Dr. Corte Madera |
| Martha | DeCamp | 94925 | 142 Mariner Green Ctd. |
| Petra C. H. | Gammer | 94925 | 3 Alta Terrace, Corte Madera, CA 94925 |
| Barry | Cohen | 94925 | 5643 Paradise Drive |
| Paula | Capocchi | 94925 | 150 Mariner Green Ct. |
| Charlotte | Hjellum | 94925 | Corte Madera |
| David | Hyams | 94925 | 13 Mohawk Ave, Corte Madera |
| Oliver | Osborn | 94925 | 5 Cay Passage |
| Erika | Karandy | 94925 | 247 Chapman Drive |
| Molly | Maloney | 94925 | 17 Echo Avenue |
| James | Ervin | 94925 | 777 MEADOWSWEET DT |
| CARLA | DAVIS | 94925 | 350 Redwood Avenue |
| Sandra | Massen | 94925 | 22 spindrift passage |
| Jen | Terry | 94925 | 31 Mohawk Ave |
| Emily | McFarland | 94925 | 41 parkview circle |
| Gabby | Ronick | 94925 | 45 Golden Hind Passage |
| Deanne | Morton | 94930 | 136 SCENIC RD |
| STEVEN | LYONS | 94930 | 136 scenic road |
| oona | lyons | 94930 | 457 Scenic Rd., Fairfax, Ca. |
| Scott | Richter | 94930 | 64 Bothin Rd, Fairfax |
| Dede | Teeler | 94930 | 136 SCENIC RD |
| MARCIA | STIEGER | 94930 | Fairfax |
| Gary | Leo | 94930 | 2575 Sir Francis Drake Blvd #44 |
| Karene | Schelert | 94930 | 31 arcagnel |
| charles | kuhn | 94930 | 96 Gregory dr |
| David | Egert | 94930 | 285 Scenic Road |
| Sheilagh | Creighton | 94930 | 9 Iron Springs Road, Fairfax, |

CA

| | | | |
|----------|-----------------|-------|--|
| Jennifer | Hammond | 94930 | 33 Meernaa Ave. |
| Peter | Burchard | 94930 | 499 Oak Manor Drive |
| Suzanna | Sterling | 94930 | 30 valley rd fairfax |
| gary | york | 94930 | 106 manpr |
| golda | michelson | 94930 | 341 Bolinas Rd |
| Brian | Hiatt | 94930 | 111 Forrest Avenue |
| Lele | Diamond | 94930 | 48 Redwood road, Fairfax |
| Bruce | Macgowan | 94930 | 46 Sequoia Road |
| Sandy | Adler
Killen | 94930 | 20 Scenic Rd. |
| TRUE | Heitz | 94930 | 359 Cascade Drive |
| Michael | Rosenthal | 94930 | 422. Bolinas Road |
| Sandra | Handsher | 94930 | 10 Banchemo Way |
| LEE | GARRETT | 94930 | 10 Banchemo Way, Fairfax CA |
| Richard | Rogler | 94930 | 336 Forrest Ave, Fairfax, CA |
| Gina | Farr | 94930 | 351 Olema Rd. Apt. 5, Fairfax,
CA |
| Hayley | Bubb | 94930 | 12 Ace Ct |
| Susanne | Chaney | 94930 | 18 Juniper Court |
| Alan | Cumings | 94930 | 402 scenic rd |
| matt | Macdonald | 94930 | 78 Toyon Dr, Fairfax CA |
| Lauren | Sandusky | 94930 | 2525 sir francis drake |
| Deborah | Peri | 94930 | 34a Scenic Rd |
| Clay | HOWard | 94930 | 769 Center Blvd, #54 |
| Mark | Gronke | 94930 | 86 laura lane fairfax Ca |
| michael | wilkerson | 94930 | 2901a Sir Francis Drake Blvd.
Fairfax, CA |
| Carol | Gold | 94930 | Bolinas Road |
| DH | Higgins | 94930 | 70 Manor Rd. |
| Sarah | Steen | 94930 | 69 Taylor dr. |
| Rene | Verduin | 94930 | 143a Dominga |
| Clive | Julianus | 94930 | 410 Bolinas Road, Fairfax, CA |
| John | Hauf | 94930 | 275 Bolinas Road |
| Terrence | Higgins | 94930 | 3Scenic Rd |
| Karen | Ecklund | 94930 | 23 Broadway |
| Iseult | Jordan | 94930 | 165 Pine Dr |
| Barry | Sless | 94930 | 233 Hillside DR |
| Fred | Hurvich | 94930 | 28 Buena Vista |
| Jan | sarvis | 94930 | 19 claus drive, fairfax |
| peter | anderson | 94930 | 180 Meernaa Ave. |
| Heather | Crawford | 94930 | 108 Dominga Avenue |
| MinJae | Laws | 94930 | 18 Mitchell Drive |

| | | | | |
|-----------|------------|-------|--------------------------------------|--|
| Carol | McRae | 94930 | 65 maple ave. | |
| Debbie | Duenas | 94930 | 7 Meadow Way, Fairfax, CA | |
| Alexander | Binik | 94930 | 89 spring lane fairfax, ca | |
| Geoffrey | Cutler | 94930 | 367A Forrest Ave.. Fairfax | |
| Dennis | Rivers | 94930 | 41 azalea | |
| McCoy | Dodsworth | 94939 | 40 Locust Avenue #6 | |
| Karsson | Hevia | 94939 | 40 Ardmore Rd. | |
| Eileen | Murray | 94939 | 10 Skylark Dr | |
| Louis | Smith | 94939 | 82 Madrone Ave. | |
| Frank | Gold | 94939 | 34 Milalrd Road, Larkspur | |
| Pamela | Feinsilber | 94939 | 965 Magnolia Ave #14 | |
| Susan | Baron | 94939 | 2100 Lincoln Village Circle | |
| Peggi | Printz | 94939 | 965 Magnolia Ave #25 | |
| Kathy | Kelly | 94939 | 89 Magnolia Ave | |
| julie | schmidt | 94939 | 79 Frances Ave | |
| Raymond | Katz | 94939 | 186 Larkspur Plaza Drive | |
| Chris | Malo | 94939 | 247 Wilson Way Larkspur CA | |
| Lois | Patton | 94939 | 505 Magnolia Ave. #25 | |
| Pauline | Sugarman | 94939 | 20 Liberty Street | |
| Jill | Rea | 94939 | Piedmont Rd larkspur | |
| Liz | Wozniak | 94957 | 8 East Road | |
| nancy | dunlop | 94960 | 219 The Alameda | |
| Taylor | Tan | 94960 | 26 berlin ave san anselmo ca | |
| Marilu | Stuart | 94960 | 18 Oak Springs Drive | |
| Kathleen | Ames | 94960 | 76 Woodside Drive | |
| Sue | Hansen | 94960 | 1507 Sir Francis Drake Blvd | |
| Megan | Leach | 94960 | 40 Ross Ave | |
| Francis | Snyder | 94960 | 300 Fawn Drive | |
| Robert | Percy | 94960 | 76 Woodside Dr | |
| KATHRYN | GALLAGHER | 94960 | 45 Crest road | |
| Gonzalo | Azcona | 94960 | 85 Broadmoor Avenue | |
| M. | Evans | 94960 | 68 Madrone Ave. | |
| Marti | Joyce | 94960 | 119 Laurel Avenue | |
| Nancy | Cicchetti | 94960 | 70 Berkeley Ave | |
| Wayne | Broadbent | 94960 | 1306 San Anselmo Ave | |
| Judith | Anderson | 94960 | Fawn Drive | |
| Jenais | Zarlin | 94960 | 32A Terrace Ave. | |
| Rebecca | Douglass | 94960 | 170 Oak springs dr | |
| ilene | malt | 94960 | 50 Oakwood Ave. | |
| Maryann | Camilleri | 94960 | 138 Tunstead Ave #4, San Anselmo, CA | |
| Lisa | Neumaier | 94960 | 1500 Butterfield Road | |

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|-----------|-------------|-------|------------------------------------|
| Roberta | Wombacher | 94960 | 154 Jordan Ave. |
| Emese | Wood | 94960 | 31 Rutherford, San Anselmo |
| Steve | Wahle | 94960 | 20 Holstein Road |
| Loris | Scagliarini | 94960 | 21 Oak Ave. |
| Carol | Luther | 94960 | 35 Sunny Hills Dr. Apt. #18 |
| Sofia | Killion | 94960 | 221 The Alameda |
| Lisa | Zure | 94960 | 52 Cordone Drive |
| Vera | Grigorian | 94960 | 26 carolina ave |
| paul | whiting | 94960 | 36 Humboldt Ave |
| Jennifer | Goheen | 94960 | 15 Alderney Rd |
| Rene | Voss | 94960 | 27 Foss Ave., San Anselmo |
| Joan | Basopre | 94960 | 29 Mather Rd |
| christa | Ortman | 94960 | 89 Bolinas Ave |
| Seth | Kaufman | 94960 | 417 laurel ave |
| kathleen | jackson | 94960 | 12 AUSTIN AVE |
| marita | mayer | 94960 | 219 butterfield rd |
| Catherine | Loudis | 94960 | 17 Waverly Rd., San Anselmo
CA |
| Julie | Love | 94960 | 425 Center Blvd. |
| Robert | Cook | 94960 | 462 Laurel Ave. |
| Katherine | Poppy | 94960 | 1628 San Anselmo Ave. |
| Annette | Pirrone | 94960 | 6 Medway Road |
| Sandra | Soklin | 94960 | 308 Laurel Ave, San Anselmo,
CA |
| Robin | Jacobson | 94960 | 100 Summit Rd. |
| Jon | Culbertson | 94960 | 24 Fern Lane |
| Peter | Brastow | 94960 | 111 Sacramento Ave |
| Anne | Cotta | 94960 | belle ave |
| tonatiuh | beltran | 94960 | 65 Sais Ave |
| Quintilia | Cesaretti | 94960 | 70 Allyn Avenue |
| Barbara | Dwyer | 94960 | 26 Martling Drive |
| Phil | Crumley | 94960 | San Anselmo |
| Stephen | Killion | 94960 | 35 Sunny Hills |
| Gabe | Killion | 94960 | 38 Savannah Ave |
| Maria | Thayer | 94960 | 19 Library Place |
| Kathryn | Terlicher | 94960 | 15 camino de herrera |
| erin | duggan | 94964 | po box 460 |
| Mary Ann | Finger | 94964 | PO Box 393 |
| Meg | Brizzolara | 94976 | p.o. box 32 |
| thunder | redwomin | 94977 | Larkspur |
| Camilla | Fox | 94977 | po 1152 |
| L | Rawlins | 94977 | P.O. Box 686 |
| Patricia | McCain | 94978 | PO Box 1112 |

| | | | |
|---------|-----------|-------|---------------------------------|
| Wendy | Botwin | 94978 | po box 1035 |
| Janet | Lott | 94978 | P.O. BOX 273 |
| SARAH | SPECTOR | 94978 | p o box 969 |
| linda | novy | 94979 | box 265 |
| Zoe | Harris | 94979 | PO Box 332 |
| Louis | Brouillet | 94979 | PO BOx 483 |
| Maureen | Groper | 94979 | P.O. Box 2243 |
| Janene | Frahm | 94979 | PO Box 81 |
| Larry | Lapuyade | 94979 | PO Box 2026, San Anselmo,
CA |
| Lisa | Roth | | |

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9 84 San Domin
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North Marin: Novato as well as areas of San Rafael

| | | | |
|-----------|-----------------|-------|---------------------------------------|
| Todd | Zwiaska | 94945 | 9 Driftwood Ave |
| Kelsey | Baker | 94945 | 80 Clausing Court |
| LaDonna | Dorsey | 94945 | 1201 Vallejo Ave #4
Novato, Ca |
| Lois | Wilson | 94945 | 468 Estado Wy |
| Barbara | Benane | 94945 | 150 San Carlos Way |
| Thomas | Ray | 94945 | 25 Lotus Ct |
| Mario | Mere | 94945 | 1849 Virginia Ave |
| Maureen | Scheuenst
hl | 94945 | 1028 4th St. Novato |
| Marvin | Burke | 94945 | 2073 hawthorne terrace |
| linda | rubin | 94945 | 2239 Laguna Vista Dr.,
Novato, Ca. |
| Dr. Robin | Bentel | 94945 | 2 Robinhood Dr |
| Michael | Clyman | 94945 | 195 San Luis Way |
| Gilbert | Hom | 94945 | Westwood Dr. |
| Dallas | DeKeyrel | 94945 | 2 Adobe Court, Novato, CA |
| Maija | Schaefer | 94945 | 30 Driftwood Avenue |
| Steve | Dolan | 94945 | Black Point |
| Russell | Lichter | 94945 | 1036 6th Street #3 Novato CA |
| Terrence | Staton | 94945 | 1143 East Court, Novato, CA |
| Judy | Swann | 94945 | 37 nunes dr |
| valerie | robbins | 94945 | 21 San Carlos way |
| Remy | Hennessee | 94945 | 73 San Felipe Way |
| Charles | Page | 94945 | 228 Seagull Row, Novato |
| Gary | Diedrichs | 94945 | 2509 Laguna vista |
| Linda | Sroa | 94945 | 1167 McClelland Drive,
Novato |

| | | | |
|-------------|------------------|-------|----------------------------|
| Scott | Kelly | 94945 | 55 Samrose Drive |
| Janice | Cumming | 94945 | 440 Wood Hollow Dr, Novato |
| Joan | Rentsch | 94945 | 228 Seagull Row |
| Peggy | Diedrichs | 94945 | 250 San Felipe Way |
| robert | Raven | 94945 | 2024 FelizRD |
| Carole | Eade | 94947 | 16 Stasia Dr |
| Michael | Colosimo | 94947 | 1509 S. Novato Blvd. #28 |
| Robert | Minekheim | 94947 | 31 lakeview ct |
| Mike | Cass | 94947 | 1931 Novato Blvd |
| Lynne | Halgren | 94947 | 848 diablo ave #8 |
| jan | mosgofian | 94947 | 8 Renata Court |
| Christopher | Coulon | 94947 | 6 Almond Ct. |
| Burt | Greenspan | 94947 | 633 Tamalpais |
| will | gorenfeld | 94947 | 31 lasen |
| Meg | Tierney | 94947 | 39 Aries Lane |
| Mary | Nicolini | 94947 | 14 Taft Court |
| Brian | Campopian
o | 94947 | 1237 L:ynwood Dr. |
| Sher | Lander | 94947 | 2 Balra Dr. |
| Georgia | Kahn | 94947 | 111c Oliva ct. |
| John | Hammond | 94947 | 1190 Leafwood Hts., Novato |
| Susan | Nielsen | 94947 | 2187 center road |
| michele | andrade | 94947 | 35 Oliva Dr, Novato |
| Joyce | Powicki | 94947 | 770 Plaza Amapola |
| Joann | Gayou | 94947 | 2552 Center Rd |
| Jill | Gregoire | 94947 | 72 Holstrom circle |
| Jay | Rice | 94947 | 1299 Parkwood Drive |
| Gail | Giacomini | 94947 | 5 Betty Lane Novato |
| Katharine | Cagney | 94947 | 11 Madeline Court |
| Howard | Blackstone | 94947 | 11 Madeline Court |
| Cathie | Blackstone | 94947 | 39 Aires Ln |
| Emilio | Ghergo | 94947 | 164 Wild Horse Valley Rd. |
| John | McQuade | 94947 | Pastel Lane |
| Skot | McDaniel | 94947 | 216 Village Circle |
| Linda | Brosh | 94947 | 23Sequoia Glen Lane |
| Barbara | Matas | 94947 | 45 hickox rd Novato, ca |
| Drew | Fernandez | 94947 | 1970 Indian Valley Rd. |
| E.J | Pearcy | 94947 | 13 Hayes St. |
| Bob | Williams | 94947 | 620 Arthur St. |
| Jane | Savage | 94947 | 25 D Oliva Drive |
| kate | gallagher | 94947 | 3 Joan Ave |
| Mary | F.
Ballantyne | 94947 | 126 Wild Horse Valley Dr. |

| | | | |
|------------|------------------|-------|------------------------------|
| Michael | Paccassi | 94947 | 25 arroyo lane |
| Lillian | Hanahan | 94947 | 6 Tenaya Lane |
| Stephanie | Tsingos | 94947 | 3 Syosset Ln. |
| Kay | Spitler | 94947 | 875 Tamalpais Ave. #2 |
| Kathy Lou | Kronenberg
er | 94947 | 32 Ranchview rd., Novato |
| D. | Tryon | 94947 | 1000 Cabro Ridge |
| Mary Earle | Chase | 94947 | 912 sunnybrae ln |
| anna | zullo | 94947 | 15 Joan ave, novato |
| Jonathan | Cook | 94947 | 318 Silvio Lane |
| Maggie | Rufo | 94947 | 773 syunlane, novato,ca. |
| brian | mattson | 94947 | 32 Oakview |
| Catherine | lidl | 94947 | novato boulevard |
| angela | jones | 94948 | PO Box 1634 |
| David | Freiberg | 94948 | PO Box 1206 |
| Dr. Susan | Zipp | 94949 | 196 martin dr |
| madeline | rose | 94949 | 6 duarte ct |
| hillary | davis | 94949 | 8 Dove Place |
| Cory | Chamberlai
n | 94949 | 50 Cavalla Cay |
| Natalie | Shamash | 94949 | 50 Cavalla Cay |
| Elias | Shamash | 94949 | 334 Ignacio Valley Cir. |
| Diane | Bolman | 94949 | 4 Fallen Leaf Way |
| Gail | Camhi | 94949 | 17 burdell court |
| kerry | gillett | 94949 | 32 Montego Key |
| Susan | ODonnell | 94949 | 125 Cielo Lane, #206 |
| Barbara | Drago | 94949 | 130 Redhawk Rd |
| Stephen | Feaster | 94949 | 164 Caribe Isle |
| Maxine | Litwak | 94949 | 199 marin valley drive |
| carole | gathman | 94949 | 125 Cielo LN |
| Tara | Rueping | 94949 | 562 bolling cir |
| vicky | waters | 94949 | 179 Marin Valley Dr |
| Brendan | Gallagher | 94949 | 1070 Calle Paseo Novato, CA |
| Tim | Churchill | 94949 | 250 Bel Marin Keys Blvd. |
| Lenore | Cantrell | 94949 | 1001 green oak dr #11 |
| Dave | Skavland | 94949 | 225 Montego Key |
| Erin | Greenwell | 94949 | 23 Serra Ct |
| Amanda | Meecham | 94949 | 626 Owens Dr |
| Joyce | Larsen | 94949 | 228 montura way, novato, CA |
| sheryl | braum | 94949 | 4 Cielo Lane #2E Novato |
| Lindsay | Murphy | 94949 | 1005 Green Oak Drive, Apt 33 |
| Leonard | Robel | 94949 | 228 montura way |
| thomas | braum | 94949 | 9 Josefa Court, Novato CA |

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|----------|----------|-------|------------------------------|
| Richard | Puaoi | 94949 | 4 West Barberry Place |
| Linda | Riedel | 94949 | Novato |
| Michael | Edridge | 94949 | 1146 highland Dr. Novato Ca. |
| Carol | Wise- | | |
| Wise- | Littrell | | |
| Littrell | | | |

West Marin: San Geronimo, Woodacre, Pt. Reyes Station, Stinson Beach, Bolinas, Nicasio, Lagunitas, Marshall, Olema, Forest Knolls, and Tomales

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9 p.o box 276
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|----------|------------------|-------|---------------------------------|--|
| vicki | heiner | 94924 | 5 terrace Bolinas ca | |
| Michael | Pinkham | 94924 | 510 Dogwood Rd | |
| Nina | Bellak | 94924 | Po Box 936 | |
| Jeff | Labovitz | 94924 | PO Box 411 | |
| Roger P | Kovach | 94924 | P.O. Box 915 | |
| Robert | Levitt | 94924 | 215 juniper rd. | |
| Heather | Clapp | 94924 | Box 177 Bolinas Ca | |
| mark | fraser | 94924 | P.O. Box 274 | |
| kathy | bustamante | 94924 | PO Box 911 | |
| Laura | Angel | 94924 | PO Box 262 | |
| Howard | Dillon | 94924 | PoBox 437 | |
| Cynthia | Wood | 94924 | 710 horseshoehill rd | |
| keith | evans | 94924 | Box 306 | |
| Merwin | Mace | 94924 | PO box 685 | |
| Chuck | Oakander | 94924 | 284 larch rd | |
| mark | butler | 94933 | POB 370 | |
| Todd | Steiner | 94933 | po box 400 | |
| serenoa | steiner | 94933 | PO 537 | |
| coby | kislik | 94933 | 6740 sir Francis drake blvd | |
| Nathan | Pringle-Dressler | 94933 | PO Box 103 | |
| Megan | Isadore | 94933 | PO Box 428 | |
| sally | Beauford | 94933 | PO box 400 | |
| Oscar | Steiner | 94933 | Forest Knolls | |
| Lynette | McLamb | 94933 | PO Box 805 Forest Knolls, CA | |
| Alex | Hughes | 94933 | PO Box 486 | |
| Ron | Davis | 94933 | Box 741 | |
| Phil | Nott | 94933 | 295 Resaca | |
| Michelle | Eaton | 94933 | 1 Forest Drive | |
| Pamela | McNeeley | 94933 | PO 537 | |
| p | kislik | 94933 | PO 537 | |
| J | Ganeles | 94933 | 17 Aztec Ave. Forest Knolls, Ca | |

| | | | | |
|-------------|---------------|-------|---|-----------------------------------|
| Sarah | Mullen | 94933 | POB 561 Forest Knolls, CA | |
| Louis | Vega | 94933 | 30 montezuma Forest knolls | |
| Faye | coddington | 94933 | P.O.Box 285 | |
| Dennis | St.Pierre | 94933 | 3 forest, forest knolls | |
| JoeBob | Beauford | 94933 | 21 morelos ave. | |
| fred | mundy | 94933 | 205 Tamal Road | |
| Paul | Berensmeier | 94933 | Box 351, Forest Knolls | |
| Bettina | Spooner-Whyte | 94933 | | po box 786
forest
knolls CA |
| charles | scull | 94933 | 3 Vista Ave. | |
| Jill | Gibson | 94937 | Inverness | |
| Paola | Bouley | 94937 | 245 Drakes View Drive,
Inverness, CA | |
| Paul | Chapman | 94937 | 260 Drakes View Drive,
Inverness | |
| Russell | Ridge | 94937 | PO Box 647, Inverness CA | |
| Jane | Bell | 94937 | PO Box 1194, Inverness, CA | |
| James | Goetz | 94937 | 510 Via de la Vista, Inverness | |
| Carlos | Porrata | 94937 | 12691 S F Drake, Inverness,
CA | |
| paul | coopersmith | 94937 | 12845 Sir Francis Drake blvd | |
| Jayne | Cerny | 94937 | P.O. Box 552 | |
| carol | whitnah | 94937 | PO Box 471 | |
| Diane | Hanson | 94937 | P O Box 126, Inverness, CA | |
| Judy | Prokupek | 94937 | 34 Drakes Summit Road | |
| Kenneth | Bouley | 94938 | 7410 Sir Francis Drake Blvd | |
| Stephanie | Hernandez | 94938 | 85 East Cintura Avenue | |
| Matt | Firpo | 94938 | P.O. Box 379 | |
| Leslie | Gleason | 94938 | 100 Alta Ave. | |
| Jean | Berensmeier | 94938 | PO Box 12 | |
| iris | shields | 94938 | Pobox 299 | |
| S | F | 94938 | 40 Rodeo Aver | |
| Phil | Arnot | 94938 | PO Box 145 Lagunitas, CA | |
| Karina | Grasso | 94938 | 160 lagunitas ave | |
| alan | lubow | 94940 | 18050 Shoreline Hwy | |
| Linda | Emme | 94950 | PO Box 113 | |
| Christopher | Lish | 94950 | P.O. Box 52 | |
| Tom | Rider | 94956 | PO Box 788 | |
| Bernie | Stephan | 94956 | 11270 Sir Francis Drake Blvd.,
Point Reyes Station | |

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|----------|------------------|-------|---|
| Barry | Deutsch | 94956 | 64 Knob Hill Rd. |
| Michael | Mery | 94956 | 10 Tomasini Canyon Rd |
| Chris | Pincetich | 94956 | POB 839, Point Reyes CA |
| Jules | Evens | 94956 | 12340 Sir Francis Drake Blvd #
A |
| HUNTER | WALLOF | 94956 | PO Box 398, Pt. Reyes Station |
| Vicki | Leeds | 94956 | p o box 157 |
| hathaway | Barry | 94956 | P.O. Box 1264 Point Reyes
Station |
| KorÃ© | D'Abbravane
l | 94956 | po 133 |
| robin | white | 94956 | Bx 28 |
| Nancy | Stein | 94956 | P.O. Box 523 |
| Joanna | McDonnell | 94956 | P.O. Box 1408 |
| Jerry | Hudgins | 94956 | 12400 Sir Francis Bacon Blvd. |
| Kim | Pollak | 94956 | PO Box 463, Pt. Reyes Station |
| Jeffry | Wilkinson | 94956 | P.O. Box 1023 Point Reyes
Station CA |
| Anne | Viale | 94956 | PO Box 237 |
| Peter | Barnes | 94956 | 11965 Highway 1 |
| Toni | Littlejohn | 94956 | Box 344 |
| Tim | Stanton | 94956 | PO Box 344, Point Reyes
Station |
| Sherry | Stanton | 94963 | 6251 Sir Francis Drake Blvd. |
| Cheryl | Fromholzer | 94963 | p.o. box 471 |
| wiliam | teufel md | 94963 | 1 Tamarack Road, Box 88 |
| W | Bassetti | 94963 | PO Box 377 |
| Elena | Belsky | 94970 | Stinson Beach |
| John T | Andrews | 94970 | po box 442 |
| todd | hicks | 94970 | PO Box 423, Stinson Beach,
CA |
| Yoshi | Fukamiya | 94970 | po box 1053 |
| LUCINDA | BRISBAN
E | 94971 | PO Box 375, Tomales |
| Miriam | Landman | 94971 | 3600 Tomales Road Tomales
CA |
| Lynne | Forester | 94971 | 27075 hwy1 box127 tomales |
| louise | gregg | 94973 | 46 Conifer Way |
| Esmy | Jimenez | 94973 | PO Box 276, Woodacre, CA |
| Beth | Huning | 94973 | PO Box 880; Woodacre, CA |
| Erica | Heimberg | 94973 | po box 272 |
| Richard | Sloan | 94973 | 49 Castle Rock Ave Woodacre |
| Caroline | Warner | 94973 | p.o. box 963 |
| christin | anderson | 94973 | PO Box 470, Wooacre, CA |

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|-----------|-----------|-------|-----------------------------------|
| Kay | Ospital | 94973 | P.O. Box 917 |
| Nathaniel | Draper | 94973 | po box 972 |
| Roseann | Dal Bello | 94973 | PO Box 528 |
| Samuel | Trillo | 94973 | POB 636 |
| John | Sullivan | 94973 | 7 Maple Road |
| Mary | Andersen | 94973 | 7 Maple Rd |
| Lindsey | Andersen | 94973 | PO Box 214 |
| Bea | Benjamin | 94973 | PO Box 373 |
| Beth | Baker | 94973 | 289 Redwood Drive Woodacre |
| Adi | Girroi | 94973 | 38 Crescent Dive, P.O. Box
917 |
| Duncan | Draper | 94973 | 5 Crescent Drive |
| Dean | Hanson | 94973 | P.O. Box 961 Woodacre, Ca |
| Joseph | Weber | 94973 | po box 884 woodacre, Ca. |
| patrick | fontenot | 94973 | 8 maple rd |
| christian | friedrich | 94973 | PO Box 785 |
| Sarah | Wright | 94973 | 38 Crescent Dr., Woodacre,
CA |
| Benjamin | Draper | 94973 | 175 Tamal Rd |
| Al | Baylacq | 94973 | 108 Central Avenue |
| Rachel | Humphrey | 94973 | box 122 |
| b | edwards | 94973 | 53 Madrone Avenue |
| Devin | Wilson | | |

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|------------|------------|-------|--------------------------------------|
| Ariel | Zucker | 94117 | 2090 grove street 6 san
francisco |
| blaine | vossler | 97045 | 18037 Newell Ridge Drive |
| Jeffrey | St Clair | 95620 | 211 S 8th St, Dixon, CA |
| Alex | Hearn | 95476 | 515 Hopkins St. |
| Teri | Shore | 98105 | 4213 5th ave NE |
| Lily | mireles | 8520 | 37 shadowstone ln |
| Pooja | Srivastava | 94611 | 3033 Richmond Boulevard |
| Robijn | van Giesen | 63108 | 3821 Lindell Blvd. |
| Zoe | Myers | 94110 | 45 powers ave |
| becky | bond | 94965 | 152 Buchanan Ct. |
| Michael | Lyon | 94611 | 3033 Richmond Boulevard |
| McAllister | | | |
| Ivy | Young | 18974 | 415 JuniperStreet |

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|-----------|-----------|------------|---------------------------------------|
| Charles | Sweeney | 95017 | POB 324 |
| Wallace J | Nichols | 97221 | portland oregon |
| eliz | knight | 69168 | Beethovenstraase 8 |
| Yee Ping | Fruehwein | 94122 | 3433 Lincoln Way |
| victoria | vasquez | 99350 | P.O Box 1290 |
| Odalys | Lopez | 77552 | PO Box 16186 |
| Kimberly | Reich | 97209 | 401 NW 18th Ave |
| Kessina | Lee | 94024 | 1255 sandalwood ln |
| Madeline | McKenna | 94965 | 1709 bridgeway |
| mary | crowley | 30341 | 3001 Northeast Expy NE |
| Evan | Padgett | 92252 | 7234 Demesne Rd. |
| Chris | Clarke | 94806 | 2703 18th St, San Pablo |
| Rita | Xavier | 94122 | 1450 35th Ave, SF, CA |
| Andrew | Kornblatt | 95427 | P.O. Box 297 |
| April | Dice | 95472 | Sebastopol |
| Anita | Smith | 92084 | 190 Paseo Del Arquero |
| Ron | Dudek | 96816 | 2822 Peter street |
| Anna | Piianaia | 92037 | 7791 starlight dr |
| Gage | Lambert | 95531 | 2510 Hwy. 199 Space 13 |
| Thomas | Behel | 94954-1545 | 116 Verde Court |
| Jeanne | Slominski | 10704 | 42 Lindsey st |
| Judith | Dronzek | 10000 | Costa Rica |
| Ignacio | PÃ©rez | 60655 | 453453 |
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| Mitchel | Efler | 90042 | 127 1/2 S. Avenue 54, Los Angeles, CA |
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| Alicia | Previn | 94061 | 1240 Woodside Rd Apt 27 |
| Robert | Mulroy | 77550 | 1214 15th St. |
| Virginia | Schmahl | 78731 | 7512 Stepdown Cove |
| Charlotte | Vick | 21212 | 6003 Sycamore Rd |
| Eric | Neffke | 20636 | 25353 McIntosh Rd.
Hollywood, MD |
| Alexander | Wyvill | 94402 | bay area |
| Sue | Garfield | 95043 | 32615 Panoche Road |
| Kim | Williams | 94062 | 470 Las Pulgas Drive,
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| Donna | Howe | 20850 | 605 Ivy League Lane |
| Marc | Strumpf | 95476 | 772 Ernest Drive |
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| Marc | Ward | 77009 | 939 1/2 Byrne Street, Houston,
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| Deirdre | Ryan | 92252 | PO Box 425 |
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| Janine | Cianciolo | 61761 | 1823 Taft Dr |
| Karen | Biddle | 32250 | 1822 1st St N, Jacksonville
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| Jennifer | Perez | 77054 | 8519 Hearth Dr |
| Bea | Killian | 95616 | 1708 haussler drive |
| Billy | Tu | 94114 | 3690 21st st |
| Gina | Sanfilippo | 90046 | 8328 livingston way |
| chris | younG | 94705 | 2625 Alcatraz Avenue |
| Deb | Castellana | 29582 | 3601 burris |
| shirley | harrell | 90019 | 1718 s. Longwood ave. Los
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| Ray | Fernandez | 6226 | Willimantic,CT |
| Pat | Calvo | 90065 | 3395 1/2 Cazador Court, Los
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| Robert | Reichman | 92024 | 1995 Fairlee Dr. |
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| Harold | Hedelman | 94110 | 1240 Valencia St., San
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| David | Tomb | 94044 | 10 Sea Breeze Court |
| John | McManus | 94952 | 121 F St., Petaluma, CA |
| Aaron | Fairbrook | 94502 | 2 Avondale |
| Melinda | Barnes | 94596 | 1365 Creekside Dr. #429 |
| Erin | Barca | 20860 | 1900 Olney-Sandy Spring Rd. |
| Hanna | Grieb | 95051 | 678 Bancroft St. |
| Karen | Locke | 94952 | 75 Purrington Road |
| Carol | Overman | 94109 | 2040 Franklin st |
| Eben | Marsh | 92252 | 7786 Elwood St. |
| James | Simpson | 94952 | 762 Cherry St. Petaluma, CA |
| Anne | Wegener | 94523 | 569 Maureen Lane |
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| Irene | Gargallo | 53716 | 5706 Tonyawatha Trail |
| Judy | Zabriskie | 85739 | 37577 S Skyline Dr |
| Kathy | Coffman | 14127 | 35 hemlock hill road,orchard park 14127 |
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| Scott | wolland | 80234 | 930 W. 133rd Circle |
| Tamara | Glover | 10021 | 201 east 75th street |
| lisa | ouaknine | 80203 | 228 Pearl Street |
| Kaki | Flynn | 93903 | 151 Deepstone Dr. |
| Zoe | Rolland | 95949 | 17069 Vintage Drive |
| Bill | Jacobson | 7043 | 480 Valley Rd. #C-10 |
| Steve | Elber | 95472 | 5911 lone pine rd. Sebastopol, ca |
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| Juliet | Lamont | 94602 | 2302 damuth st |
| carol | wild | 95465 | POB 1175 Occidental, CA |
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| Alexander | Gardener | 90036 | 832 1/2 S. Mansfield Ave. |

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| Heather | Fadden | 87111 | 3337 Betts Drive NE |
| Amy | Miller | 19352 | 1114 Thunder hill Rd |
| Cynthia | Sciotto | 66801 | 902 prairie st |
| Jamie | Rudolph | 95033 | 17755 Cherokee Trail |
| Michelle | Waters | 95060 | 1015 Smith Grade |
| Jodi | Frediani | 32233 | 1829 sea oats drive |
| margaret | silver | 32233 | 1829 sea oats drive |
| ron | silver | 94134 | 545 Brussels St. |
| Deirdre | Elmansoumi | 10024 | 50 Riverside Drive New York |
| William | Sharfman | 94566 | Pleasanton |
| Ameet | Zaveri | 95472 | 7669leland st, Sebastopol, ca |
| Robert | Fowler | 94801 | 311 Seacliff Way |
| james | zahrada | 94014 | 274 greenview dr. |
| l | rud | 94123 | 1567 Francisco Street |
| Lawrence | Kenney | 94501 | 870 Laurel St. |
| Gary | Keep | 20912 | 6704 Allegheny Ave. |
| William | Wardlaw | 195 | Via Giuseppe Andreoli 2 |
| gianluca | polgar | 96067 | pob 572 |
| richard | whitesides | 24701 | 306 Point St. |
| Acie | Gearheart | 91405 | 15050 Sherman way 147 |
| Wendi | Grasteit | 94702 | 2424 West St |
| Robert | Cohen | 92056 | Oceanside |
| Devi | Adea | 33952 | 21290 Meehan ave |
| Sarah | Smith | 20110 | 9330 English Oak Ct |
| Lynn | Goldberg | 33035 | 1330 S Audubon Dr |
| Kerstin | Milner-Stubbs | 94403 | 505 Los Gatos Way |
| Gustavo | Sandoval | 93110-2032 | 835 Puente. Dr. |
| Henry | Weinberg | 95938 | 9197 Goodspeed St Apt 6 |
| Leland | Whitlock | 95481 | box 178 |
| e | perkins | 95821 | Sacramento |
| Jana | Perinchief | 94114 | 327 Caselli AVE |
| Dorothy L | Davies | 90019 | 1364 S. Hudson Ave. |

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| Aileen | Kutaka | 90045 | 6621 W. 86th Place |
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| Angela | Black | 92604 | 1234 Vaquero Way, Irvine, CA |
| Steven | Simpson | 90815 | 5160 E. Atherton Street #83,
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| Adam | Trauger | 94707-
1502 | 551 Neilson St |
| Robyn | Swanson | 92845 | 12332 Manley St. |
| Tawny | Sherrill | 90263 | 24255 PCH |
| Greg | Stevens | 92804 | 1609 S. Gary st. |
| Karen | Malley | 97232 | 1631 NE Broadway, #617 |
| Rachel | Brice | 92264 | S Palm Canyon Dr
9407 Old Redwood Hwy.
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| Charles | Johnson | 94951 | |
| Paul | Spruell | 95818 | 1803 Castro Way |
| Jill | Leake | 93657 | 1230 'O' street |
| Marie | Rosales | 90732 | 1409 Bett Pl. |
| Mary | Bowen | 91406 | 6708 Aldea Ave |
| Mir | Bahmanyar | 93105 | 3733 Mariana Way |
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| Daniel | Lemieux | 90265 | 29500 Heathercliff rd |
| Leslie | Goldstein | 94928 | Willow Creek Apt |
| Fulvia | Marino | 92103 | 3787 Arizona St |
| Ellen | Dorfman | 95404 | 1460 Town and Country Dr. |
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| Laura | Margolis | 92530 | Lake Elsinore, CA |
| Linda | Geeson | 95466 | p.o. box 630 |
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| bill | jarest | 93004 | 1375 ficus way |
| anthony | montapert | 94965 | 91 santa rosa ave. |
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| Mark | Crane | 93307 | 509 Kirklees Ct |
| Jorge | Torres | 95073-
9563 | 4650 Cherryvale Avenue |
| Dirk | Reed | 93401 | 1470 Andrews Street |
| Joseph | Boone | 91711 | 1343 Via Zurita |
| Barbara | Barton | 92110 | 4986 Field street |
| Irene | Lopez | 93443 | PO Box 1689 |
| Brian | Espy | 90024 | 925 malcolm av |

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| Vincent | Patti | 93446 | 2430 Geneseo Rd |
| Richard | Harvey | 94115 | 1941 Turk street # 4 San Francisco, CA |
| Todd | Snyder | 93463 | 999 Jason Way |
| Paul | Ramos | 95672 | ponderosa rd |
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| Eizabeth | Cole | 90068 | 3650 Regal Place |
| Ken | Mundy | 96160 | PO Box 522 |
| Keaven | Van Lom | 95338-9479 | 4341 Bridgeport Dr. |
| Jean | Giedt | 95051 | 2598 Pebble Beach Drive |
| Julie | Andersen | 93458 | 907 Vista Del Rio |
| David | Walker | 90035 | 1664 South Crescent Heights Blvd. |
| Steven | Brattman | 94704 | 2055 Center St. |
| Gabriela | Velasquez | 91606 | 11565 Erwin Street |
| Holly | McDuffie | 95973 | 11 Hemming Lane, Chico, California |
| James | Kirks | 92106 | 3744 Kingsley St |
| Alana | Lawler | 91505 | 1429 N. Hollywood Way |
| Tonnja | Berry | 90803 | 11 Argonne Avenue |
| Jim | McCurdy | 95476-6513 | Sonoma, CA |
| Karen | Jones | 94110 | 3435 Cesar Chavez |
| Maren | Nymo | 90013 | 315 w. 5th st |
| ROLLIN | BLANTON | 94565-5135 | Declines 2 State, Pittsburg, CA |
| Marijeanne | Sarraille | 94952 | 201 stanley street |
| kris | trottingwolf | 92673-6520 | 12 Corte Loarre |
| Maryann | LaNew | 95630-4836 | 105 winchester ct |
| steve | holzberg | 90027 | 2330 N Edgemont St |
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| Lisa | Lashaway | 95618 | 1713 Poplar lane |
| Dennis | Smith | 95126-4135 | 1505 DeRose Way, #94, San Jose, CA |
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| Ann | Carranza | 90212-3532 | 153 South Palm Dr #1 |
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| henry | biggins | 95472 | 458 winding wood way,
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| Richelle | Witt | 94805 | 850 mclaughlin, richmond |
| daniele | boucher | 95207 | 1305 w el monte apt 1 |
| maria | fonseca | 92020 | 11649 Vernetta Ct |
| Nick | Sully | 91343 | 9843 Forbes Ave |
| Nolan | Farkas | 92117 | 5521 Cloud Way |
| Robert | Husbands | 96003 | 248 Boulder Cr Dr #8 |
| Bob | Atwood | 92629 | 24655 La Plaza |
| Hannah | Lewis | 94062 | 25 Hudson Street |
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| Diana | Schwab | 95603 | 125 Redwood Way, Auburn,
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| Ruby | Mitchell | 92110 | 1974 Titus St. |
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| Linda | Black | 92708 | 18030 Brookhurst St. PMB
410 |
| Suzy | Chersky | 90024 | Rochester |
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| Mona | Sperling-Conrad | 92107 | 4440 Brindisi St |
| Bridgett | Heinly | 91344 | 16456 Shamhart Dr. |
| Lisa | Hammermeister | 91607 | 12125 Weddington St. #3 |
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| Michele | Dessons | 92026 | 10249 Rayford Drive |
| Jim | Kilby | 94122 | 1738 42nd avenue |
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| B. | Lerner | 92084 | 2246 Green Hills Way |
| Jeanette | Lee-Oderman | 95125 | 894 Hummingbird Drive |
| Helene | Weil | 95125 | 1671 Marina Way |
| MichaelEric | Lerner | 90065 | 824 Elyria Dr. Los Angeles |
| Brian | OReilly | 91104 | 859 Adelaide Drive |
| Lorna | hudgins | 90042 | 6124 Buena Vista Terrace |
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| Anthony | Wong | 94010 | 1720 Broadway Burlingame |
| John | Casey | 92706 | 530 Virginia Ave |
| Joyce | Schreiner | 92264 | 670 E Ocotillo Ave |
| Anna | Factor | 90043-1544 | 5115 Verdun Ave. Los Angeles |
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| Jeremy | Griffith | 95827 | 9683 Mira Del Rio Dr |
| Philip | Duncan | 94567 | PO Box 26 |
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| Michael | Guenley | 90034 | 3714 Glendon Ave. |
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| hirosi | suzuki | 92675 | 29435 Edgewood Road |
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| Diane | Knight | 93003 | 3307 Hilltop Dr |
| Jonathan | Dennis | 91301 | 1941 Lookout Drive |
| Mijanou | Bauchau | 90035 | s elm dr. |
| tay | coban | 30344-
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| Victoria | Wikle | 92653 | 22355 Caminito Tecate |
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| Joan | Marks | 93643 | 34851 Mistletoe Ct. |
| Richard | Hundley | 92603 | 5352 Sierra Roja |
| Ranko | Balog | 92653 | 27171 Lost Colt Drive |
| Laurie | Hrdlicka | 94085 | 1259 Lakeside Drive apt 2220 |
| Jennifer | Martinez | 90026 | 2710 Bellevue Ave |

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| Dave | Seaborg | 95472 | 798 Fergie |
| Roger | Brown | 90025 | 1311 Federal Ave |
| Polly | O'Malley | 91343 | 16809 Marilla St. |
| Dolly | Aron | 95618 | 3608 Maidu Place |
| Julie | Owen | 48152 | Hermannstr.48 |
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| Pamela | Shwayka | 90033 | 651 Echandia St. |
| Candy | Rocha | 92626 | 3400 |
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| e | zuniga | 93960 | 35101 Fort Romie Road |
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| Charlene | Root | 95405 | 950 Heron |
| Thom | Philipel | 92506 | 16217 Sunset Trail |
| Susan | Watts | 93004 | 1213 cardigan ave. |
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| Francis | Glennon | 94526 | 445 Woodbine Lane |
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| Randy | Johnson | 95472 | 699 Gravenstein Hwy North
Apt 24 |
| Jessica | Wolfe | 90290 | 21342 Entrada Road |
| Jon | Povill | 95361 | 330 Flavorcrest Ct, Oakdale
CA |

| | | | |
|------------|---------------|----------------|--|
| April | Kimmerly | 93455 | 4766 Hartnell Rd, Santa Maria
CA |
| Tracey | Krill | 94114 | 111 Corwin |
| Ann | Cordova | 92123 | 8718 macawa ave |
| vicki | maheu | 94577 | No mail please |
| Michael | Bresso | 90016 | 2741 harcourt ave. |
| elizabeth | johansen | 93463 | 1240 Quail Ridge Rd, Solvang,
CA |
| Wim | van Dam | 91304 | 24303-89 Woolsey Cyn RD |
| Lois | Christensen | 95215 | 2455 Ashton pl |
| M | Dixon | 92111 | 7061 arillo st |
| Gabriela | Till | 95818 | 2776 18th St. |
| Michael | Tomlinson | 92346-
3814 | 7690 GRIFFITH AVE
HIGHLAND CALIFORNIA |
| KAREN | WASSING | 90803 | 45 1/2 65th Place |
| Brenda | Haig | 91042-
3023 | 9441 Reverie Road |
| Paul | Sinacore | 92024 | 349 chapalita dr |
| JANE | larsen | 94019 | 1020 Bancroft Ave. |
| Mary Alice | Pearce | 92679-
1108 | 18806 Vista Modjeska Rd |
| Jinx | Hydeman | 91302 | 4716 Park Granada |
| Dylan | Busse | 91910 | 212 5th Av. |
| Neil | Stanton | 94110 | 249 Bocana St |
| Robin | Mackey | 94702 | 1642 Curtis St. |
| Caryn | Graves | 92104 | 2576 Wightman St., San
Diego, CA |
| Tom | Falvey | 94521 | 4396 N Marsh Elder Ct |
| Susan | King | 90404 | 1930 Stewart St. G2, Santa
Monica, CA |
| KEN | GREENW
ALD | 92102 | 1948 felton st |
| patricia | law | 90293 | 7020 Earldom Ave, PDR, CA |
| Larry | Brown | 91423 | 13214 Magnolia Blvd. |
| Kent | Minault | 85754 | PO Box 85142 |
| Terri | Spurr | 94710 | 970 Jones Street, Berkeley, CA |
| Ellen | Franzen | 91401 | 6134 woodman ave. 108 |
| vicki | caplan | 92056 | 5030 Alicante Way |
| Sherry | Marsh | 85138 | 43615 w roth rd |
| Stefani | ramirez | 94019 | 400 Pilarcitos Avenue |
| James | Benjamin | 94303 | 1550 Dana Avenue |
| Alexander | Gaya | 94577 | 361 hollister ct. |
| Debra | Temple | 92270 | 4 Marseilles rd |
| paris | Sneider | 91401 | 5720 Costello Ave |

| | | | |
|---------------------|----------------|------------|-----------------------------------|
| Doug | Lenier | 90033 | 323 n. soto st. |
| john f | martinez | 94618 | 5109 Manila Ave, Oakland |
| Valarie | Kalb | 95616 | 707 sycamore lane |
| Travis | Grandburg | 90293 | 8640 Gulana avenue J1014 |
| Chris | Dawson | 22206 | 3565 Stafford |
| Ellen | O'Connor | 94501 | 1834 San Antonio Avenue |
| Kathleen | McCabe | 94062 | 485 Mountain Home Road |
| Timothy | Martin | 94133-3545 | 1306 Montgomery St, #5 |
| Carla | Reed | 94707 | 1015 sierra st. |
| Wendy | weikel | 95012 | 13535 Agua Dulce |
| Barbara | Harper | 95482 | Ukiah |
| Elaine | Yeh | 90275 | 1615 Caddington Drive |
| Arlene | Zimmer | 94611 | 25 SOUTHWOOD CT |
| Susan | Alcorn | 92620 | 195 rhapsody |
| Mike | Dummer | 95404 | 6567 Saint Helena Road |
| Radine | Aijala | 94577 | 2234 Belvedere |
| Hons. Jim and Diana | Prola | 92262 | 550 E Miraleste Ct |
| Earl | Nelson | 94952 | 450 Lohrman lane |
| Matt | Lunn | 95404 | 4375 wallace road, santa rosa, ca |
| joey | smith | 94040 | 186 College Street |
| Duncan | Simmons | 92109 | 1936A Oliver Ave |
| Matthew | Hess | 95608 | 6124 stanley ave carmichael, ca |
| mark | lynn | 95969 | 520 Valley View Drive |
| Janet | McCalister | 95959 | 19019 Sages Rd |
| Kim | King | 95472 | 3711 Mt. Vernon Rd. |
| Louise | Lieb | 93401 | 898 calle del caminos |
| Anaundda | Elijah | 91762-2807 | 1349 Hollowell St Ontario CA |
| Linda | Jones | 91606 | 6755 Rhodes Ave. #136 |
| Ruth | Leventhal | 94114 | 327 Caselli AVE |
| Dorothy L | Davies | 6460 | puccict@aol.com |
| Claudia | Pucci | 90265-5630 | 18408 Clifftop Way |
| Rob | Seltzer | 92117 | 5521 Cloud Way |
| Tess | Husbands | 92590 | 27315 Jefferson ave j140 |
| peace | light | 90064-4523 | 10387 Glenbarr Avenue |
| Elaine | Livesey-Fassel | 94801 | 225 Western Drive |
| janie | glidden | 91979 | P.O. Box 2762, Spring Valley, |

CA

| | | | |
|-------------------|---------------|------------|---|
| Donna | Duncan | 94403 | 3004 Hacienda Street |
| Marsha | Heimbecker | 91106-1858 | 112 N. Michigan Ave #12 |
| Gabriella | Turek | 95521 | 453 bayside court |
| PATRICIA | DANIELS | 95490 | 3502 Primrose Dr |
| Shirley | Harris | 93726 | 4875 N. Backer Ave. #117 |
| Anna | Parker | 95436 | 8427 Park Ave.,
Forestville,CA |
| Steve | Pryputniewicz | 90210 | 123 fake street |
| sara | wilson | 90034-3406 | 3113 Malcolm Avenue |
| CARMEN
SANCHEZ | SADEK | 92589 | PO Box 891551 |
| Nick | Shestople | 90035 | 1108 S. Crescent Hts. Blvd. |
| Leslie | Hicks | 95403 | 2156 chianti drive |
| devin | mccormick | 93101 | 1923 San Andres St Apt F |
| Camille | Gilbert | 95461 | 16566 Butts Canyon Road |
| Penny | Nichols | 95490 | PO Box 597 |
| Urmila Joi | Sandhu | 90014 | 423 East 7th Street, Room 536 |
| Tammy | Davis | 90807 | Long Beach, CA |
| Joe | Weinstein | 91345 | 10156 Wisner Ave |
| Melinda | Burgess | 95765 | 1718 Poppy Dr |
| Raul | Chavez | 95818 | 1004 Swanston Drive |
| Katherine | McNeill | 94555 | Creekwood Dr |
| K | Downing | 94501 | 333 Willow St., #319 |
| Sal | Gifford | 94002 | 1709 Pine Knoll Drive |
| Tim | O'Brien | 96151 | PO Box14581 |
| Frank | Cannon | 91108 | 2275 HUNTINGTON DRIVE |
| GARY | JONES | 20860 | 1900 Olney Sandy Spring Rd..
Sandy Spring, Md. |
| Gerhard | Grieb | 90046 | 1340 N Poinsettia Place |
| Thomas | Rummel | 92260 | 72630 Homestead Rd. |
| Irene | Creighton | 90502 | 801 W. 232nd Street,
Torrance, CA |
| Theda | Ray | 94002 | 2753 Yosemite, Belmont, CA |
| shiela | cockshott | 94112 | 44 Ellington Ave. |
| Diane | Palacio | 90807 | 3503 Cedar Ave # 118 |
| Louise J | Bowles | 92264 | 2392 Miramonte Circle East |
| Deborah | Hirsch | 90723 | 16600 Orange Ave Sp 83 |
| Enrique | Gutierrez | 92117 | pob 176805 |
| dinda | evans | 94530 | 1116 king drive |
| Edie | Bruce | 90036 | 6007 Lindenhurst Avenue Los |

Angeles CA 90036

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|-------------|-----------------|------------|--------------------------------------|
| Norma Faith | Rockman | 90266 | P.O.Box 3335 |
| Rosemary | Graham-Gardner | 95405 | 719 Yulupa Ave |
| Jeannine | Bressie | 94108 | 1177 California St |
| Peggy | Winchell | 94534 | 5048 Lakeview Cir |
| Samuel | Durkin | 94801 | 1400 Pinnacle Court |
| Cynthia | Fernandez | 90029 | 5343 Lexington ave |
| Natalie | Aharonian | 94602 | 3160 Wisconsin Street |
| Hale | Tokay | 90212 | 450 El Camino |
| Larry | Miller | 95132 | 1576 Sun Ln |
| Denise | Greaves | 32927 | 6395 Wien Ln. |
| Ricky | Buttery | 94561 | 1495 Quail Valley Run |
| sandy | cross | 94107 | 86 south park st |
| dale | riehart | 94040 | 49 Showers Dr A340 Mtn View CA 94040 |
| Ben | Martin | 90046-5500 | 7553 Norton Ave/Apt No 2 |
| Julie | Slater-Giglioli | 94928 | 467 Anson Ave |
| Cathy | Chapman | 95959 | 315 spring st |
| chris | flook | 95823-1931 | 4361 Turnbridge Dr |
| Candy | Bowman | 92354 | xxx |
| Susan | Wayne | 93004 | 10747 lassen court |
| erica | sommers | 91532 | 999 N Pacific St |
| Andrea | Alton | 95407 | 933 McMinn Avenue |
| Patricia | Wilburn | 92506 | Riverside Ave |
| Dominique | Marquez | 93550-2569 | 37310 36th St. E |
| Therese | Ryan | 94547 | 114 Whaler Circle |
| Sarah | Creeley | 94105 | 101 Market Street |
| Murshed | Zaheed | 93950 | 316 8th St |
| Zack | Bradford | 95403 | 1324 cashew rd |
| nicholas | lenchner | 93720 | 7554 N Trellis |
| Lacey | Kammerer | 94102 | 1390 Market St |
| Emilia | Stubbe | 90035 | 1710 Bagley Ave. |
| Saran | Kirschbaum | 22205 | 6251 Lee Hwy Arlington VA |
| Russell | Imrie | 90401 | 1301 Oceans Ave, Santa Monica, CA |
| Jodi | Noden | 95831 | 7201 gloria dr apt 04 |
| chris | hagen | 95831 | 7201 gloria dr apt 01 |
| pam | johnson | 95521 | 55 Glendale Dr. Arcata, CA |

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|----------|-----------------|------------|--------------------------------------|
| Linda | Parkinson | 94521-4419 | 4479 Silverberry Ct. |
| Barbara | Lafaver | 94608 | 3267 Hollis |
| Walt | Kleine | 94609 | 5816 MacCall Street |
| Barbara | Petterson | 70808 | 1449 Perkins Rd |
| Laura | Belden | 90230 | 6024 Buckingham Pkwy., Unit 21 |
| Carol | Sucheki | 95466 | P. O. Box 569 |
| Charles | Hochberg | 94110 | 954 Florida |
| Rose | BRaz | 94550 | 1069 Felicia Court |
| Lawrence | Thompson | 95425 | 134 Douglas Fir Circle |
| Karen | Chinn | 92029 | 1084 Terrace Crest |
| Courtney | Glondebiz | 79411 | 1902 29th |
| Laila | Haghsheno-sabet | 94702 | 1328 addison st |
| david | ely | 93727 | 1481 N Peach #106 |
| Bryan | Burks | 92054-3465 | 201-22 Country Club Lane |
| Mildred | Gordon | 91701 | 9145 Alta Loma Dr |
| Nicole | Moore | 94520 | 2160 Ann St |
| Melinda | Moros | 95014 | 20500 Town Center Lane #283 |
| Moriah | Woolworth | 94066 | 1101 National Ave #2335 |
| Joan | Morton | 95949 | 18376 HARMONY PLACE |
| GEORGE | LOVEDAY | 92223 | 9634 Oak Glen Road |
| Sara | Williams | 94549 | 3090 Sweetbrier Cir |
| Pamela | Connolly | 92284 | 56758 Desert Gold Dr |
| Elisa | Orozco | 94607 | 1919 market st |
| Robert | Ellis | 92260 | 49305 Hwy 74 # 182 |
| geri | perry | 94086 | 683 Spruce Drive, Sunnyvale CA |
| Alyssa | Vandenberg | 95650 | 9696 junewood lane |
| marion | barry | 94707 | 1940 Yosemite Road |
| Lois | Yuen | 94066 | San Bruno |
| Karen | Cameron | 94131 | 668 29th St Apt B |
| Kathi | Koontz | 94965 | 215 Caledonia street |
| Joy | Turrini | 94306 | 3039 Emerson Street |
| Wendy | Nichols | 94401 | 250 Baldwin Ave Apt 507 |
| Pete | Klosterman | 92691 | 26401 Via Galicia, Mission Viejo, CA |
| Mary | Nelson | 95409 | 5114 Parkhurst Drive |
| Debra | Sherman | 92106-1427 | 3114 Homer St |
| Jack | Hamlin | 95060 | 121 A Blaine St |
| Barbara | Ginsberg | 94965 | Sausalito |

| | | | |
|------------|-------------|------------|---|
| Susan | Head | 94705 | 3023 Deakin St. |
| Lindsay | Mugglestone | 92264 | 1980 So Camino Real #9 |
| Cathy | McPeck | 92832 | 309 W Brookdale |
| Julie | Vandergrift | 91206 | 1137 E California Ave #14 |
| Carina | Chadwick | 95762-6914 | 4100 Milano Ct |
| Robert | Krikourian | 94510 | Benicia Ca |
| Carol | Keiper | 95825-0336 | 2629 La Mesa Way |
| Carol | Merrill | 90501 | 2227 W 231st |
| Taylor | Martin | 92626 | 1102 El Camino Dr. |
| N.Lance | Hailstone | 94080-1618 | 104 Claremont Ave., South San Francisco, CA |
| Ron | Parsons | 91761 | 301 E Cedar St |
| William | Dane | 94553 | 689 Center Ave |
| Janet | Klasey | 94608 | 8 Captain Dr. Emeryville, CA |
| Jody | Hansell | 94965 | 3020 Bridgeway #297 Sausalito, Ca |
| AndrÃ© Guy | CondÃ© | 94804 | 1434 mariposa street |
| Francisco | Diaz | 91405-2797 | 13609 Valerio Street, Unit B |
| Terrell | Rodefer | 95553 | PO Box 474 |
| Carol | Taylor | 92009 | 2718 Obelisco Court |
| Melinda | Kennedy | 95062 | 28 Hanover Court |
| steve | lustgarden | 95682 | 3148 Piper Court |
| Sheila | Desmond | 95819 | F Street |
| Suzanne | Hodges | 95825-1200 | 2666 cottage way |
| karen | garnett | 94024 | 10831 mora dr, Los altos, ca |
| Deidre | Madsen | 95421 | 9460 Ben Way |
| Lani | Ka'ahumanu | 95008-3605 | 1331 Bent Dr |
| Donna | Cotner | 95476-7250 | 16912 Falcon Lane, Sonoma, CA |
| Paula | Zerzan | 90291 | 940 milwood ave |
| frederique | joly | 6030 | Puente de alvarado |
| Luz | Huerta | 94122 | 1537 12th Avenue |
| Portland | Coates | 93514 | 280 WHite Pine Road |
| Jeanette | Schneider | 91702 | 317 W Pebble Beach Lane: |
| Audrey | Johnson | 94116 | 123 Mendosa Ave |
| Diana | Goodman | 94115 | 2000 post |
| John | Oda | 94044 | 340 Esplanade Ave APT 21 |

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|------------|---------------------|-------|-------------------------------------|
| Gary | Carpenter | 94065 | 740 Mediterranean Lane |
| Norma | Corey | 93422 | 3605 Colima Rd |
| Jennifer | Eickemeyer | 94610 | 782 Calmar ave |
| Robert | Kessler | 93036 | Oxnard |
| Amy | C | 95864 | 1900 Cathay Way,
Sacramento, CA |
| Lori | Whire | 94510 | 49 Buena Vista |
| Nancy | Schroeder | 94610 | 874 York St. |
| Lesley | Schultz | 95765 | 3220 Santa Fe Way #108 |
| Diana | Madoshi | 95472 | 9440 Ross Station Rd,
Sebastopol |
| Richard | Moore | 92630 | 22302 silent brook |
| john | liddy | 85710 | 435 n.brook park dr |
| Annie | dhenery | 28772 | Box 1222 |
| Carol | Hoke | 95345 | 4954 Ponderosa Way |
| Iris | Chynoweth | 95667 | 1525 Cold Springs Rd SPC 52 |
| Candy | LeBlanc | 90266 | 1466 11th Street |
| Alice | Neuhauser | 94105 | One Market, SF |
| Laura | Walker | 90266 | 1466 11th Street |
| Thomas | Conroy | 94928 | 1404 Georgia Court |
| LindaMarie | Stubblebine | 95405 | 3070 Yulupa Ave |
| Morris | Chay | 2107 | 4728 Narragansett Ave. |
| Candy | Rand-Riley | 95959 | 13800 Miller rd.,Nevada City |
| Jacque | Bellon | 94025 | 2031 Ashton Ave. |
| Michael | Braude | 85737 | 380 west atua place |
| judith | berkman | 93446 | 7340 Drake Rd. |
| Carol | DeHart | 92821 | 417 S Associated Rd #278 |
| David | Fisher | 94621 | 7525 Spencer St |
| Leotis | Foster II | 91103 | 490 kensington Pl. |
| Bob | Poppe | 91913 | 1136 Misty Creek St |
| John | Teevan | 91423 | 14257 Roblar Place |
| Carol | Becker | 90405 | 2524 5th Street |
| Apryl | Mefford-
Hemauer | 93601 | 43920 Glenn Baker Rd. |
| Tammee | Arneson | 95403 | 14125 STARVIEW COURT |
| CHRIS | MORANO | 95039 | P.O. Box 806 |
| Jim | Curland | 94118 | 258 Ninth Ave. |
| Bill | Mc Guire | 95421 | 4000 Creighton Ridge |
| David | Passmore | 92117 | 3073 Jemez Dr. |
| Jeff | Thayer | 92618 | 21 Sutton |
| shelley | sivak | 95010 | 1760 48th ave, capitola, ca |
| phyllis | levin | 94015 | 36 Fairlawn Ave. |
| Michael | Wright | 90079 | Los Angeles |

| | | | |
|----------------|-----------------|----------------|-------------------------------------|
| Jeanie | Streit | 91906 | 2432 Bass Rd. |
| George | Steinitz | 90211 | bsas |
| silvana | zelmanovic
h | 94582-
4865 | 83 Tahoe Court |
| Joe | Buhowsky | 92026 | 1075 Memory Lane |
| Yvonne | Roussel | 94110 | 21 lapidge |
| anne | veraldi | 92131 | 10698 Weatherhill Ct |
| Justin | Bonsey | 90046 | Cochran Terrace |
| Luz | Ava | 95404 | 2330 Franklin Ave |
| Daniel | Podell | 95949 | 15470 Kingsbury Circle |
| Jean | varda | 94044 | 5005 Palmetto Ave |
| victor | carmichael | 91423 | 4950 Coldwater Cyn APT#23 |
| Miranda | Leiva | 94518 | 1082 tilley cir |
| julie | sasaoka | 84606 | 1483 E 950 S |
| Erin | Eastland | 94607 | 1233 Pine |
| D. | Singer | 93065 | 870 Anson Street |
| Anna | Thurman | 99228 | P.O. Box 18754 |
| Ellyn | Sutton | 91042 | 11002 1/2 Cardamine Dr. |
| Audra | Kudirka | 91607 | 12518 Martha St. |
| Jerri | Miller | 95060 | P.O.Box |
| Edy | Rayield | 92627 | 2567 elden ave #A |
| thad d. | solloway
JD | 94121 | 582 - 42nd Avenue |
| Jeffrey | Hurwitz | 92624 | 34522 via verde |
| Tim | Ryan | 90028-
4102 | 6683 Franklin Ave #6 |
| Dan | Silver | 95460 | 44580 SURFWOOD DRIVE |
| ANTOINE
TTE | CALAVAS | 33418 | 119 Pembroke Drive |
| Barbara | Gideon | 92507 | 3521 Watkins dr |
| Natalie | Ralston | 94133 | 1048 Union St. |
| Jim | Lansing | 91396-
2533 | PO Box 2533 |
| gowani | nancy | 31952 | australia |
| jennifer | miles | 94541 | 23693 Glenbrook Ln.,
Hayward, CA |
| Sharon | Morris | 95205 | 2960 Redwood Ave. |
| Jack | Treadwell | 91604 | 11847 Laurelwood Drive # 206 |
| Patty | Sparks | 92656 | 5 Matinee Ct., Aliso Viejo |
| Bob | Miller | 12180 | 12 103rd St. |
| Anthony | Kruegler | 95409 | 6301 Montecito Blvd. apt. 14 |
| James | Cameron | 95014 | 10400 Oakville Ave |
| Joyce | Branaman | 93003 | 3060 Channel Dr., #8 |
| Ms. | Lilith | 92630 | 21192William Jasmines |

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|-------------|---------------|------------|--------------------------------------|
| | | | way,lake forest,,ca |
| Robin | Williams | 92126-3121 | 8111 Kenova St |
| Colleen | Lobel | 92014 | 1224 Ladera Linda Way |
| Ann-Cathrin | Howard | 94501 | 1304 Broadway |
| Christopher | Richard | 92101 | 236 Kalmia ST, #107 |
| Richard | Dimatteo | 95525 | PO Box |
| Karl | Koessel | 90046-3593 | 1616 N. Poinsettia Pl. #302 |
| Renee | Boteilho | 2631 | 157 Owl Pond Rd. |
| Allison | Argo | 95446 | 14869 Drake Rd. |
| Mark | Hargraves | 91606 | 6409 clybourn ave |
| robert | burkowski | 95401 | 512 Juilliard Park Drive |
| Andrea | Pellicani | 95608 | 4311 Marshall Avenue |
| Polly | Dallas | 92870 | 106 Beggerly Circle |
| Cathryn | Wasas | 95648 | 100 f street |
| C | M | 49014 | 106 Raymond Rd N |
| Harold | Nemecheck | 91350 | 28151 Bobwhite Circle #79 |
| Lynn | Wolf | 95421 | 23 silvia drive, cazadero,ca |
| linda | petrulias | 92109 | 1846 Oliver Ave |
| Beatrix | Schrammm | 95415 | 12350 Anderson Valley Way |
| Cynthia | McMath | 95061 | pobox 1032 |
| S.Scott | Graham | 91331 | 10965 GLENOAKS BLVD |
| SHIRLEY | LE GARDE | 95129 | 1050 johnson ave |
| rebecca | koo | 93422-4913 | 9525 Avenal Ave. |
| David | Hild | 92011 | 2070 las palmas dr |
| Nicole | Fortunato | 90026-1712 | 1844 Effie Street |
| Jane | Nachazel-Ruck | 95061 | P.O. box 7543 Santa Cruz |
| David | Ross | 21076 | 6229 Fairbourne Court
Hanover, Md |
| Abbe | Smith | 44511 | 951 OLD FURNACE RD |
| BETH | KREDEL | 90044 | 745 W. 111th Street |
| Denise | Wright | 90272-4376 | 764 PATTERSON PL |
| ERIC | ERICSON | 90210 | POB 75645 |
| Janice | Barnes | 93033 | 1523 valley park dr |
| Star | Moreno | 90065 | 408 Beech Street |
| Belen | Eller | 94541 | 3342 Shawn way |
| Suehan | Estrada | 95616 | 1330 Antelope Avenue 22 |

| | | | |
|-----------|--------------------|------------|--|
| Michele | Santoro | 93021 | Main |
| C | Rivera | 94552-1708 | 5737 Medallion Court, Castro Valley, CA |
| Pat | Blackwell-Marchant | 90029 | 1228 n Berendo st apt A |
| Anthony | Salguero | 90024 | 10433 Wilshire Blvd. 902 |
| Mary Ann | Wilson | 94601 | 2712 Grande Vista Ave |
| Judith | Smith | 95624 | 8772 Vytina Drive |
| Dawn | Lahey | 94965 | 1707 Bridgeway, Sausalito |
| julie | Warren | 90069 | 9143 St Ives Dr, LA |
| Alison | Taylor | 92637 | 827-O Via Alhambra, Laguna Woods, CA |
| Nancy L | Young | 95129 | 1382 Oak Knoll Drive |
| Audrey | Okubo | 94610 | bellevue |
| Aggie | Lukaszewski | 94928 | 5569 Daniel Drive |
| Mary | Tullock | 92583 | 999 S. Santa Fe Ave. Sp. 51 |
| Raymond | Shaw | 94142 | PO Box 420121, San Francisco, CA |
| Lauren | Graham | 93953 | 12 Ocean Pines Lane |
| Renee | Kilmer | 92672 | 308 Avenida La Costa |
| Jamie | Kurnik | 94502 | 1004 auburn dr |
| Steve | Mason | 94621 | 5333 parkhighlands #6 |
| allan | kober | 90803 | 3025 E 2nd Street |
| Susie | Park | 92649-2244 | 16222 Monterey Lane #223, Huntington Beach, CA |
| Julie | Ford | 92026 | 307 Whippoorwill Glen |
| Christine | Stewart | 92614 | 34 Alicante Aisle |
| Cheryl | Bernstein | 94952 | 508 Upham St. |
| Jane | Waxman | 91006 | 5632 cochin ave |
| joan | scott | 95018 | 11891 Lake Blvd |
| Toni | Wolfson | 94610 | 671 Vernon St Oakland CA |
| Kathleen | Hopkins | 94609 | Street |
| Jessea | Greenman | 93062 | PO BOX 397 |
| Stephen | Schenck | 95476 | 208 Malaga St, Sonoma |
| James | Syfers | 93117 | 7363 A Freeman Pl., Goleta CA |
| Deborah | Sweeney | 93033 | 3411 S. C St. |
| Jeanne | Walker | 77399 | 173 Rainbow Dr. #7329 |
| Kathleen | Smith | 94501 | 2043 Lincoln Ave Apt D |
| Misty | McIntyre | 92024 | 1106 2nd St PMB 332 |
| Lisa | Katter-Jackson | 90630 | 9702 Rosemary Drive |
| Barbara | Lowden | 90005 | 745 S. Normandie Ave. Apt. |

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|------------|------------|----------------|--|
| Dominick | Falzone | 98584 | 91 E. Aycliffe Dr |
| David | Allison | 95062 | 251 20th Ave. |
| Ralph | Sanchez | 92692 | 26531 Baronet |
| Irene | Kraus | 95589 | pob 220 |
| peter | galvin | 95843 | 4361 Turnbridge Drive |
| Jason | Bowman | 91506 | Burbank |
| D | Johnson | 94928 | 1354 Oak View Circle |
| Mary | Tuteur | 94578 | 3622 Carrillo Drive |
| Edward | Escobar | 94114 | 1295 Church Street |
| Linda | Dragavon | 92647 | 16885 Nichols lane apt c |
| cindy | Santry | 94042 | PO Box 69 |
| Abe | Rahey | 94928 | 770 laguna drive |
| chris | bongardt | 94553 | 37 Bridgehead Road |
| Allen | Swift | 95060 | 133 Los Altos Ct. |
| Jim | Holm | 94015 | 166 Morningside Dr., Daly
City, CA |
| Marian | Hardin | 95063 | PO Box 3918 |
| Cynthia | Ratliff | 1364 | 80 Wheeler Avenue, Orange,
MA |
| Lee Anna | Richardson | 95624 | 10013 Meadowdale Way |
| John | Carroll | 94551 | 2624 Pickfair Lane,
Livermore, CA |
| Mary | Foltz | 94070 | 1047 Inverness Drive |
| Cynthia | Race | 94022 | 27xx |
| Namita | Dalal | 90278 | 2345 190TH ST., NO. 63 |
| Orpha Dess | WILSON | 95421 | 30350 Seaview Rd. |
| Micki | Meredith | 91042 | 10413 Glory Ave |
| becky | bristow | 90505 | 2905 W. 229th St., Torrance,
CA |
| Patricia | Deninger | 90035 | 1037 S.shenandoah st. #4, Los
Angeles |
| Ami | Levy | 95060 | 118 sherman |
| lisa | segnitz | 95465 | 15290 Coleman Valley Road |
| David | Berman | 94702 | 2159 Acton St |
| Joe | Loree | 86406 | 3501 oro grande |
| ginger | wright | 95630 | 120 Waterboro Square |
| Carol | Cotton | 95060-
6109 | 319 Laguna St. |
| Russell | Weisz | 95650 | 3581 Colony Lane |
| Kimberly | Ross | 92264 | 671 S. Riverside Dr. #6 |
| Maryellen | Redish | 94609 | 427 62nd St. |
| Julie | Litwin | 94507 | 211 South Ave |
| Carly | Owens | 90814 | 445 Los Altos Ave |

Clements

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| Tina | Pirazzi | 30075 | 12085 Wexford Overlook |
| Charles Sr. | Brexel | 94544-1126 | 24702 Broadmore Avenue |
| Timothy | Devine | 93035 | 3051 via marina ct. |
| brittany | rosas | 94133 | 2141 powell st. |
| caitlin | ryan | 92624 | 34681 Calle los Robles |
| Celia | Kutcher | 92835 | 1134 Cerritos Drive |
| Marylucia | Arace | 95661 | 104 Stratford Court |
| Dee | Warenycia | 77554 | 7103 Broadway |
| Paul | Cunningham | 91040 | 11445 Skyland Road |
| Elaine | Brown | 93111 | 5142 Hollister Ave #147 |
| Eva | Anda | 94551-7486 | 2045 Victorine Rd. |
| Susan | Allen | 96740 | 787091 Heeia Way |
| Rosanne | Shank | 95457 | 2029 west hearn santa rosa |
| Erik | Carlsen | 94109-7095 | 910 Geary 20 |
| John | Steponaitis | 96067 | 1821 eddy dr |
| gaile | carr | 95648 | 567 O Street |
| Jason | Fish | 92313 | 22770 Van Buren St |
| Alice | Chow | 92677 | 31506 West Nine Dr, Laguna Niguel, Ca |
| Desiree | Darden | 53588 | Taliesin |
| Shawn | Rorke | 91302 | 3908 oleander court |
| Nicole | Carson | 85624 | PO Box 104 |
| Laura | Cleveland | 90046 | 1829 N Fuller Ave #3 |
| Tracey | Pence | 92563 | 38118 Calle Quedo |
| Claire | Chambers | 95436 | 9435 Argonne Way |
| Gloria | Badella | 94526 | 2 cross bridge place, Danville |
| Carol | Layne | 95124 | 2003 Rosswood Dr., San Jose, CA |
| Andrew | Bear | 94703 | `649 Julia St |
| Ramona | Rubin | 94124 | 245 Bayview Cir |
| Dale | Leininger | 94402 | 10 mounds road 3E |
| Anthony | Arata | 91504 | 333 andover dr. apt. 108
Burbank, CA. |
| deirdre | brownell | 94806 | 1016 Miner Avenue |
| Sudesh | Prasad | 90024 | 1670 manning ave |
| sandra | zaninovich | 91945 | 8555 Golden Avenue |
| Andy | Lupenko | 94619 | 4386 detroit ave |
| chelsea | madison | 95405 | 1923 Marin Dr |
| David | Sherman | 96003 | 1735 Barbara Rd |

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|----------------------|------------|------------|--|
| TAMI | Phelps | 95468 | 45151 Bill Owens Rd. |
| mark | Ricci | 95112 | 432 N 9th St. |
| Shannon | Hunter | 91040 | 8772 1/2 Wyngate St |
| Denise | Lenardson | 94114 | 584 Alvarado Street, San Francisco |
| Jessie | Raeder | 91766 | 603 Fairfax Ln. |
| Ashlie | Norman | 92057 | 3936 San Pablo Ave. Oceanside CA |
| Leslie | Hickcox | 11374 | 6434 Austin Street |
| Cary A | Krais | 90069 | 856 Westmount Dr |
| Caleb | Lindley | 95667 | 1525 Cold Springs Rd SPC 52 |
| Jason | Bowman | 92124-2228 | 10930 Vivaracho Way |
| Michael | Sullivan | 93711 | 1612 West Morris Avenue |
| Dr. Jacinta | Amaral | 94933-0400 | Forest Knolls |
| Lynette | McLamb | 92591-2121 | 31463 Britton Circle |
| Dana | Ginn | 95003-4428 | 115 Valencia Avenue |
| Steve | Olson | 94703 | 2116 Jefferson Avenue |
| laurie | rolfe | 95403 | santa rosa, ca |
| gail | alford | 94539 | 41845 Mission Creek Drive |
| Josh | Chen | 96785 | po box 641 |
| Sheila | McKenna | 95814 | 408 10th St Apt 06 |
| Raymond | Moreno | 92843 | 10411 Garden Grove Blvd Apt 46 |
| Kris | Head | 91767 | 244 Hickory Ave. |
| Twyla | Meyer | 92506 | Riverside Avenue |
| Dawn | Marie | 94109 | 839 Post St. #208, SF, CA |
| Gail | Caswell | 91042 | 10877 Deliban St |
| probyn | gregory | 94577 | Deglwies 1 |
| Dorothea | Stephan | 92646 | 8782 Baywood Drive |
| Audrey | Mannolini | 92515 | Not available |
| Abraham Omorenim wen | Oboruemuh | 90034-6251 | 3701 GLENDON AVE APT 3 |
| JIM | BROWN | 50008 | #7-70, Ayyappa Colony Phase-1, Naagaram-Dammaiahguda Road, Naagaram Post, Keesara Mandal, Ranga Reddy District |
| Pradeep Kumar | Bhagvandas | 90650 | 11439 Arlee Ave Norwalk CA |
| Pagasa | Serrano | 87144 | 7437 Mackenzie Dr NE |
| Daniel | Thayer | 94954 | 910 Ashwood Ct., Petaluma |

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|-----------|--------------|------------|---|
| | | | CA |
| Mary | Phillips | 33145 | 2149 sw 30th court |
| Chris | Chase | 94116 | Santiago Street |
| David | Ninnis | 90059-3400 | 2009 N. Central Ave. Los Angeles, CA. |
| Michael | White | 94301 | 827 Lincoln Ave |
| Anne | Kastner | 90066-1641 | 3201 Sawtelle Blvd. |
| JUSTINE | TILLEY | 95051 | 136 Rodonovan Dr., Santa Clara |
| Kevin | McCabe | 94610 | 1160 Clarendon Crescent |
| Teresa | B.G. | 95401 | 1279 Ridley Ave. Santa Rosa, Ca. |
| Tim | Du Bato | 94704 | #3 2323 Parker St. |
| Kitty | Jones | 2160 | 47 PATON STREET
MERRYLANDS |
| JUDY | BLANCH | 95391 | 74 N boyle heights ct |
| janet | Williams | 92831 | 2313 E. Santa Fe Ave., #2
Fullerton CA |
| Misty | Day | 92352 | P.O. BOX 2677 |
| Thomas | Scott | 93265 | 33408 hwy 190, springville |
| joyce | kolasa | 28801 | 600 Bulldog Drive, Asheville,
North Carolina |
| David | Kaliner | 94602 | 1374 e 32nd st |
| vsevolod | ulitsky | 94116 | 1936 19th Avenue |
| Helen | Lee | 94116 | 3623 Vicente St |
| Jeanene | Taylor | 91910 | 706 F st. apt. 101, Chula Vista,
Ca. |
| Richard | Thomason | 93465 | Templeton |
| Maureen | McCoy | 90280 | P.O. Box 1604 |
| Lorena | Retana | 94521 | 5518 Roundtree Dr |
| Anne | Mahler | 94121 | 733 21st Avenue |
| Steven | Hiatt | 92688 | MORNING GLORY |
| REBECCA | BRUMME
TT | 72631 | 7 Leatherwood Lane |
| Reba | Armstrong | 7054 | Route 46 |
| Laura | Coates | 19130 | 2139 Mount Vernon St,
Philadelphia PA 19130 |
| Anne | Keyes | 90210 | 1179-2 Camp Jackson Rd. |
| Catherine | McEwan | 24536 | Ilsahl 41 |
| Tanja | Rieger | 97039 | 303 first st |
| Sara | Marvin | 91205 | 1128 Princeton Drive |
| Jan | Leath | 91901 | 2627 Eltinge Dr. |
| Elaine | Benjamin | 33009- | 1835 e hallandale beach blvd |

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|-------------------|-----------------|------------|---|
| | | 4619 | |
| Beatriz | Kohn | 10009 | 332 E 4th St. |
| Adele | Eisenstein | 93706-5739 | south elm ave |
| maria | goddard | 95412 | 36660 Annapolis Rd |
| Sharon | Lieberman | 94965 | 15 Issaquah Dock |
| alison | johnston | 94952 | 712 East D St. |
| Kit | Hillman | 94044 | P.O. Box 332, Pacifica,ca |
| Mary | Moseley | 95825 | 1461 University Ave. |
| Merick | Chaffee | 92110 | 2628 juan st |
| judith | leon de arayaes | 95819-1759 | 5321 Spilman Ave |
| Lily | Lau-Enright | 94102 | 1390 Market St. |
| Cheryl | Lewis | 95682 | 3450 Palmer Dr. 4-146 |
| Barbara | Boals | 91602-1634 | 10250 Camarillo |
| Margaret | Adams | 97396 | 16751 Willamina Creek Rd |
| Carrie | Sendak | 940622-253 | 2714 Jefferson Ave |
| George | Burkhard | 93012 | 291 Camino el Rincon |
| Antonia Ida Marie | Svennebjer | 95420 | box 79 |
| Sienna M | Potts | 94702 | 1460 Ordway St. |
| Karen | Dabrusin | 95404 | 924 Clark Street |
| Debora | ADams | 94703 | 1918 Grant St. #3 |
| Isabella | La Rocca | 94702 | 1255 Ashby Ave, Berkeley CA |
| Ann | Dentel | 92657 | 38 Avignon |
| Alicia | Koberstein | 95403 | 1800 walnut creek drive Santa rosa, ca. |
| Tim | Wong | 94025 | 1259 El Camino Real #215, Menlo Park CA |
| Nina | Wouk | 94110 | 104B Bennington Street |
| marci | yellin | 93460 | Calzada St. |
| Tristan | Daily | 94941-2241 | 95 Roques Moraes Drive |
| John | Cornett | 95460 | PO Box 1286 |
| Cheri | Langlois | 94903-1037 | 54 Mount Whitney Dr |
| Eric | Gold | 95376 | 480 east 3rd street Tracy CA |
| Zack | Padgett | 90405 | 3000 31st Street |
| Rob | Helphand | 94949-6544 | 111D Cortez Cir |
| Susan | Santiago | 94123 | 3351 Broderick St. San Francisco, CA |

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|-----------|--------------------|------------|--|
| Gayle | Cerri | 94501 | 1911 Buena Vista |
| Martha | Ashton-Sikora | 94301 | 849 Lincoln Ave |
| Kathy | Miller | 94965 | Box 454 |
| Elizabeth | Brawley | 94111 | 117 Greenwich Street, San Francisco, CA |
| Anna | Boucher | 94901-2581 | 704 Point San Pedro Rd |
| Tricia | Rose | 94965 | 122 Santa Rosa |
| Marty | Krasney | 94952 | 803 West St. |
| David | Foster | 94965 | 87 Luncon |
| Michael | Cullen | 92647 | 5961 hacienda dr |
| christine | jimenez | 2481 | 45 Hunnewell St. Wellesley, MA |
| Ingo | Stubbe | 94965 | 609 Nevada Street |
| stephen | feinstein | 94110 | 278 San Carlos |
| Aaron | Weiss | 90290 | 21587 Encina, Topanga CA |
| Jed | Fuhrman | 94965 | 309 4th Street |
| Mary | Naples | 94709 | 1236 Oxford St. |
| Susan | Schwartz | 94965 | 1413 Bridgeway |
| Stephen | Ward | 91365 | P.O. Box 6031 |
| saeed | Rami | 94965 | 769 Bridgeway |
| Marcy | Roth | 94965 | 7 Excelsior lane |
| Zohreh | Noorian | 33761 | 6765 298 Avenue North |
| V | Mullins | 91730 | 8651 'Foothill Blvd. Sp 67, Rancho Cucamonga, Ca |
| Dianna | McNair | 98105 | 323 Ne 51st Street |
| catie | clune | 94965 | Sausalito |
| James | Irving | 92780 | 14802 newport ave 22c |
| andrea | anaya | 95452 | 70 Warm Springs Rd |
| Roger | Clayton | 8005 | 7 Roxbury Drive |
| Jo-Eva | Paul-Applegate | 94965 | 10 A Dock |
| andy | rossi | 94965 | 256 Donahue St. |
| Philip | Quadrini | 94965 | 270 Currey Lane |
| Morgan | Pierce | 92663 | 4702 Neptune Ave, Newport Beach, CA |
| Carrie | Nichols | 98371-7346 | 930 14th Street SW |
| Nancy | Brown | 94945-1812 | 225 Escallonia Drive |
| Marc | Stephenson-Richman | 90036 | 431 burnside ave |
| jessica | tektas | 90230 | 11250 Garfield Ave. |

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|-------------|---------------|------------|--------------------------------------|
| Kristina | Fukuda-Schmid | 95436 | 8190 Grape Ave |
| Kathleen | Watson | 94611 | 6725 Thornhill Drive |
| Robert | Umbreit | 94612-1742 | 547 24th St Apt 21 |
| Christian | Heinold | 94609 | 430 41st St Apt 3 |
| Frank | Sosa | 90266 | 804 fifth st manhattan beach
Ca |
| susan | rudnicki | 32724 | 2723 Larkspur Rd |
| meg | belcher | 91604 | 3243 Oakdell Rd.. |
| norman | Toback | 94965 | 543 sausalito |
| Jill | Miller | 94965 | 501 Bridgeway |
| christopher | banks | 93012 | 42223 Village 42, Camarillo,
CA |
| Jan | Paley | 94025 | 2024 Santa Cruz Ave |
| Steve | Bellamy | 94965 | Headlands Ct |
| David | R | 94952 | 740 Elm Drive |
| Jennifer | Wheeler | 16761 | Ahornring |
| Jasmin | Franke | 96140 | 3955 Summit Rd, Carnelian
Bay, CA |
| Linda | Martello | 91504 | 1800 Grismer Ave |
| Karen | Burchett | 94965 | 5 Marion Ave. |
| Curt | Wells | 94122 | 1384 11th Avenue |
| Alexis | Morris | 3773 | PO Box 647 |
| Andrea | Willett | 75017 | rue du Parc |
| Christine | LESIEUR | 14301 | 100 Lancaster Dr. |
| Vicki | Lynn | 94965-9724 | 1795 Shoreline Highway |
| Edna | Rossenias | 94965 | 9 Yellow Ferry Dock |
| Wm Carey | Chenoweth | 96815 | 465 Kapahulu Ave |
| Sally | Yoshida | 95403-2227 | 2834 Ventura Avenue |
| John | Wendell | 94116 | 2001 46th Ave., San Francisco,
CA |
| Patrick | Schlemmer | 94965 | 100 Locust St |
| Patricia | Hamilton | 95403 | 229 Pacific Heights Drive |
| July | Green | 94965 | 4 south forty pier |
| hillair | bell | 69200 | vÃ©nissieux |
| julie | damin | 94952 | 5901 redhill road |
| susie | schlesinger | 94965 | 139 Lincoln Dr |
| John | DuPerry | 94965 | Sausalito, CA |
| Evan Jane | Kriss | 94965 | 32 Arana circle |
| Marjorie | Creazzi | 94954 | 1413 East Madison St |
| Katherine | Sellmann | 92377 | 1027 w buxton |

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|-----------|---------------------|----------------|---------------------------------------|
| olympia | bravo | 94305 | 920 Mears Court |
| Michael | Wyatt | 96161 | 12632 sapphire |
| Madison | Haley | 95964 | 300 Napa St. |
| Gretchen | Darnley | 94610 | 201 Santa Rosa |
| A | Corbett | 95818 | 1656 8th Avenue |
| Regina | Gandour-
Edwards | 94609 | 454 42nd Street |
| Hugo | Rupp | 95383-
1730 | P.O. Box 1730 |
| Stephen | Bohac | 94965 | 268 Donahue Street |
| Vivian | Lambert | 60618 | 3816 N Damen Ave |
| Lindsay | Byrne | 95473 | PO Box 2476 |
| Elisabeth | Fiekowsky | 90405 | 2677 Centinela Ave #408 |
| Pamela | Hammond | 94903-
1117 | 12 Mount Susitna Court |
| Frank | Lahorgue | 94901-
2846 | 999 C Street, #9 San Rafael,
CA |
| Pietro | Poggi | 10075 | 258 E 78th st, NYC |
| Brigitte | Sauget | 94965 | Muir Beach, CA |
| Gail | Falls | 94550 | 5255 Norma way #123
Livermore, CA |
| Elyse | Levy | 94965 | 3020 Bridgeway |
| Marcia | Salmond | 95460 | PO Box 1166 |
| Jeffery | Garcia | 92651 | 21544 Wesley Drive |
| Dixie Lee | English | 95050 | 1835 Grant Street Santa Clara
CA |
| Abigail | Kastner | 90069 | 728 N. Doheny Drive |
| Christina | Babst | 94117 | 826 Haight St |
| Taylor | Cornish | 94965 | 1601 Shoreline Hey |
| Deirdre | Carrigan | 94904-
2303 | 290 Via Casitas #206 |
| Richard | Feldon | 86327 | 10657 E. Kachina Place |
| Judy | Bensinger | 94801 | 618 Morgan Ave. |
| Antonia | Vanoni | 94965 | 5 Marion Ave |
| Christine | Zecca | 20901 | 10815 Lombardy Rd Silver
Spring md |
| Reuven | Walder | 92285 | 1324 Landers Lane |
| Elizabeth | Bird | 94806 | 2744 Sargent Ave. |
| sharon | procter | 90046 | 7746 Fountain Avenue |
| Grainne | OCarroll | 90064 | 2216 Overland Ave. |
| Ann | Bein | 92105 | 2546 44th street |
| jean | strong | 18255 | P.O. Box 2 |
| Janet | Davis | 94903-
3866 | 3 Poco Paso |

| | | | |
|-----------|--------------|----------------|--|
| Judy | Schriebman | 92021 | 12027 Royal Rd. # 12` |
| Elizabeth | Loyd | 90069 | 637 westbourne |
| leslie | r | 94117 | 132 Beulah |
| Katherine | Roberts | 94110 | 68 arnold ave |
| nora | roman | 92118 | 1234 churchill place |
| sanja | dimitrijevic | 94924-
9735 | 200 elm |
| marianne | ewing | 90631-
8057 | 807 West Road |
| Kathie | Kingett | 91324 | 19327 Citronia Street |
| Barbara | Orr | 94618 | 5816 Ocean View Drive |
| Christina | Ahlstrand | 95991 | 451 1/2 BIRD ST |
| Schezal | Hazlett | 95249 | 1330 Calaveritas Rd. #55 |
| Mary | Buchanan | 91001-
4552 | 17 Cliveden Green |
| Vic | Bostock | 92604 | 4041 North Park Circle |
| Ronald | Stahl | 94103 | 286 Valencia St. #24 |
| Marliese | Gabrielson | 94901-
5019 | 116 courtright rd |
| Paul | Lokay | 94965 | 45 sunset way |
| lonna | richmond | 94110 | 2027 Mission #411 |
| Ron | Avila | 95076-
4020 | 28 Brewington Avenue |
| Michael | Craib | 10029 | 1405 5th Avenue, #4B |
| Peter | Doyle | 93257 | 1454 Lowery St |
| Amy | Moreno | 95006 | 325 Crows Nest |
| Tom | Nordland | 90049-
1220 | 2616 Cordelia Road |
| Rebecca | Harper | 90278 | Redondo Bch |
| Antal | Kalik | 94965 | 11 Liberty Dock |
| Marti | Roush | 94110 | 2502 Folsom |
| Natalie | Galatzer | 93950 | 935 Lighthouse Ave #14 |
| Therese | DeBing | 27537 | 4164 Thomas Rd. |
| Kathy | Snedeker | 94015 | 123 Lake Vista Avenue Daly
City, CA |
| Jeffrey | Golden | 93065 | 2771 Fallon Cr |
| glenda | Deaton | 94110 | 23rd Street |
| Julie | Oatfield | 95404-
9616 | 3184 Calistoga Rd |
| Kamal | Prasad | 94960-
2351 | 83 Jordan Avenue |
| Herman | Waetjen | 94117 | 633 Oak |
| Karen | Kirschling | 91766 | 1970 S. Park Ave #2 |
| Gabriela | Rodriguez | 93933 | 2729 Princeton Ct |

| | | | |
|----------|----------------|------------|-------------------------------------|
| Chelsea | Swick | 91786 | 545 College Commerce Way |
| Casie | Walters | 94903-1619 | 150 Mt Whitney Ct |
| Kai | Nau | 94110 | 973 Dolores Street |
| Annie | Linton | 93304 | 1727 Orange St |
| Brian | Armer | 92651 | 735 Balboa Avenue |
| Sandra | Nealon | 93003 | 7187 Lemur St |
| Heather | Clough | 92082 | 30727 rolling hills drive |
| walter | wolfe | 91803 | 1336 Elm St. #2 |
| Diana | Morales | 22206 | 35 Stafford |
| Ellen | Young | 94114 | 261 Cumberland St |
| Cheryl | LaBrecque | 91040 | 11461 Riverwood Dr. |
| Kimberly | Harris | 94705 | 2736 Hillegass Ave Berkeley, CA |
| Inesse | Diehr | 91006-2501 | 224 E, Floral Avenue |
| Richard | Wightman | 94965 | 172 San Carlos Ave. Sausalito, CA |
| Patricia | Oneil | 83422 | P.O. Box 249, Driggs, ID |
| John | Borstelman | 95410 | pob 568 |
| dobby | sommer | 93308 | 7319 Pembroke Ave. |
| Ray | Morris | 92084 | 1047 Marbo Terr., Vista, CA |
| Jo | Presbury-Smith | 11001 | san antonio |
| ana | cardenas | 90027-4720 | 3864 Clayton Ave |
| George | Grace | 94965 | 254 Woodward Avene |
| Adrianna | Dinihanian | 94118 | 322 Clement |
| Bruce | Scotton | 94511 | pob 1075 |
| Scott | Nelson | 94965 | 58 Cloud View Rd |
| carla | berman | 94965 | 38 ross road |
| tavares | | | |
| Neil | Illiano | 94547 | 256 Sparrow Drive |
| Janis | Berryman-Poon | 90034 | 9107 W 25th St |
| Scott | Kaye | 92782 | 2480 Irvine Blvd |
| Mika | Stonehawk | 72756 | rogers, ar |
| Joan | Reynolds | 94933-0786 | PO Box 786 |
| Julia | WEAVER | 94401 | 909 e santa inez ave, san mateo, ca |
| betty | harada | 94978-0899 | P O Box 899 |
| David R. | Bergman | 91405 | 14765 Leadwell St. |

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|-----------|-------------|------------|----------------------------------|
| Eden | Kennan | 93402 | 1544 Valley View |
| Ned | Long | 94930-1351 | 58 baywood cayon rd |
| gregg | Cady | 94703 | 1741 Bancroft Way |
| Eric | Boulet | 94501 | 1310 Pearl Street |
| Scott | Eanes | 94123 | 2929 Gough Street, #3 |
| John | Lucas | 92037 | La Jolla, CA |
| T | Brooks | 95482 | 705 North State Street # 268 |
| Jorge | De Cecco | 92203 | 79291 ave 40 Indio, Ca |
| Jesse | Sherer | 94608 | 885 53rd St. |
| Nancy | Eichler | 95969 | 1090 Shadowbrook Way Apt 6 |
| Autumn | Gonzalez | 92027 | 26088bear valley height rd |
| Francoise | Young | 99686 | Po box 2981 |
| Jordan | Pond | 67000 | 11 rue finkmatt |
| gilmert | philippe | 94965-2136 | 7 Excelsior Lane, #1 |
| Donna | Brown | 95833 | 1672 Bannon Creek Drive |
| Terelle | Terry | 98366 | 2018 Yukon Harbor Rd SE |
| Jayna | Fowler | 91344 | 17900 Mayerling st granada hills |
| Marianne | Wilson | 93402 | 460 Mitchell Drive |
| Susan | Balthasar | 95620 | 600 Fountain Way, Dixon, CA |
| Damien | Luzzo | 94965 | 1601 Shoreline Highway |
| Qayyum | Johnson | 94965 | 1601 Shoreline Hwy |
| Lauren | Bouyea | 95065 | 333 Castle Drive |
| Heather | Richman | 90066 | 3521 Moore Street |
| Shannon | Matheson | 92840 | 10622 claussen st. |
| cheryl | fotia | 91602 | 10821 blix street |
| Kristen | Renton | 95401 | 1821 Fenwick Pl. |
| Dea | Maurizi | 89444 | 3665 Diamond Ct |
| Dana | Hendris | 98115 | 8000 16th Ave NE |
| Jayne | Collins | 94973-0785 | P.O. Box 785 |
| Melvyn | Wright | 94519 | 4049 Chestnut Avenue |
| Greg | Goodman | 95476 | 218 Fisher Lane |
| Paul | Strecker | 95815 | 1408 Response Rd. #152 |
| Megan | Morris | 95402 | p.o. box 1932 |
| iffet | shelley | 95609-1337 | PO BOX 1337, CARMICHAEL, CA |
| LEO G | YOUNGER | 90068 | 3863 Fredonia Dr. |
| Patricia | Marlatt | 94132 | 268 Orizaba Ave. |
| Sampson | Chan | 91126 | 40 weegschaal lemmer |
| gerrit | woudstra | 94705 | 3044a Halcyon Ct. |
| Joel | Hildebrandt | 95610- | 8054 Oak Avenue |

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|----------------|---------------|------------|---|
| | | 2514 | |
| Callie | Riley | 95610 | 8054 Oak Avenue Citrus Heights, CA |
| Brandy | Schumacher | 93950 | 1111 Austin Avenue |
| Rachel | Weber | 94965 | 300 Napa St. |
| gary | king | 94903-1722 | 15 Pine Hill Court |
| Myrto | Ashe | 94611 | 10 Cortez Ct. |
| Jackie | Dragon | 95222 | 10449 Oak Valley Road Angels Camp, CA |
| Daniel | Brower | 95405-8065 | 2522 Tachevah Dr |
| Pamela | Rosenthal | 94965 | 247 Gate Five Rd. |
| John | Shuey | 92562 | 37258 Huckaby Lane |
| Nancy | Brenner | 94901-3521 | 50 Mission |
| James | Dunn | 93704 | 1134 east lansing way |
| les | roberts | 94941-4051 | 325 Richardson Way |
| Renee | Locks | 94019 | 648 Terrace Avenue |
| Marge | Price-LaFace | 92688 | 18 El Cencerro |
| Franklin | Quan | 83422 | Driggs, Idaho |
| Kathy | Kilgallon | 94606-2559 | 1949 7th Ave. |
| Andrea | Byers | 94611 | 6114 La Salle Ave |
| Lia | F | 24440 | les younoux |
| jacquet marini | laura | 70121 | 202 Jefferson Heights Ave |
| John | Brown | 92086 | 35240 peralta dr warner springs |
| sharon | duffy | 95122 | 2213 McLaughlin Ave. #2 |
| Cynthia | Lopez-Pacheco | 94965 | 403 Napa St, Sausalito |
| Susan | Sternau | 95949 | 15193 Sierra Star Lane, Grass Valley CA |
| Janis | McGregor | 97042 | 29474 s Salo rd |
| Eileen | Blaisdell | 94109 | 1945 Washington Street, San Francisco, CA |
| Nadine | Weil | 94965 | 261 Eden Roc |
| Maureen | Manley | 93923 | 9564 Oak Court |
| Claire | Godwin | 94703 | 2439 McGee Ave |
| Gina | Damerell | 90034 | 3724 Glendon Ave #305 LA, CA |

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|----------|------------|----------------|---|
| Julie | Santucci | 95521 | Arcata |
| Heather | Freitas | 94110 | 954 Florida St. |
| Brent | Plater | 256620
090 | Travessa Prudente Aguiar |
| Thamires | Saidler | 91913 | 1974 Alederbrook Pl. |
| Lucia | Ladman | 90026 | 2119 Elsinore st #3 |
| Elaine | Hoxie | 77009 | 3013 Norhill blvd |
| Sandy | Sanderson | 94965 | 21 Glen Ct. |
| Marisa | Nelson | 13620 | Montecillo 7 |
| Ivan | Ruiz Lopez | 92865 | 530 E. Vista Del Playa Ave.
4412 Ocean View Blvd Apt
NUMBER |
| Thomas | Wilson | 91020 | |
| Karen | Berger | 11560 | Castelar 11- |
| Arturo | Aguiar | 95747 | 1822 Ravenna Way |
| Dan | Anderson | 94534 | 2443 Sawgrass Ct. |
| Shannon | Catt | 92106 | 2907 Shelter Island Dr |
| Nancy | Smith | 93444 | 759 Drumm Lane Nipomo |
| Nora | Lewis | 29512 | PO Box 1883 |
| Jon | Ferraro | 95949-
9747 | 14104 Retrac Way |
| Sharma | Gaponoff | 90210-
4119 | 34 st mary st |
| peter | faure | 93055 | 366 buckboard circle |
| Lexi | Yang | 98512 | 2039 Delphi Rd SW |
| Kristina | Cox | 32738 | 3415 Goldenhills St |
| Dawn | Zegledi | 94122 | 1226 7th Avenue |
| Jean | Lee | 94403 | San Mateo, CA |
| Cilla | Raughley | 94582 | 1218 crestfield dr. san ramon
ca. |
| Michael | Pursley | 4020 | Klingner Road, Redcliffe |
| Roberta | Turpin | 94585 | 1106 Kellogg st,Suisun,CA |
| donald | grover | 93728 | 1624 E. Hedges Ave, Fresno
CA |
| Nancy | Kelly | 94952 | 101A Post |
| kit | llfroos | 94118 | 242A 2nd Ave San
Francisco.Ca |
| A.Marie | Whitworth | 95472 | Sebastopol, CA |
| Randall | Woodbury | 94117 | 1206 Fell St |
| Kyle | Chidester | 39530 | 1160 Judge Sekul Ave. Apt.
137 |
| Casey | Blanchard | 90026 | 1406 n. benton way |
| ken | stack | 91021 | 405 main st |
| Lara | Ebisuzaki | 90027 | Catalina Street |
| Peter | McDonald | 94502 | 3527 Oleander Ave. |

| | | | |
|-----------|---------------|----------------|-----------------------------------|
| Thomas | Cipriano | 95684 | p.o. box 284 |
| Peggy | crow | 95490 | 1678 Lilac ct #B |
| Stephanie | Snyder | 57701 | 713 Fairview st. |
| Sarah | Zakhari | 90211 | 201 west mall |
| lorraine | murphy | 94591 | 401 Goheen Circle, Vallejo,
CA |
| Alicia | Jackson | 92886 | 5260 Via Geraldina |
| Peggie | Kirkpatrick | 76109 | 4108 inwood road |
| Lynda | Maenius | 8742 | 43 twilight |
| mike | amiri | 95350 | 2312 St. James Pl. |
| Jennifer | Hayes | 94941-
3624 | 286 Shoreline Highway |
| David | Dexter | 43203 | 1285 east long St |
| Angela | Adkins | 54304 | 2350 Canter Ln Apt B |
| Lyn | Gottschalk | 75080-
1103 | 3560 Alma Rd Apt. 428 |
| Bridget | Robertson | 32605 | 2701 NW 23rd Blvd, Apt. A-
12 |
| Luis | Tirado | 85013-
1368 | 6348 N 7th Ave Unit 19 |
| Michele | von
Kampen | 14810 | co rte 13, bath, ny |
| jon | dugan | 21037 | 446 Cherry Drive |
| Elaine | Phillips | 94115 | 1894 Turks st |
| ryan | mclintock | 33810 | 4515 Rushing Rd |
| Alecia | Folsom | 32136 | P.O. Box 422 |
| Michelle | Brown | 94501-
3492 | 815 Lincoln Avenue, Apt. B |
| Holly | Rose | 24551 | 500 Sweeney Circle |
| Amber | Elliott | 14810 | 8487 cty. rte. 13 |
| Amanda | Dugan | 92344 | 7713 maple ave |
| Kristina | Vest | 75074 | Shinnery Oak Dr. |
| Amy | Miller | 94591 | 13 Ramsgate Way |
| Margaret | Simonsen | 94011 | PO Box 117832 |
| Holly | Nelson | 80440 | 18 Rooibekkie Street |
| Julija | Merljak | 94127 | 58 West Portal Avenue #236 |
| Stacey | Haysler | 95405 | 1256 Janet Way |
| Samantha | Scott | 91011 | 1030 foothill |
| Rowena | Emmett | 94309 | P.O. Box 16505 |
| Christina | Morrisett | 80515 | box 274 |
| Jack | Patterson | 90019-
3925 | 1441 S Sierra Bonita Ave |
| Denise | LaChance | 50551 | A-408 1451 Brookdale Ave |
| Allan | Kellar | 81431 | 37341 II Rd. |

| | | | |
|--------------|-------------|----------------|-------------------------------------|
| ilsa | johansson | 90712 | 3746 Cameroon st |
| Joni | Newman | 94536 | 35446 Roca Drive |
| Brande | Bogosian | 6500 | Porvoo |
| Petteri | Nyström | 95407 | 973 Stony Point road |
| Michelle | Jensen | 95112 | 75 S 17th St |
| Deborah | Taylor | 93094 | P.O. Box 940884 |
| Ellyn | Sutton | 90504 | 16431 Taylor Court |
| Shota | Hanai | 95843 | 3608 Kodiak Way |
| Joseph | Grinnell | 98037 | 5926 173rd Pl SW |
| Kari | Wilson | 50284 | 23 Greer Crescent |
| Allison | Brown | 41324 | Syster Emmas Gata 9 |
| Angelika | von Bargaen | 90008 | Sunst bd |
| Maud | Laclos | 13501 | 1225 Taylor Ave |
| Patricia | Van Cour | 94964
0324 | PO BOX 324 |
| Vicky | Tuorto | 85132 | 10396 E. Aster lane |
| Tiffany | Turley | 2903 | 203 South Main St |
| Frances | Carpenter | 11111 | Dalvait Rd |
| Sarah | Mumford | 93001 | 205 Coronado St. Ventura, CA |
| Rolando | Garcia | 32958 | 2440 Wee Folks Circle |
| Alicia | Crine | 92707-
4651 | 1000 W MacArthur Blvd #78 |
| Virginia | Partridge | 57000 | place du forum |
| fiona | gandar | 94553 | 612 E Street |
| Tamhas | Griffith | 94301 | 560 Kingsley |
| James | Little | 55555 | brabantlaan |
| kaatje | adams | 95032 | 200 Winchester cir |
| L | S | 92260 | 45775 Ocotillo Drive # 4 |
| Jan | Lawson | 94608 | 1276 64th St. |
| Jane | Goodwin | 20910 | 33135 east highway |
| susan | frankel | 94024 | P.O. Box 3254, Los Altos, CA |
| C | Galloway | 95401 | 1817 Rhianna St. |
| Jeannette | Sumner | 11910 | Zuckerandlgasse 4 |
| Gerlinde | Horn | 11910 | Zuckerandlgasse 4 |
| Dr.Chrisitna | Horn | 90046 | 7719 Willoughby AVE. |
| Daniel | Zelter | 95120 | 21950 McKean Road |
| Heather | Kerr | 95864 | 206 Selby Ranch Rd. Apt. 1 |
| Clayton | Graham | 95060 | 1747 King Street, Santa Cruz,
CA |
| Renee | Flower | 77084 | 17419 Davenway dr. |
| charles | Quigley | 96073 | PO Box 800 |
| Patricia | Lawrence | 91381 | 25122 Steinbeck Ave Unit E |

| | | | |
|---------------------|-------------|----------------|---|
| Ingrid | Van Dorn | 90806 | 2169 pine ave |
| Jackie | Engle | 93001 | 184A El Medio St. |
| Andrew | Abate | 95124 | 3241 Taper Ave San Jose, CA |
| Jen | Rios | 94965 | 243 San Carlos Avenue |
| Elise | Acosta | 92673 | 56 Paseo Verde |
| Natalie | Kovacs | 95409 | 2341 Creekwood ct |
| Lily | Adams | 94087 | 941 W. Cardinal, Sunnyvale,
CA 94087 |
| Gary | Bailey | 94941-
1510 | 12 Somerset Lane |
| Rebecca | Heitz | 94930-
1804 | 187 Forrest Avenue |
| David | Firshein | 94965 | Bayvista Cir |
| Ben | Panger | 91604 | 4251 Tujunga Ave, Apt. #10 |
| Julie | Amato | 92111 | 2340 Gatling Court San Diego,
CA |
| Damion | Barton | 94546 | 3913 Castro valley blvd Spc 21 |
| Jonathan | Eandi | 53901 | 502 West Oneida Street
Portage WI |
| Elizabeth | Gray | 91942 | 5500 morro way |
| molly | watt-stokes | 22800 | Ruiz 1595 |
| carmen | garcia | 94080 | 51 Windcrest Ln |
| William | Manewal | 77079 | 802 Pinesap Dr |
| Lori | Sinclair | 94306 | 540 irven court |
| Jennifer | Szalata | 95010 | PO Box 651 Capitola, CA |
| Dennis | Davie | 94110 | 39 Mesa Street |
| Aaron | Hansen | 90064 | 10951 National Blvd |
| Frida | Morales | 80247 | 9029 E Mississippi Ave |
| Angela | Lopez | 15634 | v10 |
| Christina
Sophia | Potter | 29616 | PO BOX 26921 |
| D L | Stewart | 94610 | 600 Bellevue Ave |
| Constance | Taylor | 7762 | Spring Lake Hts., NJ |
| Samantha | Keown | 2494 | 18 damon road |
| valerie | clark | 48092 | 27500 Donald Warren Mi |
| brad | thomas | 84102 | Nejedleho 16, Bratislava |
| Jana | juhasova | 84124 | 4260 south 2700 East |
| Melinda | Orms | 4282 | 2 County Road Turner, Maine |
| Cindy | Duguay | 23111 | 7064 Mill Valley Rd. |
| Jamica | Bright | 92284 | 5524 Grand Ave., Yucca
Valley, CA |
| Cynthia | Anderson | 86427 | Po box 8310 |
| Sharon | Thompson | 85358 | P.O. Box 2578 |
| Rita | Guidi | 56017 | 24653 irish lane |

| | | | |
|--------|-----------------|----------------|------------------------------------|
| ted | redalen | 94553 | 4432 Actriz Place, Martinez,
CA |
| Sakura | Vesely | 94112-
3621 | 44 Ellington Ave. |
| D. | Palacio | 10028 | 405east 82 street apt 1k |
| Boris | Bura | 92337 | 16860 Slover Avenue Spc. 22 |
| Deanna | armendariz | 97215 | 2340 50th Ave Apt. 16 |
| Leah | Pecoraro | 93422 | 5555 Valentina Ave. |
| Debbie | Buckheim | 75017 | Paris |
| Laura | R | 93950 | 719 17th St. |
| Laurie | Solon-
Husby | 90034 | 2901 Sepulveda |
| Sam | Fargnoli | 94024 | 1021 e rose cir. los altos |
| nancie | sailor | 94024 | |

From: [Judy Schriebman](#)
To: [Thorsen, Suzanne](#)
Subject: Fwd: codornices creek report
Date: Monday, June 17, 2013 6:07:53 PM

Hi Suzanne,

Arjit sent me his comments on the SCA and he said I could forward them to you. I hope you find them useful. I think they are quite informed.

Judy Schriebman

Begin forwarded message:

From: ARIJIT SEN <arjitsenarjit@berkeley.edu>
Date: June 17, 2013 12:53:04 PM PDT
To: Gallinas Valley <gallinasvalley@gmail.com>
Subject: **codornices creek report**

Dear Judy,

I read the policies under Stream Conservation and have the following observations:

1. The inconsistency of the setback requirement from property lines due to their acreage, seems extremely silly (for the lack of a better word). Having said that, I feel 100 feet is a rather large setback. A more in depth study of the soil structure and hydrology should be done to determine a landscape specific setback. Once decided, it should be maintained throughout and all structures falling within it should be declared non-conforming and no new variances or exceptions be granted.

I find the BIO-3.2 Require Thorough Mitigation section quite vague with the 2:1 and 3:1 replacement ratios. The ratio seems random. It could be site specific- depending on the quality of habitat displaced by the existing development.

2. A section, I feel, that could be added to this report is a list of allowable materials that should be used for constructing along the creek. If its a complete green building with rainwater harvesting capabilities, soak pits, septic tanks, localized water filtration, it might not need to follow those 2:1 mitigation requirements.

3. Everywhere there is mention of importance of all these steps towards Environment, Economy and Equity. However, there is no mention of the Sense of Community and creation of a more 'liveable' environment. There is mention of an improved habitat for wildlife and humans.. maybe the Kevin Lynch/*an* concept of Liveability could be (improvised and) added to it. The way Equity descriptions are framed, make the stream corridor appear as an object - "*appreciation*" of natural resources, and aesthetic

benefits- like its a piece of art of something! Instead, the community should be made to engage with it (positively), so that we (as elements of nature) work towards a symbiotic growth, rather than as a parasitic development.

4. Stream corridors act as an ecological spine of the region the flow through. And, it is of utmost importance to first create awareness of its benefits. Outreach and education programs in the neighborhood is extremely important. During our Codornices Creek study we discovered that most people who were affected by the creek's landuse ordinance were aware of its ecological benefits, however, others in the neighborhood, had no idea.

Spreading this knowledge would not only sensitize neighborhoods towards protecting and preserving the wetlands, but also, foster a sense of community. Thereby, creating a more pleasant environment.

Best regards,
Arijit.

From: [Patterson, Diane](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraits, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Fair & Legal Setback
Date: Tuesday, June 18, 2013 12:23:36 PM
Importance: High

From: dweissman@gmail.com [mailto:dweissman@gmail.com]
Sent: Tuesday, June 18, 2013 9:44 AM
To: Adams, Susan; Arnold, Judy; Kinsey, Steven; Rice, Katie; Sears, Kathrin
Cc: Patterson, Diane
Subject: Fair & Legal Setback
Importance: High

Dear Board,

I apologize for missing the deadline for submitting written comments via Open Marin, thus resorting to this email.

My family and I are blessed to live on Mt. Tam, right off Panoramic Highway. There is a seasonal stream that runs through our property, and, we support the establishment of a fair setback distance to protect our wildlife.

However, we do not support a proposed "sliding scale" setback distance to be determined by parcel size. It is our strong opinion that this method unfairly punishes those on larger parcels simply because of size. Why should we, an owner of more than 2 acres, be held to a different standard than our neighbors simply because of our parcel size? This methodology is not logically related to the purpose of the ordinance - the protection of wildlife. Implementing a "sliding scale" would violate the due process clause of the Fifth through Fourteenth Amendment, which could be difficult and expensive for the County to defend.

This Board should determine a fair and universal setback distance that protects our wildlife and conserves our gorgeous land for generations. But that setback should not change based upon the size of someone's parcel.

Respectfully,

DANIEL WEISSMAN

455 Panoramic Hwy, Mill Valley CA 94941

dweissman@gmail.com | 415.888.3945

From: [BOS](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraits, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Stream Conservation Area Ordinance-Vote NO!
Date: Tuesday, June 18, 2013 6:52:37 AM

This message was received through the email address link for sending one email to all Supervisors. Please forward as you deem appropriate.

From: dbdune@gmail.com [mailto:dbdune@gmail.com]
Sent: Monday, June 17, 2013 7:41 PM
To: BOS
Subject: Stream Conservation Area Ordinance-Vote NO!

Denis Blaise/Aimee Montroy would like information about:

Hello,

My name is Denis Blaise and our family lives on Woodacre Creek, at 58 Oak Grove Ave., Woodacre, CA 94973-0842.

We encourage the entire Board of Supervisors to vote NO on the proposed SCA Ordinance as currently written.

Please try to put yourselves in the shoes of the residents who will be affected. The families who live in the San Geronimo Valley care deeply about fish populations and water quality. We strive to minimize environmental impacts in how we use our land. We want to continue taking reasonable measures to move forward the improvements that have already been occurring in recent years; improvements obtained in-part by local property owner/SGV Families' involvement.

To enact an ordinance that dramatically restricts normal domestic activities and will impact our enjoyment of our homes and our property values, without any financial remuneration to the affected property owners, is not only unfair but probably also unconstitutional.

We are deeply concerned about the Stream Conservation Ordinance being pushed through without further consideration. We believe the SCA Ordinance as currently written ignores verifiable and scientifically sound data/recommendations cited in the 2009 SEP report. We also are concerned that there hasn't been sufficient time for public and legal review of the proposed SCA Ordinance. We suggest the following recommendations on how the SCA Ordinance should be altered:

1. Please enact a 35 foot setback, not a 100 foot setback. The County's 2009 SEP Report shows that a 35 foot setback is adequate for stream health. This is a very important number and it should be based on science.

2. Please make all activities proposed to require Tier 1 permits Exempt. Let's have the legislation focus on educating and supporting people to act responsibly, rather than on trying to force people to jump through expensive and confusing legal red tape.

3. We support ALL of the proposed revisions described in the Marin Independent Journal article, posted 6/15/20:(Supervisor Kinsey: Ease Creekside Plan- Marin Independent Journal)

Our main concern remains being able to make repairs and improvements to our homes and landscaping - in an ecologically responsible manner - without having to spend a lot of extra time, energy and money on jumping through unnecessary legal hoops.

Please delay passing this ordinance until the changes listed above are included in any future SCA Ordinance.

Thanks for your consideration and we look forward to meeting the entire Board soon.

Denis Blaise, Aimee Montroy, and Family
58 Oak Grove Avenue
Woodacre, CA 94973-0842

MILL VALLEY STREAMKEEPERS

To: Board of Supervisors
Marin County
June 18, 2013

Re: Stream Conservation Ordinance

Dear Board:

On June 10, 2013, we emailed our letter concerning the SCA ordinance. It is not in the file prepared for you and we do not know whether you received it.

In that letter, we told you that because of events and factors which have occurred since the adoption of the Countywide Plan (CWP), under CEQA, section 15162, a new EIR is called for, or at the very least, a supplemental one, sec. 15163.

The reasons for this action include the following: updated listings for endangered and threatened species, accelerated rate of climate change (to the extent that many scientists believe we have already reached the 'tipping point'), new research on the above factors, citing proof as well as contemplated action on what must be done---the Federal Recovery Plan for Central California Coast Coho Salmon (2012). This comprehensive document, over a decade in the making, to address issues of extinction within the mandate of federal law, to wit, the Endangered Species Act (ESA), contemplates the expenditure of billions of dollars in its implementation. It cannot be ignored.

We also cited SPAWN vs. County of Marin, Dkt. 1004866, a case in which the current 2007 version of the CWP formed the gravamen for a complaint about the failure of the county to enact a stream ordinance in compliance with that Plan. At the core of this CEQA action were provisions of the ESA which prohibit a "taking", that is, a killing of endangered species. Coho salmon are listed as endangered. The surest way to kill not only one fish but the entire population is to degrade their habitat.

This lawsuit was expensive, long, and probably created a division within the county community. One could say that those who believe landowners own unrestricted use of their property are terribly misled by those who stoke the fires of resentment by saying the county can pull off a "balancing act". All landowners have restrictions on use, both in this county, in all its towns, and all across this country. Where you choose to live will be determinative of those restrictions. Here in Mill Valley where we live, all lots, even those of 4000 square feet are subject to a 30 foot setback from the top of the creek bank. Therefore complaints about 20 foot setbacks on lots as large as 22,000 square feet, in an area critical to survival of the endangered Coho, put into perspective just how off base, the proposal sent to you by the Planning Commission really is.

There can be no justification for a cavalier approach, disregarding not only science, but Federal Law, and the California statutes which provide an enforcement vehicle for that law.

To the extent that the Judge's ruling which depended upon representations of the County are disregarded, to attempt to junk the requirements of the CWP, to attempt to thwart not only Federal Law, but CEQA would be a grave mistake.

Reading the Court's Ruling in the SPAWN case, and also going through the 3 volumes of records, which do not include the voluminous "Administrative Record", which is cited extensively by the County in its various legal memoranda, which the Superior Court does in its ruling, would be of great assistance to you in your deliberations.

One series of allegations made by the County in the case is a recitation of the resources spent and efforts made as a result of the CWP, its joining with other counties in the FishNet 4 C program, collaboration with MMWD in various plans, the Fire Department and DPW of the County, California Parks, the National Park Service and the County Resource Conservation District. Additionally, County DPW entered into agreements for reports on fish barriers, hiring a full time Planner to perform fish passage and creek restoration planning/grant writing and administration. There were agreements for design and construction of culverts in San Geronimo Creek watershed and Kent Canyon, to improve fish passage.

There are numerous others.....which shed light on this subject which the public needs to know in order to understand the dire need for addressing the extinction of a species critical to our environment and an important part of the State's industry, i.e. commercial fishing. Let us not forget the intense campaign to save the headwaters in Northern California. Do you really believe it was only because of the Northern Spotted Owl?

As stated, these efforts, by 2006, resulted in this: the "County had set aside \$3,332,480 in funding from grants, County money, and County staff time for various fish protection and restoration projects..... most of which were focused on the Lagunitas Creek watershed." (County's Brief, page 10, line 9)

In early 2010, the County prepared a Salmon Enhancement Plan, at a cost of \$500,000. And the County has budgeted for this plan, over \$1.1 million. Again, the County made preparations and efforts to comply with Federal Law.

Implementation of these efforts, to comply with a CWP which MVSK believes is inadequate in light of intervening events.....is your task. Does the SCA proposal sent to you comply with the allegations of your County in Court, and the CWP, and if so, are they adequate to withstand the new facts regarding this subject, which MVSK asserts, in fact, science, and law, that they are not.

It is worth noting here, in connection with the County's efforts in saving Coho, through a SCA ordinance, that the 1994 CWP was comprehensive too, and called for the County to issue development permits only if the parcel fell entirely within the SCA or if the County determined

that development outside of the SCA would have greater water quality impacts than development within the SCA. See pages 13-14, County's Brief, citing 1st RJN, Exh.1, p.3.

That was almost 20 years ago. It is safe to say that all current residents in the area have had ample time to learn and to live with the restrictions called for by the Endangered Species Act, as set forth in the CWP.

Continuing with the County's representations in Court, it lists some of the goals of the 2007 CWP and says the following:

SCAs are designated along perennial, intermittent, and ephemeral streams as defined in the 2007 CWP [AF 7565(Policy BIO-4.1).] The 2007 CWP highlights the importance of SCAs by explaining that “[a]dequate setbacks and limitations on uses within designated Stream Conservation Areas are needed to minimize disturbance to sensitive resources and to maintain and improve wildlife habitat, flood protection, and water purification.” [AF 7572]

A core component of the SCA policies requires development to be set back in order “to protect the stream and provide an upland buffer, which is important to protect significant resources that may be present and provides a transitional protection zone”. [AF 7565 (Policy BIO-4.1).]

The Brief goes on to explain how the 2007 CWP strengthened the earlier one, by defining terms such as woody riparian vegetation and the expansion of setbacks to the “greater” of either 100 feet from top of bank or 50 feet from the outer edge of woody riparian vegetation. (County Brief, p. 15-16)

As stated, the County has made these representations in Court in order to obtain the result it wanted. That was an acceptance of the goals and protections of the 2007 CWP and the intent to enact a SCA ordinance which would implement those goals and protections.

Before you today is a statement signed by 150 scientists on the subject of stream setbacks. That is the best guidance you have to determine setbacks which comport with the ESA and the CWP.

Time and again, the County's expressed intention was for “generous” setbacks. We in Mill Valley have a 30 foot setback ordinance for lots as small as 4000 square feet. You are contemplating 20 foot setbacks for urban corridor parcels up to half an acre, 22,000 square feet. This is hardly generous, and does not suggest a rule or custom consistent with that of most of the towns and cities.

We hope that you will take the time to see how the County's money was spent in the SPAWN litigation; that litigation spells out some of the deficiencies of the CWP as well as pointing to the efforts made by the County and that which remains to be done, specifically, a Stream Conservation Area Ordinance which complies with federal and state law.

Page 4

When you look at the efforts which have been made, over decades, the recognition of the needs advanced by the 2007 CWP and the earlier ones, the dramatic changes which call for even more protective measures, the fact that the County is legally bound by its assertions in Court, as well as by the CWP, the ESA, and CEQA, you will realize that opposition to a SCA ordinance which incorporates requirements of these, has no merit and no basis.

Thank you for your consideration of the above.

Submitted,

Joyce Britt

for

Mill Valley StreamKeepers

millvalleystreamkeepers.org

From: [Patterson, Diane](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraitas, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Please Support the SGV proposal to modify the Stream Conservation Ordinance
Date: Tuesday, June 18, 2013 5:37:06 PM

This message was received through the email address link for sending one email to all Supervisors.
Please forward as you deem appropriate.

From: Robert Kuzma [mailto:bckuzma@gmail.com]
Sent: Tuesday, June 18, 2013 4:26 PM
To: Adams, Susan; Arnold, Judy; Kinsey, Steven; Rice, Katie; Sears, Kathrin; Patterson, Diane
Subject: Please Support the SGV proposal to modify the Stream Conservation Ordinance

Dear Supervisors,

10 years ago, my wife and I were fortunate enough to find in Nicasio a 50 year old, 900 square foot home, on a 2 acre lot bisected by Nicasio Creek. While a tremendous financial stretch, we were able to join the community with the intent of raising our family in Nicasio and providing a possible living situation for older family members. Now that our daughter is 5, we are hoping to expand the house and permit us to remain in the Community.

Unfortunately the proposed Stream Conservation Ordinance, in the current form, requires a 150' setback, which is not possible on our 2 acre lot due to the seasonal stream. While there are provisions for exemptions, this places a disproportionate burden on those who could only afford small homes on small parcels in the first place.

Our investment has been already compromised by FEMA, post-Katrina, rezoning our property into an "X" flood plane requiring the mandatory purchase of \$1700 per year Federal Flood Insurance. As you probably have heard, this was done without site evaluation, and the burden of proof to be taken out of the flood zone was placed on the homeowners. Please do not place additional burdens on those of us who could barely afford to join the community.

Please consider rejecting the Stream Conservation Ordinance in the current form and support the proposed changes developed by the SGV Stewards.

Sincerely
Robert and Kristin Kuzma
6725 Lucas Valley Road
Nicasio

From: [Patterson, Diane](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraitas, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Please Support the SGV proposal to modify the Stream Conservation Ordinance
Date: Wednesday, June 19, 2013 12:45:31 PM

This message was received through the email address link for sending one email to all Supervisors.
Please forward as you deem appropriate.

From: Robert Kuzma [mailto:bckuzma@gmail.com]
Sent: Wednesday, June 19, 2013 12:37 PM
To: Adams, Susan; Arnold, Judy; Kinsey, Steven; Rice, Katie; Sears, Kathrin; Patterson, Diane
Subject: Re: Please Support the SGV proposal to modify the Stream Conservation Ordinance

Dear Supervisors,

thank you for not passing the SCA Ordinance in the current form and instead choosing to revisit the proposal with additional input from Supervisor Kinsey and Supervisor Sears.

While the situation may seem at first daunting and unending, the reality is that thanks to Marin's investment in GIS mapping and Satellite imagery technology, the information needed to make good policy decisions is readily available. In other words, rather than making broad policy decisions that impact all residents in an unincorporated area, or all residents in Nicasio, it is possible to develop more granular solutions, down to even the Lot/Parcel Level.

While this does place a burden on the County Government, we feel that this is more appropriate than placing the burden on the middle class home owners on smaller creek-side parcels. The alternative would be to seek a less restrictive approach that emphasizes education and a voluntary approach by creek-side property owners to benefit the habitat that we all cherish.

Again, we thank you for taking the time to engage with the stake holders on this issue.

Sincerely
Robert and Kristin Kuzma
6725 Lucas Valley Road, Nicasio

On Tue, Jun 18, 2013 at 4:26 PM, Robert Kuzma <bckuzma@gmail.com> wrote:
Dear Supervisors,

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are provisions for exemptions, this places a disproportionate burden on those who could only afford small homes on small parcels in the first place.

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Please consider rejecting the Stream Conservation Ordinance in the current form and support the proposed changes developed by the SGV Stewards.

Sincerely
Robert and Kristin Kuzma
6725 Lucas Valley Road
Nicasio

From: [Patterson, Diane](#)
To: [Albert, Tanya](#); [Alden, Leslie](#); [Clark, Susannah](#); [Crosse, Liza](#); [Escobar, David](#); [Fraits, Rick](#); [Laird, Sandy](#); [Parton, Maureen](#); [Vernon, Nancy](#); [Weber, Leslie](#)
Cc: [Thorsen, Suzanne](#)
Subject: FW: Please Support the SGV proposal to modify the Stream Conservation Ordinance
Date: Wednesday, June 19, 2013 12:46:33 PM

This message was received through the email address link for sending one email to all Supervisors.
Please forward as you deem appropriate.

From: Robert Kuzma [mailto:bckuzma@gmail.com]
Sent: Wednesday, June 19, 2013 12:41 PM
To: Adams, Susan; Arnold, Judy; Kinsey, Steven; Rice, Katie; Sears, Kathrin; Patterson, Diane
Subject: Re: Please Support the SGV proposal to modify the Stream Conservation Ordinance

Supervisor Kinsey,

Thank you for the follow up email.

We appreciate your efforts to engage with the various stake holders to find a balanced plan that ensures that our creek-side habitats continue to thrive, without undermining the investments made by owners of smaller creek-side properties.

Sincerely
Robert and Kristin Kuzma
6725 Lucas Valley Road, Nicasio

On Wed, Jun 19, 2013 at 12:37 PM, Robert Kuzma <bckuzma@gmail.com> wrote:
Dear Supervisors,

thank you for not passing the SCA Ordinance in the current form and instead choosing to revisit the proposal with additional input from Supervisor Kinsey and Supervisor Sears.

While the situation may seem at first daunting and unending, the reality is that thanks to Marin's investment in GIS mapping and Satellite imagery technology, the information needed to make good policy decisions is readily available. In other words, rather than making broad policy decisions that impact all residents in an unincorporated area, or all residents in Nicasio, it is possible to develop more granular solutions, down to even the Lot/Parcel Level.

While this does place a burden on the County Government, we feel that this is more appropriate than placing the burden on the middle class home owners on smaller creek-side parcels. The alternative would be to seek a less restrictive approach that emphasizes education and a voluntary approach by creek-side property owners to benefit the habitat that we all cherish.

Again, we thank you for taking the time to engage with the stake holders on this issue.

Sincerely
Robert and Kristin Kuzma

6725 Lucas Valley Road, Nicasio

On Tue, Jun 18, 2013 at 4:26 PM, Robert Kuzma <bckuzma@gmail.com> wrote:
Dear Supervisors,

10 years ago, my wife and I were fortunate enough to find in Nicasio a 50 year old, 900 square foot home, on a 2 acre lot bisected by Nicasio Creek. While a tremendous financial stretch, we were able to join the community with the intent of raising our family in Nicasio and providing a possible living situation for older family members. Now that our daughter is 5, we are hoping to expand the house and permit us to remain in the Community.

Unfortunately the proposed Stream Conservation Ordinance, in the current form, requires a 150' setback, which is not possible on our 2 acre lot due to the seasonal stream. While there are provisions for exemptions, this places a disproportionate burden on those who could only afford small homes on small parcels in the first place.

Our investment has been already compromised by FEMA, post-Katrina, rezoning our property into an "X" flood plane requiring the mandatory purchase of \$1700 per year Federal Flood Insurance. As you probably have heard, this was done without site evaluation, and the burden of proof to be taken out of the flood zone was placed on the homeowners. Please do not place additional burdens on those of us who could barely afford to join the community.

Please consider rejecting the Stream Conservation Ordinance in the current form and support the proposed changes developed by the SGV Stewards.

Sincerely
Robert and Kristin Kuzma
6725 Lucas Valley Road
Nicasio

To: Marin County Board of Supervisors

From: Warren Karlenzig, San Anselmo resident, President, Common Current, San Anselmo CA
(www.commoncurrent.com) 415.259-6227

Date: June 18, 2013

Summary

I am writing in response to the Proposed Stream Conservation Area Ordinance (SCA). While I applaud the Marin Community Development Agency's efforts to improve stream water quality and habitat, I feel it would make more sense to first implement county-wide and watershed wide improvements in water quality and flood reduction through physical and bioretention policies and demonstration projects. Streamside property owners should be required to have development restrictions, but only in parallel or even after the county acts on a more widespread basis to limit non-point pollutant and flood contributing storm run-off.

When it comes to reducing watershed wide water pollution and flooding, streamside property owners represent only the very tip of the spear: the rest of the respective watershed in which these streams are situated are really as the shaft and body of the spear!

Marin County has a timely opportunity to complement its existing water quality control (and flood control) strategy with "Distributed Water Quality and Flood Control Strategies"*¹ which would include physical retention of water throughout all the Marin County watersheds and would include a wide range of bioretention approaches. I have previously testified several times before the Flood Control District Nine, the Town of San Anselmo and have met with numerous officials (including County Supervisor Katie Rice) describing this opportunity in greater detail. Directly in response to my March 14, 2013 letter to the flood Control District Nine Board (also attached), Marin County Engineer Jack Curley prepared a three-page memo for the board's May 15, 2013 meeting titled "Low Impact Development and the Marin County Flood Control District (a link was also instituted with similar content on the Marin Watersheds website page: <http://marinwatersheds.org/rossvalleywatershed-org/index.html>).

I now would like to present the opportunity for Countywide "Distributed Water Quality and Flood Control Strategies" to the Marin County Board.

Physical and bioretention are being used throughout the world as a means of mitigating urban and suburban water pollution, water quality reduction and flooding through run-off reduction from non-pervious surfaces (roofs, parking lots, roads, sidewalks). In particular, the Pacific Northwest, which receives amounts of precipitation comparable or greater than Marin County and the Ross Valley, has been a leading region for urban/suburban physical and bioretention practices. Washington State is implementing in August a statewide regulation for Low-Impact Development (LID) that would ensure

¹ Thanks to Gerhard Epke, Hydrologist, San Anselmo Department of Public Works, for naming the approach

onsite physical and bioretention of precipitation and stormwater run-off as part of National Pollutant Discharge Elimination System (NPDES), permitting. An excerpt follows from

<http://esassoc.com/news/proposed-changes-washington-state-municipal-stormwater-permits-may-have-far-reaching-impacts>

The new permits address LID at three scales: (1) Site Development; (2) Revised Development Codes; and (3) Watershed Planning. At the site development scale, the 2012 Stormwater Manual (soon to be a requirement) provides a more restrictive list of presumptive Best Management Practices (BMPs) for permit approval. These BMPs will prioritize infiltration, dispersion, and bioretention particularly for small sites. In addition, the existing flow control standard has been supplemented with an LID performance standard requiring that post-developed flow rates match eight percent of the two-year pre-developed peak flow rate; this targets much lower and more frequent storms and will apply to all sites greater than 2,000 square feet of hard surfaces.

The new permit requires that each jurisdiction review and revise development codes to make LID the “preferred and commonly used approach for site development”

The **Marin Countywide Plan** of 2007 already strongly supports physical and bioretention throughout the County as a means to both improve stormwater and reduce flooding. The following citations from the Countywide Plan support physical and bioretention for these purposes:

2007 Marin Countywide Plan http://www.co.marin.ca.us/depts/cd/main/fm/cwpcodes/CWP_CD2.pdf

Note: I added italics highlighting areas of particular relevance to distributed flood control goals and practices **outside** Stream Conservation Areas (SWA).

Plan notes that significant water quality impacts begin at approximately 10% impervious surface coverage and Marin County reached 10.1% in 2000 (mentions Marin needs to refine its Water Management Plan, p.88).

1. Natural System and Agriculture Element

Near Stream Conservation Area / or Wetland Conservation Area (SCA/WCA) the Countywide Plan includes citations on using permeable surfaces near wetlands, minimizing run-off and putting out standards for permeable materials. Minimal distance requirement: 100 feet from top of stream bank or 50 feet from riparian vegetation zone (p.67);

WR 1b Establish development standards for infiltration (Medium Priority/ Long Term Basis)

(p110-113)

Goal EH-3
Safety from Flooding and Inundation

EH 3.1 *Follow a Regulatory Approach:*

Utilize regulations instead of flood control projects whenever possible to minimize losses in areas where flooding is inevitable.

EH 3.2 Retain Natural Conditions:

Ensure that flow capacity is maintained in stream channels and floodplains, and achieve flood control using biotechnical techniques instead of storm drains, culverts, rip rap and other forms of structural stabilization.

EH 3.3 Monitor Environmental Change:

Consider cumulative impacts to hydrological conditions, including alterations in drainage patterns and the potential for a rise in sea level, when processing development applications in watersheds with flooding or inundation potential.

EH-3h Retain Ponding Areas.

Maintain publicly controlled flood ponding areas in a natural state for flood control, and continue to promote compatible uses in ponding areas, such as agriculture, open space, and recreation.

EH 3p: Assess the Cumulative Impacts of Development in Watersheds on Flood Prone Areas.

Consider the effects of upstream development, including impervious surfaces, alteration of drainage patterns, reduction of vegetation, increased sedimentation, and others, on the potential for flooding in low-lying areas. Consider watershed studies to gather detailed information.

EH 3q: Develop Watershed Management and Monitoring Plans

Develop watershed-specific, integrated watershed management and monitoring plans that include development guidelines, natural flood mitigation measures, biomechanical technologies, and the enhancement of hydrological and ecological processes. The guiding principles of the watershed plans shall equally consider habitat and species protection and monitoring as well as the protection of human life and property.

(P. 121-122)

EH 3.e *Require Hydrologic Studies* (Existing Budget/ High Priority/ Ongoing/ Medium Term)

EH 3.h. *Maintain Ponding Areas* (High Priority/ Ongoing/ Long Term)

EH 3.m *Maintain Flood Controls* (Existing Budget/ High Priority/ Ongoing Basis)

EH 3p *Assess the Cumulative Impacts of Development in Watersheds on Flood Prone Areas* (Medium Priority/ Long Term)

2. Built Environment Element

(pp 412-414)

PFS-2m *Promote Onsite Rainwater Capture and Retention* (Medium Priority/ Ongoing basis)

Encourage use of on-site rainwater capture, storage, and infiltration for irrigation and other non-potable uses, and work with Environmental Health Services and water service providers to establish standards

for rainwater quality and use. Ensure that catchments do not adversely affect habitat dependent on in-stream flow.

PFS 2t Manage Groundwater.

Manage groundwater as a valuable and limited shared resource by protecting potential ground water recharge areas and stream conservation areas from urban encroachment. The County shall use discretionary permits to control construction of impervious surfaces in important groundwater recharge areas. Potential recharge area protection measures at sites in important recharge areas may include, but are not limited to, the following:

- a. Restrict coverage by impervious materials and require use of pervious materials;*
- b. Limit building and parking footprints;*
- c. Require construction of percolation ponds on large-scale (4,000 square feet or greater) development project sites overlying identified recharge areas where development cannot be relocated outside the recharge area. Recognize that percolation ponds on small-scale sites may not be practical or feasible in terms of their development, maintenance, and management.*

PFS 3.3 Reduce Storm Water Volume.

Implement appropriate upstream water-saving technologies to reduce storm water volumes and increase percolation. Increase permeable surfaces and encourage on-site percolation to reduce storm water volume and potential overflow of wastewater treatment facilities.

Conclusion and Other Supporting Citations/ Data

To begin applying stricter regulations and permitting requirements regarding Marin County Plan water quality best management practices upon only one limited segment of the County population is short-sighted and inconsistent with watershed-wide planning, riparian and stormwater best management practices.

Following is a presentation on efficacy of biofiltration in stormwater runoff mitigation; the presentation cites that biofiltration can reduce untreated outflows off pavement and rooftops by 78% or greater (Slide 38), while significantly reducing watershed loads during storm events of all sizes. Slide 41 cites that when bioretention was modeled with a 4-inch precipitation event (which was the Ross Valley's largest single precipitation event in November-December 2012 week, when the creek caused flooding in some neighborhoods and came close to cresting in downtown San Anselmo), bioretention reduced stormwater runoff by greater than 35%: <http://rpitt.eng.ua.edu/Class/Computerapplications/Module4/WinSLAMM/M10%20Volume%20reduction%20using%20bioretention%20presentation.pdf> Extrapolating on this data plotting, larger precipitation events in the 4-6 inch range (6 inches of precipitation was what occurred on Dec. 30-31, 2005) would have efficacy in the 20-30% range, which would still be significant in reducing overall creek flow rates if implemented throughout the district at great enough scale.

Questions and Answers:

Q: Is distributed physical and bioretention only another way of saying "permeable paving"?

A: Physical and bioretention for water quality improvement and flood control can include constructed and natural watercourses, dispersion, ponding, vegetated bioswales, soil amendments, green rooftops, sidewalk and street

storage, bladders, rain barrels and cisterns, rain gardens, impervious surface reduction and disconnection, and numerous other means of stormwater retention in addition to permeable or pervious paving.

Q: If the county is largely built out, how can this approach work?

A: Distributed physical and bioretention can be implemented through the ongoing planning, design, implementation and permitting of new capital improvement projects such as re-engineering of medians, roadways, pipeline and other infrastructure upgrading projects, parking lots, sidewalks, rooftops storm drains, and in parks and open space. In some cases, retrofits by schools, businesses, county or city properties and homeowners can begin to implement physical and bioretention on a smaller demonstration scale, at little or no extra cost.

Q: I've heard that soils in the District are not suitable for bioretention. Is that true?

A: Yes, some existing District soils are often alkaline "hardpan", which are not highly effective in bioretention. However with the addition of compost, soil, drainage mediums (crushed gravel, etc.), the native soil can be replaced or amended so it performs more effective bioretention

Q: These approaches won't work in Marin County as our rains are too heavy and the soil becomes saturated, right?

A: As the data cited above indicates (Pitt, University of Alabama), bioretention can be effective (35% + runoff reduction) for single precipitation events up to 4 inches and somewhat effective for up to 6 inches (20-30% runoff reduction). These constitute the majority of types of events that have caused flooding historically in Marin County. Bioretention systems can be engineered to mitigate or account for soil saturation with above-grade systems, special compost or other media, ponding, water courses, and a variety of other approaches that have been successfully demonstrated in the United States and other nations.

Q: This may be something the County and its Flood Districts would consider. What would be next steps?

A: Develop a feasibility analysis to begin following recommendations already laid out in the Marin Countywide Plan of 2007; consider updating the County's General Plan to provide further guidance. Some of these actions can come from existing budgets (e.g., hydrologic studies) and some can come from new sources of funding:

"Follow a regulatory approach" and "Utilize regulations instead of flood control projects whenever possible to minimize losses in areas where flooding is inevitable": analyze public policy, permitting and development codes in order to reflect new approaches that would provide flood mitigation benefits (while also providing water quality improvement).

- *"Require Hydrologic Studies" and "Assess the Cumulative Impacts of Development in Watersheds on Flood Prone Areas":* Analyze and model the hydrology, soils and non-permeable coverage of the Ross Valley Watershed to prioritize opportunities for Distributed Water Quality Improvement, Flood Control and Bioretention Mitigation Opportunities.
- *Encourage use of on-site rainwater capture, storage, and infiltration:* San Anselmo, Ross and Fairfax have already begun doing this with town (Fairfax measures, San Anselmo draft measures), town construction guidance (Ross) and non-governmental ordinances (Sustainable Fairfax) raingarden guidance. Continue to formally and informally develop these programs and work with Marin cities, towns and unincorporated areas in Marin Watershed to develop the same.

- *Reduce stormwater volume:* Implement appropriate upstream water-saving technologies to reduce storm water volumes and increase percolation. Increase permeable surfaces and encourage on-site percolation to reduce storm water volume and potential overflow of wastewater treatment facilities.

In parallel, Marin County, Flood Districts, Cities and Towns can develop plans and strategies to seek additional funding sources in order to fund studies, action plans, programs and demonstration projects.

Thank you!

Warren Karlenzig
Resident
10 Floribel Ave.
San Anselmo CA 94960

and

President
Common Current
1119 San Anselmo Ave.
San Anselmo CA 94960
(415) 259-6227
www.commoncurrent.com
warren@commoncurrent.com

**Statement of Jack Wilkinson, President
Marin Association of REALTORS®
Before the Marin County Board of Supervisors
June 18, 2013**

Good afternoon. I am Jack Wilkinson, president of the Marin Association of REALTORS®. On behalf of our 1,400 members, I want to thank you for the opportunity to speak to you today about the proposed expanded Stream Conservation Area ordinance.

The Marin Association of REALTORS® recognizes and appreciates the importance of protecting our local environment and wildlife and the good intentions that are inherent in the proposal. However, we must oppose the legislation for the following reasons:

- It is ambiguous and creates uncertainties about which properties in the unincorporated areas of Marin will be affected.
- The measure will have a negative impact on property values, property rights, lending, underwriting, the marketability of properties, and the local economy
- The legislation will make property appraisals more difficult and challenging.
- The language in the proposal is written in an arbitrary manner and subject to interpretation by the assigned planner.

The Marin Association of REALTORS® has a long and proud track record of supporting legislation and initiatives that help safeguard our environment and our quality of life, and opposing projects that will harm nature and our local ecosystems. For example:

- We have called on local governments across the county to implement proactive plans to help protect the environment from faulty sewer laterals.
- We sponsor the online Marin Housing Turnover Index, which demonstrates the folly and futility of linking environmental or other mandates to real estate transactions.
- We successfully opposed plans by the state of California to conduct an aerial spraying campaign against the light brown apple moth.

Despite its good intentions, the proposed expansion of the Stream Conservation Area ordinance is deeply flawed and should not become law. We ask that you do the right thing and join with us in opposing it.

Thank you.

My name is Edward lafranchi. I was born and raised in Nicasio on a ranch that is still in the Lafranchi family. My grandparents, Peter and Anita Martin Dolcini and my parents, Fred and Zelma Dolcini Lafranchi were dairy ranchers as were most of the people in Nicasio.

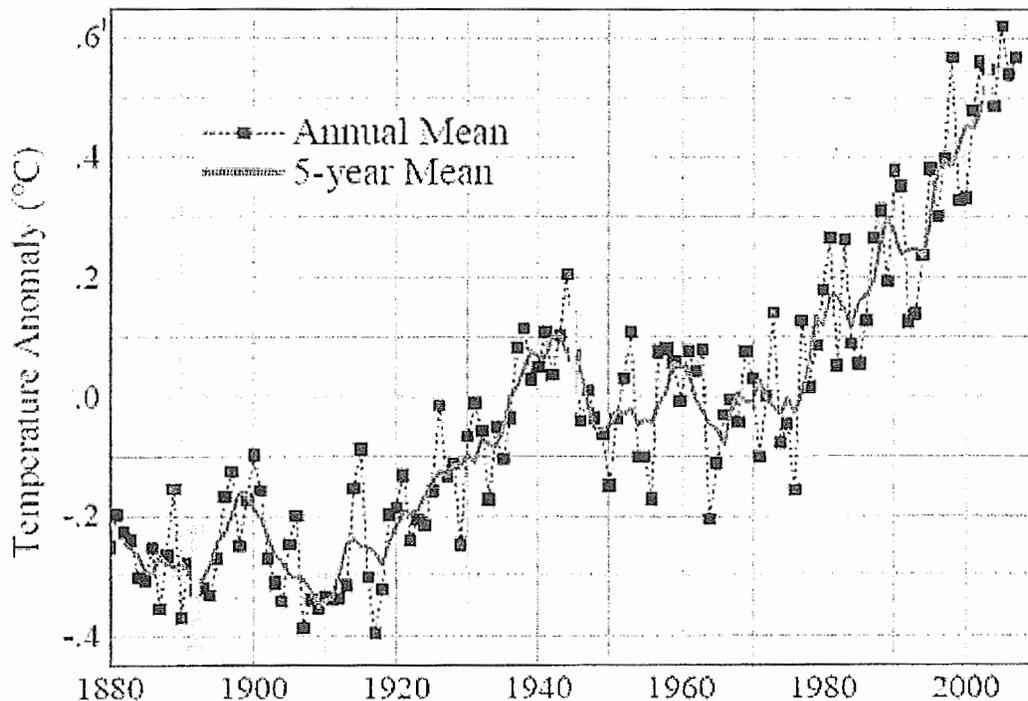
1) This ordinance is a meat-ax treating all streams (perennial, intermittent, and ephemeral) identically. I can attest to you that the two creeks on our ranch had very few, if any, fish while Nicasio creek, about a 1/4 mile away was full of fish. I believe this difference is because of the nature of the creeks, ours had very little gravel, while Nicasio creek had abundant gravel and higher water flows. Some dairies were less than 50 feet from either the Nicasio or Halleck creek yet both creeks were full of fish. Horses and cows used the creeks for drinking water and whatever. Manure and other wastes were almost certain to have entered the creeks. Therefore it is difficult to blame any ranching activity for impairing the fish population.

The actual stream geography, and its proven ability to support fish, should be demonstrated before any regulations apply. That will likely exclude all ephemeral and intermittent streams and some perennial as well. Property owners should have the prior right to contest the inclusion of any stream and the county should have to prove the necessity of the regulation. This ordinance essentially allows disinterested third parties to take operational control of privately owned real estate at zero cost, exacerbated by the future ability to add streams currently unmapped.

2) The **fact that coho in the watershed are hatched in tributaries surrounded by homes, golf courses, roads and horse corrals in the 9-square-mile San Geronimo Valley** belie the necessity of this ordinance. Logging, dairying, housing development, etc have occurred yet the streams remain healthy and the fish return. Their return makes highly suspect any need for setbacks, housing footprint limitations, permitting, applications etc. My experience growing up in Nicasio is that wildlife, including fish, are far more resilient than we believe.

- 3) This ordinance strikes me as a law searching for a problem with no indication that it will produce any meaningful change. For example, I highly doubt any fish will return to any stream behind the Nicasio dam unless and until the dam is removed. And even then, the fish may or may not return, but this ordinance will be completely extraneous to that result
- 4) Therefore, I ask you to direct that this proposed ordinance be abandoned or be rewritten to reflect a real problem that needs to be solved. And I further ask a provision be inserted that clearly states that any decision may be appealed to the Board of Supervisors.
- 5) Thank you for permitting me to state my views.

Global Temperature Land-Ocean Index



Warming Temp
D D# E F F# G G#

Holding Temp
A A# B

Cooling Temp
C C# D D# E F F#

Breaking the magnetic field code into musical pitch division= Global Cooling, and Warming.

The lower the frequency pitch, the warmer the temperature, the higher the frequency pitch, the cooler the temperature.

You may use any sound movie, and analyze the conversation in each scene using a musical tuner device. Match it up with the year, and the frequency pitch above, and then match it to the graph.

In many movies the music score matches the conversation, but sometimes the music scores, bells ringing, car horns, etc will determine the next scene = Pitch Frequency. Hollywood over dubbing science has know of pitch changes before 1930. From the Gregorian chants, to the Buddhist bells the tuning system can be understood on a global dimension. This system can be used as a tool to better understand Salmon Spawning runs.

Walter Dickson 6-18-13
To Marin Co. Supervisor
http://www.ecy.wa.gov/climatechange/images/Global_Temps_08.gif

5/13/2013

Bruce Baum, 1165 Butterfield Rd., Sleepy Hollow

I have lived on Sleepy Hollow Creek for over 31 years. For 10 years, I monitored the creek with Friends of Corte Madera Watershed. My house has flooded three times. I am familiar with creek problems and County inaction.

There are significant problems with the creek banks being undermined as the channel is scoured. In one such area, years ago the County placed boulders to support the road bed on top of the bank adjacent to the creek. This is Raven Road, and it is ^{the} only ingress/egress access to the approximately 60 homes further up the road.

In 1980, the Courts ordered the county to remove those boulders because the rocks choke the channel and cause flooding up-stream. The county has not removed the boulders.

In 1986, the county targeted Federal disaster funds from the floods of '82 to remove the blockage and repair the undermining of Raven Rd. Marin's Dept of Public Works surveyed the project, but it was never completed.

Through the '90's and early 2000's I worked with the late Supervisor Brown and DPW on this. While everyone agrees that it is a problem, the response is always we're too underfunded and understaffed to do the work.

In the Findings supporting the ordinance before this board today:

[IV.] recognizes the necessity of protecting the public health, safety, and welfare of residents and businesses.

[V]. promotes natural stream channel function...and maintenance of channel stability

[VI.] states development applications shall not be allowed if a project adversely alters hydraulic capacity- including flood control.

ALL of which are to become the responsibility of individual creek side property owners.

Nowhere does the proposed Stream ordinance address the County of Marin's responsibilities.

I'm asking when will the County step up, especially where there are previously identified problems and failings?

For the record I've attached some pertinent documents, some of which Supervisor Rice may already have shared with you.

 6/18/13

COUNTY OF MARIN

DEPARTMENT OF PUBLIC WORKS

P. O. Box 4186, San Rafael, CA 94913-4186 • 415/499-6528 • FAX 415/499-3799

ADMINISTRATION
415/499-6570

ACCOUNTING
415/499-6528

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351-A AIRPORT ROAD
NOVATO, CA 94945
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BUILDING MAINTENANCE
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CAPITAL PROJECTS
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FAX 415/499-3724

ENGINEERING & SURVEY
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COUNTY GARAGE
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LAND DEVELOPMENT &
FLOOD CONTROL DISTRICT
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PRINTING
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COUNTY PURCHASING AGENT
415/499-6371

COMMUNICATION MAINTENANCE
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REAL ESTATE
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10 N. SAN PEDRO, STE. 1022
SAN RAFAEL, CA 94903
415/499-6647
FAX 415/499-6910

Mehdi Madjd-Sadjadi, P. E.
Director

Admin

August 7, 1995

Mr. Bruce Baum
1165 Butterfield Drive
San Anselmo CA 94960

RE: Creek Obstruction

Dear Mr. Baum:

I apologize for taking so long to get back to you regarding the problem with the creek behind your property. As agreed, we had the area cleared of brambles and, upon investigation, it is apparent that the problem is considerably more complicated than it first appeared. As you described, there does appear to be some underground drainage in this area but the real problem is the movement of the rock along the base of the embankment. Were we to remove any of this material it would threaten the entire slope by removing the toe support. This could cause a much larger section of the bank to slip into the creek making the situation worse rather than better.

A true fix will require removal and replacement of the existing slope protection. This is far beyond anything we can do with the MCCs and will have to be done as a Road project. By copy of this letter and at the direction of Supervisor Brown and DPW Director Sadjadi, we are informing the Road Maintenance Section of the problem and requesting that this project be put on their list of future projects. However, to be quite frank Mr. Baum, given the vast number of road repairs necessitated by this past winter as well as the drastically reduced road maintenance budget, it is unlikely that this project will be funded anytime in the next couple of years.

I am sorry we could not be of more assistance but, if you have any questions or wish to discuss this matter further, please call me at 499-6528 between 8:00 AM and 3:00 PM, Monday through Friday.

Sincerely,

John M. Wooley
Associate Civil Engineer
Land Use and Water Resources

c: Bob Beaumont, Senior Engineer ✓ *Land Development, Planning & Flood Control*
Dick Daly, Road Maintenance Engineer
George Buckle 499-7388

DEPARTMENT OF PUBLIC WORKS

INTER-OFFICE MEMO

DATE: February 20, 1996

TO: Supervisor Hal Brown

FROM: George Buckle, Road Maintenance Engineer *gbl*

RE: Creek Flooding - 1165 Butterfield Road, Sleepy Hollow

This is the written response to our site meeting on Friday, January 19, 1996 regarding my further investigation of the creek overflow and problem at the referenced location. This issue, I find out, has a long and complicated history. Apparently it started during the 1982 storms and has gone through many stages of development. I will try to cut through this lengthy history and get to the salient points. Please realize that this is technically not a road maintenance problem.

The apparent problem is that the creek behind the subject address is too narrow with a sharp curve which results in an overflowing condition which breeches the bank behind 1165 Butterfield Road and floods the property.

There are two generic remedies, i.e. widen and straighten the channel or raise the banks.

The first suggestion is to remove the concreted rip-rap at the toe of the road slope in order to create a wider channel. As I mentioned previously on site, various permits are required to do the work within the creek. Fish and Game won't allow entrance into the creek until after April 15, and must be out by October 15; therefore, we can't legally do this work until after April 15. In addition, the water flow must be reduced significantly to physically do any work.

Another problem with any significant removal of the existing rip-rap is that there is no toe keyway of rock to anchor the rest of the slope. If the toe is removed, the integrity of the slope and of Raven Road is comprised. In addition, Dick Daly says that the concrete dam located about 100 feet down stream was originally built to create a "swimming hole." What was once a larger and much deeper pond is now filled with silt which has very little foundation strength, and further supports the notion of the weakened foundation of rip-rap slope. If the rocks at the toe are removed before the dry season, I think there is a grave risk that the slope and Raven Road will fail, thereby blocking the creek and causing great danger of flooding. The widening of the creek alternative, if acceptable, as a long range solution will require a large sum of money and can't be implemented until late summer.

Hal Brown
February 20, 1996
Page 2

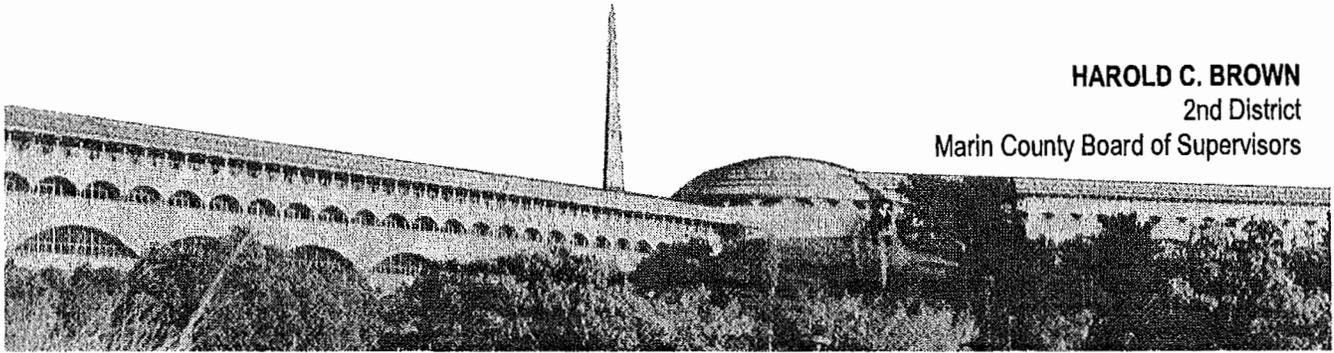
As I see it, there is only one immediate solution, and possibly the only practical final solution, and that is to raise the height of the newly installed gabion wall which supports the yard behind 1165 Butterfield Road or build a higher landscape berm behind the gabion wall. When this wall was built, the creek width and wall height should have been considered to resolve any current and future flooding. Apparently this wasn't done.

I do think, however, it is the responsibility of the owner to raise his creek wall to protect his property from the creek's high water flows. If you want to pursue slope and creek work, remember that we can't do any meaningful work until summer and that it can be extensive and expensive.

Another remedial action is for the County to carefully remove some of the most impeding rocks around the toe of the rock slope to increase the width of the channel. This work will require tedious, hard work and again we can't do the work until early summer.

Please contact me at Extension 7512, if you have any further questions or action requests.

GB:aa:304:2(e:halbrown)



HAROLD C. BROWN
2nd District
Marin County Board of Supervisors

August 14, 1995

Bruce Baum
1165 Butterfield Drive
San Anselmo, CA 94960

Dear Bruce:

I'm sorry your creek problem became such a major issue. Unfortunately, as staff has now explained, what staff originally thought was a relatively fixable problem is, indeed, a big undertaking. As you know, I've asked that your project be added to the priority list.

John Wooley is your direct staff contact. He's a very experienced man and I know will be available to answer your further questions.

Very sincerely,

HAROLD C. BROWN, JR.
Supervisor, Second District

HCB:pf

If you want to discuss this further, please call me.

TO: BOARD OF SUPERVISORS

Jacqueline Haber
P.O. Box 297
Lagunitas, Calif. 94938

~~Marin County Planning Commission~~
Marin County Civic Center
Civic Center Drive
San Rafael, Calif., 94903
April 1, 2013

Dear Honorable Commissioners,

I was unable to attend the hearing today which is considering the planning department's recommendations for stream conservation area ordinances. This issue has brought considerable stress in terms of not only financial loss but the well being of the modest home owners of the San Geronimo Valley (SGV). All due to a threat to the county of a lawsuit by the well funded SPAWN organization, an organization with the unfair advantage of endowments from foundations which allows SPAWN the luxury of hiring premium lawyers.

In a rushed and financially limited effort due to this threatened lawsuit, the county has come to rely on information (in the form of the Salmon Enhancement Plan study) that is more conjecture and theory than scientific fact. With these two organizations at work, it seems that the whole burden and blame of decreasing salmon numbers has fallen on the shoulders of the SGV creekside homeowner. This is not the case. The true impact lies in the commercial fishing off our coasts over the years as well as dramatic climate changes for which there is scientific data (drought, major temperature current changes off our coasts that decimated food sources for salmon and other marine life, dams retaining and obstructing normal stream flow needs, etc.). These are the culprits that have left the Coho environment unstable. Matching salmon populations with drought, known current temperature changes and commercial fishing allowances will easily verify this fact. (see Big Numbers of Fish Return to West Coast, SF Chronicle, Mar. 30, 2013). Our dwelling creekside is a negligible impact which is proven by the fact that the salmon and steelhead still migrate up this stream. They even survived the historical use of the stream as a papermill. Therefore, our living next to the stream is negligible to the sustainability of the fish. Over the years creekside residents have become more aware and have improved (and continue to improve) our sensitivity to seeing to the needs of the creek. Practices which have much improved the health of the creek over the 40 years that I've been here. If you want truly positive results get to work on the big commercial & industrial exploits that impact our marine life, it might not be too late.

As you consider this issue locally, however, I beg you to put yourself in our places. Imagine your modest affordable home of 40 years being next to this stream. Imagine the beauty, appreciation and joy it has brought to your life. Imagine the search for an affordable home and the mortgage payments and taxes and the costly repairs and improvements you've made for 30 tight years with hard earned money, imagine the

security of your family in that affordable home, or, as in my case, the joy and security found as an elderly widow who's FIXED income must be carefully guarded and managed as she heads into her seventies hoping to stay in her home with it's fine memories of family life and looks to enjoy the rest of her life with some stability and comfort in that sanctuary among her old friends. Then imagine an "authority" arbitrarily announcing that you no longer can rely on the home being yours to utilize because they **THINK** something is wrong. Feel the ripping of the peace and security in your life now that your home value has decreased significantly and the new rules will not allow you to enjoy the land that you've cared for and treasured because lawyers and politicians **think** it **might not** be good for the salmon who are dying en masse at sea each year by causes that have little to do with you.

I am hoping that you, as members who represent us and our well-being will consider such disadvantages brought to us by the threat of lawsuits against the county and that you will carefully weigh the impact of your actions on our lives. Currently these considerations could ultimately deliver a draconian blow to the value and management of these mostly family abodes. Your decisions could well have a negative impact on the well being of the the middle income and aging population that owns these properties. I want you to be aware that the people around me out here are of modest means, mostly older, committed long time residents and very environmentally considerate. They are good stewards of their lands. They profoundly appreciate the beauty of their living place here in the SGV.

The reality is that, nevertheless, you will go on with reviewing the possibility of imposing new creekside rules in order to avoid a lawsuit against the county. Therefore, the following are my bullett points on current considerations:

- Since this will now be a countywide implementation via the countywide plan, I ask the following question: have **all** unincorporated Marin property owners been informed in writing by the County of Marin of these meetings and plans? (Originally, the start of this issue was a deal quietly brokered by the Board of Supervisors unbeknownst to just about all of the homeowners in the SGV. Luckily, I picked up on the second meeting of the BOS addressing a moratorium, returned to the community and was able to immediately activate community concern that eventually evolved into the SGV Stewards, a group I am no longer closely affiliated with).
- Every home owner/dweller in Marin impacts the watershed streams. Whatever rules are adopted and employed to aid our streams should apply to ALL Marin homeowners. All drainage runs into the soil and to some degree downslope and eventually impacts our streams. All homes create impermeable surfaces (sidewalks, street gutters, roads, driveways) and roof runoff which is now being considered as damaging by SPAWN and the County. Therefore, all of Marin should live by the same rules. To say you don't live next to a stream is not to say

you don't impact the watersheds. Building and land use restrictions should apply to all home sites in Marin.

- Let's enhance watershed environments through the reintroduction of the native fish to all the community streams within Marin and record those that are already there so that we are aware of them. Let's put that in the "Stream Enhancement Plan".
- Decreasing the setback because a small lot falls completely within the SCA is irrational. Use of a small lot impacts the creek just as much if not moreso. Conversely, the larger lot sizes will have less of an impact on the environment, especially if the zoning is different in that area. For instance, in my area there are a number of very small parcels completely built out (most often with second units) that predate the current zoning of two acres. They are small heavily used areas. This discriminates against the parcel owner with more land, in that that landowner now has more land that has now become unusable. A 25' setback should be applied to all parcels. That larger homeowner has preserved the acreage and, under the currently discussed plans, would be penalized for it. This is discriminatory.
- Point 2 of the 100' setback: The County maps employ arbitrary geometric shapes. They do not illustrate the terrain. The parcels look like simple geometric accessible areas. In fact, most of the lots are narrow and are in heavily wooded areas with steep slopes adjacent to or a part of them. Arbitrarily saying that the larger lots should sustain a 100 ft. setback does not consider the facts that many aced lots are frequently "bowling alley lots" and only 100' wide, to build 100' back would mean disturbing a hillside with a steep and perhaps very unstable upslope full of native firs and some redwoods. Such a plan could be even more devastating to the area. It also does not allow for consideration of employing solar energy if one has to move into the woods.
- Point 3 of the 100' setback. Streams do not run in straight lines. A 100' setback when the stream actually angles across the land unfairly penalizes homeowners with acreage. It ruthlessly sacrifices their assets.... while the small parcel owner has no restraints and can continue their land use and even increase it through the development of second units. This can lead to the abuse of a very small area creekside.
- Point 4 of the 100' setback: on narrow lots the 100' setback from the bank on each side of the creek (a total of 200+ feet) on say a five acre lot where the creek cuts through deep in the parcel will devour acres of the homeowner's valuable land. A deplorably unfair situation.
- Second units on creekside small parcels are already abundant and tax land use (disturbance and increased traffic) in the area of many small parcels. An addition of more second units will create more crowding problems.

- We must be allowed to simply maintain our valuable properties, taxing us through an increased and petty/punitive permit system is unfair. If such an idea is adopted it should apply to all Marin properties.
- Allowing the deposit and build up of wood debris in streams can be detrimental to the fish. There are areas in Samuel P. Taylor where this has been employed that have disturbed the current's flow and has, instead, established areas of algae growth that changes the environment for the seasons offspring and other aquatic life.
- Buildup of woody debris in the creek may also cause obstruction of the creek with the onset of big winter storms that have tremendous force and can move debris downstream and create flooding due to the obstruction of mass amounts of debris and, perhaps, downed trees. This is dangerous and a high liability for the homeowners. This happened to a neighbor and resulted in a lawsuit some years ago.
- Fences are essential. They protect children, contain our pets, decrease liability and protect our gardens and assets. They must be permitted and/or allowed to be replaced creekside if necessary..
- Most of us in the San Geronimo valley are homeowners of modest means (we moved here because it was affordable... and, lucky for us, beautiful) and, as such, we must be allowed to maintain our property assets that predate any new ordinances (our driveways, roofs, house exteriors, decking, fencing, landscaping and other repairs as we have been doing) by affordable means. Remember, we can not afford to replace and rebuild on the county's and SPAWN's whims and we often cannot afford pricey new methods.
- The elderly living creekside must be given special consideration in this review. We are even more perishable than the fish. As we age our physical needs change and our housing will need costly adjustments (e.g., climbing stairs might become impossible and one would need to adjust their living quarters adding space to the lower level or a space for a caretaker will need to be created or all house plans electrical, plumbing, counters, walkways need to be wheelchair accessible). While this must be done to safe standards we have to be allowed to do this with the least amount of resistance and not get bogged down in a costly and prohibitive county permitting system and taxing system no matter where we live in Marin. We elders can't afford it timewise or moneywise or stresswise.

You are now charged with a great responsibility in deciding costly factors in our lives. Please, put yourself in our place in understanding the impact your work will have on the well-being of the good people of the San Geronimo Valley. Perhaps next we can work on a grand scale on correcting the true wrongs done the salmon the causes beyond our streambed.

Respectfully,

Jacqueline Haber

CC:

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Good afternoon Katie, Supervisors:

June 18, 2013

On May 7, I explained that I pay \$103,000.00 per year in property tax and if the setback is put in place, my property tax bill could be reduced by \$48,000.00. A net loss to the county of \$48,000.00 per year for this one parcel.

On May 21, I explained that I am concerned that the local municipalities might take your lead and adopt whatever ordinance you pass. I overlaid your National Hydrology Dataset, NHD Flowline map with your 2011 Marin County Parcel map, and used a 100 foot buffer as the setback from the creeks. I created a database that identifies 10,386 unique parcels affected by this ordinance. The total non-improvement value of these parcels (the dirt) sums to \$3,005,809,947.00. These numbers represent both incorporated and unincorporated Marin. If we take 1.25% and 10% of that number to represent the loss to the County revenue, the County might lose in excess of \$37,572,624.34/ annually.

Earlier this month I shared my concern regarding your definition of ephemeral creeks. Our Towns, Cities, and County maintain roads with no curbs and/or gutters. The water runs down the impervious road surface; dumps on a lower property, where it is collected, directed, conveyed, and re-deposited on a lower property; where this process starts all over again until the water reaches a creek. California law is very clear. This creates a substantial liability to the party that directs/collects the water. If you include the language as written relative to ephemeral creeks, you could spur 1,000s of lawsuits pitting neighbors against neighbors with the ultimate deep pocket being the County because a lot of the water originates or collects on our roads after a rain.

Today I remind you of these three reasons and the most important reason of all; supporting that this creek setback ordinance needs different and better language.

I would like you to consider: Who is the best steward of our creeks? Who will be around long after our budgets go bankrupt? Who will implement the current and future best practices of creek and fish stewardship? Who do you want as your partner on the ground?

The home owner. Anyone who really loves our creeks would strive to live adjacent to a creek so that they can spend a life time enjoying and caring for the creek,

Please vote no, we can do better.

How to approve SCA?

How can we move forward while acknowledging requests for both a 100' setback and a 35' setback? How to encourage community acceptance and participation in keeping West Marin streams healthy, and bringing the streams in East Marin back to life.

Gardening, structures and any development which take measures specified by the County to disperse run off and avoid water pollution outside of 35' from the stream, including riparian zone, should be removed from Tier 1 and Tier 2 regulation. Development which does not take specified environmental protection should be subject to Tier 1 and Tier 2 regulation. Neighbors will report offenders to our county.

Summary:

1. Development within 100' of stream or riparian zone may be in Tier 1 if performed without County specified protection to minimize environmental impact.
2. Limit Tier 1 to within 35' setback, if development is performed with County specified environmental protection, regardless of lot size, location or riparian zone.
3. Limit Tier 2 to within 20' setback, if development is performed with County specified environmental protection, regardless of lot size, location or riparian zone.
4. To encourage participation in protecting Marin streams, provide an annual real-estate tax credit for the square footage of property limited by the SCA ordinance.

Solve the real problem:

To solve a problem, one has to resolve the worst parts of the problem, not just the easy aspects. The most unhealthy streams, most polluted streams with the largest reduction in fish populations are in East Marin, yet the ordinance is most strict where the fish have returned to their average population. If one were concerned about the fish, like SPAWN, or water quality, they would focus on the most polluted streams. At minimum, the ordinance should be universal throughout Marin, regardless of lot size, as the fish do not care how large a lot is.

Everyone benefits from healthy streams, and everyone is responsible for their pollution and water runoff, regardless of how far from a stream they live; yet the SCA ordinance only requires those at the bottom of the hill to pay for stream protection in their time and money. People can't earn money to pay for the SCA ordinance impacts while attending these meetings, reading changing regulations, or attending classes and workshops to learn how to minimize stream pollution. Who pays for this required time? There also needs to be compensation for property limitations near a stream. To encourage community participation, provide an annual real-estate tax credit for the square footage limited by the SCA ordinance if owners attend workshops and classes related to stream health.