

JULY 2019

Amendment to the 2007 Marin Countywide Plan Final Supplemental EIR with a Focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley

## **Table of Contents**

1	INTROD	UCTION	1
	1.1 Pu	ırpose	1
	1.2 St	ummary of EIR Processes and Events	1
	1.3 Pu	ublic Review and Comment on the Draft SEIR and Final SEIR	3
2	PUBLIC	COMMENTS AND RESPONSES TO PUBLIC COMMENTS ON	
	THE FIN	AL SEIR	7
	2.1 ST	FATE AGENCY LETTERS	9
	Letter	· 1—State Clearinghouse	11
	2.2 R	EGIONAL AGENCY LETTERS	15
	Letter	<sup>-</sup> 2—SF Bay Regional Water Quality Control Board	17
		· 3—Caltrans	
	Letter	· 4—SF Regional Water Quality Control Board	25
		5—SF Bay Regional Water Quality Control Board	
	2.3 LC	DCAL GROUPS LETTERS	37
	Letter	6—Watershed Alliance of West Marin	39
		7—Turtle Island Restoration Network	
	Letter	<sup>-</sup> 8—Marin Audubon Society	47
	Letter	9—Environmental Action Committee of West Marin	51
	Letter	· 10—San Geronimo Valley Planning Group	55
	Letter	11—Turtle Island Restoration Network	59
	Letter	12—Turtle Island Restoration Network	75
		· 13—San Geronimo Valley Stewards	
	2.4 IN	DIVIDUAL LETTERS	85
	Letter	· 14—James M. Barnes	87
3	TEXT CH	IANGES TO THE FINAL EIR	91
Li	st of Table		
	able 1-1.	List of Agencies, Organizations, and Individuals Who Submitted	
I c	able 1-1.	Written Comments on the Final SEIR	5
Τs	able 3-1.	Revisions to the Final SEIR	
		TOVISIONS to the Final OLIT	52
Lie	st of Appe	andicas	
		Marin Countywide Plan Supplemental EIR Mitigation Measure 5.1	1_1
-	-	ds for Development	1-1

### 1 INTRODUCTION

### 1.1 Purpose

This document is an Amendment to the *Final 2007 Marin Countywide Plan Supplemental EIR with a Focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley* (Final SEIR). The purpose of this Amendment is to respond to points raised in the additional comments received on the Final SEIR regarding the adequacy of the responses previously prepared on the Draft SEIR. This process is consistent with the requirements of the California Environmental Quality Act (CEQA) Section 15089(b) and the Marin County Environmental Impact Review Guidelines for implementation of CEQA. The Environmental Impact Review Guidelines require, as part of the EIR certification procedure, a minimum 10-day review period of a Final EIR prior to any action to certify it. The review of a Final EIR shall exclusively focus on the adequacy of the responses to comments on the Draft EIR.

Written comments received on the Final SEIR response to comments that were received within the review period deadline will be considered, together with any written or oral response from Marin County staff or the SEIR preparer, at the time action is taken by certifying the Final SEIR. This Amendment will be considered, together with the Final SEIR, when Marin County determines whether the SEIR will be certified as being adequately prepared in compliance with CEQA, which occurs prior to the County's consideration of the merits of the project.

The Final SEIR is available at the following link:

https://www.marincounty.org/depts/cd/divisions/environmental-review/current-eir-projects/2007-marin-countywide-plan-supplemental-eir

### 1.2 Summary of EIR Processes and Events

The Marin Countywide Plan (Marin CWP [2007]) sets policy guidelines for future conservation and development in the unincorporated portion of Marin County, California. The Marin CWP (2007) is the subject of a Supplemental Environmental Impact Report (SEIR), which is additional to the Final Environmental Impact Report (EIR) for the 2007 Marin Countywide Plan (Final EIR) that was certified and adopted by the Marin County Board of Supervisors in November 2007. The Final EIR evaluated the impact of land uses and development consistent with the Marin CWP (2007) on the County's sensitive biological and wetland resources. Numerous goals, policies, and programs of the

Marin CWP (2007), especially in the Natural Systems and Agricultural Element, serve to avoid or minimize adverse impacts on biological and wetland resources in the County. The Final EIR analyzed the effectiveness of the relevant goals, policies and programs in the Marin CWP (2007) to reduce or avoid adverse changes to the environment resulting from proposed land-use designations and development applications and the degree to which they would mitigate identified impacts to a less-than-significant level. Cumulative impacts were also analyzed in the Final EIR in Section 4.6 *Biological Resources* and Section 6.2 *Cumulative Impacts*.

Following the county's certification of the Final EIR, the Salmon Protection and Watershed Network (SPAWN) filed a lawsuit challenging the adequacy of the EIR. SPAWN's challenge was limited to the application of the Marin CWP and EIR to the San Geronimo Valley.

Following certification of the Final EIR, Marin County undertook the following two studies as a means to develop recommendations to improve and maintain habitat conditions that will support viable populations of salmon and steelhead trout in San Geronimo Valley:

- San Geronimo Valley Enhancement Plan Existing Conditions Report (ECR),
   Stillwater Sciences, January 2009.
- San Geronimo Valley Salmon Enhancement Plan: A Guidance Document (SEP), Prunuske Chatham Inc. and Stillwater Sciences, February 2010.

In March 2014, the Court of Appeal of the State of California First Appellate District Division Three issued its opinion regarding SPAWN's challenge. The Court's opinion focused on two issues of the adequacy of the EIR:

- Cumulative Impacts
- Inadequate Mitigation Measures

The Final Supplemental EIR (Final SEIR) has been prepared in accordance with the Court's decision to set aside its approval of the Marin CWP (2007) and certification of the EIR with respect to San Geronimo Valley, pending the following:

 analysis of potential cumulative impacts, and the range of potential consequences, on salmonids in San Geronimo Valley resulting from future buildout in the watershed in conformity with State CEQA Guidelines Section 15130 and the Court's opinion, and  a description of mitigation measures relevant to salmonids in San Geronimo Valley in conformity with State CEQA Guidelines Section 15126.4 and the Court's opinion or a description of other findings in conformity with State CEQA Guidelines Section 15091.

For the purposes of the Final SEIR and this Amendment, the Proposed Project is land use and development specific to the San Geronimo Valley under the goals, policies and programs of the Marin CWP (2007).

Marin County Development Agency (CDA) is the CEQA Lead Agency and has the principal responsibility for compliance of the Final SEIR with CEQA (Public Resource Code [PRC] Section 21067).

In accordance with CEQA ([PRC Section 21000 et seq.), and the State CEQA Guidelines (California Code of Regulations [CCR] Section 15000 et seq.), the Marin County Board of Supervisors will use the Final SEIR, including this amendment, in considering approval of the Proposed Project (Marin CWP [2007]) and certification of the Final EIR with respect to San Geronimo Valley.

### 1.3 Public Review and Comment on the Draft SEIR and Final SEIR

The Draft SEIR was previously distributed to the public and affected government agencies for review and comment during a 45-day public review period (in compliance with CCR Section 15087 of the *State CEQA Guidelines*), starting on May 1, 2017 and ending on June 15, 2017. The public and agency comments and County's responses to these comments on the Draft SEIR are incorporated within the Final SEIR (see Section 7 *Responses to Public Comments on the Draft SEIR*).

The Final SEIR and written responses to public and agency comments on the Draft SEIR (CCR Section 15088 of the *State CEQA Guidelines*) were more recently available for an extended review and comment period (greater than the minimum requirement of 10 days). The original 21-day public review and comment period for the Final SEIR occurred from August 03, 2018 through August 24, 2018; however, on September 11, 2018 notice was circulated by the State of California Governor's Office of Planning and Research (State Clearinghouse) to all reviewing agencies of an extension to the review and comment period through October 8, 2018 for a total of 66 days. During the August 3 to October 8, 2018 review and comment period, comments were received from one state agency, two regional agencies, six local groups, and one

individual (Table 1-1). All correspondence and letters (1 through 14) submitted to the County on the Final SEIR, are presented in Section 2 of this Amendment, preceding Marin County's responses.

AMENDMENT TO THE FINAL SEIR San Geronimo Valley

Table 1-1. List of Agencies, Organizations, and Individuals Who Submitted Written Comments on the Final SEIR.

Letter Designation	Letter Date	Date Received	Agency or Organization	Commenter's First Name	Commenter's Last Name	Title (if applicable)	City
State Agencies							1
1	9/11/2018	9/11/2018	State Clearinghouse	Scott	Morgan	Director	Sacramento
Regional Agen	icies	1		T	Γ	1	1
2	8/10/2018	8/10/2018	SF Bay Regional Water Quality Control Board	Nicole	Fairley	Water Resource Control Engineer	Oakland
3	8/15/2018	8/15/2018	Caltrans	Stephen	Conteh	Associate Transportation Planner	Oakland
4	10/8/2018	10/8/2018	SF Bay Regional Water Quality Control Board	Nicole	Fairley	Water Resource Control Engineer	Oakland
Local Groups							
5	8/13/2018	8/13/2018	Watershed Alliance of Marin	Laura	Chariton	President	Mill Valley
6	8/16/2018	8/16/2018	Turtle Island Restoration Network	Preston	Brown	Director of Watershed Conservation	Forest Knolls
7	8/20/2018	8/20/2018	Marin Audubon Society	Barbara	Salzman	Co-Chair Conservation Committee	Mill Valley
8	8/23/2018	8/23/2018	EAC of West Marin	Ashley	Eagle-Gibbs	Conservation Director	Pt Reyes Station
9	8/24/2018	8/24/2018	San Geronimo Valley Planning Group	Brian	Staley	Chair	Forest Knolls
10	8/24/2018	8/24/2018	Turtle Island Restoration Network	Preston	Brown	Director of Watershed Conservation	Forest Knolls
11	8/24/2018	8/24/2018	Turtle Island Restoration Network	Preston	Brown	Director of Watershed Conservation	Forest Knolls

AMENDMENT TO THE FINAL SEIR San Geronimo Valley

Letter Designation	Letter Date	Date Received	Agency or Organization	Commenter's First Name	Commenter's Last Name	Title (if applicable)	City
12	10/8/2018	10/8/2018	Turtle Island Restoration Network	Preston	Brown	Director of Watershed Conservation	Forest Knolls
13	10/8/2018	10/8/2018	San Geronimo Valley Stewards	Peggy Denis Koa Steve Mike Laura Rick & Ann Gerald James	Sheneman Poggio Pickering Tognini Snyder Szawarzenski Seramin Toriumi Barnes		
Individuals							
14	9/20/2018	9/20/2018		James	Barnes		

## 2 PUBLIC COMMENTS AND RESPONSES TO PUBLIC COMMENTS ON THE FINAL SEIR

The Final SEIR was circulated for a 66-day public review and comment period, where the review and comment period required by the Marin County Environmental Impact Review Guidelines is a minimum of 10 days. A total of fourteen (14) comment letters were received on the Final EIR during the public comment period. This section of the Final SEIR Amendment contains those comments and Marin County responses to the comments.

As stated in Section 1, according to Marin County Environmental Impact Review Guidelines, the review of a Final EIR shall exclusively focus on the adequacy of the responses to comments on the Draft EIR. Several of the comment letters received on the Final SEIR raised questions or concerns similar to those raised in comments on the Draft SEIR. In those cases, the responses in this Amendment refer to previous responses presented in the Final SEIR. Some of the comment letters received on the Final SEIR raised issues that would be more appropriately considered by the County during development of the Expanded Stream Conservation Area (SCA) Ordinance under Mitigation Measure 5.1-1 of the Final SEIR, where future consideration of the issue or issues raised would not affect the adequacy and completeness of the Final SEIR consistent with State CEQA Guidelines Section 15151, because analysis of the issue or issues raised in the comment is not necessary to support the significance determinations and/or proposed mitigation in the SEIR. These cases are noted in the comment responses in this Amendment, as appropriate, and consistent with State CEQA Guidelines Section 15088.5(b), recirculation of the Final SEIR is not required in this situation. Some of the comment letters request minor revisions to the Final SEIR. The comment responses in this Amendment identify where Marin County has made minor revisions to the Final SEIR to address this type of comment, where minor revisions are defined as "new information added to the EIR that merely clarifies or amplifies or makes insignificant modifications in an adequate EIR." Consistent with State CEQA Guidelines Section 15088.5(b), recirculation of the Final SEIR is not required in this situation. All comment letters received by Marin County on the Final SEIR and responses to these comments are presented in this section.

## 2.1 STATE AGENCY LETTERS

## Letter 1—State Clearinghouse



# STATE OF CALIFORNIA GOVERNOR'S OFFICE of PLANNING AND RESEARCH



### Memorandum

Date:

September 11, 2018

To:

All Reviewing Agencies

From:

Scott Morgan, Director

Re:

SCH # 2004022076

2007 Marin Countywide Plan Supplemental EIR with a Focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley

1a

Please note that the State Clearinghouse forwarded the above-mentioned project to your agency for review on **August 3**, **2018** with incorrect review dates. Pursuant to the attached letter, the Lead Agency has *extended* the review period for the above referenced project to **October 8**, **2018** to accommodate the review process. All other project information remains the same.

cc:

Rachel Reid

Marin County Community Development Agency

3501 Civic Center Drive, Room 308

San Rafael, CA 94903

### PLANNING DIVISION

# NOTICE OF EXTENDED REVIEW AND COMMENT PERIOD AND NOTICE OF RESCHEDULED PUBLIC HEARING SAN GERONIMO VALLEY FINAL SUPPLEMENT TO THE 2007 MARIN COUNTYWIDE PLAN FINAL EIR

NOTICE IS HEREBY GIVEN that the public review and comment period on the Final Supplement to an Environmental Impact Report (Final SEIR), to the 2007 Marin Countywide Plan Final Environmental Impact Report has been extended to Monday, October 8, 2018 to allow additional time for comments.

The 2007 Marin Countywide Plan Supplemental EIR has been prepared in accordance with the decision of the Court of Appeal of the State of California First Appellate District Division Three, to set aside the County's certification of the 2007 Countywide Plan EIR with respect to San Geronimo Valley watershed only, pending preparation of a supplemental EIR with respect to the San Geronimo Valley watershed only, that analyzes potential cumulative impacts in conformity with Guidelines section 15130, subdivision (b) and the Court's opinion, and that describes mitigation measures in conformity with State CEQA Guidelines section 15126.4 the Court's opinion or makes other findings in conformity with State CEQA Guidelines section 15091. As specified in the Court's order, the principal action considered in this SEIR is adoption and implementation of the Marin Countywide Plan (2007) with respect to the San Geronimo Valley watershed and the potential for cumulative effects on salmonids. The SEIR will be used to fulfill the Court's mandate, and will be used by the Marin County Board of Supervisors in considering approval of the Proposed Project (Marin Countywide Plan [2007]) and certification of the 2007 Countywide Plan EIR with respect to the San Geronimo Valley.

NOTICE IS HEREBY FURTHER GIVEN that the extended public review period on the Final SEIR will close on October 8, 2018. Written comments on the environmental review will be accepted at the Community Development Agency until the close of the public review period on October 8, 2018. If comments were already been submitted during the previously noticed public comment period, it is not necessary to submit the same comment letters again during the extension. All comment letters received either during this or the extended comment period will be included in the Final SEIR Amendment. Commenters are advised to mail written comments postmarked on or before October 8, 2018, to the attention of Rachel Reid, Environmental Planning Manager at 3501 Civic Center Drive, Suite 308, San Rafael, CA 94903. Comments can also be sent via email to <a href="mailto:envplanning@marincounty.org">envplanning@marincounty.org</a> or faxed to the Community Development Agency Office at (415) 473-7880.

NOTICE IS HEREBY FURTHER GIVEN that a public hearing of the Marin County Planning Commission to consider recommendation of the Final SEIR previously scheduled for Monday, September 24, 2018 will be rescheduled to a date to be determined and held in the Planning Commission Chambers (Room 328—Administration Building) Civic Center, San Rafael, California, at which time any and all persons interested in this matter may appear and be heard. A future notice stating the rescheduled public meeting date and time will be provided 10-days prior to said public hearing.

3501 Civic Center Drive - Suite 308 - San Rafael, CA 94903:4157 - 415 473 6269 T - 415 473 7880 F - 415 473 2255 TTY - www.marincounty.org/plan

Governor's Office of Planning & Research.

SEP 11 2018 STATECLEARINGHOUSE

1a

1a

Project plans and other documents related to the Final SEIR are available on the project's webpage, where you can subscribe to receive email notifications and updates. Hard copies of all of the application materials, including project plans and any technical reports, are available for viewing at the Planning Division's public service counter, which is normally open from 8 AM until 4 PM, Mondays through Thursdays.

September 7, 2018

Rachel Reid Environmental Planning Manager











The Planning Commission Chambers is accessible to persons with disabilities. If you require American Sign Language interpreters, assistive listening devices, or if you require this document in an alternate format (example: Braille, Large Print, Audiotape, CD-ROM), or if you require other accommodations to participate in this meeting, you may request them by calling (415) 473-2255 (voice/TTY) or 711 for the California Relay Service or e-mailing disabilityaccess@marincounty.org at least four working days in advance of the event.

Mail to: State Clearinghouse,	P.O. Box 3044, Sacramento, dress: 1400 Tenth Street, Sacramento	CA 95812-3044 (916) 445-06	sch#2004022076
Project Title: 2007 Marin Co	ountvwide Plan Sunnlemental	FIR with a Focus on Cumula	tive Impacts to Salmonids in San Geroe
Lead Agency: Marin County C	community Development Age	ncy Contact P	
Mailing Address: 3501 Civic Co	enter Drive, Room 308	Phone: (4	15) 473-6868
City: San Rafael		Zip: 94903 County: N	Marin
		County. I	
Project Location: County: Ma	arin	City/Nearest Community: Sa	n Geronimo Valley
Cross Streets:			
Longitude/Latitude (degrees, min	nutes and seconds):o	'"N/_ ° '	Zip Code: 94963
		occion: (wp.;	Range: Rase
Within 2 Miles: State Hwy #:		Waterwaye	And the same of th
Airports:		Railways:	Schools:
Early Cons S	Draft EIR Supplement/Subsequent EIR Prior SCH No.) 2004022076 Other: Final SEIR	□ DA.FIG	Other:
		ATIO	73 2018
Local Action Type:	П с .и. т.		
General Plan Update General Plan Amendment General Plan Element Community Plan	☐ Specific Plan ☐ Master Plan ☐ Planned Unit Developmen ☐ Site Plan	t [ ] Use Permit	ARINGHOUSE development  Coastal Permit ision, etc.) Other:
Development Type:			
Residential: Units	Acres		
Office: So ft	A cree Employees	Transportation: Typ	e
Industrial: So ft	Acres Employees	Mining: Min	e eralMW eMGD
Educational:	AcresEmployees	Waste Treatment: Typ	eMW
Recreational:		Hazardous Waste:Tvr	ne MGD
☐ Water Facilities:Type	MGD	Other:	eMGD
<ul> <li>✓ Biological Resources</li> <li>☐ Coastal Zone</li> <li>☐ Drainage/Absorption</li> <li>☐ Economic/Jobs</li> </ul>	eral Plan Designation:	Solid Waste Toxic/Hazardous Traffic/Circulation	
ate Clearinghouse Contact:	Pro	oject Sent to the followi	ng State Agencies
	445-0613	K Resources	Cal EPA
ate Review Began: 3 - 3	<b>3</b> -2018	Boating & Waterways	ARB: Airport & Freight
	******	Central Valley Flood Pro	t ARB: Transportation Projects
		Coastal Comm	ARB: Major Industrial/Energy
CH COMPLIANCE 10.3	2018	Colorado Rvr Bd Conservation	Resources, Recycl.& Recovery
THEOMILIAISEL 1		CDFW # 3, M	SWRCB: Div. of Drinking Wat
	<u>}- /</u>	Cal Fire	SWRCB: Div. Drinking Wtr # SWRCB: Div. Financial Assist.
		Historic Preservation	SWRCB: Wtr Quality
•		Parks & Rec	SWRCB: Wtr Rights
= 15 based or	d partial	Bay Cons & Dev Comm.	X Reg. WQCB # 2
YI: Finne/ Extended	K KWIW _	<u> </u>	Toxic Sub Ctrl-CTC
			Yth/Adlt Corrections
	•	ColeTA	Corrections
ease note State Clearingh	ouco Numbou	CalSTA	Independent Comm
	ouse mullinel	Aeronautics	Delta Protection Comm
CH#) on all Comments	0.7.6 ×	CHP	Delta Stewardship Council
CH#: 2004022	0 / 0x	Caltrans# _4	Energy Commission
J11#,		Trans Planning	X NAHC
ease forward late comments di	rectly to the	Other	Public Utilities Comm
ead Agency		Education	Santa Monica Bay Restoration
<u> </u>		OES Food & Agriculture	State Lands Comm
·		HCD	Tahoe Rgl Plan Agency
QMD/APCD_2_		State/Consumer Svcs	Conservancy
91		General Services	·
Lesources: $\mathcal{B} / \mathcal{H}$ )			Other:

1a Based on this and other public comments, Marin County extended the public review and comment period on the Final SEIR to October 08, 2018, for a total of 66 days. All public comments submitted within the extended review and comment period are considered in this Amendment.

## 2.2 REGIONAL AGENCY LETTERS

Letter 2—SF Bay Regional Water Quality Control Board

### Reed, Michelle

From:

Taylor, Tammy on behalf of EnvPlanning

Sent:

Wednesday, October 10, 2018 9:49 AM

To:

Reed, Michelle

Subject:

FW: Request for review period extension and meeting regarding 2007 Marin

Countywide Plan Final SEIR

From: Fairley, Nicole@Waterboards < Nicole.Fairley@Waterboards.ca.gov>

Sent: Friday, August 10, 2018 11:17 AM

To: EnvPlanning < EnvPlanning@marincounty.org>

Cc: Ferguson, Leslie@Waterboards <Leslie.Ferguson@waterboards.ca.gov>

Subject: Request for review period extension and meeting regarding 2007 Marin Countywide Plan Final SEIR

### Good Morning,

### 2a

We received the Final SEIR with a focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley on August 7, 2018. Mike Napolitano of our staff, who has been actively involved in the review of this project, is out of the office currently and we hope to give him adequate time to review and provide comments when he returns on August 27, 2018. As we did not receive the final SEIR at the beginning of the public review period, we would like to request an extension of the deadline for submitting comments.

We would also like to request a meeting with your team to discuss the final SEIR and our comments. Please let me know potential dates and times that could work.

### Best,

Nicole Fairley
Water Resource Control Engineer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland CA, 94612
(510) 622-2424
Nicole.fairley@waterboards.ca.gov

2a Based on this and other public comments, Marin County extended the public review and comment period on the Final SEIR to October 08, 2018, for a total of 66 days. All public comments submitted within the extended review and comment period are considered in this Amendment.

## Letter 3—Caltrans

### Reed, Michelle

From:

Taylor, Tammy on behalf of EnvPlanning

Sent:

Wednesday, October 10, 2018 9:49 AM

To:

Reed, Michelle

Subject:

FW: 04-MRN-2017-00103 2007 Marin Countywide Plan Supplemental EIR with a Focus on Potential Cumulative Impacts on Salmonids in San Geronimo Valley - FSEIR August

14, 2018

From: Conteh, Stephen@DOT <Stephen.Conteh@dot.ca.gov>

Sent: Wednesday, August 15, 2018 3:10 PM

To: EnvPlanning < EnvPlanning@marincounty.org>

Cc: Carboni, Lisa@DOT <lisa.carboni@dot.ca.gov>; Maurice, Patricia@DOT <patricia.maurice@dot.ca.gov>

Subject: 04-MRN-2017-00103 2007 Marin Countywide Plan Supplemental EIR with a Focus on Potential Cumulative

Impacts on Salmonids in San Geronimo Valley - FSEIR August 14, 2018

### To Whom It May Concern:

Зa

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the 2007 Marin Countywide Plan Supplemental EIR with a Focus on Potential Cumulative Impacts on Salmonids in San Geronimo Valley – Final Supplemental Environmental Impact Report (FSEIR). Please include our Encroachment Permit language below in the FSEIR for this project.

### **Encroachment Permit**

Please be advised that any sign or work within Caltrans ROW will require an encroachment permit prior to construction. To apply for an encroachment permit, please complete an encroachment permit application, environmental documentation, and six (6) sets of plans clearly indicating State ROW, and submit to the following address: David Salladay, District Office Chief, Office of Permits, California Department of Transportation, District 4 Office of Permits, 111 Grand Avenue, Oakland, CA 94612. The encroachment permit application should include a check for \$492.00 payable to Caltrans. Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process. See the website link below for more information.

http://www.dot.ca.gov/hq/traffops/developserv/permits.

Should you have any questions regarding this letter, please call Stephen Conteh at 510-286-5534 or <a href="mailto:Stephen.conteh@dot.ca.gov">Stephen.conteh@dot.ca.gov</a>.

Sincerely,

Stephen Conteh Associate Transportation Planner Local Development-Intergovernmental Review, District 4 111 Grand Avenue, MS 10D Oakland, CA 94612

The requirement for an encroachment permit for any work in the California Department of Transportation (Caltrans) Right of Way (ROW) is noted. Marin County is committed to working with Caltrans to obtain any necessary permits for future works. As explained in Section 1.2.2 of the Final SEIR, the SEIR is a programmatic EIR that represents the first tier of environmental review and focuses on the potential cumulative effects of the Marin CWP (2007) on salmonids in San Geronimo watershed. Any future site-specific projects would be subject to all relevant permitting requirements and real estate agreements, including adherence to requirements contained within the Caltrans Encroachment Permits Manual, as appropriate.

Letter 4—SF Regional Water Quality Control Board

## Reed, Michelle

From:

Taylor, Tammy on behalf of EnvPlanning

Sent:

Wednesday, October 10, 2018 9:50 AM

To:

Reed, Michelle

Subject:

FW: Water Board Comments regarding 2007 Marin Countywide Plan Final SEIR

**Attachments:** 

R2\_CmntsOnSGVSFEIR\_8.24.2018.pdf

From: Fairley, Nicole@Waterboards < Nicole.Fairley@Waterboards.ca.gov>

Sent: Friday, August 24, 2018 12:32 PM

To: EnvPlanning <EnvPlanning@marincounty.org>; Reid, Rachel <rreid@marincounty.org>

Cc: Fernandez, Xavier@Waterboards <Xavier.Fernandez@waterboards.ca.gov>; Ferguson, Leslie@Waterboards

<Leslie.Ferguson@waterboards.ca.gov>

Subject: Water Board Comments regarding 2007 Marin Countywide Plan Final SEIR

Hi Rachel,

## 4a

Please see the attached comment letter regarding the 2007 Marin Countywide Plan Final SEIR with a Focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley. I look forward to hearing from you regarding a meeting with everyone prior to the public hearing.

Best,

#### Nicole Fairley

Water Resource Control Engineer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland CA, 94612
(510) 622-2424
Nicole.fairley@waterboards.ca.gov





## San Francisco Bay Regional Water Quality Control Board

Sent via electronic mail: No hard copy to follow

August 24, 2018

Marin County Community Development Agency Planning Division 3501 Civic Center, Suite 308 San Rafael, CA 94903

Attn.: Rachel Reid

Email: envplanning@marincounty.org

Subject: Comments on the Final 2007 Marin Countywide Plan Supplemental Environmental Impact Report with a Focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley, dated July 2018.

Dear Ms. Reid:

Thank you for the opportunity to comment on the Final 2007 Marin Countywide Plan Supplemental Environmental Impact Report (SEIR) with a Focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley, dated July 2018. We received the SEIR late and requested a time extension for the comment period to allow for a full 21-day review. The request was not accepted. Following a brief review, we have determined that the response to comments contains new and substantive information that warrants a 30-day recirculation of a revised draft SEIR for public comment.

Due to the insufficient time to thoroughly review the new information, we intend to provide comments on the Final SEIR at the upcoming September 24, 2018, public hearing. We look forward to continuing to work with the County on this.

If you have any questions concerning this letter, please contact Nicole Fairley of my staff at (510) 622-2424 or nicole.fairley@waterboards.ca.gov.

Sincerely,

Digitally signed

by Keith H.

\_\_\_\_\_ Lichten

Date: 2018.08.24

11:10:06 -07'00'

Keith H. Lichten, Chief

Watershed Management Division

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

4a Comment noted. The request for a time extension was granted and Regional Board comments in Letter 5 have been considered.

This page left blank intentionally.

Letter 5—SF Bay Regional Water Quality Control Board

This page left blank intentionally.





# San Francisco Bay Regional Water Quality Control Board

Sent via electronic mail: No hard copy to follow

October 5, 2018

Marin County Community Development Agency Planning Division 3501 Civic Center, Suite 308 San Rafael, CA 94903

Attn.: Rachel Reid

Email: envplanning@marincounty.org

Subject: Comments on the Final 2007 Marin Countywide Plan Supplemental EIR (SEIR) with a Focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley, dated July 2018.

Dear Ms. Reid:

Thank you for the opportunity to comment on the Final 2007 Marin Countywide Plan Supplemental EIR (SEIR) with a Focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley, dated July 2018. We acknowledge Marin County's efforts to reduce the impacts of property development and management on coho salmon habitat, in a manner commensurate with the significance of these impacts while judiciously balancing other property management considerations and the feasibility of mitigation measures. We recognize that SEIR adoption would significantly expand the scope of actions that require discretionary permits to include most development and management activities that may adversely affect the ecological integrity of riparian and channel habitats. Therefore, we concur that SEIR adoption would result in less-thansignificant impacts to coho salmon habitat when compared to the existing baseline condition under the California Environmental Quality Act. However, we also note that under the federal Clean Water Act (San Francisco Bay Regional Water Quality Control Board [Water Board], 2014), the existing baseline condition for creeks in San Geronimo Valley is substantially impaired by the persistent effects of legacy disturbances and ongoing effects of property development and land management activities. Although the SEIR strengthens protections for habitat, it does not address all impacts from property development and land management activities. Considering this fact, and the persistence and significance of the impairment, we conclude that a broader program of actions is needed to restore functions to creeks in San Geronimo Valley sufficiently enough to prevent listed populations of coho salmon and steelhead from continuing down the extinction spiral.

The following comments outline the additional studies, measures, and programs that are needed to preserve the dwindling salmonid population. We ask that you note where we request **minor revisions** to the SEIR versus recommend **voluntary measures**. We

DR. TERRY F. YOUNG, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

SIER focusing on Salmonids in San Geronimo Valley

hope to see the minor revisions incorporated into the Final SEIR. Further, we strongly urge the Board of Supervisors to consider and incorporate the voluntary measures presented in this letter. However, we understand they may be outside the scope of the Final SEIR and included them in our letter to provide an outline of our recommendations as we continue to work collaboratively with the County to restore creek functions and protect salmonid populations within San Geronimo Valley and the rest of the Lagunitas Creek Watershed in the future.

# Comment 1: Analytical Framework

We concur with the following conclusions of the Final SEIR:

- a. Adequate data is not available for a full life cycle analysis, so the document uses a "modified life cycle approach"; and
- b. Population viability analysis is not feasible due to lack of sufficient data, and therefore, in this case would be less protective than the "impact analysis approach" used in the document, which evaluates salmonids ability to complete essential behaviors.

Based on analysis of the existing data, it was determined that egg survival, juvenile winter and summer rearing are the most susceptible life stages to future cumulative impacts. We concur, but are also concerned that survival from egg emergence to late spring (juvenile) is a life stage susceptible to cumulative impacts. However, we agree that there is insufficient data to adequately evaluate impacts to this life stage. We suggest that future research determine the status of this life stage and evaluate potential measures specific to this life stage to enhance viability. At this time, mitigation measures that mitigate for winter rearing impacts should also alleviate impacts to this life stage.

In recent discussions with the County and their consulting firm, Stillwater Sciences, it has been indicated that a modified life cycle approach is being used for the cumulative impact analysis. However, the discussion in the SEIR does not clearly reflect this for the juvenile summer rearing life stage and appears to use a limiting factor analysis (LFA) approach. We have discussed in our October 10, 2017, comment letter on the draft SEIR, comment #1, our rationale for not supporting the use of an LFA to identify medium to long-term impacts related to the Project. The language and analysis presented in the SEIR sections referring to juvenile summer rearing success require minor revisions to clarify this point. Further, the rationale for determining that the summer rearing life stage is not substantially adversely impacted by the Project requires minor revisions to further discuss and clarify.

# Comment 2. Summer Rearing

The SEIR, National Marine Fisheries Service's Recovery Plan for the endangered California Central Coast Coho (NMFS 2012), and San Geronimo Valley Enhancement Plan (SGVEP) (PCI 2010) have all concluded that juvenile summer rearing habitat is

the large woody debris (LWD) that creates pools; and in-stream shelter. These are discussed below.

currently degraded. Critical factors include summer baseflow; pool frequency along with

- a. Baseflow: Many factors that are directly influenced by dry season baseflow affect juvenile summer growth and survival. Growth in the summer is as important as winter survival because it directly affects juvenile size. A reduction in groundwater discharge to San Geronimo and its tributaries as a result of new groundwater pumping could potentially lead to reduced stream baseflow and resultant higher water temperatures, lower dissolved oxygen, higher fish densities, and less growth. This could result in reduced summer and winter rearing success and decreased smolt production. We understand that Marin Municipal Water District (MMWD) provides the potable water supply for most home owners. However, from our work in the watershed, we are aware that some properties also pump groundwater for irrigation purposes. The SGVEP rates protecting and enhancing base flow as one of the top-rated priorities (rated 1). The proposed voluntary mitigation measure of conducting a baseflow ground water study is excellent and unprecedented in most watersheds. We strongly support this and believe it should lead to enhanced baseflow in the future. However, until this study is complete and the impacts of any new groundwater pumping is assessed, we request a minor revision to the Final SEIR for the inclusion of a temporary injunction of new groundwater pumping wells in the San Geronimo Valley related to the Project.
- b. **Pool Frequency**: Deep pools are an essential element for successful coho juvenile rearing. Currently, the Creek and tributaries are degraded due to low pool frequency. In an incised channel with significant bank armoring (e.g., rip-rap, concrete, etc.), the geomorphic factors that would naturally create pools are suppressed causing pool formation to occur mainly from pool forcing factors, such as LWD, and other "roughness" elements, such as live downed wood (bay laurels, willows, and willow root clumps), and large living tree roots. See Comment 5 below for additional details.
- c. Instream Shelter and Riparian Canopy: Instream shelter is an essential component to both winter and summer life stage survival and growth. Instream shelter in a system such as San Geronimo Creek consists mostly of undercut banks and roots, low hanging bank vegetation extending over the water, LWD and small woody debris (SWD). Currently, there is a lack of instream shelter due to bank erosion and bank hardening practices; previous and on-going LWD/SWD removal (see comment 5 for LWD discussion); and creekside herbaceous and shrub vegetation clearing. With the exception of stream bank hardening (rip rap, concrete walls, etc.), the majority of these activities are conducted with hand tools and not currently regulated by the County, California Department of Fish and Wildlife (CDFW) or Water Board. The provisions included in the SEIR should improve most of these practices. However, the current list of SMPs does not

5c

5c

include measures to protect or restore impacted shrub or herbaceous vegetation that serves to provide in-stream cover and additionally provide pollutant filtering, soil stabilization and erosion reduction. To address this, we request a **minor revision** to the proposed measures in Section 5.1.1, Provision 4, to include additional protective and enhancement measures herbaceous and shrub vegetation clearing. Specifically, for development and redevelopment that includes clearing of herbaceous and/or shrub vegetation within SCA, the SCA ordinance should require riparian zone plantings that incorporate native shrub and herbaceous understory species to provide in-stream cover, pollutant filtering, soil stabilization and erosion reduction.

# Comment 3. Bank Stabilization

Mitigation Measure 5.1-2 requires biotechnical bank stabilization practices to be used to stabilize eroding streambanks. This represents a significant improvement over existing practices which frequently rely on traditional rip-rap and concrete walls that result in a streambank devoid of terrestrial or aquatic ecological function. Our comments on this section are minor and include incorporating a minor revision for avoidance in conjunction with three voluntary measures and two additional minor revisions to bolster the benefits of Mitigation Measure 5.1-2 as discussed below.

Due to historic changes in hydrology, the channel has incised in many locations down to bedrock. This typically signifies that the channel cannot incise any deeper, but rather will erode its banks in a natural process of energy dissipation and channel adjustment (termed channel evolution). Therefore, as an avoidance measure for all parcels, including parcels wholly within the SCA, the location of homes should include, when feasible, a setback from the stream an adequate distance to allow for the natural process of streambank erosion and stream width adjustment (widening and meandering). For structures other than homes, this setback should always be considered feasible. We request that this minor revision be included as the standard for new development rather than relying on biotechnical bank stabilization as the primary action. Without an adequate setback of structures, as is the case with many existing homes, the homeowner will need to stabilize the banks to prevent structure loss. Biotechnical bank stabilization is a viable method for bank stabilization and a critical restoration tool because it can improve localized instream habitat and reduce bank erosion and associated fine sediment discharge. However, as a stand-alone action, it may prevent the stream from adjusting its size, shape gradient and other critical geomorphic features, as is necessary to dissipate stream energy and evolve to a more functional stream shape (not narrow and deep). In conjunction with this minor revision, we recommend the following voluntary measures be included the SEIR:

a. **Voluntary measure** to perform an assessment of streambed and bank stability and likelihood of ongoing bank erosion for property lots that are entirely within the SCA.

5d

- b. **Voluntary measure** to develop a County program to evaluate stream reachbased approaches to stream channel and bank instabilities that do not transfer the instabilities to adjacent property owners or other stream reaches.
- c. **Voluntary measure** to develop a program for identifying, replacing, or enhancing existing legal non-biotechnical bank stabilization structures with biotechnical structures or incorporating vegetation into existing structures as feasible. The recommended manuals referenced in mitigation Measure 5.1-2 provide an excellent range of biotechnical bank stabilization designs and methods. However, not all methods incorporate trees for stream canopy cover. We request that a minor revision is incorporated to include tree planting wherever feasible.

Further, we recommend incorporating a **minor revision** that requires illegal structures to implement biotechnical approaches wherever feasible. Where this is not feasible, require off-site mitigation for illegal activity.

Lastly, the recommended manuals referenced in mitigation Measure 5.1-2 provide an excellent range of biotechnical bank stabilization designs and methods. However, not all methods incorporate trees for stream canopy cover. We request that a **minor revision** is incorporated to include tree planting wherever feasible.

# Comment 4. Canopy Cover

Tree canopy cover is critical for providing stream shade and reducing stream temperatures. Stream temperature data for San Geronimo Creek is incomplete. However, in several locations it has been recorded as being higher than the recommended Maximum Weekly Average Temperature (MWAT) of 15 degrees. We recommend the following **minor revisions** to the SEIR's provision 4 that address canopy cover and other issues related to the riparian zone tree cover:

- a. Incorporate a stream "predicted canopy cover" requirement after 5 to 10 years of growth that is equal to or greater than the existing canopy cover. This would not be a monitored parameter due to the long timeframe necessary to achieve it, but rather would be a calculation, by a qualified professional, incorporated into the design review process in a fashion similar to many other calculations.
- b. Provision 4 recommends that removed trees will be replaced 2:1 ratio, irrigated, and then monitored for 2 years for survival. In Water Board regulatory programs, we require a minimum of monitoring for 3 years following cessation of irrigation. Due to the longer monitoring period and cessation of irrigation, we recommend a minimum of 70 percent survival by the final monitoring year.
- c. Incorporate or allow flexibility for additional tree species to be incorporated into the tree list, such as red willows that are fast growing, native, and provide shade.

5d

5e

- d. The language referring to plant container sizes and willow pole plantings should be revised to "recommended" sizes so that flexibility is given for expert opinions where deviations from these sizes are warranted.
- e. Exemption 2 allows removal of pyrophytic trees or vegetation consistent with Title 16 of the fire code. We recognize the necessity of fire protection activities both for protection of the land owner and the ecosystem from catastrophic wildfires. However, we are concerned that unless fire protection activities are adequately coordinated with qualified professionals in stream/riparian zone vegetation function, the riparian zone including shrub and herbaceous vegetation, will not be adequately protected and may be needlessly negatively impacted. This may result in loss of stream function for all aquatic species and an increase in erosion and pollutant discharges. We suggest the following **voluntary measure**:
  - i. Expansion of the current Urban Streams Conservation Program conducted by Marin RCD and funded by Marin County, to develop and implement a land owner assistance program for fire related vegetation treatment. One goal of the program would be to replace and revegetate existing pyrophytic trees, shrubs, herbaceous vegetation such that fire protection and defensible space standards are achieved while preserving and enhancing riparian zone functions.

# Comment 5. Large Woody Debris

Key pieces of LWD – large trees that fall into channels - are the primary agents that create complex interconnected channel and floodplain habitats in creeks that drain forested areas (Collins et al., 2012). Coho salmon and steelhead have evolved to exploit the complex habitat formed by LWD. However, there has been a significant and persistent decrease in LWD loading and functions in the San Geronimo Creek watershed, and consequently a reduction in habitat complexity and connectivity caused by legacy disturbances and ongoing development and land management.

In evaluating the overall impact of rural residential development and land management on LWD recruitment and loading, we note most key pieces of LWD are contributed from riparian trees that die and then fall into channel, or from bank erosion that causes a tree located in the riparian corridor to fall in. In creek reaches, where the riparian forest is hardwood or coast redwood forest, most LWD comes from trees that were growing within 100 feet of the top of the channel banks (Benda and Bigelow, 2014). LWD recruitment via bank erosion is particularly important because the root wad usually remains intact, greatly enhancing the stability and functional significance of the tree that is recruited.

As compared to the CEQA baseline, we infer that adoption of the SEIR will be beneficial for recruitment and loading of LWD because a broader range of development and management actions within the SCA would be subject to discretionary permit approval, and related avoidance and mitigation measures (e.g., most vegetation clearing, all bank

5e

5f

stabilization projects, and most removal of LWD in channels). Also, the Marin County Tree Protection Ordinance (as amended in 2012) requires discretionary permit approval to remove "Heritage Trees" or more than two "Protected Trees" within any 12-month period. Considering size classifications for "Protected Trees" and "Heritage Trees," upon recruitment to channels, most of these trees would function as key pieces.

There are inherent conflicts between the development and management of riparian parcels and restoration of properly functioning riparian and LWD conditions<sup>1</sup>, as a result of property development and management in most cases there will be fewer mature riparian trees and less LWD in channels. Although SEIR adoption and continued implementation of the Tree Protection Ordinance would reduce impacts as compared to the baseline, it is important to note the baseline for LWD recruitment and loading is impaired (Water Board, 2014, pp. 19-25), channel habitat is greatly simplified causing significant adverse effects on the growth and survival of anadromous salmonids in all freshwater life stages.

Therefore, we urge the Board of Supervisors to consider a **voluntary measure** to develop *Large-Scale Collaborative Enhancement Actions* that provide the resources needed to establish a collaborative partnership with all interested stakeholders to plan and implement large-scale stream and riparian habitat enhancement projects throughout the San Geronimo Creek watershed, in locations where such projects would be effective and compatible with property protection and public safety. Some of the types of LWD projects that could be considered include, but are not limited to, the following:

- a. Bank input jams one-or-more fallen trees partially perched above the channel that form small bars and pools, that could be installed safely at many locations along San Geronimo Creek and in its tributaries;
- b. Log steps a single log forming a low dam and/or small channel-spanning debris dams composed of several logs that could be installed in bedrock reaches of tributaries to force step-pool units to form, and thereby greatly enhance spawning and rearing habitat and limiting additional incision;
- c. Bankfull bench jams create pool-bar units and local floodplain patches that could be installed in tributaries or along San Geronimo Creek, in reaches where

(footnote continued on next page)

5f

<sup>&</sup>lt;sup>1</sup> Where mature trees present a hazard to a home and ancillary structure, where the home site or location of an addition or ancillary structure is constrained to overlap with the location of mature trees, and/or where bank erosion or LWD in channels presents a perceived or real threat to property or safety, the mature trees or LWD will be removed to facilitate development and land management. The Tree Protection Ordinance, and the SEIR mitigation measures, both include exemptions for removal of hazard trees.

5f

- buildings and roads are not near the channel, and/or where the incised channel already has widened substantially; and/or
- d. Valley jams several large fallen trees that form a jam that is wider that the existing channel to facilitate channel aggradation and widening and formation of multi-threaded channels. This may be appropriate along the North Fork of San Geronimo Creek, upstream of the Dickson Weir, to reconnect the channel to its historical floodplain<sup>2</sup>.

In addition to these types of LWD projects, there are opportunities in most developed parcels to collaboratively enhance riparian habitat conditions through planting of native species, removal of invasive species, and active management to enhance growth and survival of riparian trees. The *Large-Scale Collaborative Enhancement Actions* could also include these types of projects which contribute to enhanced aesthetics, property protection, and human safety.

- This essential work only can occur through a voluntary collaborative effort. Therefore, Water Board staff also endorses formation of voluntary stewardships to facilitate implementation of reach-scale projects to restore properly functioning habitat conditions in the San Geronimo Creek watershed. Water Board funding to support such efforts would be prioritized in reaches where potential gains in habitat function are significant, and landowner support is obtained. Channel reaches that appear to have a high potential for enhancement include the following:
  - a. Along the North Fork of San Geronimo Creek, upstream of the Dickson Weir, where it may be safe and feasible to aggrade the channel and reconnect it to a broad historical floodplain;
  - b. Adjacent to reaches where coho salmon spawning density already is high;
  - c. At/near tributary confluences, where backwater conditions may be created or enhanced to increase winter rearing habitat capacity for coho salmon and steelhead;
  - d. In reaches where an inset floodplain can form or be constructed, and/or where an inset floodplain already has formed, and an alcove or side channel could be constructed; and/or

(footnote continued on next page)

Page 8 of 12

<sup>&</sup>lt;sup>2</sup> If feasible and compatible with adjacent agricultural land-uses and implemented in combination with restored fish passage upstream of the Dickson Weir, there appears to be the potential to create a significant amount of high- quality winter rearing habitat for coho salmon.

5f

e. Where bank habitat suitable to provide winter high flow refuge habitat for salmonids and other native aquatic species can be created and maintained.<sup>3</sup>

Large-scale stream and riparian habitat enhancement projects also should be explored in the San Geronimo Golf Course property, following an extensive public outreach effort to determine support for habitat enhancement and other public benefits and uses of the property. We appreciate your efforts and look forward to the opportunity to work together to restore properly functioning habitat conditions for coho salmon and steelhead in the San Geronimo Creek watershed.

# Comment 6. Development Stormwater

Under the baseline, legacy disturbances including the effects of rural residential development likely have contributed to significant and persistent increases in storm runoff peak and volume:

- a. Many San Geronimo Creek tributaries traverse broad valleys prior to joining the mainstem. As documented in nearby Miller and Redwood creeks (SFEI, 2008; Stillwater Sciences, 2004), it is likely that some tributaries to San Geronimo Creek were naturally disconnected and ended in alluvial fans or flood basins without reaching San Geronimo Creek, and that naturally disconnected tributaries were later ditched (connected to San Geronimo Creek) to facilitate agricultural and residential development in the 19<sup>th</sup> century (Water Board, 2014, pp. 27-30, and pp. 156-159). Horse, Flanders, Sprit Rock, North Fork San Geronimo, and Treatment Plant creeks all appear to have been ditched in their lower reaches (e.g., long nearly straight reaches or right-angle bends define confluences with San Geronimo Creek). If naturally disconnected tributaries were ditched, then there has been a significant and persistent increase in storm runoff in San Geronimo Creek.
- b. Post WW II development in the Woodacre area has converted a significant amount of forest to rural residential cover, permanently increasing storm runoff from this part of the watershed.
- c. Intensive historical grazing (as described in Water Board, 2014, p. 34) and perhaps also nineteenth century logging of old-growth redwoods concentrated storm runoff during these disturbance periods, likely resulting in headward expansion of channels, which would cause persistent increases in storm runoff from hillslopes throughout the watershed.
- d. There is a very high density of roads in the San Geronimo Creek watershed (about 9 miles of road per square mile of watershed). Besides the direct effect of

<sup>&</sup>lt;sup>3</sup> In some locations where bank erosion presents a significant threat to a home or other building, installation of a flow-deflection jam or bank input jam may be effective in providing protection and in creating habitat.

road construction - converting natural pervious surfaces to impervious roads - the cut banks of roads also intercept subsurface runoff and deliver it more rapidly to channels (because subsurface flow velocities typically are orders-of-magnitude slower than surface flow in road ditches.

Although the potential for significant further incision of San Geronimo Creek appears to be limited in many reaches, as evidenced by the exposure of hard bedrock in many locations, further channel adjustments may include additional coarsening of the streambed, channel widening, and/or a significant reduction in the extent of alluvial (gravel) cover.

In response to amplified storm runoff and other direct channel disturbances (e.g., LWD jam removal, connection of naturally disconnected tributaries, straightening of channel reaches, stream crossings, etc.), as noted in Comment 5, there appear to be many opportunities to enhance large woody debris loading in locations throughout the San Geronimo Creek watershed. Such projects could provide an effective approach for addressing both the impacts of amplified storm runoff and simplified channel habitat. Also, voluntary projects to enhance riparian habitat and/or to construct rain gardens or other bioretention facilities within existing improved parcels would further ameliorate development related storm runoff increases and impacts to riparian habitat functions that persist under the baseline condition.

We appreciate that the SEIR adds mitigation measures to storm proof roads (e.g., to limit hydrologic connectivity of roads, for road crossings to pass the 100-year peak flow, and to address plug and diversion potential at crossings), which are expected to fully attenuate road-related increases in storm runoff (as per Provision 5 of Mitigation Measure 5.1-1, and Mitigation Measure 5.2-1). We request a **minor revision** to the SEIR to clarify that driveways are included in the road classification and all associated mitigation measures apply.

As compared to the baseline, adoption of the SEIR adds requirements for control of development related increases in storm runoff through a performance standard for retention of runoff generated from impervious surfaces (to prevent offsite discharge from events up to the 85th percentile 24-hour rainfall event), where a project would add 500 square feet or more of new impervious surfaces. Under current rules, almost all new- or re-development projects in the San Geronimo Creek watershed are less than 2,500 square feet, and therefore, are exempt from current runoff control requirements which come into play at 2,500 square feet. Also, we note that the proposed performance standard would apply to all parcels throughout the watershed. Therefore, the overall effect of adoption of the SEIR performance standards for storm runoff control, as compared to the baseline would be beneficial. Please be aware, however, that future Water Board permits may require more stringent stormwater protections and Low Impact Development (LID) requirements.

**5**g

The performance standard for impervious surfaces/structural development appear to reflect practical considerations related to feasibility of construction of large bioretention and detention structures on small or steep parcels, and therefore, is not expected to fully attenuate the storm runoff increases that will occur from the new- and re-development anticipated under adoption of the 2007 Countywide Plan. Though the proposed standards are an improvement from the CEQA baseline, impacts resulting from increased stormwater runoff such as, but not limited to, high velocity flows washing fish downstream, decreased spawning gravel availability from incision, and decreased summer baseflow resulting from a decrease in upland infiltration.

As described above, expected increases in storm runoff that will occur even after adoption of the SEIR mitigation measures could be ameliorated through implementation of the **voluntary measure**, *Large-Scale Collaborative Enhancement Actions* (discussed in comment 5). This includes, but is not limited to, LWD jam construction for winter refuge habitat during high velocity flows, riparian habitat enhancement, and rain garden and other bio-retention construction to promote infiltration in developed or undeveloped parcels throughout the watershed.

#### Stormwater Retention Performance Standard

We request a **minor revision** to elaborate on the definition of the performance standard for storm runoff retention in Provision 5, so that planners and applicants have a clear and consistent understanding of how performance standard attainment is evaluated/determined. Specifically, we recommend that the SEIR answer the following question: Does the performance standard require retention of the full volume of runoff produced by each 24-hour period where the accumulated rainfall is  $\leq 1.79$  inches regardless of antecedent soil moisture conditions, or is there an assumed typical value for antecedent moisture that is used to calculate the necessary volume of runoff to infiltrate, transpire, and/or evaporate on-site in bioretention facilities?

Water Board staff recommend the inclusion of a **voluntary measure** to develop a guidance document for planners and applicants, which appears to be essential for insuring that they can consistently reach the same conclusions regarding attainment of the performance standard. Existing Bay Area Stormwater Management Agencies Association guidance documents for Phase II municipalities may provide a foundation for such a document that could then be refined to reflect conditions in the San Geronimo Creek watershed. Additionally, it would be useful if the guidance document assisted planners and applicants with identifying feasible types of bioretention facilities as well as determining the appropriate size and design configuration.

In conclusion, we urge the Board of Supervisors to consider providing the resources needed to establish a collaborative partnership with all interested parties to plan and implement large-scale stream and riparian habitat enhancement projects throughout the San Geronimo Creek watershed. The SEIR shows an impressive level of commitment to preserving the valuable and dwindling habitat for salmonids and we hope our comments present a path to not only preserve but reverse the continued degradation.

59

Let us embrace this challenge together, and as we move forward be inspired by the tenacity and majesty of these iconic fishes. Thank you for your time and attention. We look forward to partnering with you on this very important work.

If you have any questions concerning this letter, please contact Nicole Fairley of my staff at (510) 622-2424 or <a href="mailto:nicole.fairley@waterboards.ca.gov">nicole.fairley@waterboards.ca.gov</a>.

Sincerely,

Digitally signed by Xavier Fernandez Date: 2018.10.05 17:13:42 -07'00'

Xavier Fernandez North Bay Section Leader Watershed Division 5a Comment noted. The Regional Board's requested minor revisions to the Final SEIR are noted, and responses to specific minor revisions are discussed, as appropriate, below. While Marin County notes that the Regional Board's "recommended voluntary mitigation measures" would add to the collective scientific knowledge and understanding of the linkages between development activities, ecosystem processes, habitat form, and biological response, the recommended measures are, as noted by the Regional Board, outside the scope of the Final SEIR. The purpose of the Final SEIR is not to examine and provide for remediation of all historical impacts of all property development and land management activities, but instead to analyze potential cumulative impacts, and the range of potential consequences, on salmonids in San Geronimo Valley resulting from future buildout in the watershed, and to provide a description of associated mitigation measures relevant to the salmonids in San Geronimo Valley. Comments regarding recommended voluntary measures do not address the adequacy of the Final SEIR Response to Comments. Responses to specific voluntary measures requested by the Regional Board also are discussed, as appropriate, below.

## 5b Analytical Framework

Marin County agrees that the success of juvenile coho salmon during spring is an important component of their life cycle and that a better understanding of this life stage would help identify whether there are specific management and mitigation strategies that could enhance viability. Marin County notes the Regional Board's statement that the measures proposed to avoid and mitigate impacts to the winter rearing life stage should also alleviate impacts to the spring rearing life stage.

In the Draft SEIR, the analysis of summer rearing included references to a previous limiting factors analysis (LFA) that were intended to point out that even if there were adverse impacts that limited production of summer juveniles, such impacts might not result in population-level implications. This information was intended to help justify the "less than significant" conclusion under Impact 5.3 and affirm that the conclusion is consistent with either a life cycle analysis approach or a limiting factors analysis approach. Text describing the approach used to analyze Impact 5.3 has been clarified in the Final SEIR (see Section 3 of this Amendment).

The Regional Board requests a minor revision to the SEIR to further discuss and clarify the rationale for determining that the summer

rearing life stage is not substantially adversely affected by the Proposed Project. Text clarifying the rationale supporting the significance determination for Impact 5.3 has been clarified in the Final SEIR (see Section 3 of this Amendment).

## 5c Summer Rearing

The Regional Board requests that a temporary injunction of new groundwater pumping wells be added to Voluntary Mitigation Measure 5.3-1. As previously noted by the Regional Board, adoption of the SEIR would result in less-than-significant impacts to coho salmon habitat when compared to the existing baseline condition under CEQA. Accordingly, inclusion of this type of temporary injunction is not necessary, and it is outside the scope of mitigation measures that may be considered in the Final SEIR. As discussed in Impact 5.3, the Final SEIR impact determination relies upon an analysis of the incremental contributions of reduced habitat complexity on summer rearing conditions for salmonids and determines that any impacts would be less than significant. Still, should the results of the voluntary Groundwater Study referenced by the Regional Board, and which would be completed within 3 years of certification of the Final SEIR. determine that existing and future groundwater pumping, surface water diversions, altered watershed hydrology, and other effects related to development (e.g., septic systems, landscape irrigation) are or would be likely to adversely impact summer baseflow in San Geronimo Creek, then a temporary moratorium of new groundwater pumping wells may be considered to address this issue.

The Regional Board requests a minor revision to Mitigation Measure 5.1-1, Provision 4, to require replacement in the SCA of riparian shrubs and herbaceous vegetation removed in association with development activities. Inclusion of these requirements is not necessary to mitigate the potentially significant cumulative impact on winter survival of juvenile coho salmon. The comment regarding the requested revision does not address the adequacy of the Final SEIR Response to Comments. No further response is considered necessary.

#### 5d Bank Stabilization

## **Minor Revisions**

The Regional Board requests a minor revision to Mitigation Measure 5.1-1 to require new structures to be set back from the stream to allow natural streambank erosion and stream width adjustment. This revision is unnecessary as adoption of the SEIR without this revision would result in less-than-significant impacts. Additionally, this offered revision could conflict with the requirements of Marin County Code 24.04.560 which requires all structures shall be set back from creeks, channels or other major waterways at least twenty feet from the top of bank or twenty feet plus twice the channel depth measured from the toe of the near embankment, whichever is greater.

The Regional Board requests a minor revision that requires illegal structures to implement biotechnical bank stabilization approaches where feasible, or offsite mitigation where this is not feasible. The word "permitted" has been removed from the first sentence of Mitigation Measure 5.1-2 (see Section 3 of this Amendment), such that the bank stabilization requirements apply to all 'permitted' and 'unpermitted' bank stabilization projects. Additionally, we note that unpermitted and illegal developments are discussed in the response to comment 5k on the Draft SEIR, which can be found in Section 7.3 of the Final SEIR.

The Regional Board's request for a minor revision to require tree planting wherever feasible to provide stream canopy cover is noted. The County concurs that tree planting is important; however, this topic is already adequately covered by the third bullet point under Mitigation Measure 5.1-2, which requires bank stabilization work to incorporate salmonid habitat enhancement elements, such as overhanging woody vegetation, that improve the shelter complexity rating.

The Regional Board's suggestions for various "voluntary measures," include: 1) perform an assessment for streambed and bank stability and likelihood of ongoing bank erosion for property lots that are entirely within the SCA, 2) develop a County program to evaluate stream reachbased approaches to channel and bank instabilities that do not transfer the instabilities, and 3) develop a program for identifying, replacing, or enhancing existing legal non-biotechnical bank stabilization structures with biotechnical structures or incorporating vegetation into existing structures. The County acknowledges these suggestions, as well as the Regional Board's indication that these "voluntary measures" are

outside of the scope of the Final SEIR, and that the Regional Board included these suggestions to outline the Regional Board's future goals regarding the San Geronimo Valley and the Lagunitas Creek Watershed.

## 5e Canopy Cover

#### Minor Revisions

The Regional Board requests a minor revision to Mitigation Measure 5.1-1, Provision 4, that incorporates a stream "predicted canopy cover" requirement after 5 to 10 years of growth that is equal to or greater than the existing canopy cover. This revision is unnecessary as adoption of the SEIR without this revision would result in less-than-significant impacts, as is noted by the Regional Board in its comments. Marin County acknowledges, however, that future development of a stream predicted canopy cover requirement that equals or exceeds the mitigation value of the proposed requirements for SMPs for riparian vegetation and habitat described in Mitigation Measure 5.1-1, Provision 4, may be possible. Accordingly, the Regional Board may submit this recommendation as part of the public process associated with development of the Expanded SCA Ordinance.

The Regional Board requests a minor revision to Mitigation Measure 5.1-1, Provision 4 to require a longer monitoring period that includes monitoring after cessation of irrigation. The Regional Board recommends a minimum of 70 percent survival by the third year following cessation of irrigation, in conformance with the Water Board's regulatory programs. This revision is unnecessary as adoption of the SEIR without this revision would result in less-than-significant impacts, as is noted by the Regional Board in its comments. Marin County acknowledges, however, that future development of a stream predicted canopy cover requirement that equals or exceeds the mitigation value of the proposed requirements for SMPs for riparian vegetation and habitat described in Mitigation Measure 5.1-1, Provision 4, may be possible. Accordingly, the Regional Board may submit this recommendation as part of the public process associated with development of the Expanded SCA Ordinance.

The Regional Board requests a minor revision to Mitigation Measure 5.1-1, Provision 4, that incorporates or allows flexibility for additional tree species to be incorporated into the tree list, such as red willows, that are fast-growing, native, and provide shade. Marin County agrees

to this minor revision and has adjusted the Final SEIR accordingly (see Section 3 of this Amendment). Consistent with Section 15088.5 of the State CEQA Guidelines, this revision does not constitute significant new information and recirculation is not triggered.

The Regional Board requests a minor revision to Mitigation Measure 5.1-1, Provision 4, that revises the language referring to plant container sizes and willow pole plantings to "recommended" to allow for expert opinions where deviations from these sizes is warranted. The Final SEIR clarified and amplified a number of performance standards for the proposed mitigation measures and the requested minor revision to Mitigation Measure 5.1-1, Provision 4, would remove specificity for performance standards required under CEQA (Section 15126.4 (a) (1) (B)).

#### **Voluntary Measures**

As mentioned in the footnote to Mitigation Measure 5.1-1, FIRESafe MARIN already provides information regarding fire-prone plants to the public: <a href="http://www.firesafemarin.org/plants/fire-prone">http://www.firesafemarin.org/plants/fire-prone</a>. Additionally, Fire Code Officials undertake site inspections, as required, pursuant to the 2016 California Fire Code.

# 5f Large Woody Debris (LWD)

The Regional Board's comment that the SEIR will be beneficial for recruitment and loading of LWD, but that the baseline for LWD recruitment and loading is impaired, is noted. Substantial consideration has been given to LWD in the SEIR. Although Marin County does not foresee itself as a lead agency in the development of 'Large-Scale Collaborative Enhancement Actions' for stream and habitat enhancement projects throughout the San Geronimo Creek watershed, the County is open to working with other agencies on future collaborative enhancement efforts.. Regarding the San Geronimo Golf Course Property, please see Individual Response 14k in Section 7 of the Final SEIR.

## 5g **Development Stormwater**

The Regional Board recommended two minor revisions: (1) That driveways are included in the "road classification and all associated mitigation measures apply." (2) To elaborate on the definition of the performance standard to clarify how it is implemented. With respect to item no. 1, driveways are included in the road classification and the text in Mitigation Measure 5.1-1, Provision 5, has been clarified to be explicit (see Section 3 of this Amendment). With respect to item no. 2. the application of volume-based requirements (such as this one) require a treatment that can fully manage the specified volume in each 24-hour period regardless of antecedent conditions. The text in Mitigation Measure 5.1-1, Provision 5, has been clarified accordingly (see Section 3 of this Amendment). The County has also further evaluated the existing runoff reduction measures described in Appendix C of the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual (BASMAA 2014) and has determined that they are sufficient to retain the 85th percentile, 24hour design storm standard (please refer to Appendix A of this Amendment). The text in Mitigation Measure 5.1-1, Provision 5, has been clarified accordingly (see Section 3 of this Amendment).

The Regional Board also offers additional "voluntary measures" that the Regional Board acknowledges as exceeding the scope of the Final SEIR. These measures appear to reflect larger policy goals for large-scale collaboration efforts to address environmental issues that are beyond the scope of the Final SEIR, and are acknowledged as contributing to the scientific discussion surrounding future large-scale efforts for environmental protection and remediation. The comment does not address the adequacy of the Final SEIR Response to Comments. No further response is considered necessary.

# 2.3 LOCAL GROUPS LETTERS

This page left blank intentionally.

Letter 6-Watershed Alliance of West Marin

This page left blank intentionally.

## Reed, Michelle

From:

Taylor, Tammy on behalf of EnvPlanning

Sent:

Wednesday, October 10, 2018 9:49 AM

To:

Reed, Michelle

Subject:

FW: Request Extension SEIR San Geronimo Valley comment period

From: Laura Chariton <watermarin@comcast.net>

Sent: Monday, August 13, 2018 10:31 AM

To: EnvPlanning <EnvPlanning@marincounty.org>

Cc: Laura Chariton <watermarin@comcast.net>; Washington, Brian <BWashington@marincounty.org>; Crawford, Brian

<BCrawford@marincounty.org>; Rodoni, Dennis <DRodoni@marincounty.org>; Liebster, Jack

<JLiebster@marincounty.org>; Lai, Thomas <TLai@marincounty.org>
Subject: Request Extension SEIR San Geronimo Valley comment period

Dear Rachel Reid,

6а

The Watershed Alliance of Marin only learned about the comment period deadline of August 24, on August 10 from the press release shown below - in fact only 14 days. We believe that the amount of time given to review the 870 page documents, now 2 weeks, is insufficient and are requesting an extension of the public review period.

We believed that we had subscribed to that portal for notification and were surprised by this press release. After many meetings with County and staff on these and countywide related stream issues we would like the opportunity to review the documents.

Thank you for your consideration.

Sincerely,

Laura Chariton, President, Watershed Alliance of Marin 446 Panoramic Hwy. Mil Valley, CA 94941 415 234-9007 415 855-5630 Cell

Begin forwarded message:

From: "County of Marin" < <a href="mailto:camarin@public.govdelivery.com">camarin@public.govdelivery.com</a>> Subject: County's Key Planning Document to be Updated

Date: August 9, 2018 at 2:23:10 PM PDT

To: watermarin@comcast.net

Reply-To: camarin@public.govdelivery.com



# **NEWS RELEASE**

www.marincounty.org/news



Attachment to Letter 6

# County's Key Planning Document to be Updated

Environmental review is for stream conservation efforts in San Geronimo Valley

**San Rafael, CA** – After more than a year of review by staff, scientists and residents, a new environmental review further analyzing the County of Marin's stream conservation efforts is inching closer to approval, covering the impacts on certain types of fish living in the San Geronimo Valley watershed.

The Marin County Community Development Agency (CDA) has released a final versior of the Supplemental Environmental Impact Report (SEIR) to the 2007 Marin Countywide Plan, posting it on the CDA webpage. The report describes environmental impacts on fish in the San Geronimo area arising from potential development pursuant to the 2007 Countywide plan. Prepared by consulting firm Stillwater Sciences, the SEIR is 870 pages. The 21-day public review period closes August 24.

A draft version of the SEIR was circulated in May 2017 that included a robust analysis of existing conditions, potential impacts on coho salmon and steelhead (collectively known as salmonids along with other species) and required mitigation measures. During the 45-day comment period, the County received written and verbal comments from San Geronimo Valley residents and other stakeholders on the adequacy of the draft SEIR, and that feedback was considered in the final SEIR.

Written in conjunction with County staff, the final SEIR finds that proposed conditions of the 2007 Countywide Plan update would not result in any unavoidable significant impacts to the fish. All environmental impacts were either identified to be less than

significant or able to be rendered less than significant through mitigation measures, including a stream conservation area ordinance.

The matter will go before the Marin County Planning Commission on September 24 and, if recommended for certification there, would go before the Marin County Board of Supervisors for final approval at a subsequent meeting.

The additional environmental analysis of the 2007 Countywide Plan comes as the result of a lawsuit. When the County updated its 1994 Countywide Plan in 2007, the analysis of cumulative impacts to stream resources and fish habitat did not clear environmental review. The Marin-based nonprofit Salmon Protection Watershed Network (SPAWN), which for a decade challenged the County in court over salmon protections, contended that salmonids were threatened by County-permitted home and land development in the San Geronimo Valley. The valley is a subwatershed of the larger Lagunitas Creek watershed that drains to Tomales Bay and eventually to the Pacific Ocean. In 2014, the First District Court of Appeals in San Francisco required the County to set aside its approval of that provision with respect to the San Geronimo watershed.

First created in 1973, the Countywide Plan is a guiding roadmap for future land use and development and serves to avoid or minimize adverse impacts on biological and wetland resources in the county. The 2007 Countywide Plan and accompanying EIR were certified and is in effect except for the provision about the San Geronimo Valley watershed.

Comments about the SEIR may be emailed to <a href="maileotro">envplanning@marincounty.org</a> or mailed to Rachel Reid, Environmental Planning Manager, Marin County Community Development Agency, 3501 Civic Center Drive, Suite 308, San Rafael, CA 94903.

Anyone may <u>subscribe</u> to receive emailed updates about the project whenever there is news to report.

#### Contact:

Brian Washington COUNTY COUNSEL

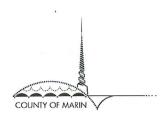
Marin County Civic Center 3501 Civic Center Drive Suite 275 San Rafael, CA 94903 415 473 6117 T CRS Dial 711 bwashington@marincounty.org

Attachment to Letter 6

Brian Crawford DIRECTOR Community Development Agency

Marin County Civic Center 3501 Civic Center Drive Suite 304 San Rafael, CA 94903 415 473 6278 T CRS Dial 711 bcrawford@marincounty.org You have subscribed to Press Releases & Features for Marin County. This information has recently been updated.

You may view a copy of the updated information by clicking <a href="here">here</a>.



Not all events are sponsored by the County of Marin. County of Marin sponsored events are required to be accessible. If you are an individual with a disability and require an accommodation to participate in a County sponsored event, please call (415) 473-4381 (voice), (415) 473-3232 (TTY), or dial 711 for CRS or email <u>Disability Access</u> at least five work days in advance. Documents in alternative formats are available upon request.









SUBSCRIBER SERVICES:

Manage Preferences | Unsubscribe | Help

This email was sent to watermarin@comcast.net using GovDelivery Communications Cloud on behalf of: County of Marin



The comment period was extended through October 08, 2018. Please see Letter 1 above.

This page left blank intentionally.

**Letter 7—Turtle Island Restoration Network** 

This page left blank intentionally.

## Reed, Michelle

From:

Taylor, Tammy on behalf of EnvPlanning

Sent:

Wednesday, October 10, 2018 9:49 AM

To:

Reed, Michelle

Subject:

FW: Request Extension SEIR San Geronimo Valley comment period

----Original Message----

To: EnvPlanning < EnvPlanning@marincounty.org>

Subject: Request Extension SEIR San Geronimo Valley comment period

### Dear Rachel Reid,

7a

The Turtle Island Restoration Network only learned about the comment period deadline of August 24, on August 3. We believe that the amount of time given to review the large document is insufficient. We are requesting an extension of the public review period to 60 days following the release.

Thank you for your consideration.

Sincerely,

Preston Brown
Director of Watershed Conservation
Turtle Island Restoration Network
Salmon Protection And Watershed Network (SPAWN)
Cell:(303) 877-0880
Email: Preston@tirn.net

\_FIGHTING FOR A BLUE-GREEN PLANET!\_ Visit our NEW website SeaTurtles.Org

Pased on this and other public comments, Marin County extended the public review and comment period on the Final SEIR to October 08, 2018, for a total of 66 days. All public comments submitted within the extended review and comment period are considered in this Amendment.

Letter 8—Marin Audubon Society

# Reed, Michelle

From:

Taylor, Tammy on behalf of EnvPlanning

Sent:

Wednesday, October 10, 2018 9:49 AM

To:

Reed, Michelle

Subject:

FW: MAS comments on San Geronimi Creek Final EIR

**Attachments:** 

San Geronimo Cr. FEIR Supplemental.pdf

----Original Message-----

From: Reid, Rachel

Sent: Monday, August 20, 2018 2:44 PM

To: EnvPlanning <EnvPlanning@marincounty.org>

Subject: FW: MAS comments on San Geronimi Creek Final EIR

----Original Message----

Sent: Monday, August 20, 2018 2:40 PM To: Reid, Rachel <a href="mailto:rreid@marincounty.org">rreid@marincounty.org</a>

Subject: MAS comments on San Geronimi Creek Final EIR

8a

Hi Rachel

Please find Marin Audubon Society's comments on the Final Supplemental EIR for San Geronimo Creek. Much improved.

Barbara



P.O. Box 599 | Mill Valley, CA 94942-0599 | Marinaudubon.org

August 20, 2018

Rachael Reid, Environmental Coordinator Marin County Community Development Dept. 3801 Civic Center Drive San Rafael, CA 94903

RE: Comments on San Geronimo Creek Final Environmental Impact Report

Dear MS Reid:

We appreciate the significant revisions to the Draft EIR. The Final EIR is much improved and the revisions and new information provided in response the many comments is clearer and more protective of the resources. We have the following comments:

Sediment: Response 8 is weakened by deletion of "shall" and it being replaced with "will". The requirements in Response 8 are more thorough and more protective of the stream resources. Even though construction is stopped by October 15, the common date used to mark the beginning of the rainy season, does not mean sediment is controlled, however. As recently as several years ago, we had a large storm before October 15. Also, even if storms come after the 15<sup>th</sup>, bare ground can still erode and result in sediments flowing to and entering the creek. We recommend that erosion control measures, such as coir rolls or jute netting be required for any disturbed spoil area within the SCA and even further if there is the potential for sediment to be carried into the creek. Sediment can certainly be carried more than 100 feet.

Mitigation ratio (Master Response 7): We disagree with the County's determination that it is infeasible to quantify a standard mitigation ratio that characterizes the area of "salmonid habitat enhancement that would be required to avoid or minimize the potential impacts." Using a mitigation ratio for wetland impacts is a common practice and is incorporated into the CWP. Although the habitat conditions are different in stream habitats, the explanation does not justify the conclusion. A mitigation ratio of a minimum of 1:1 replacement acreage of the same type of habitat can and should be required and the mitigation should be located as close to the impact site as possible.

Furthermore, maintaining and enhancing riparian functions as described in Mitigation Measure 5.1.2 would benefit the habitat, but it is not clear that even with the positive measures identified (biotechnical techniques, specific criteria, design specifications and guidelines) that adverse impacts would be avoided or even minimized. If a project removes a native vegetation, significantly modifies a natural shoreline and uses all of the recommended measures, it is still not clear that the habitat functions and values would be better than, or even equal to, the disturbed natural shoreline. And if the values are degraded, then there is a temporal loss of habitat. There would still be a loss of habitat and it could take many years to even find that out.

86

8b

8c

We fully support Mitigation Measure 5.1.1, reinforcing the County's commitment to implement a permanent Expanded SCA Ordinance and requiring that a plan review and regulation be required for all projects with potential to cause impacts to salmonids, regardless of zoning district the property is in. The ordinance requirements should be clearly defined and uniformly implemented across all zoning districts.

We also support the expanded set of activities that require an on-site assessment and discretionary permits. All activities within the SCA or landward that could impact salmonid habitat including any ground clearing/disturbance including agriculture should be regulated, but we suggest the following exception. Leaf litter protects and enriches soil, and contributes to stream productivity when they fall in the water. Leaf litter should remain in the SCA.

Further, we fully agree that woody vegetation below the top of bank should remain for its habitat and bank stabilization values. Proposals to remove woody vegetation should be reviewed by agencies and should be conditioned on avoiding stream and habitat impacts. It might be useful, to develop a list of circumstances that would warrant removal.

Thank you for considering our comments above. The limited comment period has limited our ability to provide more complete comments.

Sincerely,

/ Barbara Sałźmań, Ćo-chair

Conservation Committee

Phil Peterson, Co-chair Conservation Committee

- In the first sentence of Mitigation Measure 5.2-1, the word "shall" was changed to "will" because the grammatically correct use of "shall" requires a capable subject (i.e., a person or entity). A mitigation measure itself, or a provision included in a measure, is not a capable subject. The first sentence of Mitigation Measure 5.2-1 merely serves to acknowledge the intent of protections included in Mitigation Measure 5.1-1, which is only relevant for the SCA, while the remainder of the text in Mitigation Measure 5.2-1 expands protections outside of the SCA. The word "shall" is used correctly with respect to future County actions in the second sentence of Mitigation Measure 5.2-1.
- 8b Marin County acknowledges that there is no definitive date that 'rain' stops every year; however, the 'rainy season' is defined in the Marin Municipal Code based on past and present trends to allow for consistent implementation of the provisions in the Code. It is considered that not setting a definitive season would mean grading would be more likely to occur under conditions that may lead to erosion and sediment transfer, as well as making provisions more difficult to implement.

Marin County recognizes that sediment transfer occurs at the watershed-scale (over distances > 100 ft), which is why Mitigation Measure 5.2-1 of the Final SEIR implements low impact development (LID) practices and designs at the watershed scale—within and beyond the SCA. It is considered that the LID practices and designs discussed in Master Response 6 of the Final SEIR and included in Mitigation Measures 5.1-1 and 5.2-1, will sufficiently control and reduce production and delivery of fine sediment to streams.

- Reasons for not quantifying a standard "mitigation ratio" are explained in detail in Master Response 7 in Section 7 of the Final SEIR.
- Marin Audubon Society's support for Mitigation Measure 5.1-1, including expanding the set of activities that require discretionary permits, and for retaining woody vegetation, are noted. Please refer to Mitigation Measure 5.1-1, Provision 1, Exemption 1, for reference to leaf-litter requirements.

Letter 9—Environmental Action Committee of West Marin

### Reed, Michelle

From:

Taylor, Tammy on behalf of EnvPlanning

Sent:

Wednesday, October 10, 2018 9:50 AM

To:

Reed, Michelle

Subject:

FW: EAC Comments re. 2007 Marin Countywide Plan Final SEIR

**Attachments:** 

2018.08.23. EAC Ltr re. Final SEIR comments FINAL.pdf

From: Ashley Eagle-Gibbs <ashley@eacmarin.org>

Sent: Thursday, August 23, 2018 12:01 PM

To: EnvPlanning <EnvPlanning@marincounty.org>

Cc: Morgan Patton <morgan@eacmarin.org>; Terence Carroll <carrollfk@comcast.net>

Subject: EAC Comments re. 2007 Marin Countywide Plan Final SEIR

Dear Ms. Reid,

9a

Please find attached EAC's brief comments on the Final SEIR, which include a request for a time extension for public review.

Thank you, Ashley

Ashley Eagle-Gibbs, Esq. | Conservation Director Environmental Action Committee of West Marin (EAC) PO Box 609 | 65 Third Street, Suite #14 Point Reyes Station, CA | 94956 (415) 663-9312 ashley@eacmarin.org

#### **Keeping West Marin Wild Since 1971**

Website | Facebook | Twitter | Instagram

#### **Upcoming Events:**

9/8 - Sonoma Nature & Optics Fair 9/10-14 - Litter Bugs Me 9/15 - Coastal Clean Up Day

<sup>\*</sup> Please note: I work part-time Tuesday - Thursday typically, and I will respond to messages accordingly.



**Board of Directors** 

August 23, 2018

Bridger Mitchell, Ph.D.

President

Rachel Reid, Planning Manager **Environmental Planning** 

Ken Drexler, Esq. Vice-President

Marin County Community Development Agency

3501 Civic Center Dr. San Rafael CA 94903

Terence Carroll

Treasurer

Via electronic delivery to: envplanning@marincounty.org

David Weinsoff, Esq.

Re: Comments on 2007 Marin Countywide Plan Supplemental EIR with a Focus on Potential Cumulative Impacts to Salmonids in San

Geronimo Valley

Secretary

David Wimpfheimer

Director

Dear Ms. Reid,

Jerry Meral, Ph.D. Director

**Daniel Dietrich** 

Director

Cynthia Lloyd, Ph.D. Director

Staff and Consultants

Morgan Patton Executive Director

Ashley Eagle-Gibbs, Esq. Conservation Director

Jessica Reynolds Taylor Membership Director

Catherine Caufield Tomales Dunes Consultant The Environmental Action Committee of West Marin (EAC) is based in Point Reves Station and has been working to protect the unique lands, waters, and biodiversity of West Marin since 1971. EAC submits the below brief comments on the 2007 Marin Countywide Plan Supplemental EIR with a Focus on Potential Cumulative Impacts to Salmonids in San Geronimo Valley (Final SEIR).

These comments follow up on our prior comments, including our June 15, 2017 comments. We thank the County for the comment responses contained in the Final SEIR. In particular, Master Response 10 acknowledges that science and policy call for a 100-foot buffer, not a 35-foot buffer, which coincides with the request we made in our 2017 comment letter.

For all interested parties, we request an extension of time for the submission of comments. Considering the length (870 pages) and complexity of the document, a 21-day public review period is extremely short. The document, mitigation measures, and the complicated nature of the issues involved necessitate thorough review and analysis by all interested persons and organizations.

9b

We also request that the Stream Conservation Ordinance be enacted as soon as possible to maximize the protection of local species, which are already in jeopardy.

Thank you for your consideration of our comments.

Sincerely,

Morgan Patton Executive Director

Ashley Eagle-Gibbs Conservation Director

# Reed, Michelle

From: Taylor, Tammy on behalf of EnvPlanning

Sent: Wednesday, October 10, 2018 9:50 AM

To: Reed, Michelle

**Subject:** FW: SGV Planning Group Response to CWP FEIR

**Attachments:** SGVPG FEIR Response.docx

From: SGV Planning Group <sgvpg.notice@gmail.com>

Sent: Friday, August 24, 2018 3:25 PM

Subject: SGV Planning Group Response to CWP FEIR

August 24 2018

Letter Repeated Below

Ms Rachel Reid Environmental Planning Manager 3501 Civic Center Drive, Suite 308 San Rafael CA 94903

Re: San Geronimo Valley Final Supplement to the 2007 Marin Countywide Plan Final Environmental Impact Report (FEIR)

Dear Ms Reid,

Thank you for the opportunity to comment on the San Geronimo Valley Final Supplement to the 2007 Marin Countywide Plan Final EIR. Our volunteer members were not able to review this 872-page document in its entirety due to the very limited review period of 21 days, so we have relied on the summary provided by the Salmon Protection And Watershed Network (SPAWN). Our comments are as follow:

We agree with SPAWN that some subjects related to impacts from development were not thoroughly discussed or evaluated. Some of the final mitigation measures fail to address goals stated in the Countywide Plan (CWP), and there are many loopholes where development within the Stream Conservation Area (SCA) could occur.

Section 5.1.2 of the EIR, Consideration of Water Quality Impacts, concerns impacts to salmonids from road runoff pollution but fails to include analysis on juvenile coho. The Final EIR uses a study of impacts of road runoff on salmonids in the Puget Sound, which found that adult salmon experienced adverse impacts when subject to road runoff from highways, suggesting that road runoff levels are toxic to salmonids. An investigation is needed of the levels of road runoff generated within the SGV and its potential impact on all life stages of salmonids. No empirical data on heavy metals and hydrocarbon pollution exists in the SGV. The failure to include cumulative impacts of road runoff on salmonids is a blatant omission of cumulative analysis on how much road runoff the SGV can

generate before salmonids are adversely impacted.

Letter Repeated Below

In Section 5.1.3, Consideration of Impacts Due to Non-native Species, the FEIR concludes that non-native aquatic invertebrates and plants are not typically associated with adverse impacts to salmonids in cold water streams, therefore impacts from invasive aquatic species would not be considered in the cumulative impacts analysis. This category also fails to include analysis on non-native vegetation in riparian areas and how much non-native vegetation in riparian areas exists in the SCA. It also fails to address the impacts from domestic animals such as cats and dogs on salmonids. Aquatic non-native invasive species that have adverse impacts in cold water streams need to be evaluated, such as the New Zealand mud snail, which is prolific in urbanized Mill Valley.

In Section 5.1.4, Life State Analysis Approach, the FEIR does not evaluate the cumulative impacts from development on migrating adults or migrating juveniles (smolts), citing insufficient data on these factors. This is highly unlikely given the extensive dataset collated by MMWD, SPAWN, and NPS on adult spawning salmonids and out-migrant juveniles. Additional life stages may experience, for example, other impacts from development including streamflow discharge fluctuations, flow "flashiness" that impacts upstream and downstream migration, and dissolved oxygen concentrations and stream temperatures required for spawning.

The County has an ongoing sediment reduction program pursuant to the Regional Water Quality Control Board's Basin Plan Amendment, but in the FEIR they do not elaborate or discuss their ongoing program in any depth. The omitted items are another reason to consider the Cumulative Impacts Analysis inadequate.

As for Mitigation Measures, the FEIR cites Policy BIO-2.1, which calls for "no net loss" of sensitive habitats, values, and function (Table 2-1), yet the mitigation measures will not achieve "no-net loss" to habitats, values, and functions when development would occur within the SCA.

In Mitigation Measure 5.1-1, Expanded SCA Ordinance, the SCA identified by the County is not a setback. A setback identifies a mark from the top of the stream bank where a clear boundary is demarked to restrict all development. The SCA is not a setback unless there it is determined that within 100 ft of the stream, new or replacement development is not allowed.

Provision 1 of 5.1-1 expands the range of development activities within the SCA that require a discretionary permit but should exclude the removal of dead, invasive, or exotic vegetation below the streamside top of bank. An offer of a free consultation with the County, MMWD, or CDFW must occur prior to removal of any vegetation in the SCA, with the top of bank determined through site inspection.

Exemption Ex-2 provides for a wide loophole for removal or trimming of pyrophytic streamside vegetation, such as bay, Douglas fir, and tanoak. This vegetation is fast growing and can provide Large Woody Debris (LWD) to streams in a short period. This Exemption could lead to reduced LWD, increased sun exposure, and bank instability.

For Exemption Ex-4, if a septic system requires alterations to vegetation or channel form, additional measures should be incorporated. This includes requiring the channel bank to be repaired using biotechnical features if altered (no rip-rap), and replacement of any riparian vegetation removed at a 2:1 onsite or 3:1 offsite ratio.

Provision 5 of 5.1-1 does not achieve the "no net loss" of habitat acreage, value, or function. Even with the new standards, only 15% of all runoff in a 24-hour rainfall will be captured. A loophole exists here to allow for loss of habitat acreage. To prevent the loss of habitat acreage, a firm setback of 35

ft from the top of the bank is needed, combined with a 1:1 ratio of Low Impact Development (LID) requirements on-site from new and replacement builds, so that "no net loss" to riparian habitat acreage, value, and function can be realistically achieved.

Mitigation Measure 5.1-2, Require Biotenchnical Techniques and Salmonid Habitat Enhancement Elements for All Bank Stabilization Projects, needs to state what Biotechnical methods are acceptable since some methods, such as vegetation rip rap, can be detrimental to coho as the structures often harbor predatory fish.

In conclusion, the County needs to reduce the major loopholes in the FEIR, such as pyrophytic vegetation removal below the top of stream bank. The County needs to require that trunks, branches or stems of pyrohpytic vegetation below the top of the stream bank cannot be cut if they are larger than 6" in diameter. This leaves large wood but allows for cutting of stems and limbs so that flammable leafy vegetation can be removed.

In mitigation measure 5.1-1, 15% of the runoff in the 24-hour rain event is not retained, and there is no safeguard against removing habitat acreage by installing impervious area, even if LID runoff goals are achieved. This mitigation measure needs to establish a firm "No Development" setback from the creek as stated in Policy BIO-4. The subject of road runoff analysis and the evaluation of impacts to migrating adults and juvenile salmonids also needs to be addressed.

Most importantly, the FEIR needs to address development violations to the Expanded SCA Ordinance. Illegal, unpermitted development that is subject to the ordinance must be addressed through enforcement actions, including fines and environment restoration.

The Planning Group looks forward to the day when common-sense rules provide an appropriate environment for our native coho salmon while at the same time helping creek side residents to maintain our streams without an undue financial burden and onerous restrictions. We thank you for working toward that goal.

Sincerely,

Brian Staley Chair San Geronimo Valley Planning Group

PDF Attached

Letter Repeated Below

- 9a The Environmental Action Committee of West Marin's support for the 100-ft SCA buffer is noted. The comment period was extended through October 08, 2018. Please see Letter 1 above.
- 9b Regarding the timeframe for implementing the Expanded SCA Ordinance, please see Master Response 6.2.

Letter 10—San Geronimo Valley Planning Group



PO Box 57 - Forest Knolls CA 94933-0057

August 24 2018

Ms Rachel Reid Environmental Planning Manager 3501 Civic Center Drive, Suite 308 San Rafael CA 94903

Re: San Geronimo Valley Final Supplement to the 2007 Marin Countywide Plan Final Environmental Impact Report (EIR)

Dear Ms Reid,

Thank you for the opportunity to comment on the San Geronimo Valley Final Supplement to the 2007 Marin Countywide Plan Final EIR. Our volunteer members were not able to review this 872-page document in its entirety due to the very limited review period of 21 days, so we have relied on the summary provided by the Salmon Protection And Watershed Network (SPAWN). Our comments are as follow:

We agree with SPAWN that some subjects related to impacts from development were not thoroughly discussed or evaluated. Some of the final mitigation measures fail to address goals stated in the Countywide Plan (CWP), and there are many loopholes where development within the Stream Conservation Area (SCA) could occur.

10a

Section 5.1.2 of the EIR, Consideration of Water Quality Impacts, concerns impacts to salmonids from road runoff pollution but fails to include analysis on juvenile coho. The Final EIR uses a study of impacts of road runoff on salmonids in the Puget Sound, which found that adult salmon experienced adverse impacts when subject to road runoff from highways, suggesting that road runoff levels are toxic to salmonids. An investigation is needed of the levels of road runoff generated within the SGV and its potential impact on all life stages of salmonids. No empirical data on heavy metals and hydrocarbon pollution exists in the SGV. The failure to include cumulative impacts of road runoff on salmonids is a blatant omission of cumulative analysis on how much road runoff the SGV can generate before salmonids are adversely impacted.

In Section 5.1.3, Consideration of Impacts Due to Non-native Species, the FEIR concludes that non-native aquatic invertebrates and plants are not typically associated

10a

with adverse impacts to salmonids in cold water streams, therefore impacts from invasive aquatic species would not be considered in the cumulative impacts analysis. This category also fails to include analysis on non-native vegetation in riparian areas and how much non-native vegetation in riparian areas exists in the SCA. It also fails to address the impacts from domestic animals such as cats and dogs on salmonids. Aquatic non-native invasive species that have adverse impacts in cold water streams need to be evaluated, such as the New Zealand mud snail, which is prolific in urbanized Mill Valley.

In Section 5.1.4, Life State Analysis Approach, the FEIR does not evaluate the cumulative impacts from development on migrating adults or migrating juveniles (smolts), citing insufficient data on these factors. This is highly unlikely given the extensive dataset collated by MMWD, SPAWN, and NPS on adult spawning salmonids and out-migrant juveniles. Additional life stages may experience, for example, other impacts from development including streamflow discharge fluctuations, flow "flashiness" that impacts upstream and downstream migration, and dissolved oxygen concentrations and stream temperatures required for spawning.

The County has an ongoing sediment reduction program pursuant to the Regional Water Quality Control Board's Basin Plan Amendment, but in the FEIR they do not elaborate or discuss their ongoing program in any depth. The omitted items are another reason to consider the Cumulative Impacts Analysis inadequate.

As for Mitigation Measures, the FEIR cites Policy BIO-2.1, which calls for "no net loss" of sensitive habitats, values, and function (Table 2-1), yet the mitigation measures will not achieve "no-net loss" to habitats, values, and functions when development would occur within the SCA.

In Mitigation Measure 5.1-1, Expanded SCA Ordinance, the SCA identified by the County is not a setback. A setback identifies a mark from the top of the stream bank where a clear boundary is demarked to restrict all development. The SCA is not a setback unless there it is determined that within 100 ft of the stream, new or replacement development is not allowed.

Provision 1 of 5.1-1 expands the range of development activities within the SCA that require a discretionary permit but should exclude the removal of dead, invasive, or exotic vegetation below the streamside top of bank. An offer of a free consultation with the County, MMWD, or CDFW must occur prior to removal of any vegetation in the SCA, with the top of bank determined through site inspection.

Exemption Ex-2 provides for a wide loophole for removal or trimming of pyrophytic streamside vegetation, such as bay, Douglas fir, and tanoak. This vegetation is fast growing and can provide Large Woody Debris (LWD) to streams in a short period. This Exemption could lead to reduced LWD, increased sun exposure, and bank instability.

For Exemption Ex-4, if a septic system requires alterations to vegetation or channel form, additional measures should be incorporated. This includes requiring the channel bank to be repaired using bio-technical features if altered (no rip-rap), and replacement of any riparian vegetation removed at a 2:1 onsite or 3:1 offsite ratio.

Provision 5 of 5.1-1 does not achieve the "no net loss" of habitat acreage, value, or function. Even with the new standards, only 15% of all runoff in a 24-hour rainfall will be captured. A loophole exists here to allow for loss of habitat acreage. To prevent the loss of habitat acreage, a firm setback of 35 ft from the top of the bank is needed, combined with a 1:1 ratio of Low Impact Development (LID) requirements on-site from new and replacement builds, so that "no net loss" to riparian habitat acreage, value, and function can be realistically achieved.

10a

Mitigation Measure 5.1-2, Require Biotenchnical Techniques and Salmonid Habitat Enhancement Elements for All Bank Stabilization Projects, needs to state what Biotechnical methods are acceptable since some methods, such as vegetation rip rap, can be detrimental to coho as the structures often harbor predatory fish.

In conclusion, the County needs to reduce the major loopholes in the FEIR, such as pyrophytic vegetation removal below the top of stream bank. The County needs to require that trunks, branches or stems of pyrohpytic vegetation below the top of the stream bank cannot be cut if they are larger than 6" in diameter. This leaves large wood but allows for cutting of stems and limbs so that flammable leafy vegetation can be removed.

In mitigation measure 5.1-1, 15% of the runoff in the 24-hour rain event is not retained, and there is no safeguard against removing habitat acreage by installing impervious area, even if LID runoff goals are achieved. This mitigation measure needs to establish a firm "No Development" setback from the creek as stated in Policy BIO-4. The subject of road runoff analysis and the evaluation of impacts to migrating adults and juvenile salmonids also needs to be addressed.

Most importantly, the FEIR needs to address development violations to the Expanded SCA Ordinance. Illegal, unpermitted development that is subject to the ordinance must be addressed through enforcement actions, including fines and environment restoration.

The Planning Group looks forward to the day when common-sense rules provide an appropriate environment for our native coho salmon while at the same time helping creek side residents to maintain our streams without an undue financial burden and onerous restrictions. We thank you for working toward that goal.

Sincerely,

Brian Staley Chair San Geronimo Valley Planning Group

10a As the San Geronimo Valley Planning Group submitted comments consistent with those submitted by the Turtle Island Restoration Network, please refer to the detailed responses provided for Letters 11 and 12 in this Amendment.

Letter 11—Turtle Island Restoration Network

### Reed, Michelle

From:

Taylor, Tammy on behalf of EnvPlanning

Sent:

Wednesday, October 10, 2018 9:50 AM

To:

Reed, Michelle

Subject:

FW: Comments to FINAL 2007 Marin Countywide Plan Supplemental EIR

Attachments:

FINAL COMMENTS\_SEIR\_SPAWN.pdf

11

----Original Message-----

To: nvplanning@marincounty.org; EnvPlanning <EnvPlanning@marincounty.org>

Cc: Washington, Brian <BWashington@marincounty.org>; Crawford, Brian <BCrawford@marincounty.org>; Rodoni,

Dennis < DRodoni@marincounty.org>; Liebster, Jack < JLiebster@marincounty.org>; Lai, Thomas

<TLai@marincounty.org>; dsivas@stanford.edu; tsteiner@tirn.net; Mlchael Graf <mwgraf@aol.com>

Subject: Comments to FINAL 2007 Marin Countywide Plan Supplemental EIR

Dear Rachel Reid,

Oh behalf of the Turtle Island Restoration Network's Salmon Protection And Watershed Network, I am submitting our official comments regarding the Final Supplemental EIR with a focus on Cumulative Impacts of Development in the San Geronimo Valley.

The attached document contains our comments.

Thank you,

Preston

Preston Brown
Director of Watershed Conservation
Turtle Island Restoration Network
Salmon Protection And Watershed Network (SPAWN)
Cell:(303) 877-0880
Email: Preston@tirn.net

\_FIGHTING FOR A BLUE-GREEN PLANET!\_ Visit our NEW website SeaTurtles.Org



24 August, 2018

Marin County Redevelopment Agency Attn: Rachel Reid, Environmental Planning Manager 3501 Civic Center Drive, Suite 308, San Rafael, CA 94903

Re: Comments to FINAL 2007 Marin Countywide Plan Supplemental EIR

Dear Ms. Reid:

These Comments to the FINAL SEIR are submitted by Turtle Island Restoration Network, a California public benefit corporation, and Salmon Protection and Watershed Network, a conservation project of Turtle Island Restoration Network, (collectively "Turtle Island/SPAWN"), in response to the issuing of the FINAL SEIR.

As noted in the FINAL SEIR, this supplemental analysis under CEQA has been mandated by the California Court of Appeal in a March 2014 opinion which required the County to set aside its approval of the 2007 Marin Countywide Plan Update (2007 CWP) pending preparation of a supplemental SEIR that analyzes the cumulative impacts of such project, and describes mitigation measures to address such impacts, in conformity with the CEQA Guidelines. 14 Cal. Code Reg. § 15000 et seq. ("Guidelines").

11a

The County is presently subject to Peremptory Writ of Mandate issued by the Marin County Superior Court issued on December 5, 2014 following remand by the Court of Appeal to prepare and certify a final Supplemental EIR. Until the Writ is returned to the Superior Court, the 2007 CWP is not in effect in the San Geronimo Valley watershed, and development applications are reviewed under the 1994 Countywide Plan.

With this submission, Turtle Island Restoration Project and its program Salmon Protection And Watershed Network joins in all comments previously submitted; and 2) does not believe that the mitigation measures described in the FINAL SEIR document set forth adequate performance standards for the EIR to conclude that significant impacts will be avoided or substantially lessened and that therefore the EIR's findings on this lack substantial evidence.

## **Summary of Comments**

- 1. In the analysis of cumulative effects, the FINAL SEIR fails to identify and analyze all prospective development allowable under the 2007 CWP, understates the extent of prospective development and other future known and likely projects, and fails to consider the additional development likely to be allowed under the "Expanded SCA Ordinance." ("Proposed Ordinance")
- 11c 2. The FINAL SEIR provides an incomplete and inadequate description of the environmental baseline of the project area, specifically including the riparian and instream habitats.
- The FINAL SEIR provides an incomplete and flawed analysis of potential and cumulative impacts from prospective development allowed under the 2007 CWP, including direct and indirect impacts to water quality, riparian habitat, spawning, nursery and rearing habitats, and to endangered and threatened salmonid species.
- 4. The FINAL SEIR provides inadequate mitigation for the significant impacts on spawning and rearing salmonid habitat from future development allowable under the 2007 CWP in that the Proposed Ordinance is vague, unenforceable, and lacks any reasonable timeline or actual deadline for the formulation and adoption of the Proposed Ordinance.
- 5. The FINAL SEIR is deficient in failing to provide any analysis of the Proposed Ordinance under CEQA, or adequate performance standards by which the future formulation of the Proposed Ordinance may be analyzed under CEQA, or providing any explanation of the process or deadlines for analysis of the Proposed Ordinance under CEQA.
- 6. The other measures provided by the FINAL SEIR to mitigate the significant impacts on spawning, rearing and summer salmonid habitat from future development allowable under the 2007 CWP are inadequate in that such measures are vague, unenforceable, lack performance standards, and lack a reasonable timeline or actual deadline for their development and/or implementation.
- To satisfy the requirements of CEQA, the FINAL SEIR cannot be certified without the concurrent formulation and adoption of an SCA Ordinance that addresses the specific significant impacts to salmonid species and their habitat from the prospective development allowable under the 2007 CWP.

#### **Project Description**

An over-arching concern with the project description arises from loopholes that of the Proposed Ordinance description that relies on reference to the aspirational provisions of Goal BIO-4 of the 2007 CWP and broadly-stated provisions. The description of the Proposed Ordinance in the FINAL SEIR is relevant to the project description in that

the Proposed Ordinance description fails to include (or expressly exclude) certain exemptions and exclusions included in Goal BIO-4.a and in prior versions of an Ordinance, and a "by right" exclusion for additional development of additional footprint within the SCA. The inclusion of such exemptions and exclusions to the Proposed Ordinance allows additional future development not considered in the cumulative effects analysis in the FINAL SEIR. In addition, as discussed below, such exemptions and exclusions would also result in an ineffective mitigation measure to reduce those key significant impacts from the 2007 CWP both identified in the FINAL SEIR and described in these Comments.

## Natural Systems and Agriculture Element [2.4.1]

11i

Despite language to the contrary, the FINAL SEIR continues to allow "net loss of habitat acreage, value and function," through a number of exceptions and exemptions. If furthermore confuses "no net loss of habitat" with the planting of tiny saplings to replace the removal of mature trees, leaving decades to centuries to reach a no net loss of habitat value and function, and in no way addresses "net loss of habitat acreage."

The exemption to allow property owners working with the Resource Conservation District to proceed outside regulations is another exception that may lead to loss of habitat and is not analyzed in the document.

(1) Increased Toxins from Increased Development and Sewage Disposal. Despite language to the contrary, an increase in development within the Lagunitas Creek watershed will result in increased stream pollution from toxins, sewage and pharmaceutical contaminations.

Specifically, the environmental baseline described in the FINAL SEIR continues to inadequately address existing levels of toxicity from all sources including road runoff, pharmaceuticals in wastewater and pesticide use. The FINAL SEIR unpersuasively attempts to analyze and discuss the likelihood of future levels, the impacts to the stream and riparian habitats from increased levels of toxins, and dismisses the impacts on salmonid health, its insect food sources and survival.

Recent studies indicate that spawning salmon in streams subject to impacts on water quality from toxins in storm runoff and other sources are negatively impacted by decreased water quality (i.e. in the Puget Sound) and rejects potential impacts in the San Geronimo Valley based on inadequate analysis. For example, while urbanization is higher in the Puget Sound, the quantity of water that flows through its river systems is massive, compared to the small creeks in the tiny nine square mile San Geronimo Valley. Simply not assessing the impacts from road runoff in the San Geronimo Valley because the impacts from road runoff in the Puget Sound are more amplified demonstrates omitted analysis required by CEQA.

The San Geronimo Valley is a major artery running along the San Geronimo Creek, connecting the entire Bay Area with recreational opportunities with National and State

Parks resulting in very high automobile traffic and the water pollution it creates. Additional runoff from allowed future development this document proposes will carry these toxins into the San Geronimo Creek. The FINAL SEIR admits that the density of roads in the San Geronimo Valley are very high for the size of the watershed. Furthermore, the anticipated increase in population brings more automobiles and traffic, yet fails to analyze this impact.

More specifically, daily surveys of a representative urban stream revealed premature spawner mortality rates that ranged from 60-100% of each fall run compared to a of <1% rate in a non-urban stream. The authors concluded that the weight of evidence suggests that freshwater- transitional coho are particularly vulnerable to toxic contaminant (or contaminant mixture) in urban runoff. Stormwater may therefore place important constraints on efforts to conserve and recover coho populations in urban and urbanizing watersheds throughout the western United States.

The FINAL SEIR provides no mitigation for disconnecting urban runoff from roads and allows increases in urban runoff through inadequate measures to capture admitted increases.

An increase in development will necessarily result in increased pollution from oil and other toxins from road run-off. Increased automobile traffic associated with residential and commercial development will increase these known toxins to salmonids, and no specific mitigation for this hazard is provided.

Sewage disposal for all housing and businesses located in the San Geronimo Valley occurs within the Lagunitas Creek watershed, whether through individual or community septic systems or planned centralized wastewater treatment plants. Sewage disposal technology does not remove pharmaceuticals from wastewater causing known impacts to salmon species. While the current FINAL SEIR attempts to address this issue, we find their conclusion to be unnecessarily dismissive without providing ample evidence to support the conclusion.

Finally, pesticides from agricultural and other sources are known causes of increased toxicity and impacts to salmonids. The FINAL SEIR inadequately discusses and analyzes this important impact on water quality, and no specific mitigation for this hazard is provided.

(2) Increase in Toxic Metals

The FINAL SEIR inadequately discusses toxic metals in the Lagunitas Creek watershed and the impacts of such toxins on salmonids and their food sources.

Specifically, in 2009 the San Geronimo Valley Salmon Enhancement Plan Existing Conditions report stated:

11k

11i

Although a number of metal species have been measured in San Geronimo Creek and a few of its major tributaries (Table 3-8), none were measured at water column concentrations of concern (Piovarcsik and Andrew 2008, SFBRWQCB 2007, TBWC 2006). However, sediment concentrations in San Geronimo Creek were high for chromium and nickel (> probable effects concentration [PEC), as well as arsenic, copper, and mercury (> threshold effects concentrations [TECs]) (Table 3-9). The observed sediment metals concentrations were high enough to support possible acute toxicity to infaunal invertebrates (SFBRWQCB 2007, MacDonald et al. 2000). Additionally, tissues of clams deployed near the Creamery Creek confluence with mainstem San Geronimo (referred to as Creamery Gulch in SFBRWQCB [2007]) as part of the toxicity testing were among the highest mercury concentrations measured anywhere in the Bay Area at 0.03 ug/g. Copper concentrations were also high at 7.68 ug/g. While the tissue results reflect elevated sediment chemistry measurements, the bioavailability and toxicity of sediment metals to salmonids and other local biota is currently uncertain in the San Geronimo Creek watershed. The observed concentrations may be more representative of increased erosion in the watershed than of anthropogenic sources of toxicants (SFBRWQCB 2007), and assessing fish tissue levels would be required to determine possible health effects.

The FINAL SEIR's failure to sufficiently to mitigate for this leaves the document incomplete and inadequate.

#### (3) Increase in Fires

The FINAL SEIR fails to adequately consider or analyze the impacts on salmonid habitat from wildfires and fire control activities, stochastic events that become more likely with increased levels of development because it improperly reaches the conclusion that increased development will not increase fire risk.

This is contrary to common sense. Fire departments increase their resources as communities grow, specifically because increased development results in increased opportunities for fire. While new development standards have improved to reduce fire hazards from new development, the majority of housing in the San Geronimo Watershed is not required to upgrade to these new levels, and continues to deteriorate with age. Also fires started from increased automobiles, mowing equipment, etc. also can be expected to increase with increased development and population.

Additionally, climate change is expected to increase drought conditions and increased fire risk. This coupled with increased development is very likely to lead to additional fire hazards that can destroy salmonid habitat.

#### As stated by NOAA:

Control of wildland fires may include the removal or modification of vegetation due to the construction of firebreaks or setting of backfires to control the spread of fire. This removal of vegetation can trigger post-fire landslides as well as chronic sediment erosion that can negatively affect downstream coho habitat. Also, the use of fire retardants may adversely affect salmonid habitat if used in a manner that does not sufficiently protect streams

5

11k

111

111

11m

causing the potential for coho to be exposed to lethal amounts of the retardant. This exposure is most likely to affect summer rearing juvenile coho. Fire retardant has impacted salmon in the San Geronimo subwatershed creeks in the past resulting in mortality and harm to salmonids and mitigation of these threats are not addressed adequately.

The FINAL SEIR glosses over these known factors and does not provide adequate mitigation.

(4) Increase in Invasive Species

The FINAL SEIR fails to identify and adequately analyze the impacts from an increase in invasive species associated with increased levels of development. Invasive species (both plant and animal) impact salmon streams. Research indicates that increased development opens new niches for invasive species that often thrive in newly disturbed habitat. The problem is compounded by the introduction of additional invasive species through development activities. The significant increase in exotic pet trade in the US will increase the likelihood of invasive species. The FINAL SEIR, improperly concludes that most invasive species introductions occurred in previous decades. The popularity of exotic species trade, coupled with a more affluent population (homes purchased for less than \$100,000 forty years ago, now sell for over \$1 million) is likely to increase the threat of animal and plant invasions.

The FINAL SEIR states that most introductions occurred in earlier times, but fails to address the fact that the number of pets, such as house cats for example, appears to be increasing with increasing population and a more affluent population.

(6) Climate Change

Although not an impact of the Proposed Project, the likely impacts from changes in temperature, precipitation, the frequency and intensity weather events, and other conditions from a changing climate are part of a dynamic environmental baseline that will change over the course of the Proposed Project. Accordingly, consideration of the likely direct and indirect impacts on salmonid species and habitat from climate change should be considered as part of the cumulative effects analysis to the same extent as the effects of known and likely future development.

11n

The impacts of climate change on salmon have already been identified and discussed, including impacts from increases in temperature, rainfall variability, storm frequency, climatic water deficit, and fire frequency, and an increase in non-native species that prey on salmon.

Future Development [2.6]

11o

This Section, which establishes parameters for the projection and discussion of impacts from future development in the San Geronimo Valley fails to account for historical and current unpermitted development within the San Geronimo Valley, including development within the SCA, is an acknowledged significant problem.

Failing to properly acknowledge these existing conditions, and factor them into the development metrics for the number of developed units within the watershed, provides an inaccurate basis for the cumulative effects analysis in the FINAL SEIR.

Further, this Section fails to use accurate parameters for development that may be allowed by the Proposed Ordinance, which will not only establish measures to regulate future development and mitigate the resulting impacts within the San Geronimo Creek subwatershed, but are likely to include provisions that will determine the amount of permissible **additional** development on already- developed parcels. For example, an exception provided in Goal BIO-4.a and included in a previous proposed SCA Ordinance provided for by-right "modest additions" to existing residences within the SCA of sheds, shipping metal containers which continue to increase throughout the watershed and are not regulated. The amount of loss habitat due to these two structures alone are likely significant and remain unaccounted for.

Further, the County has not indicated whether the exceptions would also be eventually allowed on the 474 currently undeveloped parcels in the future after they are developed, which could allow significant additional square feet of future development that which is not considered in the FINAL SEIR.

The gentrification of the rural valley by a much more affluent population is leading to an increase in housing size of new and redevelopment of past modest homes, additional transportation vehicles, recreational vehicles, boats, and the need for more structures to store accessory equipment. Furthermore, all of these vehicles need to be parked somewhere, leading to a further loss of available native habitat that supports salmonid survival. Many of these can regularly be seen parked inside the Stream Conservation Area. The proposed mitigation measures fail to regulate this significant problem.

The FINAL SEIR, as noted in our comments on the Draft SEIR, continues to mischaracterize available data to reach a conclusion of **less than significant impact**. The number of permits may be "low" or "moderate," but this remains significant relative to the small size of the area under consideration. Furthermore, the FINAL SEIR admits that size of these developments continue to get larger, while obviously the parcel sizes remain the same size. Loss of habitat will continue under the development allowed by the 2007 CWP and no adequate mitigations are provided.

(3) The conclusion that it is "unlikely" no new development will use groundwater wells and that the number of wells will remain approximately equal to the existing number of wells is based upon an unsupported assumption that all new improved parcels would possess municipal water supply. The conclusion also ignores the likelihood of new wells drilled for agricultural, animal husbandry or other purposes, which should be considered as either foreseeable future development accessory to existing uses, or as an indirect result of permitted development under the 2007 CWP (e.g. a large garden or horse stable accessory to a new rural residence).

11p

Subbasin/Reach Scale [2.6.3].

- (1) As noted above for the watershed scale, there is no basis to conclude that the number of improved parcels or units anticipated from implementation of the 2007 CWP is "overestimated."
- 11q (2) The parsing of data by subbasins and reaches is of questionable utility unless the analysis includes allowances for the quantity and quality of stream and riparian habitat available in such subbasin or reach. For example, characterizing the effect of increase in improved parcels and units in the Lower San Geronimo/Woodacre Creek reaches as "moderate" based upon the lower "relative increase" fails to account for the effect on habitat provided in such subbasin/reach.

The parsing of data by subbasins could be useful if the final mitigation measures were also applied to subbasins, yet the FINAL SEIR fails to use a similar methodology in developing its mitigation measures that are proposed.

- (3) There is also ample evidence that pumping directly from creeks within the Lagunitas Creek watershed occurs that is likely to increase with greater development without regulatory controls. This issue has been discussed at the Lagunitas Creek Technical Advisory Committee on which the County holds a seat and informed of this issue, and it is discussed in the federal NOAA Coho Recovery Plan.
- (4) No data or other support is provided for the assertion that "relatively few parcels small enough to lack significant flexibility in development placement (0- 0.5 ac) [are] located completely within the SCA."
- 11t (5) The basis for characterizing the effects of developing parcels within the Lower San Geronimo/Woodacre Creek SCA as "moderate" is a purely qualitative analysis based upon a "relative increase," which masks the actual effect on the stream and riparian habitat.

#### **Environmental Setting [3]**

The discussion of the fish species' and habitat condition in this Section require additional review and clarification to be accurate for the purpose of the analysis and findings made in the FINAL SEIR.

Special-Status Anadromous Fish Species [3.1]
The coho salmon that spawn in the Lagunitas Creek watershed are part of the Central California Coast Evolutionary Significant Unit (ESU) that is listed as "endangered" under the federal Endangered Species Act (ESA). This coho salmon population segment is also listed as endangered under the California Endangered Species Act (CESA).

The historical and continuing decline in coho salmon abundance in the Lagunitas Creek watershed is well-documented and includes data that extend well beyond the limited numerical data referenced in the FINAL SEIR at 3-1. The data provided on recent trends is inadequate to understand the current extinction threat the species face.

More specifically, coho salmon and steelhead trout populations have experienced significant historical population declines in the Lagunitas Creek watershed approaching 90% since the mid 20<sup>th</sup> Century, precipitating listings as "endangered" (coho salmon) and "threatened" (Chinook salmon and steelhead trout) under the ESA, as well as listings under the CESA. Annual coho spawning numbers in the watershed have dropped from thousands to hundreds, and some recent years have seen the numbers drop as low as 26 nests ("redds"). Recent data unequivocally indicates that the coho salmon remain in danger of imminent extinction. The coho salmon in this ESU have been described by NOAA as "gravely close to extinction" and, more recently, as of "critical concern" with "current threats expected to push species to extinction in the wild within 10 - 15 generations."

The greatest contemporary threat to the continued survival of the coho salmon and steelhead in the greater Lagunitas watershed is the continued impacts from residential and commercial development. citing NMFS (2012), NMFS (2015).) Although the Lagunitas Creek watershed has historically been significantly impacted by dams that directly caused spawning and rearing habitat loss and from forest removal, the impacts from continuing development present the greater current threat. (FINAL SEIR 3.2, citing NMFS (2012).) 1 1 u Specifically, "Studies in the Pacific Northwest have shown that coho salmon abundance is significantly lower in rural, urban, and agricultural areas, and areas with high road density, than in watersheds with fewer human land uses (Sharma and Hilborn 2001, Pess et al. 2002). Of 14 potential threats to coho salmon in the greater Lagunitas Creek Watershed evaluated by NMFS (2012), residential and commercial development was ranked as the greatest overall threat ("very high") to the viability of the coho salmon population." The impacts from development and urbanization include loss of riparian habitat, increased stream velocities from impervious surfaces and vegetation removal, increased pollution inputs and additional armoring and simplification of stream channels to protect housing structures.

The coho salmon in the Lagunitas Creek watershed is a designated "focus population" for the recovery of the CCC ESU. Given the historical and future impacts from development within the Lagunitas Creek watershed, to stabilize and recover the endangered coho salmon the County must adopt a strategy of both minimizing and mitigating impacts from both future development and reducing current impacts from historical development as proposed by NMFS and referred to as "managed retreat." Unfortunately, the FINAL SEIR fails to recognize or adopt both aspects of this strategy.

Water Quality [3-4]

The FINAL SEIR states that "reported water temperatures in mainstem San Geronimo Creek and at least two of its major tributaries (i.e., Woodacre Creek, Montezuma Creek) 11v have consistently been below the maximum thresholds for salmonids upper incipient lethal temperature (26.6oC, Brett 1952) and the critical thermal maxima (24.6oC; McGeer et al. 1991), although they have been observed to exceed optimal ranges for coho, steelhead, and Chinook salmon during summer low-flow periods (Stillwater Sciences 2009a)."

Notwithstanding the concern that summer water temperatures exceed optimal ranges for 11v salmonids, the FINAL SEIR inadequately addresses what effects additional development in the stream conservation area would have on water temperatures.

In the discussion of water quality conditions, it is important to emphasize that Lagunitas Creek, which includes San Geronimo Creek, is listed under Clean Water Act § 303(d) as an "impaired waterbody due to increases in the amount of fine sediment (primarily sand) that is being deposited in the streambed." Accordingly, a TMDL and load allocation has been established for Lagunitas Creek upstream of Devils Gulch that requires a 50% reduction in sediment delivery from all sources from the historical load period 1983 – 2008. From this determination, it is evident that regarding fine sediment the water quality of San Geronimo Creek is significantly impaired, which must be considered as both an important part of the environmental baseline in analyzing the cumulative impacts from future development, and in considering the standards for adequate mitigation measures to address such impacts.

Regarding the impaired status of Tomales Bay for pathogens, and the presence of elevated levels of coliform bacteria and nitrate levels in the San Geronimo Creek and Woodacre Creek, a significant tributary, the FINAL SEIR discuss high coliform levels and determines these are not expected to affect salmonids, yet excessive algal growth from high nutrient levels may decrease dissolved oxygen levels in the creek (Stillwater Sciences 2009a)." However, although the FINAL SEIR states that high coliform and nitrate levels are "not expected" to affect salmonids, the presence of fecal coliform has been identified as a cause of the decrease in aquatic insect diversity and biomass in freshwater streams where fecal coliform bacteria exceed daily load standards according to section 303(d) of the Federal

11x

Clean Water Act. Because aquatic invertebrates are a major food source for rearing salmonids and that the effects of invertebrate biomass and diversity are negatively impacted by coliform bacteria, the FINAL SEIR fails to adequately address the impact of coliform bacteria on salmonids.

Basic Water Quality [3.1.2]

11**v** 

In the discussion of "water quality," the FINAL SEIR states that the analysis focuses on water temperature and dissolved oxygen which the water quality parameters previously identified as most likely to limit salmonid populations in San Geronimo Creek and most likely to be affected by the Proposed Project. However, this focus excludes other parameters that can have a significant adverse effects on water quality and adversely limit salmonid populations, even if not the "most likely." Such parameters include items that are commonly associated with increasing urbanization of rural areas, including oil and other

toxins from roadway runoff, pesticides and herbicides, and elevated nitrate levels from 11v sewage which are currently documented in San Geronimo Creek and part of the water quality baseline. These additional stressors on water quality must also be considered in the water quality analysis of the effects from implementation of the 2007 CWP.

Riparian Zone [3.5]

The importance of the riparian zone to the preservation and recovery of salmonids is central to the cumulative effects analysis. Unfortunately, the FINAL SEIR is deficient in its discussion and analysis of the current conditions and the effects from increased development in the riparian from the 2007 CWP, and the direct and indirect impacts on salmonids. These deficiencies are discussed below:

(1) In the discussion of vegetation coverage, the FINAL SEIR states, "Data summarized by Ettlinger et al. (2013) from 1998, 2003, 2006, and 2011 indicate a decline in vegetation covering the stream banks (bank cover) from 1998 to 2006, followed by an increase from 2006 (53% bank cover) to 2011 (> 70% bank cover)." (FINAL SEIR at 3-16.) Unfortunately, this data is only for the mainstem of San Geronimo Creek and provides no data on the majority of the stream length of San Geronimo Creek which occurs on the many tributary streams. In fact these tributaries provide 25-35% of annual spawning habitat for coho salmon. These tributary streams also provide the majority of current and future development parcels and thus are likely to have significantly less vegetation cover.

The San Geronimo Valley Existing Conditions report, which this data is derived, actually states, "General trends in dominant bank vegetation, percent of bank vegetated, percent total canopy, and percent deciduous and evergreen trees are apparent from 1998, 2003, and 2006 data, including a consistent dominance of deciduous trees and shrubs along the banks, and an overall decline in bank cover from 75% in 1998 to 53% in 2006 (Ettlinger 2008)."

11z

While the FINAL SEIR suggests an improvement the original Existing Conditions Report suggests a decline, and even when the new data is considered through 2011 ("followed by an increase from 2006 (53% bank cover) to 2011 (> 70% bank cover)" vegetation cover remains below the 75% level recorded in 1998.

(2) In the discussion of vegetation coverage, the methodology of the referenced data further inaccurately portrays the overall amount and trend of coverage in the riparian zone. FINAL SEIR at 3-16 - 3-17. Specifically, the data collected and summarized by Ettinger et al. and Stillwater Sciences indicating an increase in coverage in the two most recent surveys only measures the coverage over the stream, and does not account for the width of the forested zone, and is not a conclusive indicator of increasing riparian health.

While shade is important, this is one only one function of riparian habitat that is critical to salmonid survival and recovery. This conclusion is buttressed by the noted lack of large DBH trees as a future supply of LWD, and by the contra-indicator of concentrated TIA within the riparian zone of San Geronimo Creek.

As stated in the San Geronimo Valley Salmon Enhancement Plan (2009): A dense riparian forest strip adjacent to the stream that transitions to shrubs and herbaceous vegetation is a vital feature in most, but not all, riparian zones. Intact riparian zones provide filtration of sediment and other pollutants, streambank stabilization, shade for temperature regulation, shelter, and food sources for a range of fauna. Riparian zones also hold water in winter to recharge in-stream flows in summer months. Another important function of the riparian zone in salmon-bearing streams such as San Geronimo is delivery of both large and small downed wood. Large woody debris (LWD) is essential in these stream systems to create pools, trap coarse sediment, generate channel complexity, and provide shelter from high velocities and predators. Without significant amounts of LWD, channel beds become simplified and unstable, prone to incision. Small wood also provides intricate shelter components during summer low-flow conditions, and its incorporation into large-wood structures improves their functioning during high flow events.

The Plan further states, (Table 7) that the science-based goal is "100 feet or more, depending on location," though it sets an unexplained "target" of 35 feet.

The FINAL SEIR fails to provide protection for even the "minimum target" of 35 feet, and fails to evaluate the effectiveness of the 100 feet or other greater width protections.

- 11z
- (3) The discussion of vegetation coverage fails to accurately describe and document the current conditions, specifically including the amount of vegetation destroyed by past development activities, disease (e.g. Sudden Oak Death Syndrome) and other causes and amount remaining, the levels of patchiness and continuous coverages with discussion of the impacts of these differences, and a discussion of the amount of coverage necessary to foster self-sustaining recruitment.
- (4) The discussion of vegetation coverage also continues to fail to accurately describe and analyze the effects of projected development from the 2007 CWP, including a projection of the types and extent of coverage loss from development within the SCA, a similar projection for loss from other activities outside of the SCA (e.g. increased run-off from expanded TIA), a similar projection for loss from fire protection activities, a similar projection for loss from disease (e.g. SODS) either caused or spread by development and for loss from removal of diseased vegetation for public safety reasons. In fact SODS is a relatively recent invasion of an alien species, contradicting analysis that suggest invasions rarely occurred in recent times.

The recent invasion of the highly invasive Japanese Knotweed that is now overtaking portions of the riparian zone in the San Geronimo Valley is another example of threats resulting from increased human population and urbanization that the FINAL SEIR fails to even address or mitigate for. The Marin Resource Conservation District is attempting to address this new and very serious threat with inadequate resources, but is unlikely to prevent rapid increases.

There is no doubt that an increase in TIA from increased development under the 2007 CWP and not mitigated by the Proposed Ordinance will adversely impact the riparian habitat and be detrimental to the survival and recovery of salmonids.

11aa

The FINAL SEIR does indicate that TIA within 100 foot riparian zone already exceeds the 5% threshold in all reaches of San Geronimo Creek. Yet, TIA only measures reduction of riparian vegetation replaced by impervious surfaces such as houses/roads/driveways, but fails to measure development impacts that would also include dirt roads, lawns, wooden decks, sheds not requiring permits, grassy parking areas and the general living areas surrounding homes. Since most parcels are small, the majority of riparian habitat has been removed from most parcels. The proposed mitigation allows for unmitigated increase in driveway, lawns, etc.

- (5) The discussion further fails to consider the projected losses from inadequate regulatory protections for riparian zone vegetation in the face of increased development from the 2007 CWP, including the lack of a comprehensive tree ordinance and lack of a comprehensive vegetation ordinance. The mitigation of replacing removed mature trees
- 11ab that may be 100 feet or more high and provide thousands of pounds of biomass with two or three five gallon trees that likely provide less than 1 pound of biomass is laughable as a mitigation measure. Furthermore these tiny saplings are required to be maintained for two years, after which time there are no regulations to prevent them from being removed.
  - (6) The discussion further fails to adequately consider the direct and indirect impacts on salmonids from the effects of changes in riparian zone (e.g. decreased or loss of vegetation coverage, lack of source material for LWD), including impacts to food resources and
- 11ac changes in species composition. As summarized by Monoham (2013), "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."
- 11ad <sup>(7)</sup> The discussion further fails to analyze the economic costs of decreased biological services from a functionally-impaired riparian zone, including decreased water quality.

Spawning Habitat [3.6.1]

The discussion of spawning habitat in San Geronimo Creek highlights the significant challenges of addressing and mitigating the significant adverse impacts from increased development forecast under the 2007 CWP. Of particular note is the current state of degraded spawning habitat that is "below targets" in much of San Geronimo Creek due to 11ae fine sedimentation and low dissolved oxygen levels. Significant impacts from red scouring are also noted. These conditions highlight the challenges of mitigating additional impacts from implementation of the 2007 CWP.

Regarding barriers to fish passage, the discussion of existing barriers is incomplete and understates the actual number and extent of such barriers.

## Analysis of Significant Impacts [5.1 - 5.2]

As noted in the FINAL SEIR's discussion of "Significance Criteria" [4.1], "cumulatively considerable" means that the incremental effects of the of proposed project when viewed in connection with the effects of past projects, the effects of other current projects and the effects of probably future projects. While the FINAL SEIR notes that its analysis of significance complies with the Guidelines and the Court of Appeal Order, the analysis is limited to the evaluation of the cumulative effects from the adoption and implementation of the 2007 CWP in the San Geronimo Valley. FINAL SEIR at 4-1.

However, notably absent from either the description of the San Geronimo Valley environment and potentially affected resources, or the future development projected to result from implementation of the 2007 CWP, is consideration of "other current projects and the effects of probably future projects." An inadequate list of "past, present and probably future projects" is provided in the FINAL SEIR to inform the cumulative impacts analysis as required under the Guidelines, including a list of illegal developments that have been identified and "red-tagged" but remain in place, as the County almost never follows through with requirements to remove illegal structures While one example of a known current project that is in the CEQA planning stage is the proposal for a Woodacre – San Geronimo Wastewater Recycling facility, for which the County commissioned a FINAL Project Report prepared for the County dated March 2017, the FINAL SEIR states "because details are unknown" and thus it fails to include it in the cumulative impacts analysis. Furthermore, the impacts on future development by creating the Wastewater facility is also not included in the cumulative impact analysis.

## 11af

In addition to the deficiencies discussed above, the approach to impact analysis states that the predictions of impacts are of necessity qualitative and conservative (i.e. potentially overestimated) except where quantitative information is readily available and that adverse impacts can result from conditions that are not a "direct consequence" of the 2007 CWP.

These continued limitations on the validity of the cumulative impacts analysis, without greater explanation as to their application (e.g. all qualitative cumulative effect or just specific effects), or providing a confidence range for effects, continues to undermine the integrity of the impacts analysis. If "overestimation" is being used to reduce uncertainty as to any or all effects, then it should be noted that such use of the precautionary principal is commonly considered appropriate, and often mandated, when dealing with potential effects to ESA-listed species.

Also with regard to the impacts analysis, the FINAL SEIR states that "because incremental changes in the salmonid populations that utilize San Geronimo Creek during their freshwater life states may not be discernable at the scale of the population (e.g., coho salmon in the Lagunitas Creek watershed) or ESU (e.g., Central California Coast coho salmon" that the analysis will, in essence, disregard such population changes in its analysis of incremental effects. While focusing the effects analysis on those biological features, functions and processes that impact the life cycle stages of salmonids, the purported inability to note "discernable" changes in populations from incremental changes is

insufficient basis to ignore decades of data reflecting trends in population abundance at least at the watershed level where populations are most likely to be directly impacted. Such data is the clearest evidence available that documents the adverse effect on salmonid populations from the effects of development, and failing to factor it into the analysis of continued and increased development on the populations is a clear failure to use readily 11af available and relevant scientific information and data.

As described above, the FINAL SEIR provides an incomplete and flawed analysis of potential and cumulative impacts from prospective development allowed under the 2007 CWP, and the analysis of the significance of such impacts is incomplete and fails to comply with CEQA.

### Proposed Measures to Mitigate Significant Impacts

As mandated by the Court of Appeal and the Writ, in the FINAL SEIR the County must provide a description of mitigation measures relevant to salmonids in the San Geronimo Valley in conformity with Guidelines § 15126.4 and the Court of Appeal opinion.

§ 15126.4(a)(1)(B) specifically requires that the discussion of mitigation measures shall identify measures for each significant environmental effect identified in the FINAL SEIR. As described below, the mandatory mitigation measures described in the FINAL SEIR are inadequate to satisfy the Court of Appeal's order and the requirements of CEQA. As such, the FINAL SEIR fails to remedy the inadequacies of the 2007 CWP Final EIR to provide the kind of specific, concrete, and enforceable mitigation measures necessary to reduce the impacts of significant impacts identified in the FINAL SEIR and as described in these Comments.

Accordingly, based on the information and analysis provided in the FINAL SEIR, it is not possible to reach a conclusion that the significant impacts identified in the FINAL SEIR will 11ag be mitigated to "less than significant" for the reasons discussed below.

#### Expanded SCA Ordinance [5.1-1, 5.2-1]

As the principal measure to mitigate the significant impacts of additional development allowable under the 2007 CWP on winter rearing habitat [5.1-1] and spawning habitat [5.2-1], the FINAL SEIR proposes adoption of an Expanded SCA Ordinance consistent with Goal BIO-4 and associated implementing programs under the Proposed Project. The FINAL SEIR's reliance on the Proposed Ordinance" fails to satisfy CEQA's requirements for an adequate measure to mitigate significant impacts in a variety of ways, including vagueness, lack of enforceability, and the ability of any individual to block the five year timeline for formulation and adoption of the Ordinance by simply filing a lawsuit. No actual deadline is included.

Each of these shortcomings is discussed below.

(1) Vagueness. Although vaguely described in the FINAL SEIR, the Proposed Ordinance continues to insufficiently provide details regarding its provisions is provided upon which to base any meaningful analysis of its effectiveness to address each of the significant impacts from additional development allowable under the 2007 CWP that the County asserts will be mitigated with enactment of the Proposed Ordinance. For example, mitigation measure 5.1-2 that requires new and replaced impervious area to comply with a low-impact-design (LID) stormwater retention plan does not define specifically what developments are subject to this requirement, such as cement patios, driveways, or metal shipping containers. Also Mitigation Measure 5.1-2 requires biotechnical techniques and salmon habitat enhancement elements for all bank stabilization project. This mitigation measure requires that salmonid habitat enhancement elements (LWD, overhanging woody vegetation, cobble/boulder substrate, or other features) that improve shelter complexity be applied to at least ½ of the affected length of each habitat unit impacted by the bank stabilization measure. This mitigation allows for additional degradation and does not mitigate for it. The Final SEIR does not state which biotechnical methods are acceptable under this provision. This uncertainly can lead to misinterpretation of what bank stabilization measures are acceptable. For example, biotechnical methods such as vegetation rip rap and live crib walls can be detrimental to coho as these structures often harbor predatory fish that prey on juvenile coho salmon.

The FINAL SEIR's reliance on the unformulated and unanalyzed Ordinance as a measure to mitigate the significant impacts from additional development renders the FINAL SEIR inadequate under CEQA.

The FINAL SEIR if also misleading in its description of the Proposed Ordinance by reference to Goal BIO-4 *Riparian Conservation* but excluding key provisions in Goal BIO-4 that would affect the Proposed Ordinance's efficacy to address and mitigate the significant impacts. (*See* FINAL SEIR at 2-4 – 2-5, 5-12.) these and any other possible exceptions to the Ordinance or discuss the effects of these exceptions to the Ordinance's effectiveness to mitigate Impact 5.1 and 5.2.

- (2) Performance Standards. Guidelines § 15126(a)(1)(B) provide that "mitigation measures should not be deferred until some future time." An EIR is deficient under CEQA if it relies on an undeveloped and unapproved mitigation measure that is not subject to analysis and review in the EIR. However, under certain circumstances, mitigation measures may be subject to future development and analysis; specifically, if mitigation is "feasible but impractical" at the time of a general plan amendment, then if the EIR articulates "specific performance criteria" and makes further approvals contingent on meeting such criteria.
- Mitigation measure 5.1-2 expands the coverage of permit requirements for development within the SCA by requiring that any new or replacement developments 500 sq ft and larger be required to provide a stormwater mitigation plan that requires that runoff from the new or replaced impervious area retain 85% of the precipitation on-site for a 24-hour rainfall event. However, 15% of the runoff during a 24-hour rain event will not be captured, increasing net runoff by 15% and by doing so does not achieve the "no net loss" of habitat acreage, value, or function. Runoff has been implicated in salmonid mortality in the FINAL SEIR. This provision also makes exemptions for development activities that are < 500 sq ft,

11ag

11ai

which provides another loophole for development of structures within the SCA that contribute to the TIA of the San Geronimo Watershed, which has no mitigation provisions.

11ai

The FINAL SEIR relies upon the adoption of the Proposed Ordinance as the principal mitigation measure to address significant impacts to salmonid habitat. The Proposed Ordinance has not been well formulated, and it has not been adequately analyzed or reviewed in the FINAL SEIR. The FINAL SEIR is deficient in that it fails to provide adequate "performance standards" for the Proposed Ordinance to satisfy if and when it is formulated.

While a five-year timeline is proposed, it provides a roadmap for anyone opposed to the regulations to prevent them, simply by filing a lawsuit. This "poison pill" renders the timeline useless. No actual deadlines are set.

As noted, the FINAL SEIR describes the proposed Ordinance to be "consistent with" Goal BIO-4 and implementing programs. (FINAL SEIR at 5-12.) However, neither BIO-4.a nor the general description provided in BIO-4.1 [See Table 2.1] provides insufficient performance standards by which to measure the effectiveness of the Ordinance, or to provide adequate criteria upon which to base the future development of the Ordinance as an effective mitigation measure.

For example, "Development shall be set back to protect the stream and provide and [sic] upland buffer, which is important to protect the significant resources that may be present and provides a transitional zone" does not provide any measurable performance standard criteria. The Ordinance does not determine setback criteria, as BIO-4 states. The discussion of setback is limited only to the proposed permitting provisions within the SCA, but does not establish firm setback measures within the SCA to protect riparian habitat acreage, value, and function, as Goal Bio-2 states. Nor do the implementing programs provide more than a series of steps to implement the provisions of the Ordinance after adoption.

11aj

The lack of performance standards in Goal BIO-4 is not remedied by the generalized and conflicting additional "provisions" discussed in the FINAL SEIR. For example, expanding the set of development activities that require a permit and site assessment to include any activity that requires vegetation clearing, increases impermeable area, alters surface runoff, or results in exposed soil. This broadly-stated provision encompasses a range of activities that are contemplated as possible exceptions under Goal BIO-4.a, and likely includes activities that are in conflict with activities required under other County rules and ordinances, such as the clearing of brush adjacent to structures for fire mitigation. In the same vein, the requirement for Standard Management Practices to be incorporated into all projects lacks specificity as to the scope of such practices and standards to be met to "ensure that the SMPs are adequate to avoid or minimize impacts to salmonids." (*Id.*)

In addition, the Proposed Ordinance fails to provide any performance standard necessary to comply with the "no net loss" standard for sensitive habitat under Goal BIO-2.1 of the 2007 CWP. Although Goal BIO-2.1 provides that the "no net loss" standard of "sensitive

11aj

habitat acreage, values and function" will be achieved, in part, by the adoption of an SCA ordinance, the qualitative description of the Proposed Ordinance in the FINAL SEIR adds nothing to Goal BIO-4 in providing a performance standard to achieve this standard.

Instead, the FINAL SEIR for example, feebly attempts to meet this critical standard by 11ak allowing large mature trees to be removed and replaced by tiny sapling trees that receive no protection after a two year maintenance period.

Under provision 1 of mitigation measure 5.1-1, exemption no. 2 allows for the removal of pyrophytic vegetation, identified as bay, Doug-fir, and tanoak within the active channel. This mitigation measure therefore, creates a loophole that permits the cutting of these species within the active channel without the need for a permit. However, these species are fast-growing and often provide significant instream habitat, large woody debris, and canopy cover for salmonids in the San Geronimo Watershed. Allowing this mitigation measure to be adopted as-is would create a damaging effect on riparian and instream habitat by allowing significant habitat trees that contribute large woody debris and other habitat values and channel stability to be removed simply because they are considered pyrophytic.

- (3) Proposed Ordinance Enforcement. As noted previously, unpermitted or unauthorized development is a known problem in the San Geronimo Valley, as is ordinances. In addition to failing to address the problem of unpermitted development under existing programs and ordinances, the FINAL SEIR is silent as to the importance of robust and effective enforcement of the Proposed Ordinance to be an effective mitigation measure for Impacts
   11am
   5.1 and 5.2, and fails to offer any plan for the effective enforcement of its provisions. The FINAL SEIR also does not offer any analysis of the Proposed Ordinance's effectiveness as a mitigation measure if it is not fully enforced and the resulting effect on cumulative impacts. Given the past history of lax enforcement of County regulations regarding building and development in the San Geronimo Valley, the complete failure to acknowledge this problem and its effect on the FINAL SEIR's analysis renders it deficient as a mitigation measure.
  - (4) Enforceability of Mitigation Measure. Guidelines § 15126.4(a)(2) provides that, in the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design. However, although reliance on the Proposed Ordinance to provide mitigation is provided for in CEQA, the FINAL SEIR fails to provide the required that the Ordinance will be enacted.

11an

First, the FINAL SEIR provides an inadequate five-year timeline for the adoption of the Proposed Ordinance that contains loopholes and is longer than the current terms of the sitting County Supervisors who may ultimately approve the FINAL SEIR.

A reasonable deadline or timeline is required when future mitigation depends on the adoption of a plan, policy or regulation that will contain specific mitigation measures, and the FINAL SEIR fails to provide a reasonable timeline.

Second, the FINAL SEIR fails to specify a monitoring program for the Proposed Ordinance 11ao that incorporated as a mitigation measure for the significant impacts from future development under the 2007 CWP.

Finally, the FINAL SEIR fails to specify that implementation of the 2007 CWP is conditioned upon the enactment and implementation of the Proposed Ordinance. However, the County cannot implement the 2007 CWP prior to adopting the Proposed Ordinance to mitigate its significant effects.

11ap

As demonstrated by the ongoing litigation between Turtle Island/SPAWN and the County, the Peremptory Writ of Mandate process is inadequate to enforce the requirements of CEQA on the County. Seventeen years have now passed since the 2007 County-Wide Plan was adopted and yet the County has failed to act to initiate regulations to protect endangered salmonids or the habitat on which it depends. It now proposes another minimum five year wait.

The County's actions to date provide no assurance that the development and adoption of the Proposed Ordinance would proceed in a timely manner, effectively making the proposed mitigation unenforceable.

Winter Enhancement Projects [5.1-2]

#### **Proposed Actions and Conclusion**

Although the FINAL SEIR does an better job of discussing a number of the threats to coho salmon and steelhead trout survival and recovery than previous draft (subject to some important omissions as discussed in these Comments), it falls short in its analysis of the impacts from additional development allowable under the 2007 CWP and its failure to explain how the proposed mitigations will reduce these impacts to "less than significance."

The FINAL SEIR highlights the critical importance of mitigation to address the most damaging impacts from urbanization and the "irreversibility of these effects" on impairment of watershed processes and stress on rearing juvenile salmonids.

11aq

However, the Proposed Ordinance and other measures described in the FINAL SEIR to mitigate the significant impacts for the increase in development allowed under the 2007 CWP are largely vague and aspirational, and fail to provide measurable standards to evaluate if they will be effective to mitigate such significant impacts.

The FINAL SEIR relies on an amorphous process with no real schedule and no deadlines for the development and adoption of the Proposed Ordinance which, like the other mitigation measures, lack monitoring programs to ensure implementation. As a result, if the FINAL SEIR were to be finalized and certified in its current form, development under the 2007 CWP in the San Geronimo Valley would proceed without the existence of enforceable mitigation measures as required under the CEQA.

In addition to informing decision-making, the CEQA must be interpreted "to afford the fullest *possible* protection to the environment." Given the crucial role of the Proposed Ordinance and other mitigation measures to the protection of federally and state-protected salmonid species and their habit, and to provide regulatory certainty to all stakeholders in the San Geronimo Valley, it is imperative that the preparation and adoption of the Proposed Ordinance must take place concurrently with—not after—the finalization and certification of the FINAL SEIR.

# 11aq

There is simply no basis to argue that the CEQA process for the 2007 CWP can be completed without the finalization of the Proposed Ordinance. Turtle Island/SPAWN is ready to participate as one of the stakeholder parties in the process necessary to complete this last step of the CEQA process.

Turtle Island/SPAWN looks forward to the County's due consideration of, and responses to, these comments within the requirements of CEQA.  $^{83}$ 

Respectfully submitted,

Tool Ste

Todd Steiner and Preston Brown

TURTLE ISLAND RESTORATION NETWORK

PO Box 370

Forest Knolls, CAS 94933

This page left blank intentionally.

11a

Several of the statements that Turtle Island Restoration Network includes in its August 24, 2018 comment letter are the same as, or similar to, assertions included in prior comments on the Draft SEIR, including assertions regarding the adequacy of performance standards for proposed mitigation measures; the timeline for development of the Expanded SCA Ordinance; the adequacy of the description of the environmental baseline; enforcement of existing requirements for development; the precision of TIA estimates; the contribution of seasonal and ephemeral streams to the San Geronimo Valley ecosystem; direct pumping of surface water from local creeks; underestimation of future development; potential impacts related to light and noise associated with development; potential impacts related to livestock and pets associated with development; illegal removal of large wood debris; potential impacts related to water quality, including toxins and toxic metals from runoff; effects of wildfires and the need for fire control associated with development; potential impacts of invasive species associated with development; and discussion of climate change.

Because the Marin County Environmental Impact Review Guidelines requires that review of a Final EIR shall exclusively focus on the adequacy of the responses to comments on the Draft EIR, the following responses do not attempt to address concerns relating to the Draft SEIR that have been addressed in Section 7 Responses To Public Comments On The Draft SEIR. For those comments that do raise questions about the adequacy of the responses to comments on the Draft SEIR (including minor revisions to the Final SEIR), however, the following responses are offered.

The Final SEIR is unequivocal throughout Section 3.2 *Overview of Urbanization Effects on Stream Function*, other subsections in Section 3 *Environmental Setting*, and Section 5 *Cumulative Impacts and Mitigation Measures*, that the effects of urbanization include fundamental changes to the nature of a watershed's hydrology (both surface flow and groundwater recharge), sediment inputs, channel form, streamside vegetation, nutrient inputs, water quality, solar inputs and primary productivity, the physical characteristics and suitability of instream habitats, and the biotic communities that rely on these habitats. While the recurring assertions raised by Turtle Island Restoration Network in its comment letters on the Draft and Final SEIR (see above list in the first paragraph of this response)

generally fit within the set of likely urbanization effects, they do not constitute substantial evidence under State CEQA Guidelines Section 15384 that would link projected future development in San Geronimo Valley, as specifically described under the Proposed Project, to potential impacts on local salmonid populations in a manner that could be used to support significance determinations. The Final SEIR acknowledges many of the general concerns and/or assertions that Turtle Island Restoration Network raises in its August 24, 2018 comment letter, but existing data are insufficient to support quantitative trend analyses and/or robust qualitative arguments related to these assertions for salmonids in San Geronimo Valley (beyond those analyses and forecasting already conducted for the SEIR, consistent with State CEQA Guidelines Section 15145). Further consideration of the general concerns and/or assertions noted above would involve speculation on the part of the County, which is not required of a lead agency, consistent with State CEQA Guidelines Section 15145.

Instead, the Final SEIR has made use of all relevant and quantifiable development-related metrics (e.g., % total impervious area [TIA], population) (see also Section 2.6.1 Development *Metrics*), and existing environmental data (e.g., fish population data and trends, stream and riparian habit data and trends, risk of redd scour and other effects of hydromodification on instream habitat, water temperature, aquatic macroinvertebrate data) to support its conclusions (e.g., trend analysis relating population growth to the number of wet season flow reversals as a measure of hydrologic change, see Figure 5-6) and to provide a detailed rationale for determinations of significance, as well as discussions of significance after mitigation. Although a belief in the inadequacy of the proposed measures to avoid significant impacts may always exist, the Final SEIR objectively documents the potential impacts of future development under the Marin CWP (2007) and assesses the effectiveness of the proposed mitigation based to the extent possible on robust methodologies, as well as scientific and factual data, thus meeting the requirements of State CEQA Guidelines Section 15064 (b).

As stated in Master Response 6, Mitigation Measure 5.1-1 in the Final SEIR reinforces the existing commitment of Marin County to implement a permanent Expanded SCA Ordinance for San Geronimo Valley within five years from certification of the Final

SEIR, barring unforeseen schedule delays. Although the County is encouraged by the relatively high coho salmon abundance and the near-record steelhead abundance recently reported by MMWD for the 2018-2019 spawning season (E. Ettlinger personal communication, Lagunitas Creek spawner email update 2/1/2019), including signs of sustained generational growth for the population, regional abundance is still well below the NMFS recovery targets and the population segment remains severely depressed. Accordingly, it is not in the best interests of the numerous stakeholders in the SEIR process or the San Geronimo Valley ecosystem as a whole, to continue to delay development of the ordinance and the protections it will offer salmonids and their habitat.

11b

Section 2.6 Future Development of the Final SEIR analysis, as well as Master Response 4.1, provide the rationale for the analysis of the future number of improved parcels and developed units. The analysis considers both parcel availability and likelihood of future development in relation to design and permitting constraints, which is reasonable within the context of a programmatic EIR and does not understate or downplay the potential cumulative effects of the Proposed Project.

11c

Please see Individual Responses 11u through 11ad of this Amendment.

11d

Please see Individual Response 11a of this Amendment.

11e

Please see Master Response 6 in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.

11f

Please see Master Response 6 in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.

11g

Please see Master Responses 7, 8, and 9 in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.

11h

Please see Master Response 6 in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.

11i

As stated in the Introduction to the Marin CWP (2007), Countywide goals reflect core community values and identify what fundamental outcomes are desired. Overarching goals are not quantifiable or time dependent, but the implementation of policies and programs is

intended to assist with achieving said goals. Goal BIO-4 is stated in the Marin CWP (2007) as follows: "Riparian Conservation. Protect and where possible, restore the natural structure and function of riparian systems." This goal, along with the implementing policies and programs, has been given due consideration in the SEIR, and the proposed mitigation measures achieve the intent of this goal. Further, the Expanded SCA Ordinance would provide additional and strengthened requirements for development that generally align with the goals, policies, and programs outlined in the Marin CWP (2007).

The "no net loss" goal of Policy BIO-2.1 Include Resource Preservation in Environmental Review is considered in the SEIR's analysis of impacts 5.1 and 5.2 and cited therein as one of the reasons those impacts would be significant (i.e., effects of future development could conflict with the Policy). With respect to the perceived problem regarding exemptions and exclusions in the Expanded SCA Ordinance, please see Master Response 6.1 in Section 7 of the Final SEIR.

With regard to the exemption from the requirement for a discretionary permit and site assessment under Mitigation Measure 5.1-1 for landowners who partner with the Marin Resource Conservation District to voluntarily restore creeks on their property, as stated in the SEIR, the exemption is only valid if the proposed work is consistent with and authorized under the Marin Resource Conservation District's Permit Coordination Program (http://www.marinrcd.org/pcp/) and the Resource Conservation District takes full responsibility for the work. Turtle Island Restoration Network's assertion that this exception would allow property owners to proceed outside regulation, which may lead to loss of habitat, does not constitute substantial evidence under State CEQA Guidelines Section 15384.

11j

Please see Master Response 15 in Section 7 of the Final SEIR relating to sewage disposal systems, and Individual Response 11a of this Amendment.

Regarding stormwater runoff and pesticides, please see Individual Response 15k in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.

Please see Individual Responses 15k and 15l in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.

11k

111 Regarding wildfire, please see Master Responses 6 and 16 of the Final SEIR. Wildfire will be considered further during development of

the Expanded SCA Ordinance.

11m Please see Master Response 11 of the Final SEIR and Individual Response 11a of this Amendment.

Turtle Island Restoration Network's assertion that affluent homebuyers or homeowners are more likely to have and release exotic species and, that these species would have an impact on native fish or aquatic ecosystems, does not constitute substantial

evidence under State CEQA Guidelines Section 15384.

Please see Master Response 2 and Individual Response 150 in Section 7 of the Final SEIR, and Individual Response 11a of this Amendment.

Regarding development metrics, please see Individual Response 11b of this Amendment.

Regarding Goal BIO-4 and associated policies and implementation programs, please see Individual Response 11i of this Amendment.

Please also see Individual Response 11a of this Amendment.

Please see Master Response 5.2 in the Final SEIR and Individual Response 11a of this Amendment.

The analysis of impacts in the SEIR relies in large part on predictions of future development (i.e., buildout) in the watershed and the potential for effects on physical, hydrological, and biological processes that could result from such development. Parsing development metrics by reach and sub-basin allows for meaningful analysis of the relative potential for these effects depending on the amount and type of projected development in each segment of the watershed. The SEIR analysis for each reach and sub-basin, which also considers the cumulative effects of upstream influences on downstream reaches, is necessary to evaluate the interrelated effects of watershed processes and human land and water uses that may occur at the scale of individual sub-basins and reaches and propagate downstream. Contrary to Turtle Island Restoration Network's assertion, the analysis in the Final SEIR considers differences in habitat conditions, use by salmonid species and life stages, and risk of future degradation in the reaches and sub-basins for which information is available. While reach-based mitigation was

11n

110

11p

11q

considered for the Draft SEIR, the final proposed mitigation measures are not specific to individual reaches or sub-basins, but rather apply to any location throughout the watershed where impacts are likely to occur.

11r

In addition to Individual Response 11q of this Amendment, surface water diversions are considered in Master Response 5.2 and Individual Response 15w of the Final SEIR.

11s

The complete statement can be found in Section 2.6.4 of the Final SEIR: "The distribution of parcel sizes and location relative to the SCA would vary by subbasin and/or reach, with relatively few parcels small enough to lack significant flexibility in development placement (0–0.5 ac) located completely within the SCA (Figure 2 6a, b)."

Please also refer to Section 2.6 *Future Development* and Master Response 4 of the Final SEIR.

11t

The Final SEIR analysis considers both the absolute number of parcels and the relative increase in parcels, as described in Section 5 of the Final SEIR. Please also refer to Tables 2-9 and 2-10, which present both sets of data. See also Individual Response 11a of this Amendment.

11u

The Final SEIR in Sections 3.3–3.6 includes more than 30 pages describing the riparian and aquatic habitat conditions in San Geronimo Creek and its major tributaries, as well as the population status and trajectory of coho salmon in the watershed, based on the best and most recent information available from previous studies, monitoring efforts, technical reports, and other sources. The Environmental Setting section of the Final SEIR is appropriately focused on providing the information necessary to describe the environmental baseline and serve as an explanatory foundation for the analysis of impacts, as specified under Section 15125 of the State CEQA Guidelines (2018, as amended): "The description of the environmental setting shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives."

Please also refer to Individual Response 11a of this Amendment.

11<sub>v</sub>

Please see Individual Responses 15ac, 42h, and 42o in the Final SEIR and Individual Response 11a of this Amendment.

11y

11w Please see Master Response 8 in the Final SEIR and Individual Response 11a of this Amendment.

11x Please see Individual Response 15ae in the Final SEIR and Individual Response 11a of this Amendment.

Please see Individual Responses 15k and 15l in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.

11z Please see Individual Responses 11a and 11u of this Amendment.

With respect to the concern regarding invasive, non-native vegetation associated with development under the Proposed Project, as stated in the Final SEIR, Section 3.5 *Riparian Zone*, while surveys of the herbaceous understory vegetation in 2008 included a high percentage of non-native invasive species (Stillwater Sciences 2009a), the non-native vegetation did not appear to be preventing the establishment or growth of native riparian trees. Despite this, in general and as acknowledged in the Final SEIR, increases in non-native vegetation in riparian areas can compromise riparian function, reducing recruitment of native riparian trees and the supply of LWD to the stream (Section 5.1.3 *Consideration of Impacts Due to Non-native Species*).

The Draft and Final SEIR present the following Marin CWP (2007) policies addressing invasive species in Table 2-1:

#### Goal BIO-1 Enhanced Native Habitat and Biodiversity

BIO-1.5 Promote Use of Native Plant Species

Encourage use of a variety of native or compatible non-native, non-invasive plants species indigenous to the site vicinity as part of project landscaping to improve wildlife habitat values.

BIO-1.6 Control Spread of Invasive Exotic Plants

Prohibit the use of invasive species in required landscaping as part of the discretionary review of proposed development.

BIO-1.7 Remove Invasive Exotic Plants

Require the removal of invasive exotic species, to the extent feasible, when considering applicable measures in discretionary permit approvals for development projects unrelated to agriculture, and include monitoring to prevent re-establishment in managed areas.

#### **Goal BIO-4 Riparian Conservation**

#### BIO-4.5 Restore and Stabilize Stream Channels

Pursue stream restoration and appropriate channel redesign where sufficient right-of-way exists that includes the following: a hydraulic design, a channel plan form, a composite channel cross-section that incorporates low flow and bankfull channels, removal and control of invasive exotic plant species, and biotechnical bank stabilization methods to promote quick establishment of riparian trees and other native vegetation.

#### BIO-4.6 Control Exotic Vegetation

Remove and replace invasive exotic plants with native plants as part of stream restoration projects and as a condition of site-specific development approval in an SCA, and include monitoring to prevent reestablishment.

While existing information does not clearly support the assertion that invasive, non-native vegetation from past or present development is adversely impacting salmonids or their critical habitat in San Geronimo Valley, and the aforementioned policies would offer substantial protections related to future development both outside the SCA (Goal BIO-1 and aforementioned policies) and inside the SCA (Goal BIO-4 and aforementioned policies) under the Proposed Project, ongoing colonization of invasive species within the valley merits further consideration by the County during development of the Expanded SCA Ordinance from the perspective of general riparian health and the potential for additional scientific information to become available that sheds ight on the nexus between invasive, non-native vegetation and the condition of salmonid habitat in San Geronimo Valley. The following *italicized* text is provided as an example of language that could be added to the Expanded SCA Ordinance and required for implementation outside the SCA as well:

Mitigation Measure 5.1-1: Expanded SCA Ordinance, Provision 3:

Require site assessments to be conducted by a qualified professional with at least five years of field experience assessing potential impacts to stream ecology, riparian ecology ([Example text only] including presence of invasive non-native plant species), and hydrology in coastal California, and the potential for impacts to

anadromous salmonids from changes to these processes and conditions.

Mitigation Measure 5.1-1: Expanded SCA Ordinance, Provision 4: The SMPs will include, at a minimum, the following information:

For Riparian Vegetation and Habitat:

- Identification (common names, scientific names, and images) of riparian vegetation important for salmonids;
- [Example text only] Identification (common names, scientific names, and images) of invasive, non-native plant species that have been included by CAL IPC on the list of Invasive High, Moderate, or Limited (https://www.cal-ipc.org/plants/inventory) for Riparian and Bottomland Habitat, as periodically updated by CAL IPC;
- [Example text only] Requirements for removal of invasive, nonnative plant species other than trees (see above for treerelated requirements) that are growing on-site and, if replacement is desired, use of alternative species recommended by CAL IPC through their "Don't Plant A Pest" program for the Bay Area region (<a href="https://www.calipc.org/solutions/prevention/landscaping">https://www.calipc.org/solutions/prevention/landscaping</a>), as periodically updated by CAL IPC.
  - [Example text only] Replacement species shall be irrigated as needed and monitored to ensure survival for a minimum of two years.
- [Example text only] Requirements that hay, feed, straw or straw mulch intended for use in animal feed and bedding or in erosion control materials has been inspected and certified not to contain propagative plant parts or seeds found on the California noxious weed list, as listed in the California Code of Regulations, Title 3, Division 4, Chapter 6, Section 4500. Additional information can be found on <a href="https://www.cal-ipc.org/solutions/prevention/weedfreeforage/">https://www.cal-ipc.org/solutions/prevention/weedfreeforage/</a>.

11aa

With respect to the more general topic regarding continued efforts to more precisely delineate TIA in San Geronimo Valley, please see Individual Response 5k of the Final SEIR. With respect to how unpaved roads (dirt roads) are addressed under the Proposed Project, please see Mitigation Measure 5.1-1, Provision 5, "New

roads (paved and unpaved) shall be required to meet the following design criteria..." Further, please see pages 2-32 and 2-33 of the Final SEIR for a discussion of how unpaved roads (dirt roads) are assessed and considered with respect to the potential for impacts under the Proposed Project.

11ab

Please refer to Individual Responses 5e and 13d.

11ac

The potential cumulative impacts of the Proposed Project on salmonids due to development impacts on the riparian zone are discussed in detail in Impacts 5.1 and 5.2, and Potential Impact 5.3 of the Final SEIR. Please also see Individual Response 11a of this Amendment.

11ad

Please see Master Response 3 of the Final SEIR and Individual Response 11a of this Amendment.

11ae

Existing conditions for spawning habitat, as well as consideration of fine sedimentation, dissolved oxygen levels, and redd scour, are discussed in Impacts 5.1 and 5.2, and Potential Impact 5.3 of the Final SEIR.

Regarding fish passage barriers, the County's understanding of existing barriers related to County infrastructure is described in Section 3.6.1 of the Final SEIR. The text in the Final SEIR has been clarified accordingly (see Section 3 of this Amendment). Turtle Island Restoration Network's comment does not provide details regarding the potential number or location of additional fish passage barriers that are missing from the Final SEIR. Please also see Individual Response 11a of this Amendment.

11af

Turtle Island Restoration Network states that the list of past, present, and probable future projects is inadequate, but has not indicated other such projects that should be added to the list. Based on available information, Marin County considers that relevant projects are included in the list. Please also see Individual Response 11a of this Amendment.

Regarding illegal development, please see Individual Response 5d of this Amendment. Please also see Master Response 15 of the Final SEIR relating to sewage disposal systems.

The SEIR uses a conservative analysis approach, consistent with the precautionary principal, and has referenced authors who discuss the precautionary principal to support this approach (Persson 2016; Jalava et al. 2013).

Regarding the ability to discern population changes at various scales and the adequacy of the analysis approach, please see Master Response 5 and Individual Response 15as in Section 7 of the Final SEIR.

11ag

The Final SEIR identifies feasible and enforceable mitigation measures for each finding of a significant environmental impact, as discussed in Section 5 of the Final SEIR. The five-year timeframe for development of the Expanded SCA Ordinance is discussed in Master Response 6.2 of the Final SEIR.

LID requirements are discussed in Mitigation Measure 5.1-1, Provision 5, including the definition of which development projects would necessitate these requirements. As stated in Mitigation Measure 5.1-2, specific criteria, design specifications, and guidelines for individual bank stabilization and instream habitat enhancement projects shall be developed in coordination with and approved by CDFW, with input from agencies such as NMFS and other willing participants, as appropriate for project permitting. Additional provisions are also provided in Mitigation Measure 5.1-2.

Please also see Individual Response 11a of this Amendment.

11ah

Please see Individual Response 11i of this Amendment.

11ai

Turtle Island Restoration Network notes that Mitigation Measure 5.1-2 requires the retention of the 85<sup>th</sup> percentile 24-hour storm for all projects of 500 square feet and larger. Mitigation Measure 5.1-1 addresses stormwater runoff volumes in the Final SEIR. The comment mistakenly assumes that if 85% of the rain is captured then 15% of the rain is not, increasing runoff by 15%. In fact, the reality is both better and worse than this. The magnitude of the 85<sup>th</sup> percentile 24-hour storm is determined on an annual-volume basis: over the 3½ years of available data from the Lagunitas Forest Knolls rain gage, the 85<sup>th</sup> percentile storm is 1.79", which means that *all* runoff will be precluded for days with rainfall at or below this amount, and that runoff control is not required for any rainfall that exceeds this amount in a day.

In fact, the volume captured by this requirement is only 59% of the total annual volume of rainfall, which might suggest that the

requirement is even *less* protective than it seems at first glance. However, it is the type of storm that is controlled that is important, particularly for biological and geomorphic impacts. Under "traditional" stormwater-management approaches, every storm of any size will produce some runoff, and typically the smaller storms will not be mitigated at all. However, these events would normally have produced little to no runoff in a predevelopment state, and so they represent the single greatest disruption to the natural hydrologic regime. Their control is critical to improving instream conditions, which is why this approach has become so widespread in the last decade.

In contrast, large storms (here, those exceeding the 1.79"/day threshold and so not achieving full retention) would almost certainly have produced runoff in the predevelopment condition as well. There is no claim that the alignment of pre- and post-development runoff volumes and rates will be identical for all such storms, but aquatic organisms are evolved to manage infrequent, episodic high flows. The prevailing judgment in the scientific literature is that the magnitude of such (already) high flows is less biologically impactful than the imposition of a pervasively flashier flow regime, a consequence of even small rainfall events producing measurable runoff.

No stormwater mitigation scheme can claim to perfectly replicate a predevelopment hydrology with the runoff from impervious surfaces. There is little evidence, for or against, that the approach recommended in the Final SEIR can achieve a true "no net loss" of habitat acreage or function in the face of ongoing development in the San Geronimo Valley. There is ample evidence, however, that this measure will achieve a greater level of protection than any alternative that has previously been implemented, and that by any measure the downstream consequences would be less than significant.

With respect to performance standards, see Master Response 6.1 in the Final SEIR. With respect to the five-year timeline, see Master Response 6.2 in the Final SEIR. Mitigation measures must be feasible (State CEQA Guidelines Section 21061.1) and without acknowledging the potential for unforeseen delays, an absolute timeline for completing development of the Expanded SCA Ordinance would be infeasible.

Please also see Individual Response 11a of this Amendment.

11aj

The Marin CWP (2007), including Goal BIO-4 and associated policies and implementing programs, was adopted by the Marin County Board of Supervisors in November 2007. The adequacy of Goal BIO-4 is not at issue in the Court's opinion, which provides the direction of the Final SEIR (see Section 1.2 SEIR Requirement of the SEIR). Please also see Individual Response 11ai of this Amendment.

The rationale for the 100-ft buffer is provided in Master Response 10 of the Final SEIR. Please also see Individual Response 5d of this Amendment.

Please note that BIO-4.a is an implementing program, not a goal. Implementing Program BIO-4.a in the Marin CWP (2007) does not incorporate exceptions that would conflict with proposed mitigation measures in the Final SEIR. The provisions of Mitigation Measure 5.1-1 provide a number of detailed, quantitative performance for reducing the cumulative impacts of development activities on salmonids in San Geronimo Valley under the Proposed Project.

Regarding performance standards for "no net loss", please Individual Response 11i of this Amendment.

Finally, mitigation measures discussed in the Final SEIR and Master Responses 6 through 9 of the Final SEIR incorporate performance standards, which will ensure that adopted measures are not disregarded.

11ak

Please see Individual Response 11ab of this Amendment.

11al

Please see Master Response 16 of the Final SEIR and Individual Response 11a of this Amendment. Additionally, Marin County will continue to coordinate with Fire Code Officials as part of development of the Expanded SCA Ordinance.

11am

Please see Individual Response 5k in Section 7 of the Final SEIR. Please also see Individual Responses 11a and 5d of this Amendment.

11an

Please see Master Response 6.2 in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.

11ao	Regarding future monitoring, please see Master Response 6.2 in Section 7 of the Final SEIR, which is consistent with State CEQA Guidelines Section 15097 (b).
11ap	Please see Master Response 6.2 in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.
11aq	Please see "Significance After Mitigation" in each of Impacts 5.1 and 5.2 for a discussion of how the proposed mitigations would reduce the identified cumulative impacts on salmonids.
	Please also see Master Response 6 in Section 7 of the Final SEIR and Individual Response 11a of this Amendment.

Letter 12—Turtle Island Restoration Network

This page left blank intentionally.

#### **Taylor, Tammy**

From:

Sent:

Monday, October 08, 2018 2:50 PM

To:

nvplanning@marincounty.org; EnvPlanning

Cc:

Washington, Brian; Crawford, Brian; Rodoni, Dennis; Liebster, Jack; Lai, Thomas;

dsivas@stanford.edu; tsteiner@tirn.net; MIchael Graf

Subject:

Additional Comments to FINAL 2007 Marin Countywide Plan Supplemental EIR

**Attachments:** 

COMMENTS\_SEIR\_SPAWN\_10\_8\_2018.pdf

Dear Rachel Reid,

12

On behalf of the Turtle Island Restoration Network's Salmon Protection And Watershed Network, I am submitting additional comments regarding the Final Supplemental EIR with a focus on Cumulative Impacts of Development in the San Geronimo Valley. These comments are in addition to the comments submitted on August 24, 2018.

The attached document contains our additional comments.

Thank you,

Preston

--

Preston Brown
Director of Watershed Conservation
Turtle Island Restoration Network
Salmon Protection And Watershed Network (SPAWN)
Cell:(303) 877-0880
Email: Preston@tirn.net

\_FIGHTING FOR A BLUE-GREEN PLANET!\_ Visit our NEW website SeaTurtles.Org



8 October, 2018

Dear Ms. Reid:

Marin County Redevelopment Agency Attn: Rachel Reid, Environmental Planning Manager 3501 Civic Center Dr., Suite 308 San Rafael, CA 94903

Re: Comments to FINAL 2007 Marin Countywide Plan Supplemental EIR

Dear Marin County Redevelopment Agency:

These comments are submitted by Turtle Island Restoration Network (Turtle Island), a California public benefit corporation, and Salmon Protection and Watershed Network (SPAWN), a conservation project of Turtle Island. The comments are in addition to the comments submitted by Turtle Island on August 24, 2018 and are in response to the issuing of the FINAL SEIR and extension of the applicable comment period. Turtle Island Restoration Network is concerned that the SEIR's conclusion of a less than significant cumulative impact is flawed and deficient and that the mitigation measures are not adequate to meet the County's requirements. Turtle Island explains below examples of its concerns regarding the County's responses to Turtle Island's letters.

Responses to Turtle Island Letter from April, 2016

Page 7-307, in response to Turtle Island letter section 5d, indicates that the FINAL SEIR analyzes impacts on habitat and processes occurring in the streams throughout the watershed for which data are available or information is sufficient to form the basis for reasonable assumptions. However, it does not specifically answer the concern raised in section 5d, which it is critical the analysis incorporate not just impacts of development on the main stem and tributaries, but also impacts on all seasonal and ephemeral streams within the watershed. There is significant scientific information available regarding the importance of seasonal ephemeral streams, and information about seasonal and ephemeral streams is not insufficient to form the basis for reasonable inclusion in the FINAL SEIR.

Also page 7-307, in response to Turtle Island letter sections 5e and 5f, references Master Response 3. Letter sections 5e and 5f focus on the requirement from CEQA guidelines that

impacts of the past, present, and future time frames must be considered. Master Response 3 does not clarify whether the FINAL SEIR meets the requirements of sufficiently analyzing all the impacts throughout the various time frames and instead focuses on the FINAL SEIR's focus on physical versus social and impacts.

Page 7-307, in response to Turtle Island letter section 5g notes that the FINAL SEIR characterizes existing conditions and discusses the likely causes of habitat degradation and population decline. This explanation does not clearly answer the concern from section 5g, which notes the serious degradation of coho habitat and suggests that even small changes would constitute considerable significant impacts due to the severely impacted baseline status of coho habitat. Turtle Island continues to be concerned that the great existing environmental problems have not been sufficiently included in the analysis and conclusions in the FINAL SEIR.

Page 7-310 indicates that Turtle Island should refer to Master Responses 6.7. In reviewing 12d the Master Responses included in the FINAL SEIR, there does not appear to be a Master Response 6.7.

Page 7-311 indicates that the FINAL SEIR fails to analyze impacts related to light and noise, impacts of livestock and pets, and illegal, unpermitted or emergency removal of large wood debris from streams. The absence of specific local data on these issues does not allow the county to discount potential impacts from these types of sources.

Responses to Turtle Island Letter from June, 2017

In response to Turtle Island's assertion that the SEIR cannot be finalized and certified without concurrent formulation and adoption of an adequate SCA Ordinance, Master Response 6.1 claims that inclusion of a completed SCA Ordinance is impractical. Yet, the Ordinance will be a principal part of the mitigation measures for the significant impacts of future development, and the details of the Ordinance are important to evaluate the adequacy of mitigation measures and whether the County is meeting CEQA requirements. Even if, as Master Response 6.1 notes, the Court did not explicitly direct the County to prepare an SCA ordinance, the absence of such a directive does not remove the necessity of doing so in order to include sufficient specificity to comply with the Court's order and corresponding law.

In response to Turtle Island letter section 15i, the County references Master Response 3.

Letter section 15i focuses on Turtle Island's concern that the County is sidestepping necessary analysis by asserting necessary details will be analyzed in the future. Master Response 3 is conclusory and does not adequately clarify how the County's FINAL SEIR meets CEQA requirements. Master Response 3 instead addresses the FINAL SEIR's focus on physical versus social and impacts. Also in response to Turtle Island letter section 15i, the County references Master Response 6.3. Similarly, Master Response 6.3 does not adequately clarify how the County's FINAL SEIR meets CEQA requirements.

While the County acknowledges the adverse impacts of concentrated toxins in runoff to adult salmonids, the County distinguishes the San Geronimo Valley from more urbanized watersheds. However, it is unreasonable to assume that such impacts as concentrated toxic runoff can be left out of the County's analysis because the impact to salmon may be lower than in more urbanized areas. This comparison does not indicate that concentrated toxins of road runoff is not impacting salmonids in the San Geronimo Valley, and acknowledges that local data is not available. The absence of specific local data on the issue does not allow

the county to discount potential impacts from this type of source.

In response to Turtle Island letter sections 15m and 15n, the County acknowledges the risk of harm to salmon from increased fires and invasive species. While acknowledging the damage of fire and invasive species to salmon generally, the County's response, on pages 7-476 through 7-477 and in Master Response 11, downplays the harm from the increased development is expected to result from the FINAL SEIR. This analysis is at odds with the concept that even small changes can constitute considerable significant impacts due to the severely impacted baseline status of coho habitat. The recent Irving Fire demonstrates the

12i concept that even small changes can constitute considerable significant impacts due to the severely impacted baseline status of coho habitat. The recent Irving Fire demonstrates the continued threats from fire and the argument that the Proposed Project would reduce salmonid impacts is not reasonably supported. Similarly, additional development brings additional risk for invasive species introduction and spread, and this increase should not be discounted due to ongoing levels of risk.

Turtle Island continues to be concerned that the SEIR underestimates future development. The County's response to this concern, in Master Response 4, notes that there is potential for an increased number of improved parcels but downplays the impacts of these improvements because of environmental constraints. Turtle Island's letter notes various sources of concern regarding underestimated future development that are not addressed in the County's response.

Turtle Island continues to be concerned about pumping water directly from the creeks, which is already occurring and likely to increase with greater development. The County's response to the concern, on page 7-477, indicates that unregulated pumping from the creeks cannot be predicted. However, the absence of specific data on the issue of unregulated pumping does not allow the county to discount potential impacts from this type of source.

In response to Turtle Island's concern about enforcement of the Ordinance in letter section 15aw and 15ax, including failing to specify a monitoring program, the County points to a website where the public can report complaints for land use, zoning, building, housing and environmental health. The County further notes that the Ordinance would be the subject of the same enforcement program that is currently in place. A continuation of the same enforcement program, under which there is ample evidence of illegal development, does not alleviate Turtle Island's concerns about adequate enforcement.

### Conclusion

Turtle Island continues to be concerned that the SEIR's conclusion of a less than significant cumulative impact is flawed and deficient and that the mitigation measures are not adequate to meet the County's requirements under CEQA. The above comments illustrate examples of Turtle Island's continued concern.

### 12m

Additionally, throughout the FINAL SEIR, the County has claimed that revisions do not constitute significant new information that could trigger recirculation. Turtle Island is concerned that some of the revised information provided in the FINAL SEIR does constitute significant new information, which may trigger recirculation.

Respectfully Submitted,

Respectfully submitted,

Tool Ste

Todd Steiner and Preston Brown

TURTLE ISLAND RESTORATION NETWORK

PO Box 370

Forest Knolls, CAS 94933

- 12a As stated in the Marin CWP (2007), an ephemeral stream is subject to the SCA setback if it (a) supports riparian vegetation for a length of 100 feet or more, and/or (b) supports special-status species and/or a sensitive natural community type (such as native grasslands). If the ephemeral stream is not subject to the SCA setback, then the setback measurement is a minimum of 20 feet, regardless of parcel size. Under the Marin CWP (2007) BMPs are strongly encouraged in ephemeral streams not defined as SCAs, but not required. As noted in the Final SEIR, Mitigation Measure 5.2-1 requires that the same stormwater, LID, erosion and sediment control measures required inside of the SCA also occur outside of the SCA, which offers important protections to ephemeral streams that would not be subject to SCA setbacks and thus may not be otherwise adequately protected. Please see Individual Response 12i in Section 7 of the Final SEIR for a similar comment response regarding ephemeral streams.
- Please see Master Response 2 of the Final SEIR for discussion of the topics that were missing from the original comment response.
- 12c Please see Section 4 of the Final SEIR for a discussion of significance criteria and consideration of how salmonid populations and associated habitat have already been significantly adversely impacted by past development activities.
- The reference to Master Response 6.7 was incorrect, as the commenter notes. Please see Master Response 6.1 of the Final SEIR.
- 12e Please see Individual Response 11a of this Amendment.
- 12f Please see Individual Response 11a of this Amendment.
- As stated in the first paragraph of Master Response 3 of the Final SEIR, "The SEIR has been prepared in compliance with the Court's opinion and with applicable CEQA requirements, as was described in Section 1.2 of the Draft SEIR and was noted in numerous explicit references to specific sections of the State CEQA Guidelines throughout the rest of the Draft SEIR." While a portion of Master Response 3 is focused on CEQA requirements for an economic analysis, the last paragraph discusses how adoption of an ordinance as mitigation for cumulative impacts under the Proposed Project is appropriate and feasible. Further, adoption of an ordinance to address potential environmental impacts is consistent with State CEQA Guidelines 15002(h)(3), which states that adopting plans or ordinances to control a broader class of projects to

- avoid adverse changes to the environment is one among a set of methods a governmental agency can take.
- 12h Please see Individual Response 11a of this Amendment.
- Please see Individual Response 11a of this Amendment. Regarding wildfire, please see Master Responses 6 and 16 in Section 7 of the Final SEIR. Regarding invasive species, please see Master Response 11 in Section 7 of the Final SEIR, as well as Individual Response 11m of this Amendment.
- 12j Please see Individual Response 11b of this Amendment.
- 12k Surface water diversions are considered in Master Response 5.2 of the Final SEIR, as well as in Individual Response 15w in Section 7 of the Final SEIR (i.e., the original response on the Draft SEIR that the additional comment considered here relates to). As stated in Master Response 5.2, surface water diversions are not subject to County regulations and permitting. Please see Individual Response 11a of this Amendment.
- As noted in this comment, Marin County has already acknowledged that the existing code enforcement program to ensure compliance with the County's laws and regulations would apply to the provisions of the Expanded SCA Ordinance in Individual Response 15aw of the Final SEIR.
- 12m Please refer to Individual Responses 12a through 12l of this Amendment.

Letter 13—San Geronimo Valley Stewards

# Reed, Michelle

From:

Taylor, Tammy on behalf of EnvPlanning

Sent:

Wednesday, October 10, 2018 9:52 AM

To:

Reed, Michelle

Subject:

FW: Final SEIR, Attached Comments of San Geronimo Valley Stewards

**Attachments:** 

10-8-18 - SGV Stewards Final SEIR - V5DJP.pdf

Importance:

High

Sensitivity:

Confidential

From: madwork@comcast.net < madwork@comcast.net >

**Sent:** Monday, October 08, 2018 2:48 PM **To:** Reid, Rachel <a href="mailto:rreid@marincounty.org">rreid@marincounty.org</a>

Cc: EnvPlanning < EnvPlanning@marincounty.org>

Subject: Final SEIR, Attached Comments of San Geronimo Valley Stewards

Importance: High

Sensitivity: Confidential

To: Rachel Reid, Environmental Planning Manager

RReid@marincounty.org
Community Development Agency
envplanning@marincounty.org

From: San Geronimo Valley Stewards

Peggy Sheneman, Denis Poggio, Koa Pickering, Steve Tognini, Mike Snyder, Laura Szawarzenski, Rick & Ann Seramin, Gerald Toriumi, James M. Barnes

San Geronimo Valley Stewards (Stewards) is a volunteer non-profit with over 600 San Geronimo Valley (SGV) supporters and donors. We thank Marin County for the opportunity to comment on the July 2018 Final SEIR (Final SEIR) for the SGV.

We (Stewards) appreciate the response of Stillwater Sciences to the Stewards' 2017 comments regarding roads and Total Impervious Areas (TIA) (SEIR pages 7 - 339 to 7 - 342). We also appreciate the detailed responses to all comment letters in Part 7 of the Final SEIR.

### **Planning Commission Resolution**

We understand the Planning Commission cannot edit or make additions to the Final SEIR. It is a science-based report from Stillwater Sciences to provide the technical information the public officials to make scientifically sound management decisions regarding the SGV Watershed and the residents whose property are abutting its streams and tributaries.

However, the Planning Commission, will after be listening to public comments, will adopt a Resolution that will be forwarded to the Board of Supervisors (BOS) for their consideration.

We respectfully request the Planning Commission's Resolution include the Stewards' comments listed below to County staff and the BOS before the acceptance of the Final SEIR.

The Stewards' request the Planning Commission Resolution include recommendations listed below regarding the Expanded Stream Conservation Area (SCA) Ordinance as proposed in the Final SEIR.

The Expanded SCA Ordinance would dictate the future San Geronimo Valley (SGV) property use, types of home improvements requiring unrealistic County permit processes, along with burdensome financial County permitting costs. It is our contention that much of the requirements listed in the Expanded SCA Ordinance would negatively affect property values of 741 existing SGV family homes that are located within 100 feet of San Geronimo Creek and its tributaries. (SEIR pg. 2-42).

We believe the Final SEIR would through the Expanded SCA Ordinance will impose on the existing SGV 741 families the financial burden to mitigate environmental effects from all current and future development in the entire SGV. including development on parcels outside the stream conservation area and development on parcels which are exempt from the Expanded SCA Ordinance because they are owned by government agencies or agricultural enterprises.

13a

This financial mitigation burden is not acceptable to the 741 SGV families and it is an over-reaching effort by the BOS upon financially struggling families in the SGV to be penalized for Nature's unrecognized negative effects on aquatic eco-systems in the SGV Watershed. The 741 SGV residents are not the main contributor for the decline of the Coho and Steelhead Salomon; oceanic conditions are the principal affecting their return to the SGV.

The Planning Commission is uniquely qualified to make suggestions about the Expanded SCA Ordinance, because the Commissioners are knowledgeable about architecture, construction, housing, land use, and related fields.

The Commissioners would have a central role enforcing any future Expanded SCA Ordinance. The Commissioners possess decades of experience with sensible regulations that work, and other regulations that have failed to meet legitimate public goals without over reaching into the public's wallets.

### SGV Stewards Comments on Final SEIR

<u>Comment 1</u>: County officials consider socio-economic factors, balance costs against measurable benefits, and evaluate the effect on existing homeowners.

<u>Comment 2</u>: County clarify requirements; create less burdensome rules for minor home repairs, additions or replacements; and exempt house roof replacements.

<u>Comment 3</u>: Fire prevention and defense: Request County delete requirement to double or triple the number of trees planted in SG Valley.

Comment 4: Projections of additional building units and increased TIA are inflated and should be checked against actual site assessments.

<u>Comment 5</u>: The proposed SCA Ordinance imposes on 741 existing family homes (located within 100 feet of any stream) the entire mitigation burden for all development everywhere in the SGV Watershed, including buildings located outside the stream conservation area and future buildings not yet constructed.

Comment 6: Evaluate potential mitigation effects of other projects not studied in Final SEIR

### **Details on SGV Stewards' Comments**

Comment 1: County officials consider socio-economic factors, balance costs against measurable benefits, and evaluate the effects on existing home owners.

- CEQA Guideline 15131 (c) states "economic, social and housing factors shall be considered by public agencies, together with technological and environmental factors, in determining whether a project is feasible or to avoid effects on the environment". (SEIR pg. 7-8.)
- Marin 2007 Countywide Plan (CWP) describes public health, safety and affordable housing as policy goals. (SEIR pg. 7-40.) The task of our public agencies is broader than the limited scope requested of the consultants who wrote the Final SEIR, who state that economic or social effects on humans cannot be considered as a "significant impact" on the environment. (SEIR pg. 7-40.)

13b

13b

Although Stillwater Sciences was not engaged to determine public policy, it is disappointing the only mitigation measure studied or proposed by the Final SEIR is the Expanded SCA Ordinance to regulate SGV family homes (SEIR Chapter 5).

Before drafting a new SCA ordinance, County officials should exercise their discretion to analyze costs and benefits of other potential mitigation measures which benefit salmon populations, and to explore alternatives that are less financially burdensome on those Marin property owners located within the SCA.

- The 2016 Census Report details that the Marin median 12-month income is \$63,608, which is the typical annual income for the SGV.
- The 2016 Census Report also reports that 4.100 people live on 1,415 developed parcels in the San Geronimo Valley. (SEIR pgs 2-36 & 2-37)
- Approximately 741 existing single-family residences are located on parcels completely or partially within the SCA. (SEIR pg. 2-42. See Marin County 2009 LIDAR map available in CDA office.)
- Tax Dollars Diverted into Salmon Enhancement Projects
  - Despite over \$30 million in taxpayer dollars diverted into land-based salmon enhancement projects surrounding SGV Creek, and untold delay and expense as San Geronimo families suffered through five years of building moratoriums and court injunctions, the adult coho salmon population has not increased.
  - There is no published scientific data which has objectively measured any increase in the adult salmon population as a result of projects funded by \$30 tax dollars.

### Fish Counts

- Since 1982 Marin Municipal Water District (MMWD) has been required by the Regional Water Quality Control Board to count adult salmon each year from Tomales Bay upstream to the San Geronimo Creek and its tributaries.
- 164 adult salmon have been annually mean recorded by MMWD staff that reach the San Geronimo Creek and its tributaries.
- Each year about 82 coho Redds (nests) have been counted (as annual mean) in San Geronimo Creeks and its tributaries over the past 35 years, "National Park Service assume two adult salmon for each Redd.".
- Adult salmon migration varies, depending on ocean conditions, drought, floods, and the 3-year salmon life cycle. Adult coho number from 2 to 20 in low years (such as 1995, 2008, 2013). Adult coho number from 230 to 516 in high years (such as 1996, 2001, 2004, 2006).
- The number of Redds (nests) have ranged from 10 to 96 per year since the most recent drought began in 2013. Adult coho number about 57 (annual mean) for the past 5 years in San Geronimo Creeks and its tributaries.
- Between 3% to 7% of juveniles spawned in San Geronimo Creek and tributaries return to our creeks as adults in their third year. There is some evidence the number and body weight of juvenile salmon have increased, so juveniles may be healthier when they migrate to the ocean. But larger numbers of adult salmon are not returning to SGV creeks each year. (Minutes from the March 2018 and June 2018 meetings of Lagunitas Creek Technical Advisory Committee).

13b

13c

- The number of adult salmon returning to the San Geronimo Creeks suggests that ocean conditions not SGV family homes, are the major problem affecting salmon survival.
  - Is it cost effective for our government to divert public tax dollars into landbased projects on the creek banks?
    - NO.
  - Why are we ensnaring SGV families in old small homes they are not permitted to improve because of costly and lengthy County Permitting Processes?
    - Because of Salmon Protection and Watershed Network (SPAWN) threat of more law suits against the County of Marin.
  - Why, for example, do County regulations make it prohibitively expensive for the typical SGV family to add a 400 square foot accessory unit and create workforce housing?

<u>Request 1.0</u>: If the Planning Commissioners determine to accept the Final SEIR, the Commission Resolution should recommend that, before any new SCA ordinance is drafted, County staff and the BOS study:

- Methods to reduce the expense, delay, and regulatory burden on existing SGV family homes:
- The housing needs of humans;
- The public costs of enforcing an SCA ordinance; and
- Actual measurable increase in the salmon population attributable to land-based creek restoration projects.

# Comment 2: Clarify and simplify requirements for existing homes.

- The BOS and County staff MUST clarify what home improvement and maintenance falls under the category of "DEVELOPMENT" for SGV property owners. Surely, repairs of stairs, decks, doors, along with additions or replacements on existing homes; and existing house roof replacements should be exempt from the category of a "DEVELOPMENT".
- The Final SEIR proposes an "Expanded SCA Ordinance" which would require a discretionary permit and a professional site assessment (SEIR pg. 5-18.) for certain "development activities", which seem to include minor repairs, replacements and additions to existing single-family homes located within the SCA.
- Discretionary permits invite litigation and discourage compliance with best practices. The requirement for a discretionary permit is often impossible for the homeowner to satisfy, without hiring a real estate lawyer and an engineering expert.
  - Consider the long process: First, the Community Development Agency conducts a <u>hearing before an administrative officer</u>, with notice to neighbors and advocacy groups.
  - o If the officer grants a permit, any person can appeal to the Planning Commission.
  - o If the permit is granted, the objecting party can appeal to the BOS.
  - o Finally, the objecting party may file a lawsuit in the Marin Superior Court.
- SGV residents have already been subjected to the nightmare scenario of SPAWN's many lawsuits.
  - For example, the Murray Family was ordered to pay over \$100,000 of SPAWN's attorney fees and the County of Marin has NOT yet issued to the Murray Family their building permit to construct a 1,200 square foot house in Woodacre.

Not only does the requirements from the proposed Expanded SCA Ordinance make new housing economically unviable, but SGV families living in existing homes cannot afford to maintain them if they try to comply with SCA Ordinance regulations.

- Regulatory expense, delay and risk of litigation actually discourage compliance with best practices which would protect our streams.
- Professional Site Assessment Adds Unnecessary Expense
  - The proposed new SCA ordinance requires a site assessment by a qualified professional with at least 5 years' experience in stream ecology, hydrology, and salmon. (SEIR pg. 5-20.)
    - Would it be possible or reasonable for a typical SGV property owner to hire qualified professional at \$300 per hour to assess the new drainage patterns into the adjacent ephemeral or seasonal creek from installing a new roof?
      - NO
    - Assume at least six hours of their time to travel, inspect the project, and writing their report for the County's consideration and to the property owner.
      - Extra cost \$1800 would be added to every minor home project.

These Are Examples of Minor House Projects That Could Require Discretionary Permit and Site Assessment Under Mitigation Measure

- Increased Impervious Area
  - Add smooth surface ramp for wheelchair or walker for access and egress to existing single-family properties;
  - o Construct 4 feet X 6 feet roofed enclosure for garbage cans and recycling bins; or
  - o Build 6 feet X 6 feet chicken coop or other domestic pet.
- Vegetation Clearing
  - o Remove an existing lawn turf and replace with gravel and low water plants;
  - Clear poison oak, blackberries and shrubs to create 100-foot fire defensible space:
- Increased Surface Run-Off:
  - o Repair or replace gutters and downspouts on existing roofs; or
  - o Install new gutter or curb on existing driveways.
- Is it cost effective for the County of Marin to micro-manage small single-family projects on existing SGV homes?
  - o NO
- Is there any evidence the salmon population will increase by subjecting homeowners to the expense and delay for repairing and maintaining their homes?
  - o NO

<u>Request 2.0:</u> We Propose the Planning Commissioners Recommend Reduced County Permit Fees to Affordable Levels and To Direct Staff to Develop an Expedited Permitting Process for The SGV Property Owners Seeking County Permits and Approval.

- The Planning Commission's Resolution should recommend that County staff draft exceptions and simplified written guidelines for SGV family projects that maintain the habitability of existing homes.
- Small projects should promptly be issued over-the-counter permits, based on site photographs and plans by licensed contractors.

### Request 2.1: Focus on Net Impervious Area and Encourage Removal

- Allow the homeowner to add new impervious area around their home by granting 2:1 (two-for-one) credit for removing or replacing old impervious materials.
  - Example: Homeowner is allowed to add a new 10 feet x 10 feet" deck, on condition of removing old 10 feet x 20 feet above-ground swim pool.

### Request 2.2: Handicap Access

• The Planning Commission resolution should recommend a blanket exemption for new impervious area reasonably necessary for differently-abled people to live comfortably in their homes, such as a ramp or car port cover.

# Request 2.3: Human Health and Safety Requires Immediate Roof and Gutter Replacements

• The Planning Commission Resolution should recommend that the expanded SCA Ordinance exempt repair and replacement of roofs, gutters and downspouts, on existing homes, with over-the-counter permits, issued for a licensed roofing contractor. The Final SEIR recommends that any" new or replaced impervious areas", which would include a roof repairs or replacement, would require bio-retention design and underdrain-overflow requirements. (SEIR pg. 5-21 & 5-22.) Typical SGV house roofs are over 500 square feet.

In addition, replacement of existing roof or driveways over 500 square feet would require a storm water control plan (SWCP) that exceeds the standards of Bay Area Regional Authorities. The SWCP must "achieve retention of the 85th percentile 24-hour design storm." (SEIR pg. 5-22.)

- This is an over-reach by Stillwater to recommend to the Planning Commission to mandate this expense to be required by an SGV property owner when maintaining their property.
- Please do not put our families at risk for uninhabitable homes and serious structural damage, while we wait for experts and government officials to approve our roof replacement. Many people do not know their roofs leak until the first storm. It can be difficult to schedule a roofing contractor in the busy season.

# Comment 3.0: Fire Prevention and Defense

Requires Deleting the Requirement to Double or Triple the Number of Trees In the SGV.

- The Expanded SCA Ordinance would require that for each tree removed from properties in the SCA that it would be replaced by two new trees planted on site, or by three new trees planted off site. (SEIR pgs. 5-20 & 5-21.)
- The Final SEIR makes this naïve proposal, ostensibly to SOLVE TWO PROBLEMS THAT DO NOT EXIST:
  - Reduced habitat complexity, and
  - Increased water temperature.
- The SEIR determines these two "project effects" have <u>less than significant impact</u> on salmon summer rearing. (SEIR pgs. 5-38 & 6-2.)
- The 2009 Marin County LIDAR map shows ample shade canopy over fish bearing streams.
- This confirms the Marin Municipal Water District finding of 70% to 80% shade canopy, cited in the 2009 Salomon Enhancement Plan (SEP) Report and Existing Conditions Report.

13c

13d

- The Final SEIR states that additional trees are required to provide salmon and steelhead fish more shade from trees.
- The addition of more trees is not substantiated from the County's "digital analysis".
  - We support the County issuing an RFP to hire qualified consultants to photograph all the SGV Watershed fish-bearing streams to determine the necessity of providing more shade is necessary.
  - o Occasional tree cutting may reduce shade canopy along steep seasonal and ephemeral streams on the hillsides.
  - However, the environmental impact on these <u>non-fish bearing streams</u> is offset or mitigated by reduced fire danger.
- Tree and brush-filled <u>canyons become fire chimneys</u>, as flames from the SGV floor are wind driven to higher elevations. A fire in the SGV can travel to Fairfax or Mill Valley from hot wind driven embers, certainly not the best management practice to reduce fire threats to other County communities.
- The SGV needs fire fuel reduction, not more trees.
  - Small trees now crowd the forest floor.
    - Drive down Sir Francis Drake Blvd. and look up at the hills.
  - We live in a bowl of overgrown brush and small trees that should be thinned and removed to promote a healthy fire-resistant forest for the SGV.
- The SG Valley is a human fire trap.
  - We have only three roads to evacuate 4,100 people with their pets and animals.
  - Each road is only two lanes, and those will be needed by firefighters and emergency equipment.
- Wildfire Conflagration Would Forever Destroy Salmon Habitat
   At high temperatures, the ground can burn to mineral soil, removing all vegetation.
   The streams would fill with chemical flame retardant, and become choked with melted metal and plastics from buildings, roads and cars.
  - Refer to James Barnes' September 17, 2018 email to the Planning Commission from regarding the SGV fire threats. Mr. Barnes is a veteran aerial fire fighter with Cal-Fire.
- Tree Removal and Defensible Space Is Required by Fire Agencies, State Law and Our Insurance Companies

The SGV Stewards requested the 2017 Draft SEIR to allow the SGV property owners the unprohibited right to remove any tree or shrub, if required by state law, a fire agency or insurance carriers. Unfortunately, the final SEIR currently before the Planning Commission merely recites general policies from the 2007 County Wide Plan (CWP) which is NO SMALL OVERSIGHT. (SEIR pgs. 7-51 & 7-52.)

**Request 3.0:** The Planning Commission resolution should recommend deleting the requirement of planting 2 or three new trees for each tree removed in the SCA. One-for-one 1:1 tree replacement is adequate to maintain the currently healthy shade canopy and low water temperatures for summer salmon rearing.

<u>Request 3.1</u>: The Planning Commission resolution should recommend to County officials to also consider an exemption (with no replacement planting) for any tree or shrub removal required by state law, a fire agency, and/or any insurance carrier.

13e

Request 3.2: We agree with Final SEIR pg. 5-21 that three species would not be good replacement trees: tanoak, California bay laurel, and Douglas fir. The Planning Commission 13d should recommend one other species be listed ineligible: ghost pine (Pinus sabiniana). These pyrophytics were planted around the golf course 50 years ago and are now spreading in the SG Valley.

Comment 4.0: Projections of additional building units and developable parcels are inflated, and should be checked against actual site assessments. The Final SEIR over-estimates development within the SCA and for the watershed as a whole.

When compared with actual past experience in SGV, the future projections are inflated. Mean house size in 2005 was 2,675 square feet footprint. (SEIR pg. 2-31.)

Recently reviewed Community Development Agency construction permits issued revealed:

- 73 new single-family homes (including the planned development of French Ranch) during years 2000 to 2017,
  - of which 35 homes were less than 2,500 square feet;
- 151 home additions during years 2015 to 2017
  - reflecting pent up demand following 5 years of building moratoriums and court injunctions due to SPAWN'S law suits; and
- home additions range from 50 SF to 1,000 square feet.
  - With an average 400 square feet or less.
- Presently there are 312 vacant parcels have access to utilities, roads and MMWD water.
- The Final SEIR projects 358 units will be built on 323 unimproved parcels. (SEIR pg. 2-34.)
  - o Is it realistic to suppose the inaccessible parcels will be developed with multiple units?
    - NO
- According to County data there are only 95 buildable parcels within the SCA.
- However, Marin CDA and the 2010 SEP Report revealed another 108 mapped parcels are not buildable because they are too small to accommodate at least 3,000 square feet of house, garage and a driveway.
- Many mapped parcels are leftover "paper streets" recorded in 1920 by Lagunitas Land Company.
  - However, the Final SEIR before the Planning Commission currently projects 166 new building units on parcels totally or partially within the SCA. (SEIR pgs. 2-45 & 7-338.)

Where Does Final SEIR Find 71 Additional Developable Parcels Within The SCA?

- Those 71 parcels are described as "non- residential" or "other land use classifications". (SEIR pgs. 7-337 & 7-338.)
- What specific classifications and uses?
- Would development require zoning changes or special use permits?
- We request Marin CDA staff inspect these 71 parcels to verify if any can be developed at reasonable cost and accessibility.
- If not, then Marin CDA staff must update their data to remove those 71 parcels from being buildable.

13e

TIA Might Increase 1% (Or Less) In Each "Sub Basin", Even Assuming An Inflated Number Of New Units Are Built In The Entire Valley.

- SEIR "Sub Basins" are broadly mapped to include acreage outside the SCA.
- SEIR states:
  - o 99 new developments could be located in the "Woodacre Creek Sub Basin"
  - 157 new developments could be in "Lower San Geronimo Sub basin". (SEIR pg. 2-37.)
- Each "sub basin" includes areas far away from creeks, or on steep hillsides, where fish cannot swim. (SEIR pgs. 2-25 & 2-45.)
- While buildings located outside the SCA may generate sediment and TIA-caused storm flow, the Final SIER proposes that only homes located within the SCA are burdened with the proposed ordinance to mitigate development effects for the entire sub basin.

Note: An exception is Montezuma where TIA might increase 1.4% (SEIR pg. 2-38.)

# <u>Total Impervious Area (TIA) Within The SCA Would Increase One Tenth Of One Percent (0.1%), Even Assuming An Inflated Number Of New Units In The SCA.</u>

- Final SEIR measures 2,418 acres within the SCA.
- It concludes the 2007 CWPlan could potentially add 2.9 acres of impervious area within the SCA
  - o increasing TIA from 189 acres to 192 acres.
- This could increase TIA from 7.8% of total SCA acres to 7.9% of total SCA acres. (SEIR pgs. 2-45 & 2.46.)
- For the entire watershed, TIA might increase 0.6% (less than one percent), even assuming the inflated projection of 358 new developed units. (SEIR pg. 2-38.)
- Under the 2007 CWPlan, SEIR estimates 74 acres of TIA could hypothetically be added to the total 12,036 acres in SGV.
- We are of the opinion that 12,036 acres is inaccurate and requires more analysis.
- A light regulatory touch is called for 741 existing homes in the SCA, no matter how you measure tiny the hypothetical increases in TIA.

<u>Request 4.0</u>: The Planning Commission Resolution Should Recommend County Staff and The Board of Supervisors Look at Alternative Mitigation Measures That Do Not Burden Existing Family Homes Within The SCA, Built Decades Ago, On Small Parcels.

- Balance the hypothetical 1% increase in TIA for the entire watershed (on the one hand) against private costs, public enforcement expense, and lack of affordable housing.
- A fair and effective mitigation program should not penalize creekside homeowners with consultants' fees and delay, but instead should encourage all SGV property owners to follow best practices authored by the County of Marin.

<u>Request 4.1:</u> The Planning Commission Resolution should recommend County staff evaluate the reasonably probable number and size of future houses within the SCA, with attention to the SGV history of small homes and limited additions to square footage based upon the parcel's ability to perk and if the site is unbuildable due to slope.

13e

Request 4.2: The Planning Commission should recommend site evaluation of vacant parcels within the SCA to estimate how much development is reasonably possible, with attention to whether each parcel is accessible to roads and utilities, and whether each parcel could support 3,000 square feet of house, garage, driveway and septic system.

Comment 5.0: Final SEIR shifts to 741 family homes located within the SCA the full burden of mitigation for all current and future development in the entire Valley.

- The Expanded SCA Ordinance appears to apply only to private properties within the SCA.
- The SEIR would impose no duties on government lands which is exempt under the County Development Code, nor Agricultural uses which are separately regulated, nor on parcels located outside the SCA.
- About 40% of the acreage within the SCA is owned by two government agencies
- MMWD and Marin County Parks & Open Space District.
  - Impervious area on these lands includes the MMWD water treatment plant, which undoubtedly contributes to stormwater flow into San Geronimo Creek. Dirt and gravel roads on these lands dump sediment into creeks. Fire fuel load is high because the agencies do not spend enough money for meaningful tree and shrub removal.
- Existing County data show 1,415 improved parcels in SGV. (SEIR pg. 2-42.)
  - About half of the 741 of those improved parcels are located fully or partially within the SCA.
- Final SEIR projects it may be possible to improve 1,721 parcels in the SGV under the 2007 CWP.
  - o In the future, about half of the 885 improved parcels may be partially or completely within the SCA. (SEIR pg. 2-42.)
- Sediment and storm water from Government Lands and new houses outside the SCA, in the hills flow down to family homes along the creeks.
- Half the SGV property owners are being burdened by the SCA Ordinance to clean up the harm caused by the other half, as well as environmental impacts on government land and agricultural properties.
  - This is unfair to those SGV property owners which appear on the LIDAR map as within the SCA merely because they are located near seasonal or ephemeral stream in the hills (where there are no fish).
  - This is unfair to families whose older homes were built decades ago near fishbearing streams and now need to modernize for habitability.
    - Policy needs to be created to address these older homes from being overburdened by the SCA Ordinance.
- If Marin voters truly believe land-based creek projects funded with tax dollars will save the salmon, they should be willing to shoulder the costs imposed on 741 existing family homes.
- Normal repairs, minor replacements of existing structures, and small home additions should not be burdened with permit fees, professional site assessments, and lawyer bills accompanied with years of Marin CDA's design and review processes.

13f

13g

<u>Request 5.0:</u> The Planning Commission Resolution should recommend the BOS and County staff examine a more equitable distribution of mitigation costs.

Request 5.1: Consider for existing family homes:

- Waived or reduced permit fees,
- County funded-professional fees,
- o Site assessments by County staff, rather than outside consultants, and
- Consider minimal regulations and permitting costs for normal repairs, replacements of existing structures, and small additions on existing homes.

# Comment 6.0: Evaluate potential mitigation effects of other projects not studied in Final SEIR.

- Final SEIR does not evaluate the environmental benefits or mitigation effects of future projects, which SEIR describes as "reasonably foreseeable" which include
  - o Community septic/sewer system for flats of Woodacre and San Geronimo;
  - Marin DPW road repairs and stream crossing upgrades, such as the daylighting of culvert at confluence of Woodacre Creek and San Geronimo Creek; or
  - The many salmon enhancement projects sponsored by SPAWN and California Department of Fish and Wildlife.
- The Final SEIR states the "details are unknown and impacts would be SPECULATIVE" even though the projects will "provide substantial benefits" for salmon, they cannot be considered due to "lack of sufficient information". (Id.) (SEIR pg. 5-2.)
- The Final SEIR further states "these projects "WOULD NOT CONTRIBUTE CONSIDERABLY TO ADVERSE CUMULATIVE IMPACTS" FOR SALMON."
- Why are we spending public money on these salmon enhancement and flood plain projects if their benefits for salmon are too speculative to measure?
- Final SEIR totally ignores other watershed projects.
- 2014 Coho-Friendly Habitat and Operations Plan for San Geronimo Golf Course, over \$1.2
  million has been spent to upgrade stream crossings, plant natives, and remove invasive
  from ponds. The 2014 Coho-Friendly Plan was commissioned by SPAWN, prepared by
  environmental experts, and funded by CDFW and NOAA.
  - SPAWN's current construction of a flood plain in Tacaloma and Jewell, through which fish must pass before they reach the SGV.
  - SPAWN's design and CDFW's approved plan to spend \$3 million of tax dollars to re-build Roy's Fish Ladder and construct a second stream parallel to San Geronimo Creek.
    - Footnote: SPAWN's 1999 re-build plan for Roy's Fish Ladder was a huge disaster, in that the steel railings on the face of each concrete pool killed many returning Redds during their journey to spawn in the Woodacre Creek headwaters.

Request 6.0: The Planning Commission resolution should recommend that, before the BOS and County staff burden 741 SGV family homes with the numerous mitigation duties for the entire SGV Watershed, we suggest they consider other pending or proposed Salmon Enhancement Projects, and mitigation measures on Governmental Lands.

###

In closing and most important, please listen to the families who live in San Geronimo Valley, whom we represent and voice their concerns regarding the Final SEIR and SCA Ordinance.

13g

We have learned from Dr. Elinor Ostrum, who was awarded the 2009 Nobel Prize in Economic Sciences, that fisheries and other natural resources are best managed by local communities. We recommend her book, *Governing the Commons (Cambridge University Press 1990). Rules governing common resources should match local needs and conditions; "People affected by the rules should participate in setting and modifying the rules".* 

Thank you for your attention to our comments and please apply your due consideration to our Requests. And Comments

Respectfully yours, San Geronimo Valley Stewards

- 13a Please see Master Response 3 of the Final SEIR.
- Please see Master Response 3 and response 15an in Section 7 of the Final SEIR, relating to CEQA requirements for economic analysis. Please also refer to Master Response 13, which explains that Marin County strives to achieve the balance you mention between socioeconomic development and environmental protection.

A total of four mitigation measures are included in the SEIR; Mitigation Measure 5.1-1 *Expanded SCA Ordinance* is only one of them. The intention of the Expanded SCA Ordinance is not to impose burdensome requirements on family homes, but to mitigate for the potentially significant impact of the Proposed Project on coho salmon winter rearing success by avoiding, minimizing, or compensating for adverse impacts to the watershed processes and functions that create and maintain essential winter rearing habitat.

Section 3.1 of the Final SEIR summarizes the salmonid population status and recent trends in San Geronimo Creek. Preliminary data reported by MMWD for the 2018-2019 spawning season (E. Ettlinger personal communication, Lagunitas Creek spawner email update 2/1/2019) indicate above-average numbers of adult coho salmon returning to San Geronimo Creek. Although the County is encouraged by this season's relatively high coho salmon abundance, including signs of sustained generational growth for the population, regional abundance is still well below the NMFS recovery targets and the population segment remains severely depressed. Ocean conditions and freshwater habitat conditions are among the factors contributing to low abundance and survival. Only freshwater habitat conditions are subject to influence by the Proposed Project.

With regard to measuring increases of the salmon population because of actions in the SEIR, please see response 8d above.

13c Mitigation Measure 5.1-1 focuses on development activities that would result in potential impacts to salmonids and/or their habitat. Activities that would require a discretionary permit involve vegetation clearing, increases in impermeable area, increases in surface runoff, exposed soil, or alterations to the bed, bank, or channel of any stream. Repairs of stairs and doors are unlikely to require a discretionary permit under Mitigation Measure 5.1-1. The addition of decks, along with additions or replacements of existing homes, are more likely to trigger the criteria

and require a site assessment and discretionary permit under Mitigation Measure 5.1-1.

Please also see Master Responses 13 and 18 in Section 7 of the Final SEIR.

Please see Master Responses 6 and 16 of the Final SEIR for discussions of wildfire. Please also see section 3.5 *Riparian Zone* and response 15ag of the Final SEIR relating to riparian tree canopy coverage.

Mitigation ratios for vegetation are often set at greater than 1:1 to increase the likelihood that one of the replanted saplings will survive 5, 10, 20, or more years into the future to provide adequate shade for the stream corridor. Additionally, removal of a single established tree and the shade provided by its canopy represents an immediate loss of shade. While doubling the number of replacement trees does not also double the amount of replacement canopy cover during the first several years following replanting, it does provide relatively more cover during the establishment period of the planted trees.

Request 3.1: An exemption has already been included in Mitigation Measure 5.1-1 for the removal or trimming of pyrophytic combustible live trees and/or vegetation (see Exemption 2).

Request 3.2: The County agrees to exclude Gray pine (which is also commonly referred to as Ghost pine) from the list of allowable woody riparian tree species for replanting in the SCA, due to its 'highly flammable' status according to the USFS:

https://www.fs.fed.us/database/feis/plants/tree/pinsab/all.html

A minor revision has been made to Mitigation Measure 5.1-1, Provision 4, to address this request (see Section 3 of this Amendment).

- 13e Please see Section 2.6 *Development Metrics* of the Final SEIR and response 11b above.
- 13f Please see Master Response 13 in Section 7 of the Final SEIR.
  - Please also see response 8b above.
  - Marin County notes the comment regarding permitting costs.
- The full paragraph on page 5-2 of the Final SEIR, from which the commenter excerpted the phrases included in their comment, states the

following regarding current and reasonably foreseeable future projects in San Geronimo Valley:

Because details of the Woodacre/San Geronimo Flats Wastewater Recycling Project are currently unknown, an assessment of potential cumulative impacts to salmonids within the context of future development under the Marin CWP (2007) would be speculative at this time and is not included in the cumulative impact analysis. The road, stream crossing, and stream habitat enhancement projects are designed to reduce sediment input to streams and improve aquatic habitat conditions, and would thus provide substantial benefits to salmonids in San Geronimo Valley. Likewise, CDFW-funded salmonid habitat enhancement projects are expected to benefit salmonids throughout the watershed. Based on the available information, it can reasonably be concluded that the impacts of these or similar projects either would not contribute considerably to adverse cumulative impacts on salmonids or cannot be considered in the analysis due to lack of sufficient information. Additionally, these projects may be considered to be within the projections and policies of the Marin CWP [2007], as detailed above, and as analyzed in this SEIR.

As written, the above paragraph notes that the details of the Woodacre/San Geronimo Flats Wastewater Recycling Project are unknown, while potential cumulative impacts of the other two types of projects or similar projects would not contribute considerably to adverse cumulative impacts on salmonids. Please also refer to Individual Response 14k in Section 7 of the Final SEIR for additional discussion of the status of the Woodacre/San Geronimo Flats Wastewater Recycling Project.

# 2.4 INDIVIDUAL LETTERS

# Letter 14-James M. Barnes

### Reed, Michelle

**From:** Taylor, Tammy on behalf of EnvPlanning **Sent:** Wednesday, October 10, 2018 9:52 AM

**To:** Reed, Michelle

**Subject:** FW: Increased fire danger resulting from proposed vegitation ordinances.

From: James M. Barnes <aapilots@sonic.net>
Sent: Thursday, September 20, 2018 11:07 AM
To: EnvPlanning <EnvPlanning@marincounty.org>

**Subject:** Increased fire danger resulting from proposed vegitation ordinances.

# 14a

My name is James M. Barnes. I have been a resident of the San Geronimo Valley for most of my 68 years. I served as an Aerial Firefighter throughout the Western States and for the last 32 years in California. Too many times in my firefighting career I have witnessed the destruction of whole communities ravaged by wildfire. These are some of my concerns for the Citizens and Firefighters of Marin County.

The prescriptive requirement in the SEIR (Salmon Environmental Impact Report) for property owners to replace every tree removed by planting two more is a recipe for disaster. We need only review after action reports on fires where similar ordinances were adopted. The Angora Fire, in South Lake Tahoe, was unstoppable because of draconian ordinances that prohibited the creation of defenseable space around homes and business. An entire community was burned to the ground in two days. Firefighters cited the lack of any defensible space as a major contributor for this devastation.

In the time before the large-scale impacts of "human activity", natural, seasonal fires cleared the understory of dead fall and large stands of pyrophitic vegitation species every few years. This kept fuel loads from accumulating to the point where fire behavior becomes so explosive it consumes everything in its path burning down to mineral soil. Believing that human intervention to create more and thicker stands of vegitation, especially in the wildland urban interface environment, will result in rebalancing nature, is a cruel fantasy.

"Human activity" is the cause of the dangerous conditions that now prevail. It will take human intervention to reduce this terrible threat. The correct approach is to mimic what would have taken place before the explosion in human habitation that led to this imbalance in the natural habitat. This can be accomplished by having all stake holders take the necessary measures to defuse this ticking timebomb. It must be done by home owners in concert with all responsible government agencies. It can be accomplished by creating defensible space around homes and businesses and by managing the thousands of acres of pyrophitic species that populate our wildlands. The tools needed to accomplish this re-balancing are managed control burning and the creation of fire breaks using mechanical clearing. By constructing covered fire breaks the understory, consisting of deadfall and ladder fuels, are cleared and mulched into the soil while preserving the forest canopy. This would have much the same effect that natural fires had historically clearing the understory of dead and diseased vegitation. It could go a long way to help protect our vulnerable hillside communities

Vegitation management is the most important factor in reestablishing a natural balance reducing fuel loads in the wildlands and wildland urban interface. What now must be all to obvious is the result of Nature trying to reestablish a balance by wiping the slate clean and starting over. This is a major contributing factor in the extreme fire behavior we have witnessed over these past two fire seasons in northern California. Unchecked it will in the future destroy whole communities and precipitate environmental catastrophes. Instead of a mosaic of diverse vegitation that would be created by natural fires in a balanced environment, there will be fire that burns everything down to mineral soil,

resulting in all soil and aquatic biota being extinguished for an indefinite period of time. Bare hillsides cause further damage to the environment and property by soil erosion and slide activity further choking and sterilizing creeks and streams.

The first and most vital step in protection from wildland fires is to perceive the threat in the first place. Well-intentioned but fatally flawed ordinances that prevent fire protection measures will at some point have devastating consequences.

Sincerely,

James M. Barnes

Sent from Mail for Windows 10



Virus-free. www.avg.com

14a Comment noted. Please refer to Master Responses 6 and 16 in Section 7 of the Final SEIR.

### 3 TEXT CHANGES TO THE FINAL EIR

Consistent with Section 15088.5 (a) of the State CEQA Guidelines, the revisions that have been made to the Final SEIR to address public comments do not require recirculation of the SEIR prior to certification because they do not constitute significant new information that would deprive the public of a meaningful opportunity to comment upon any substantial adverse environmental effects of the Proposed Project, or a feasible way to mitigate or avoid such an effect (including a feasible project alternative), that Marin County has declined to implement. The modifications are not due to any of the following:

- (1) A new significant environmental impact that would result from the project or from a new mitigation measure proposed to be implemented.
- (2) A substantial increase in the severity of an environmental impact that would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Rather, any new information that has been added to the Draft SEIR to address public comments clarifies or amplifies or makes insignificant modifications in an adequate EIR, consistent with Section 15088.5 (b) of the State CEQA Guidelines.

This section identifies changes that have been made to the Final SEIR. Exact text from the Final SEIR (not including strikethrough and underline of previous changes made to the Draft SEIR) is shown and modified as necessary. Where the text is included in the Final SEIR in two locations, both page numbers are referred to, and the change shown is made in both locations. Omitted text is shown in strikethrough mode and new text is underlined.

Table 3-1. Revisions to the Final SEIR.

Page No.	Revision			
3-24 and 3- 25	Section 3.6.1 is revised as follows:  However, salmonid access is currently blocked by culverts or other passage barriers in several locations throughout the watershed <u>due to both County infrastructure and infrastructure on private lands</u> , and the target of unimpeded access to 90–100% of suitable habitat is not currently met (Table 3 2). These include, but are not limited to, barriers in Creamery Creek, Sylvestris Creek, and Treatment Plant Creek, as well as all three major tributaries to the North Fork (i.e., Spirit Rock, Horse, and Flanders Creeks) due to the presence of Dickson weir (Stillwater Sciences 2009a) <u>as well as barriers located further upstream (pers. comm. Kallie Kull – Marin County, 12 March 2019)</u> . In Larsen Creek, steelhead access to significant stretches of potential upstream habitat is restricted by a large pond in the San Geronimo Golf Course and road crossings at Nicasio Valley Road and Meadow Way, while both coho and steelhead presence are restricted by an impassable culvert on Montezuma Road just upstream of the confluence between Montezuma and Candelero Creeks.			
5-20 and 5-21, 7-23 and 7-24	<ul> <li>Mitigation Measure 5.1-1: Expanded SCA Ordinance, Provision 4, is revised as follows:         <ul> <li>Requirements for replacement of riparian trees removed in association with development activities, including:</li></ul></li></ul>			

Page No.	Revision
	http://www.firesafemarin.org/plants/fire-prone. Where planted, Douglas-fir should be set back from structures in compliance with Title 16 of the Marin County Municipal Code and the California Public Resources Code. Additionally, its potential to contribute to wildfire may be reduced through appropriate trimming, thinning, and removal of branches and shoots to reduce the density of woody plant material in the understory. While tanoak is also a native riparian and understory species in the San Geronimo Valley, tanoak is highly vulnerable to Sudden Oak Death and therefore can increase the amount of dead and dry plant material (i.e., fuel) and the potential for wildfire (Forrestel et al. 2015). The native riparian tree California Bay Laurel is currently considered to be a vector for Sudden Oak Death and is thus not included on the list of allowable woody riparian tree species for replanting in the SCA. Other tree species that may be native or non-native to the region but do not naturally occur in the riparian corridor and are pyrophytic-combustible, such as Monterey pine (Pinus radiata), Eucalyptus (Eucalyptus globulus), and Ghost pine (Pinus sabiniana), are also not included on the list of allowable woody riparian tree species for replanting in the SCA.
5-22 and 7-27	Mitigation Measure 5.1-1: Expanded SCA Ordinance, Provision 5, is revised as follows:  Require that discretionary permits for development projects¹ within the SCA include low impact development (LID) practices and designs that are demonstrated to prevent offsite discharge from events up to the 85th percentile 24-hour rainfall event. This requirement applies to retention of the entire volume of each day's rainfall that does not achieve this total volume, and the first increment of rain up to this volume for those 24-hour periods whose rainfall exceeds this volume. Specifically:  - Small projects, including single-family homes and driveways, that create or replace 500 ft2 or more of impervious surface shall be required to complete a stormwater control plan (SCP) that achieves retention of the 85th percentile, 24-hour design storm for the newly created or replaced impervious surface, or for an equivalent area of previously unretained impervious surface on the same site. For San Geronimo Valley It is acceptable for the SCP cannot rely upon to use the existing runoff reduction measures as

<sup>&</sup>lt;sup>1</sup> Includes paper streets (Marin County Municipal Code 24.04.627) and/or improvements to existing unpaved roads.

Page No.	Revision	
	described in Appendix C of the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual (BASMAA 2014) to retain the 85th percentile, 24-hour design storm standard.	
	<ul> <li>Regulated projects shall be required to complete a stormwater control plan (SCP) that achieves retention of the 85th percentile, 24-hour design storm for the newly created or replaced impervious surface, or for an equivalent area of previously unretained impervious surface on the same site. For San Geronimo Valley It is acceptable for the SCP cannot rely upon to use the bioretention sizing factor (0.04) described in Appendix D of the BASMAA Post-Construction Manual (BASMAA 2014) to retain the 85th percentile, 24-hour design storm standard.</li> </ul>	
	<ul> <li>New roads (paved and unpaved, including driveways) shall also be required to meet the following design criteria:</li> </ul>	
	Mitigation Measure 5.1-2 is revised as follows:	
5-24 and 7-31	Marin County shall require that biotechnical techniques and salmonid habitat enhancement elements be included for all permitted bank stabilization projects.	
	Potential Impact 5.3 is revised as follows:	
5-35	While the influence of degraded summer rearing conditions habitat on the production of coho salmon or steelhead in the watershed and its importance are believed to be of lesser importance to salmonids than relative to poor overwintering conditions (Impact 5.1) and redd scour (Impact 5.2) and are not currently considered to be limiting are not well understood (Stillwater Sciences 2008, 2009; Ettlinger et al. 2015c, 2016b, 2017b), degraded summer habitat contributes to overall adverse conditions for juvenile coho salmon and steelhead in the San Geronimo Creek watershed and may reduce summer rearing success (though not necessarily the production of smolts from the watershed	

Page No.	Revision		
	Potential Impact 5.3, Impact Significance, is revised as follows:		
5-38			
	are limiting salmonid growth or production. Further, development-related reductions in summer stream flow are not expected to occur under the Proposed Project, due to the low likelihood of additional groundwater pumping or surface water diversions under the Proposed Project.		

# **APPENDIX A**

Marin Countywide Plan Supplemental EIR Mitigation Measure 5.1-1 LID Standards for Development

### **TECHNICAL MEMORANDUM**

To: Rob Carson

Marin Countywide Stormwater Pollution Prevention Program

From: Dan Cloak

Subject: Marin Countywide Plan Supplemental EIR

Mitigation Measure 5.1-1 LID Standards for Development

Date: Revised 31 May 2019

### **Background**

Provisions within Mitigation Measure 5.1-1 include a standard for retention of the 85<sup>th</sup> percentile, 24-hour design storm for development sites within the subject area that create or replace 500 square feet or more of impervious area (Supplemental EIR, p. 7-27).

Current requirements for development projects are set forth in Provision E.12 of State Water Resources Control Board Water Quality Order 2013-0001-DWQ, an NPDES permit (Permit) governing stormwater discharges applied to small municipalities throughout California. In Marin County and neighboring Napa, Sonoma, and Solano counties, the Permit requirements are implemented via the Bay Area Stormwater Management Agencies Association (BASMAA) Post-Construction Manual (LID Manual, rev. 2019).

The LID Manual specifies a Low Impact Development (LID) approach. Applicants for development approvals for Regulated Projects are instructed to design their project with the following principles:

- Optimize the site layout to avoid impacts to the site.
- Limit paving and roofs.
- Use pervious pavements where possible.
- Direct drainage to landscaped areas—either by dispersing runoff to lawns or landscaping, or by routing runoff to bioretention facilities.

The LID Manual includes detailed design criteria for pervious pavements, for dispersal to landscape, and for bioretention facilities.

County Public Works staff requested an analysis of whether implementation of the Permit and the LID Manual could achieve equivalent mitigation of the projected impacts. The Permit and LID Manual would continue to be implemented within the subject area, but with a reduction in applicable threshold for a Regulated Project—from the current 5,000 square feet of impervious area created or replaced to 500 square feet of impervious area created or replaced.



### **Objective**

The purpose of this analysis is to evaluate quantitatively the effectiveness of the proposed retention standard vs. the current LID standard.

### **Basis for Comparison**

In lieu of a simulation or more comprehensive hydrologic analysis, the comparison will be based on relative volumes of stormwater retained. This basis is similar to that used in a previous analysis (p. 7-25 of the SEIR).

#### Analysis

Differences in Volumes Retained

Existing and future cumulative total impervious area (TIA) is taken from Table 2-4 on p. 2-30 of the SEIR. As noted on SEIR p. 2-34, these are likely to be overestimates.

Although Mitigation Measure 5.1-1 calls for the retention standard to be applied to redevelopment of sites with existing impervious area, the SEIR does not estimate the amount of existing TIA that would be replaced. This replaced TIA would be designed and built under the governing retention or LID standard. For the purpose of comparing estimated volume retained, replacement of existing TIA is included in the analysis of both standards. Replacement of existing TIA is assumed to be in the range of 15% to 30% during the period corresponding to future theoretical buildout.

The LID Manual requires applicants to divide the development site into drainage management areas (DMAs) and to account for the runoff from each DMA. The LID Manual directs applicants to prioritize dispersal of runoff from impervious DMAs to landscape and pervious pavements before incorporating bioretention facilities into the project.

The LID Manual specifies a maximum 2:1 ratio of tributary impervious area to receiving landscaped area. This is intended to achieve infiltration of approximately 80% of average annual runoff. To be conservative, this analysis assumes 70% of average annual runoff from impervious areas is infiltrated when this criterion is applied.

Remaining runoff is directed to bioretention facilities. The LID Manual includes specific criteria for these facilities. The criteria include:

- A surface ponding layer at least 6 inches deep and sized to be at least 4% of the tributary impervious area
- A growing medium (sand and compost mix), at least 18 inches deep
- A gravel storage layer at least 12 inches deep
- An underdrain located at the top of the gravel storage layer and connected to the storm drain system or to an approved discharge point.
- An open (unlined) interface between the gravel storage layer and the underlying native soil.



A facility designed to these criteria will detain and treat 80-90% of average annual runoff. In clay soils, about 40% of the total runoff volume will be infiltrated (retained), and the remainder discharged slowly via the underdrain. The percentage infiltrated varies with local hydrology and soil permeability. For the purpose of this analysis a range of 35%-45% has been selected.

Based on County staff's review of implementation of post-construction measures on the types of development projects allowed in the subject area, most runoff from TIA is managed by landscape dispersal, some small amount by use of pervious pavements, and the remainder by bioretention. Many single-family homes, which comprise most of the development expected in the subject area, use only landscape dispersal and/or pervious pavement, and no bioretention, or use bioretention to manage only a small portion of TIA. For the purpose of this analysis, it is assumed that landscape dispersal and pervious pavement, together, account of 75% of TIA, and bioretention for the remainder.



3 of 5

Assumptions and data used in the analysis are summarized in the table below.

Quantity	Data or estimate	Source
Existing TIA (buildings and parking lots) subject to development requirements	89.9 acres	SEIR Table 2-4
Added TIA (buildings and parking lots) subject to development requirements	35.8 acres	SEIR Table 2-4
Existing TIA redeveloped and subject to development requirements	15%-30%	1% per year is a typical rough estimate
Total acres subject to development requirements	49.3 acres - 62.8 acres	Sum of added TIA and existing TIA redeveloped range
Mean Annual Precipitation (MAP)	44 inches	Marin Countywide Plan Hydrology and Water Quality Report (2005), p.25
85th percentile storm volume as a percentage of average annual volume	59%	SEIR pp. 25-26
Proportion of TIA subject to LID Manual managed by dispersal/pervious pavements	75%	Conservative estimate based on review of past development projects.
Proportion of average annual runoff infiltrated when directed to dispersal/pervious pavements	70%	Conservative estimate based on BASMAA 2011* p. 16 and long- standing management practices, adjusted for higher MAP in subject area
Retention performance of bioretention facilities, as a percentage of average annual runoff	35%-45%	BASMAA 2011*

<sup>\*</sup>Geosyntec Consultants. Harvest and Use, Infiltration and Evapotranspiration Feasibility/Infeasibility Criteria Report. Prepared for the Bay Area Stormwater Management Agencies Association. May 1, 2011.

https://www.waterboards.ca.gov/sanfranciscobay/water\_issues/programs/stormwater/muni/mrp/05-02-2011/Feasibility\_Infeasibility.html



4 of 5

Estimate is as follows:

Total acres subject to requirements equals new TIA plus 15%-30% of existing TIA. Range = 49.3-62.8 acres.

Total volume retained by application of 85<sup>th</sup> percentile storm retention standard = MAP × 59% × Total acres subject to requirements

Range = 107 to 136 acre-feet per year (AFY)

Total volume retained by application of LID Manual = Volume retained by dispersal + Volume retained by bioretention

Volume retained by dispersal = 75% of area  $\times$  70% retention  $\times$  total acres subject to requirements. Range = 94.9 to 120.8 AFY

Volume retained by bioretention = 25% of area  $\times 35\%$ -45% retention  $\times$  total acres subject to requirements. Range = 15.8 to 25.9 AFY

Range = 110.7 to 146.7 AFY

Based on the tabulated assumptions, application of the proposed standard to retain runoff from the 85th percentile storm corresponds to retention of between 107 and 136 acre-feet per year (AFY) of runoff from TIA on development sites that would be subject to the standard, depending on the estimate of redeveloped TIA. Implementation of the LID Manual corresponds to retention of between 111 and 147 AFY from TIA, depending on the estimate of redeveloped TIA and depending on assumed retention performance of the bioretention facilities.

#### **Results and Discussion**

Application of either of the two standards would have about the same effectiveness in retaining runoff and therefore about the same effectiveness in mitigating increased runoff that would occur due to land development.

Public Works staff observes that the application of the LID Manual to the types of development allowed in the subject area results in runoff from most TIA being dispersed to landscape. Previous modeling (BASMAA 2011) indicates that the landscape dispersal practices specified in the LID Manual infiltrate somewhat more runoff than the 85<sup>th</sup> percentile retention standard specified in the SEIR. This would balance the effect of slightly less runoff than the 85<sup>th</sup> percentile standard being infiltrated by bioretention facilities if built to the criteria in the LID Manual.

DAN CLOAK ENVIRONMENTAL CONSULTING