From:	Bridger Mitchell
To:	MarinLCP
Subject:	EAC comment letters: viticulture, hydrologic and scenic resources
Date:	Thursday, April 14, 2016 5:24:00 PM
Attachments:	EAC to CCC_LCP viticulture Oct 2 2014[1].pdf
	EAC to CCC staff re Viticulture Concerns March 2015 final[2].pdf

Please add EAC's previous, attached letters from October 2, 2014 (hydrologic issues and scenic resources) and March, 2015 (viticulture development) to the CDA administrative record for the LCP Amendment proceeding.

Thank you.

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Bridger Mitchell – Environmental Action Committee



October 2, 2014

Kevin Kahn, District Supervisor California Coastal Commission <u>Via email</u>: Kevin.Kahn@coastal.ca.gov

Re: Further suggestions for Marin County's Implementation Plan

Dear Kevin,

Please accept the Environmental Action Committee of West Marin's comments below on issues to be addressed as you complete the draft of Marin County's Implementation Plan. We greatly appreciate your consideration of our comments and concerns and look forward to working with you on the completion of the IP.

1. Introduction

This comment letter focuses on issues surrounding an application to intensify the use of pasture and grazing lands to viticulture or row crops. Where pasture is proposed to be converted to viticulture or other irrigated row crops, a number of individual and cumulative impacts must be addressed and mitigated through a coastal development permit and potentially also a CEQA initial review, mitigated negative-declaration, or full EIR. Additionally, the County's Design Review process, which is a non-coastal specific process, should be directly incorporated into the Implementation Plan and should contain coastal-specific considerations such as impacts to visual and scenic resource protection, public access, and ESHA protection and enhancement.

2. <u>Hydrologic issues</u>

Marin's 1981 Certified LCP states that, "Geologic studies described by Clyde Wahrhaftig and J. Ross Wagner in "The Geologic Setting of Tomales Bay, 1972," show that there are no dependable supplies of groundwater in any quantity in the Franciscan Formation on the east side of the Bay. Of the springs and creeks which exist in the area, many are intermittent or do not provide sufficient quantities for development on a large scale. . . . In short, water supply is a serious constraint." To EAC's knowledge, no subsequent studies have been performed to alter this very concisely-stated conclusion.

Groundwater pumping during the dry season can draw down streams, impact Environmental Action Committee of West Marin PO Box 609 Point Reyes, California 94956 www.eacmarin.org 415.663.9312 limited groundwater supplies, and impact blue line creeks. For any agricultural operator wishing to intensify the use of their coastal zone property to viticulture or row crops, developing a pond would likely be essential. For viticulture, a pond would be especially necessary if frost is an issue, but also to avoid dry season pumping. The placement of a pond would be critical to avoid impacts on winter flows and hydrologic connectivity.

If a vineyard is on a hill slope, drop drains may be required. Often, winter overland flow is consolidated into a pipe and moved off site (similar to urban development) – the key is to distribute this flow or move it into a pond and avoid shooting the flow into a small channel that then must become very large to accommodate huge amounts of very fast flowing water. These rerouting issues have a very large cumulative impact on the Napa River, for example.

Proposed Requirements for Marin IP:

- 1. **Groundwater Usage Estimate**: For any new viticulture or irrigated row crop application require a licensed hydrogeologist to prepare a report estimating the amount of groundwater to be used in both rainy and drought years.
- 2. **Groundwater Pump Test**: For any new viticulture or irrigated row crop application, require a full hydrogeologic study that includes, at a minimum, a 48-hour pump test that monitors all wells within a 5000-foot radius for hydrologic connections and adverse impacts. If adverse impacts are shown after the initial hydro study, potentially require a full EIR. [See sample language below].
- 3. **Meter All Wells**: Require all new wells and the intensification of existing wells on the project site and within 5,000 feet to be metered with established dry-season pumping allowances and reporting requirements to Marin Environmental Health & Safety Department.
- 4. **Pond Engineering Study**: Require a certified engineer to prepare a pond study showing drainage flow patterns, size, habitat impacts, etc.

3. Scenic Resource Protection, Habitat conversion

The Certified LCP highlights that any proposed new development on the "open rolling grasslands east of the Bay" can have "the potential for significant adverse visual impacts unless very carefully sited and designed." Both the shoreline of Tomales Bay and agricultural lands were rezoned in the Certified LCP to bring them under design review standards to protect visual quality. In particular, two types of development -- housing or conversion of pasture land to viticulture -- could have a significant adverse visual impact.

Winter run off from terraced row crops on certain slopes can cause major erosion downstream. Tomales Bay remains an impaired water body under Section 303d of the Clean Water Act for sediment, nutrients and pathogens. To protect the Bay's already degraded water quality, no viticulture or row crops that use chemical pesticides, herbicides or rodenticides should be allowed. Grading should be held to a minimum and should only be allowed during the dry season – June through October.

Depending on the size of the area proposed for conversion to intensified agriculture, wetlands, roosting and nesting bird habitat may be altered or disturbed.

Proposed Requirements for Marin IP:

- 1. **Prohibit conversion** of pasture land on slopes greater than 20%.
- 2. **Require Design Review** to ensure that scenic and visual resources are not adversely impacted.
- 3. **Require a field survey** of nesting bird habitat based on the location and size of the proposed conversion area.
- 4. **Require an Agricultural Production and Stewardship Plan** if the property owner has not previously engaged in organic viticulture or row crop operations.
- 5. **Prohibit the use** of any pesticides, herbicides, or rodenticides as part of the intensified agricultural operation.
- 6. **Require Best Management Practices** and mitigation measures to address sedimentation.

We hope that you find these recommendations helpful. Attached to this email I've included some research papers that I received from UC Berkeley and hope that this information is also useful.

Please do not hesitate to let us know if we can answer any questions or provide additional information.

Sincerely yours,

Amy Trainer, Executive Director

**This information is provided as an example of the pump testing requirements and review by a certified hydro geologist that could be incorporated into Marin's IP for new residential development, subdivisions, as well as intensified agricultural operations.

San Juan County, Washington County Code

8.06.150 Subdivision

Applicants for short subdivisions, long subdivisions, and subdivision alterations shall demonstrate an adequate, potable source of water for each new parcel in the proposed subdivision. For purposes of this section, new parcel shall include all parcels created except parcels containing existing residential structures served by existing water supplies.

Minimum source capacity for individual and community supplies shall be 1,000 gallons per day/connection. The minimum water quality testing parameters for individual and/or community water system sources shall be a complete inorganic chemical analysis and a recent (less than six months) bacteriological sample. All water quality tests must comply with drinking water standards in <u>Chapters 246-290</u> and <u>246-291</u> WAC. See <u>Chapter</u> 13.08 SJCC for fire flow requirements.

A. Community Water Supplies.

1. For a new community system with groundwater as the proposed source, the yield of the well(s) shall be demonstrated by a pump test as outlined in subsection (C) of this section. In addition, the well(s) must have complete water quality tests (inorganic chemical analysis and bacteriological sample) submitted prior to preliminary approval.

2. If the applicant proposes to connect to an existing community water system, the water system must demonstrate to the department of health and community services the ability to provide water to the proposed parcels and compliance with current regulations. Prior to final approval the applicant must provide proof of authorization for service connection for the proposed lots.

3. The community water system or expansion of an existing system must be approved, constructed, and a water service installed to the property line of each lot prior to final plat approval.

B. Individual Wells.

1. If water is to be provided by private wells, in order to provide proof of adequate supply for preliminary approval, a well (or wells) with sufficient capacity to serve the proposed lots as a community system must be drilled and tested, or individual wells must be drilled and tested and approved on each lot.

2. Individual wells must comply with the community water supply standards for siting, testing, and source capacity. Said well(s) must be pump tested as outlined in subsection

(C) of this section. Any conditions of approval for the wells will be incorporated as conditions of final plat approval.

C. Seawater Treatment. Desalination of seawater must be designed by a qualified, licensed engineer and meet applicable local, state, and federal requirements. Designs shall comply with Washington State Health Department guidelines.

D. Pump Test Protocol. All new groundwater supplies shall be pump tested in accordance with DOE's WRIS Bulletin 30, Aquifer Test Procedures. The developer shall complete and submit a pump test protocol to be reviewed by the County hydrogeologist prior to testing. Minimum requirements for conducting the pump test include:

1. Pump tests shall be conducted between mid-July and mid-October or as defined by the County hydrogeologist.

2. At least one monitoring well must be used, if available.

3. The developer shall be responsible for costs associated with the aquifer test.

4. At a minimum, the following steps should apply:

a. A step-drawdown test to determine the pumping rate and recovery data,

b. A 24-hour sustained-rate pump test using an automatic recording device, and

c. If the water level does not stabilize or chloride levels increase (greater than 20mg/L on field samples), continued pumping for 72 hours.

E. Minimum Review Requirements. All new groundwater supplies shall be reviewed and include an evaluation of long-term well capacity and impact on the local aquifer. The County hydrogeologist will determine whether all or part of a hydrogeologic site evaluation (subsection (F) of this section) will be required. The County hydrogeologist will review the initial information and other relevant data and either make a decision regarding the proposal or provide detailed additional testing and analysis requirements needed to evaluate the impacts the proposed withdrawal will have on local groundwater resources. A hydrogeologic site evaluation will be required for projects that have potential for groundwater contamination or impairment. Information required to be submitted for initial review include:

- 1. Well site approval;
- 2. Water quality tests for complete inorganic chemical analysis;
- 3. Surveyed wellhead elevation;
- 4. Location coordinates;
- 5. Proposed use;

6. Layout of plat;

7. Pump test results.

F. Hydrogeologic Site Evaluation. If required, a hydrogeologic site evaluation shall be prepared and address resource availability in relationship to the scope of the project. The hydrogeologic site evaluation must address requirements as specified by the County hydrogeologist which may include but is not limited to the following:

1. Hydrogeologic Setting.

a. Description of the geologic setting of the site illustrated with geologic and soil maps.

b. Description of the occurrence and movement of groundwater in the area, including a general discussion of the aquifers present in the area.

c. General discussion of groundwater availability in the area, including a discussion of historic problems such as well failures or seawater intrusion.

d. A scaled map showing location of wells and springs within 1,000 feet of the site or as required by the County hydrogeologist.

2. Site-Specific Resource Availability.

a. An aquifer test conforming to the guidelines found in WRIS Bulletin No. 30. The test should be analyzed to determine the hydraulic properties of the aquifer (storativity and transmissivity), and to the degree possible, the spatial variability of these properties.

b. A map(s) showing static water level elevations for the aquifer(s) proposed for use for the project.

c. An evaluation of theoretical changes to water level elevations resulting from the proposed withdrawal, and the method that was used.

d. An evaluation of the potential to induce or exacerbate seawater intrusion in the aquifer.

G. Project actions that cannot mitigate potential impacts that degrade or impair the groundwater source will be denied. (Ord. 22-2013 § 9; Ord. 20-2007 § 6; Ord. 10-2001 § 9; Ord. 14-2000 § 4; Ord. 14-1996. Formerly 13.06.150)



MEMORANDUM

To: California Coastal Commission staff

From: Amy Trainer, executive director, EAC of West Marin

Date: March 23, 2015

Re: Concerns about viticulture development approval process in Marin

The Environmental Action Committee of West Marin (EAC) continues to be concerned about Marin County's reliance on its 2011 "Vineyard Erosion and Sediment Control" ordinance, Marin Code 23.11 (the "Vineyard Ordinance"). The County staff has stated at recent meetings about the LCP Amendment that the Vineyard Ordinance would govern all future viticulture development in the coastal zone.

EAC understands that unless the Coastal Commission certifies the Vineyard Ordinance as part of the Marin LCP Amendment, the Vineyard Ordinance cannot govern viticulture development in the coastal zone. Due to the many failings of the ordinance enumerated below, EAC strongly believes the ordinance should not govern viticulture development. Rather, viticulture development in the coastal zone is a land use matter that should be governed by specific standards for land use and sensitive resource protection. When the Board of Supervisors considered the Vineyard Ordinance, EAC raised numerous issues of concern regarding both substantive and procedural issues, none of which were addressed in a meaningful or substantive way either in the ordinance or since it was adopted.

Based on the concerns set forth below, EAC requests that you include a statement in the LCP Implementation Plan to the effect that the Marin Vineyard Ordinance does <u>not</u> govern viticulture development in the coastal zone but all coastal permit regulations and standards in the updated LCP are applicable to any viticulture proposal.

EAC's continued concerns with the Vineyard Ordinance include the following:

- 1. The Vineyard Ordinance may contradict or otherwise be inconsistent with various provisions of the Coastal Act, including Sections 30006, 30240, 30251, and 30603.
- 2. The Vineyard Ordinance vests sole authority to regulate and permit all activities associated with the planting or replanting of a vineyard grading, terracing, ripping, soil chiseling, removal of vegetation, field road construction, installation of underground drainage systems and water supply systems –with the County's Agricultural Commissioner (the "Ag Commissioner"). *See* Sections 23.11.060 and 23.11.090 under the definition of "Initial vineyard planting work."

- 3. The Vineyard Ordinance establishes a ministerial permit system the Ag Commissioner is required to issue a permit for the proposed vineyard development on <u>slopes up to 50%</u> as long as a "County recognized qualified professional" issues a report saying the vineyard development is alright. A "County recognized qualified professional" can include a certified rangeland management specialist or "other registered or certified professional acceptable to the agricultural commissioner . . ." An actual licensed civil engineer report is required only in limited circumstances. Sections 23.11.090, .100, and .120.
- 4. The Ag Commissioner is not required to consult with the Community Development Agency – the sole agency authorized to implement the Local Coastal Program and issue development permits - or with the Department of Public Works – the agency that issues grading permits and oversees erosion control measures. Section 23.11.150.
- 5. The Vineyard Ordinance limits the Ag Commissioner's review of the submitted erosion plan and proposal to develop a vineyard on slopes up to 50% to merely ensuring the plan was "prepared, reviewed, and certified in accordance with this chapter, and that the plan includes all of the information required by that section." There are no substantive or meaningful standards to guide issuance of a permit. Section 23.11.150.
- 6. Section 23.11.090 puts limits on the use of "best management practices" by defining that term as "those practices or sets of practices that have proven to be the most effective feasible means of preventing or reducing stormwater runoff, erosion, and sedimentation in vineyards, *given technological, institutional, environmental, and economic constraints.*" (Emphasis added).
- 7. Section 23.11.170 does not establish the amount of riparian setback or give any standards for determining the appropriate setback distance. The provisions of the Marin County Code that the applicant "shall comply with" are not set forth. In general, the Code exempts agricultural activities from riparian setback requirements and the definition of "stream" in 23.11 is inconsistent with other provisions of the Code and LCP.
- 8. Section 23.11.190 states the erosion and sediment control plan requirements, but does not include actual requirements because there are none. Subsection (b)(2) states that the "agricultural commissioner shall prepare and maintain detailed plan requirements and have them available on request."
- 9. This Vineyard Ordinance provides no oversight of surface water or groundwater use for vineyards. Vineyards consume an exceptionally large amount of water and have the potential to significantly impact community groundwater supplies. This ordinance provides no testing or monitoring requirements for the viticulture water source, including the number of new wells, their location, the amount of water used from each, requiring that a meter be placed on new and existing wells used for viticulture, and requiring monitoring reports be submitted to monitor overall groundwater levels and consumption. See 23.11.140.
- 10. The Vineyard Ordinance does not provide any public process for neighbors or the public to review and comment, or possibly appeal a proposed vineyard. The public should be afforded an opportunity to comment on a proposed vineyard's size, location, construction

near streams or impacts to wildlife and wildlife habitat, and other possible impacts. The only appeal provisions is for a person the Ag Commissioner finds has likely violated the ordinance, yet the Commissioner is explicitly designated as the sole review authority for appeals.

- 11. This Vineyard Ordinance does not address the use of pesticides or other man-made chemicals that are often used by viticulture operators, nor does it addres their impacts on the community water supply, bird and fish habitat, or nearby organically certified farms. See 23.11.140.
- 12. There is no indication that the erodible soils and slope standards are based on science or best practices.

Thank you for your consideration of our concerns.