

**Final Report of Recommendations
for the Revision of the Alameda County
Watercourse Protection Ordinance**

prepared by the
San Lorenzo Creek Watershed Task Force

June 27, 2011
(Attachment B: Minority Report added October 3, 2011)

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- A. Alameda County Watercourse Protection Ordinance
- B. Minority Report by Rex Warren (added October 3, 2011)

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**San Lorenzo Creek Watershed Task Force
Final Recommendations
(June 27, 2011)**

INTRODUCTION

San Lorenzo Creek Watershed Task Force Mission Statement

To preserve and enhance our San Lorenzo Creek watershed by proposing policy and guidelines as well as ordinance revisions and integration in an effort to control flooding, manage storm water runoff, rehabilitate and restore our creeks system, protect our biological resources and ultimately improve water quality and the quality of life for the residents of Alameda County.

Background

On March 27, 2007, the Board of Supervisors appointed fifteen members and three alternates to the San Lorenzo Creek Watershed Task Force and directed the Task Force to identify and address the community's concerns regarding development projects that have the potential to degrade the quality of creeks and their riparian corridors within the San Lorenzo Creek Watershed. Task Force members represented a diverse cross-section of the community; including homeowners, environmentalists, agriculturalists, and business owners. The Task Force met regularly from June of 2007 to December of 2010 and was staffed jointly by the County Public Works Agency and the County Community Development Agency.

Process

The Creek Task Force identified five key topics of concern: creek setbacks, development within creek setbacks, rights and responsibilities of creek-side property owners, grading related to creeks, and stormwater management and discharge control. For each of these key areas, the Task Force developed recommendations that are intended to serve as the basis for revision by County staff of the existing County Watercourse Protection Ordinance (see Attachment A). The Task Force formed a work group for each of the five topic areas. These work groups were responsible for preparing for each topic in advance of consideration by the full Task Force by framing the issues; gathering data; and identifying resources, relevant agencies, and potential speakers.

The Task Force members composed the following question in order to frame their discussions:

Does there exist an Alameda County ordinance that provides sufficient requirements to regulate development and provide enforcement so as to protect aquatic and riparian resources in creeks and culverts in the San Lorenzo Creek watershed; and is it being implemented effectively?

The Task Force identified the following objective for their effort:

Develop recommendations for a comprehensive watercourse ordinance that protects the aquatic and riparian resources of the San Lorenzo Creek Watershed.

To the extent feasible, the Task Force reached decisions by consensus. When a consensus could not be reached, decisions were made by majority vote with the understanding that dissenting members could choose to prepare a minority report.

Additional Relevant Regulations

Other County ordinances, in addition to the County Watercourse Protection Ordinance, may apply to development and other types of activities in or near a watercourse. These ordinances include the Grading Ordinance, Stormwater Management and Discharge Control Ordinance, and Flood Control Ordinance.

State and/or federal permits may also be required for work in or near a watercourse. These agencies are listed in this paragraph, and some permits are summarized in subsequent paragraphs. The California Department of Fish and Game (CDFG), the San Francisco Bay Regional Water Quality Control Board (SFRWQCB), and the U.S. Army Corps of Engineers (Corps) are the three main permitting agencies. In some cases, other agencies such as the U.S. Fish and Wildlife Service (USFWS), U.S. Environmental Protection Agency (USEPA), or the National Marine Fisheries Service (NMFS) may also have some oversight authority.

Section 1600 et seq of the California Fish and Game Code requires that for any work that will: “1. substantially divert or obstruct the natural flow of a river, stream, or lake; 2. substantially change the bed, channel, or bank of a river, stream, or lake; 3. use any material from the bed, channel, or bank of a river, stream, or lake; and/or 4. deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake,” the project proponent must enter into a Lake or Streambed Alteration Agreement with CDFG.

The SFRWQCB issues permits for activities in waters of the State under the authority of both federal and State laws. For projects that impact waters of the U.S., the SFRWQCB issues Clean Water Act Section 401 Water Quality Certifications which certify that the federal permit will not violate State water quality standards. Most certifications have additional requirements beyond those imposed by the federal permits. For activities involving the discharge of “fill” (e.g., outfall, bridges, riprap, abutments, piers, retaining walls, etc.) to waters of the State, the SFRWQCB issues Waste Discharge Requirements (WDRs), under the authority of the State’s Porter Cologne Water Quality Act. Every certification issued by the RWQCB is issued concurrently with WDRs. Projects that are outside of federal jurisdiction, receive only WDRs.

A permit from the Corps of Engineers is required in order to locate a structure or discharge dredged or fill material, in waters or navigable waters of the United States. Section 404 of the Clean Water Act prohibits the discharge of dredged or fill material into waters of the United States without a permit from the Corps.

Description of the Watershed

The San Lorenzo Creek Watershed is made up of many smaller subwatersheds that drain a nearly 50 square mile area of western Alameda County into the Bay. Rain that falls in these subwatersheds makes its way into many creeks that eventually flow into San Lorenzo Creek. The watershed begins north of Castro Valley near the County's border with Contra Costa County, and in the hills between the urban area of Castro Valley and the City of Dublin. From there, it runs through the unincorporated communities of Castro Valley, Fairview, Cherryland, Ashland and San Lorenzo (see map on page 4). While the watershed includes portions of the Cities of Hayward and San Leandro, this report and the recommendations of the Creek Task Force apply only to the Unincorporated County.

Upper San Lorenzo Creek Watershed

The upper watershed consists of 37 square miles generally known as the Castro Valley Canyonlands. This rural area is primarily used for grazing cattle and horses. The subwatersheds of Bolinas Creek, Crow Creek, Cull Creek, Eden Creek, Hollis Creek, Norris Creek, Palomares Creek, and Upper San Lorenzo Creek comprise the upper watershed. These creeks are, for the most part, in their natural state and provide good quality riparian habitat. The steep slopes and unstable soils of the canyonlands can result in severe erosion problems in some areas.

Middle San Lorenzo Creek Watershed

The middle watershed encompasses nearly 10 square miles and is more developed and less pristine than the upper watershed. Four creeks are included in the middle watershed: Chabot Creek, Castro Valley Creek, San Lorenzo Creek from Don Castro Reservoir to Foothill Boulevard, and Sulphur Creek. These creeks are a highly fragmented combination of natural creeks, culverts, and concrete channels that run through a mix of suburban density housing and more rural properties. The exception is San Lorenzo Creek which is generally intact but confined by urban encroachment.

Lower San Lorenzo Creek Watershed

The lower watershed extends from Foothill Boulevard to the Bay and is highly urbanized. Development in the area includes single-family homes and apartment buildings, as well as a variety of commercial uses. San Lorenzo Creek flows in engineered channels through this entire reach, with little or no riparian habitat present.

Western Alameda County Unincorporated Watersheds



A watershed is the land that water flows over or under on its way to a creek, lake or bay. Water travels down hills, across farm fields, suburban lawns, and city streets or it seeps into the soil and travels as ground water.

Sources:
 1. William Lettis Associates - Creek and Watershed Map of Hayward and San Leandro, 1997
 2. Alameda County Flood Control & Water Conservation District - Watershed Delineation, 2000
 3. U.S. Geological Survey - 1:24,000 Digital Line Graphs, 1987
 Map produced by:
 Paul Modrell - Alameda County Public Works Agency - May 8, 2006



INTERIM RECOMMENDATIONS

Early on, Task Force members agreed that the current Watercourse Protection Ordinance could be implemented more effectively in advance of amending the existing ordinance language if clear interpretation of the ordinance language was provided and if procedures for processing development applications were modified to require that more information be provided at the time of application. On February 27, 2008, the Task Force presented a memo to the Board of Supervisors' Unincorporated Services Committee that contained the following list of concerns regarding implementation of the existing County Watercourse Protection Ordinance:

- The County's general plan and specific plan policies recognize the importance of and encourage the preservation of the County's creeks and riparian areas; these policies should be considered in concert with the provisions of the County Watercourse Protection Ordinance in the implementation of the ordinance.
- Differing interpretations of or lack of understanding of the Watercourse Ordinance has resulted in inconsistent application of the ordinance by staff and decision-making bodies.
- Provisions in the Watercourse Protection Ordinance authorizing the Director of Public Works to approve development within creek setbacks have precluded public involvement in these decision-making processes.
- Identification of parcels in creek areas immediately upon submittal of development applications is crucial to ensuring that the appropriate policies and ordinances are applied in the application analysis.
- The granting of grading permits for parcels adjacent to creeks before approval for new development may be granted, without consideration of potential environmental impacts on the creeks, and without ensuring that erosion controls are in place may lead to erosion and excessive siltation which degrade the quality of creeks and riparian corridors.

In the February 27, 2008 memo, the Task Force recommended that County staff take the following actions to address these concerns:

- Clarify when the Watercourse Protection Ordinance is applied. Currently, staff applies the ordinance only to natural channels designated by a solid or dash and three dots as shown in blue on USGS topographic maps. The Task Force recommends that the ordinance be applied more broadly, as indicated in the definition of "watercourse" in the existing ordinance.
- Define the terms "riparian areas" and "inhibit riparian restoration" as they are used in Article V, Section 13.12.310.B. of the existing ordinance.
- Clarify when the Director of Public Works should not allow permits to be issued for development within a creek setback; adopt a public notification process (which includes notification of downstream property owners) to be used before a permit is issued to allow

development within a creek setback; and emphasize that, according to the terms of the Watercourse Protection Ordinance, the 20-foot setback is a minimum (and that other factors, such as riparian vegetation, should be taken into consideration in determining the setback in each case). Once determined, the creek setback should be strictly enforced.

- Ensure that all relevant staff is trained with regard to interpretation of the Watercourse Protection Ordinance, as well as appropriate general plan and specific plan policies.
- Implement a process whereby staff can determine that a parcel is in a creek area immediately upon submittal of a development application.
- Be responsible for determining the boundary of a riparian area and/or an area that will inhibit riparian restoration if property is on a watercourse. An applicant may choose to initially determine the boundary of a riparian area and/or an area that will inhibit riparian restoration. In this case, the County is responsible for confirming the boundaries.
- Develop the expertise to determine and confirm boundaries of riparian areas and/or areas that will inhibit riparian restoration.
- Grant grading permits for parcels adjacent to creeks only after approval for new development is granted, taking into consideration potential environmental impacts on the creeks, and ensuring that erosion controls are in place.

In response to the Task Force's memo, County staff changed the procedure for accepting and processing applications for development on parcels adjacent to creeks. Previously, applicants were required to delineate the creek setback on plans for Tentative Maps, but not for other types of development applications or for over-the-counter plan checks, although the application review process still addressed creek-related issues on the property. The Planning Department now requires that creek setbacks be delineated on plans for all development applications and plan checks for property having an on-site or adjacent creek. The Public Works Agency requested that applicants provide accurate creek cross-sections every 20' or less, site topography, and that riparian habitat be delineated. Planners at the zoning counter confirm the existence and location of the creek on the property, and refer plan checks to the Public Works Agency for approval of the creek setback before signing off on plans. Development review applications have always been referred to Public Works as part of the application review process. Zoning Counter handouts have been revised to inform the public of the need to include the creek setback on plans. Applicants will also be informed of this requirement at the pre-application meetings for development applications.

RECOMMENDATIONS OF THE TASK FORCE

Recommendations Not Specific to the Watercourse Ordinance

In the process of developing recommendations for amendments to the watercourse ordinance, some important issues were raised that do not apply directly to the content of the ordinance itself. However, because these issues are closely related to the function and implementation of the ordinance, Task Force members feel that it is important that these issues be addressed.

A significant concern is the lack of information that is available about the watercourses within the watershed and properties adjacent to them. The Task Force feels that this lack of information limited their ability to carry out their task and also limits the County's ability to implement the ordinance effectively. Another related concern raised by the group is the lack of an overall vision for the protection of the watershed and its watercourses. Given the complex variety of land uses and types of watercourses within the watershed, the Task Force concluded that a comprehensive watershed master plan is needed to adequately protect these resources into the future.

The Task Force makes the following recommendations:

- The County should collect the baseline information listed below regarding streams. This information will be used as a planning and permitting tool to better identify and better address creek-related issues.
 - 1) Prepare an inventory of lots that adjoin watercourses and thus would be affected by the ordinance.
 - 2) Inventory the watercourses and riparian areas within the watershed, and break them down into various classifications based on factors such as the watercourse's physical characteristics.
 - 3) Identify all of the storm drain outfalls in the watercourses. If someone proposes to build a home, or develop a lot, the County should be able to identify where runoff from that development will enter the creek.
- The County should explore methods and potential funding sources to carry out the tasks above.
- The County should prepare a watershed master plan to inform how development should occur near watercourses within the watershed.

Recommendations for Ordinance Implementation

Several issues raised by Task Force members had to do with how the existing Watercourse Protection Ordinance is implemented. The definition of "watercourse" in the existing ordinance states in part: "Watercourse means any conduit or appurtenant structure or any natural or man-made channel through which water flows continuously or intermittently in a definite direction and course or which is used for the holding, delay or storage of water." A primary concern of the

group is that it has been the practice of the County to not apply the setback requirement in the ordinance to engineered flood control channels. It is the position of the Task Force that by not requiring a minimum setback from engineered channels, the County is limiting the potential for restoration of these man-made channels to a natural state in the future. While recognizing that naturalizing every engineered channel in the watershed is not a realistic goal, the Task Force believes that opportunities to naturalize and day-light creeks should be preserved to the extent feasible, while still protecting public health and safety and respecting the rights of property owners.

The definition of “watercourse” in the existing ordinance also states: “Natural channels shall generally be limited to those designated by a solid line or dash and three dots as shown in blue on the most recent U.S. Geological Survey 7.5 minute series of topographic maps. At the discretion of the director of public works, the definition of natural channel may be limited to those channels having a watershed area of fifty (50) acres or more, and this definition will be commonly used in the administration of this chapter except for those cases in which the director of public works determines that the definition must be extended to a natural channel with a watershed area smaller than fifty (50) acres in order to prevent a condition which is a menace to life and limb, endangers property, is a hazard to public safety, adversely affects the safety, use or serviceability of adjacent property, public way or drainage channel, or could adversely affect the water quality of any water body or watercourse were the definition not extended to a particular natural channel with a watershed area below fifty (50) acres.” According to USGS map definitions, “solid lines ... as shown in blue” represent perennial streams and “a dash and three dots as shown in blue” represent intermittent streams. While the “watercourse” definition in the existing ordinance does not explicitly preclude applying the ordinance to ephemeral streams, which tend to be smaller and flow less frequently than perennial or intermittent streams, it allows Public Works staff broad discretion in determining the watercourses to which a setback should be applied. In practice, the ordinance is not applied to ephemeral streams.

Recognizing that ephemeral streams are an important part of the watershed system as they feed into, and therefore affect, the larger intermittent and perennial streams, Task Force members agreed that a definition should be added to the ordinance for ephemeral streams and that the ordinance should apply to these watercourses as well. One member abstained from the vote on the ephemeral stream definition due to concerns that the proposed definition is too vague and applying the watercourse ordinance to ephemeral streams could place unreasonable restrictions on development and maintenance activities, particularly in rural areas. Further discussion of setbacks from ephemeral streams is included under “Recommendations for Determination of Creek Setbacks” below.

Section 13.12.320 of the existing watercourse ordinance contains three diagrams of watercourse cross-sections to illustrate how watercourse setbacks are determined under different circumstances (see Attachment A). According to Public Works Agency staff, recently adopted Federal Emergency Management Agency (FEMA) regulations have made the second and third diagrams obsolete. The remaining diagram shows how the 2:1 slope is applied to a natural watercourse to determine top of bank, the point from which the setback is measured. Task Force members reviewed the diagram and recommend that it be revised to better define the terms used and to clarify how the measurements are done. For example, how is the point from which the

measurement of the 2:1 slope starts determined? The Task Force also recommends that a second diagram be developed to illustrate application of the setback requirement to an engineered channel.

The Task Force makes the following recommendations:

- The County Watercourse Ordinance should apply to all types of watercourses as defined in the ordinance, including engineered flood control channels.
- The County's long-term vision should be to restore man-made channels to a natural state when allowed by health and safety considerations.
- The County should include ephemeral streams in the watercourse definition in the Watercourse Protection Ordinance.
- Recommended Watercourse Definitions – (Modified from Definition in Existing Ordinance):

"Watercourse" means any conduit or appurtenant structure or any natural or man-made channel through which water flows continuously or intermittently in a definite direction and course or which is used for the holding, delay or storage of water. Channels shall include perennial streams, intermittent streams, and ephemeral streams.

"Ephemeral stream" means a naturally occurring stream with a defined bed and bank that flows only in direct response to precipitation, flows no more than 30 days per year, and flows to an intermittent or perennial stream. Ephemeral streams do not include swales or sheet flow.

"Intermittent stream" means a stream that flows at certain times of the year, usually has water for at least 30 days after a storm, should have a defined stream channel, and is commonly designated by a dash and three dots as shown in blue on the most recent U.S. Geological Survey 7.5 minute series topographic maps.

"Perennial stream" means a stream that normally has water in its channel at all times and is designated by a solid blue line on the most recent U.S. Geological Survey 7.5 minute series of topographic maps.

"Sheet flow" means an overland flow or downslope movement of water taking the form of a thin, continuous film over relatively smooth soil or rock surfaces and not concentrated into a small stream. The Watercourse Protection Ordinance does not apply to sheet flow.

"Swale" means a slightly depressed area that primarily serves as a vegetated flow path in the landscape, connects the area to a wetland or stream, and lacks differentiation between bed and bank. The Watercourse Protection Ordinance does not apply to swales.

Recommendations for Determination of Creek Setbacks

The existing watercourse ordinance establishes a minimum setback of 2:1 + 20'. The setback is measured from the "top of bank," which is either the point where the slope of the bank of an open channel approaches the horizontal or, if the bank is steeper than a 2:1 slope (two feet of horizontal distance for every foot of vertical distance), the point at which a line determined by calculating a 2:1 slope from the toe of the bank intersects the adjacent ground. An important issue for the Task Force was that the County tends to require the 2:1 + 20' minimum setback for developments adjacent to watercourses, and rarely requires a setback that is greater than the minimum. Generally, the group felt that the County does not adequately evaluate circumstances in which the setback should be greater than the minimum.

Consideration of what constitutes an adequate watercourse setback comprised the majority of the Task Force's discussions. The group began with a general discussion of setbacks, but recognized the need to separate consideration of the urban and rural areas, given the differences in physical characteristics, the type of development allowed, and the issues that apply in these areas. The discussion of setbacks within the urban area was further broken down by type of watercourse: engineered channel, mixed urban (a mix of engineered channels, culverts, and natural creeks), and natural creeks.

The group concluded that no single setback requirement is appropriate for all types of watercourses, but the question of how to determine an appropriate setback is difficult to answer since it depends a great deal on site-specific conditions. After much discussion, Task Force members agreed to maintain the current 2:1 + 20' minimum setback for engineered channels and for natural perennial or intermittent streams. They also developed a list of seven criteria to be used on a case-by-case basis to determine whether the setback should be greater than the minimum setback. While recognizing the importance of protecting life and property, these criteria also take into consideration factors such as preservation of riparian habitat and water quality. The intent is for County staff to develop a creek classification system through which setbacks are determined based on the type of watercourse and the physical characteristics of the watercourse.

As noted above, the Task Force agreed to recommend that setbacks be required for ephemeral streams in both the urban and rural areas. Members also agreed that there should be no minimum setback for ephemeral streams, but that an appropriate setback should be determined based on the same seven criteria recommended for the determination of a setback greater than twenty feet for other types of watercourses.

The setback requirements in the current watercourse ordinance, which are generally applied only to natural perennial and intermittent streams, are required for all structures constructed in both the urban and rural areas. There was disagreement among the Task Force members as to whether the recommended requirement for setbacks from ephemeral streams should be applied to agricultural structures such as barns and sheds. The Task Force agreed that placement of all types of structures in rural areas over ephemeral streams should be avoided but allowed when necessary for the reasonable enjoyment of the property as presented in Table 1. The Task Force agreed that requiring setbacks from ephemeral streams in all cases could place a burden on

agriculture by sometimes making the siting of agricultural buildings difficult in the canyonlands. Protection for ephemeral and all stream types is also provided by other regulations and programs such as the Grading Ordinance and the California Department of Fish and Game which requires Streambed Alteration Agreements to control stream modifications such as rechanneling and diverting streams, stabilizing banks, implementing flood control projects, stream crossings, and diverting water.

Section 13.12.190 of the existing Watercourse Ordinance exempts agricultural operations from the provisions of the ordinance, “as long as these activities do not significantly pollute or damage watercourses or cause excessive erosion of banks and deposition of sediments in watercourses thereby requiring abatement measures and imposing cost burdens on the district and its taxpayers.” Section 13.12.030 of the existing ordinance defines “agricultural operation” as “any land-related activity for the purpose of cultivating or raising plants or animals or conserving or protecting lands for such purposes when conducted on agriculturally zoned lands, and is not surface mining or borrow pit operations nor preparation for construction or construction of any structure for human occupancy.”

A point of consensus that came out of discussions about the rural areas was that Task Force members support agriculture in the watershed and do not want to burden agricultural operations with restrictions that might threaten their ability to continue. The group agreed that the exemption for agricultural operations that is in the current watercourse ordinance should be maintained. There was some concern among members of the group that, if not managed properly, agricultural operations may have a negative impact on creeks in the rural area, and ultimately on downstream watercourses as well. Therefore, the Task Force recommends that the County work to educate property owners in the rural area about best management practices and encourage them to work with organizations such as the Alameda County Resource Conservation District (RCD) and the Natural Resources Conservation Service (NRCS) to protect and enhance the creeks on their property.

The Task Force makes the following recommendations:

- The minimum setback for man-made and natural perennial and intermittent watercourses should be 2:1 + 20’ for new development. Existing legal development within the creek setback should be allowed to remain and to be rebuilt if damaged or destroyed, but not expanded beyond its current footprint, if the cost of restoring the damaged portion does not exceed 75 percent of the cost of replacing the entire structure, as defined in Section 17.52.680 of the County Zoning Ordinance.
- Recognizing that a single setback is not appropriate for all types of watercourses, it should be stressed in the County Watercourse Ordinance that the minimum required setback is only a minimum. The ordinance should establish a process using the criteria listed below for determining when a setback should be larger than the minimum.
- The following criteria should be used to determine when a setback should be larger than the minimum. The order in which the criteria are listed does not indicate the priority they should

be given in determining an appropriate setback. Priorities may vary from one property to another, depending on site-specific circumstances.

Criteria:

- 1) Protect life, property and bank stability during higher flows and flooding
 - 2) Protect creek aquatic and riparian habitat that constitute one of our most valuable eco-systems.
 - 3) Protect creek-side areas where aquatic and riparian habitat could be restored
 - 4) Create a pervious area that absorbs run-off and filters pollutants and sediments
 - 5) Protect creek and bay water quality
 - 6) Protect the scenic value of creeks
 - 7) Expand public access and recreation where appropriate
- County staff should further develop the above criteria for inclusion in the Watercourse Protection Ordinance or as guidance when applying the Ordinance. The following list provides examples of evaluation points that could be used to determine if each of the above criteria are a concern for the project being considered:
 - 1) What are the geomorphic characteristics of the land surrounding the creek and what is the potential for flooding, land erosion, property damage, and drowning?
 - 2) The riparian zone is the transition zone between the creek's aquatic habitat and the surrounding terrestrial habitat. What is the current presence and diversity of native plants and animals in the creek and the surrounding riparian zone? How far does the riparian zone extend? Are there trees that provide shade for the creek? Does the creek provide potential habitat for fish for other critical species? Is the section of creek part of a corridor for the movement of aquatic and terrestrial animals?
 - 3) Was the aquatic and riparian habitat previously altered or destroyed (e.g., by grading or installation of an engineered channel)? What area next to the creek should not be developed so that the riparian area may be restored now or at sometime in the future?
 - 4) Does runoff from the surrounding areas flow across the project site and does the ground surface on the project site function as a natural pervious surface that absorbs run-off and filters pollutants and sediments before the water enters the creek?
 - 5) Is space needed outside the minimum creek setback area for engineered stormwater treatment systems to retain and filter the runoff before it enters the storm drain or creek?
 - 6) Is the project site located on a section of creek that has existing visual and natural creek-related geomorphologic and biological assets and/or is the location highly visible to the public?
 - 7) Does the site have a high potential for providing homeowners or the public access to or recreational use of the creek area?
 - The County should apply the same setback rules (as recommended by the Task Force) to all perennial (blue line) and all intermittent (blue dot and dash line) streams regardless of their location (in both urban and rural areas).
 - The County should apply different setback rules to ephemeral streams than those for perennial and intermittent streams.

- The County should allow the setbacks for ephemeral streams to be less than the minimum setback recommended for perennial and intermittent streams (2:1+20') if determined to be appropriate. For properties where development is managed under Measure D, construction of permitted structures within ephemeral streams should be limited to minimize impacts listed in Table 1, List B, allowing for the property owner's reasonable enjoyment of the property. This extra allowance for Measure D lands is important because development of permitted structures is limited by Measure D to two acres and it is often difficult to find two acres in canyonlands that does not have an ephemeral, intermittent, or perennial stream.
- The same seven criteria should be used to determine the setback for ephemeral streams as those previously recommended above for determining when setbacks for perennial and intermittent streams should be larger than the minimum.
- Through outreach and education, the County should encourage property owners outside the Urban Growth Boundary, to use conservation and creek protection related best management practices and to work with the Alameda County Resource Conservation District to protect and enhance watercourses within the watershed.

Recommendations for Development within Creek Setbacks

Section 13.12.310 of the watercourse ordinance gives the Director of Public Works the authority to grant a permit for limited development within a watercourse setback under certain circumstances. Section 13.12.090 of the ordinance establishes a procedure for consideration of the permit. The feeling among the Task Force members was that the current process gives too much authority to one individual without providing for adequate public notification and involvement in the decision-making process, resulting in a process that lacks transparency. There was also concern that the existing ordinance does not specify factors that should be taken into consideration in the Director of Public Works' decision. The Task Force recommends that this process be revised so that the decision-making authority is shared by the Public Works Agency and the Planning Department, that a public notification process be included, and that a public hearing be held to provide an opportunity for the public to comment on the permit application before a decision is made.

Recognizing that there may be circumstances in which it would be appropriate to allow certain types of development within a creek setback when no other alternative exists, the Task Force considered what types of development might be allowed. Rather than create a list of all types of development that could be permitted, the group developed two sets of findings, one for public uses such as trails and one for private uses (see Table 1 on page 15). The Task Force recommends that the County be required to make these findings before development within a creek setback can be approved to ensure that factors of concern to the group are taken into consideration in the decision-making process.

Task Force members recognize that some existing buildings are currently legally non-conforming and additional existing buildings may no longer conform to the creek setback

requirements in the watercourse ordinance if their recommendations are implemented. The group was concerned about protecting a property owners' ability to rebuild an existing building in the event that it is damaged or destroyed. The Task Force recommends that if an existing structure that would not be consistent with the watercourse ordinance, as it is proposed to be amended, is damaged to the extent that the cost of restoring the damaged portion does not exceed 75 percent of the cost of replacing the entire structure, that the structure be allowed to be rebuilt as it was in its original location. If the structure is more severely damaged or destroyed, the group recommends that every effort be made to bring the replacement structure into conformance with the revised ordinance. In order to facilitate this goal, the Task Force recommends that the zoning ordinance be amended to allow for reductions in zoning setbacks to allow the replacement structure to be relocated on the parcel to accommodate the watercourse setback. The group felt that this approach balances the objective of watercourse protection and a property owner's ability to continue to use their property.

The Task Force makes the following recommendations:

- Under the current County Watercourse Ordinance, the Director of Public Works is given the authority to grant a permit for development within a setback required by the watercourse ordinance. In order to protect riparian resources, the Creek Task Force recommends that the permit approval process be revised so that this decision-making authority is shared with the County Planning Department to create a collaborative decision-making process that combines the appropriate expertise of Public Works, the land use planning perspective of the Planning Department, and recognizes environmental perspectives.
- The approval process for permits for development within the creek setback should require a public hearing to allow for public comment on the permit application, public hearing notices to all owners of property within a minimum of 300 feet of the subject property as well as any other interested parties who have requested such notification, and an appeals process.
- The following findings should be used by the decision-making entity to determine whether to grant a permit for development within the designated creek setback:

TABLE 1
Findings Required to Grant a Permit for Development within a Creek Setback

In order to grant a permit for development within the designated creek setback, the decision-making entity must make ***EITHER ALL*** of the findings from List A ***OR ALL*** of the findings from List B. To the extent feasible, in cases where the findings on List A can be made, consideration must also be given to all of the Findings on List B.

List A – Public Improvements

1. The proposed public improvement is necessary to protect the health and safety of the occupants of the subject parcel and/or the surrounding area, including upstream and downstream properties; or the proposed public improvement will serve the public good and will be accessible to the general public.
2. Alternatives to the proposed development were considered and no physically and economically viable alternative to the proposed development that does not involve development within the creek setback was found.
3. The proposed development will not create a hazard to people or structures either on the subject property or on properties upstream or downstream.
4. The proposed development will not result in the removal or degradation of significant in-stream or riparian corridor habitat, nor will it harm the health of the aquatic and riparian habitat and function in the creek system.

List B – Private Development

1. The proposed development is necessary for the subject property owner’s reasonable enjoyment of the property, as otherwise allowed under County ordinances.
2. Alternatives to the proposed development were considered and no physically and economically viable alternative to the proposed development that does not involve development within the creek setback was found.
3. The proposed development will not create a hazard to people or structures either on the subject property or on properties upstream or downstream.
4. The proposed development will not create, exacerbate, or prevent the abatement of erosion and bank destabilization problems either on the subject property or on properties upstream or downstream.
5. The proposed development will not increase stormwater runoff into the watercourse. Where feasible, pervious surfaces will be used in place of impervious pavement.
6. The proposed development will not degrade the water quality of the watercourse through the disposal or deposition of oils, chemicals, poisons, or trash; or through increased sedimentation and particulates from disturbed soils either on the subject property or on properties upstream or downstream.
7. The proposed development will not result in the removal or degradation of significant in-stream or riparian corridor habitat, nor will it harm the health of the aquatic and riparian habitat and function in the creek system.
8. The proposed development will not further impede the maintenance or repair of the watercourse or related structures either on the subject property or on properties upstream or downstream.

- If an existing structure that does not conform to setbacks required by the current watercourse ordinance is damaged or partially destroyed to the extent of seventy-five (75) percent or less, as defined in Section 17.52.680 of the County Zoning Ordinance, restoration of that structure should be permitted provided that such restoration is permitted by all other County ordinances. Section 17.52.680 of the County Zoning Ordinance states that: “The proportion of damage or partial destruction shall be based upon the ratio of the estimated cost of restoring the building to its prior condition to the estimated cost of duplicating the entire structure as it existed prior thereto.”
- The County zoning ordinance should be revised to allow for flexible zoning setbacks when replacing non-conforming structures that have been damaged or destroyed to an extent greater than seventy-five (75) percent, as defined in Section 17.52.680 of the County Zoning Ordinance, so the structures may be brought into conformance with current creek setbacks.
- The Creek Task Force recommends that the County Zoning Ordinance be amended to add language that would allow flexible zoning setbacks for properties adjacent to creeks for the replacement of damaged structures:
 - For properties adjacent to watercourses (as defined in the County watercourse ordinance), a structure that has been damaged more than seventy-five (75) percent, as defined in Section 17.52.680 of the County Zoning Ordinance, may only be restored in compliance with the current watercourse setbacks required in the County watercourse ordinance.
 - If a structure that has been damaged more than seventy-five (75) percent, as defined in Section 17.52.680 of the County Zoning Ordinance, cannot be restored to its original size in its original location on the property in conformance with the current watercourse setback requirements in the County Watercourse Ordinance, the required zoning setbacks may be reduced below the minimum zoning setbacks required for the zoning district in which the property is located, to the extent necessary to comply with the watercourse setback.
 - Where the required zoning setbacks are reduced to accommodate the watercourse setback, the total square footage of the restored structure cannot exceed that of the damaged structure.
 - The flexible setback provision should apply in all zoning districts with required setbacks.
 - Zoning setbacks shall not be reduced to accommodate the watercourse setback if the reduced setback(s) would result in a violation of any other County ordinance or code.
 - Zoning setbacks shall not be reduced to the extent that health and safety on the subject property or the surrounding properties would be compromised.
 - If the zoning setbacks cannot be reduced to the extent necessary to allow for the replacement of the structure in compliance with the current watercourse setbacks required in the County watercourse ordinance, the property owner may apply to the County for a

permit to develop within the watercourse setback in accordance with the County watercourse ordinance.

Recommendations for Property Owners' Rights and Responsibilities

Section 13.12.060 of the watercourse ordinance states: "Every person owning property through which a watercourse passes, or said person's lessee or tenant, shall keep and maintain that part of the watercourse within said property reasonably free of trash, debris, excessive vegetation and other obstacles which would pollute, contaminate or significantly retard the flow of water through the watercourse; shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function or physical integrity of the watercourse; and shall not remove healthy bank vegetation beyond that actually necessary for said maintenance or other maintenance specified in Section 13.12.190C of this chapter, nor remove said vegetation in such a manner as to increase the vulnerability of the watercourse to erosion." Many of the Task Force members own property adjacent to a creek within the watershed. The general feeling within the group was that the County does not provide sufficient information about the individual property owner's responsibilities for maintaining the creek or adequate guidance about how to perform this maintenance, or adequate support to accomplish these tasks.

The County Public Works Agency has prepared a document titled "Creek Care, A Guide for Residents in the San Lorenzo Creek Watershed." This booklet includes general information about watersheds and creeks, and provides advice for watershed residents about how to maintain the health of the creeks in the watershed. The Task Force believed that the County's creek care guide could be expanded to provide more specific information for property owners and it should be made more widely available. It was also suggested that the County consolidate all information about the rights and responsibilities of property owners and the responsibilities of the County, as well as restrictions on uses, activities, and structures near watercourses, in one ordinance or similar mechanism that is separate from the watercourse ordinance, so that is easily accessible to the public.

There was also concern among the Task Force members that the County does not provide the same level of maintenance in and around creeks that it had in the past, placing more responsibility on the property owner for this work. The group recommends that the County seek funding to restore the previous level of maintenance.

The Task Force makes the following recommendations:

- The County should increase annual maintenance efforts to the level of service provided by the County prior to 1990 and secure revenue enhancement (i.e. assessment districts, property tax, grants) that would allow for this increased service.
- The County should consider a separate creek ordinance that addresses in detail all issues pertaining to creek maintenance including property owner rights and responsibilities, and the

responsibilities of the County. In addition, the uses, activities, and structures that are or are not allowed within a specified distance of a creek should be clarified.

- The County should revise and enhance its existing creek care guide, distribute the revised guide to the owners of property adjacent to creeks, and make the guide available on the county website.

Recommendations for Grading Related to Creeks

Early in the process, Task Force members brought to the table certain issues of concern pertaining to grading. Members expressed concern about properties being graded and left undeveloped for extended periods of time. Erosion control measures often fail or are not always in place, resulting in erosion of creek banks and deposition of silt into local creeks.

Other concerns included past and current projects for which a grading permit should have been obtained, but work begins without application for a permit, and the permit is applied for after the construction, the permit is never obtained, or the permit is granted regardless of the violation. There exists a mentality that it is easier to beg forgiveness than ask permission. Consequences for violations are inadequate to deter non-compliance.

The Task Force makes the following recommendations:

- The County should enforce regulations for grading projects that are permitted and should be permitted (but for which a permit was not obtained), and new or existing ordinance should be developed or modified to allow for this enforcement.
- The County should develop appropriate process to ensure that timing between the issuance of a grading permit and construction of a project does not allow for erosion into the creeks and storm drains.
- If development is delayed after grading has been completed, the land owner is responsible for maintaining erosion control measures and compliance with the County's NPDES permit requirements and the County should enforce compliance.
- In cases when a stormwater permit is issued, a grading permit should not be issued until the stormwater permit is issued.

Recommendations for Stormwater Management and Discharge Control

The Task Force recognizes that the County has a new Stormwater Municipal Regional Permit and that this permit outlines the County's responsibilities and compliance measures. One area of concern in the new permit is the County's responsibility to inspect and enforce the maintenance of stormwater treatment facilities that are more readily required as part of construction projects.

The Task Force makes the following recommendations:

- The County should ensure that existing stormwater treatment measures remain intact and function as designed.
- The County should provide the appropriate level of inspection services needed to effectively inspect and enforce maintenance of stormwater treatment measures and secure revenue to enable these services.
- The County should enforce stormwater regulations for grading projects that are permitted and should be permitted (but for which a permit was not obtained), and develop new or modify existing ordinance to allow for this enforcement.

PROCESSES FOR COMPLETING THE TASK FORCE REPORT AND AMENDING THE WATERCOURSE PROTECTION ORDINANCE

The draft recommendations report was presented at public meetings before the Castro Valley Municipal Advisory Council, the District 4 Agricultural Committee, the County Agricultural Advisory Committee, and the Board of Supervisors' Unincorporated Services Committee. The Task Force has made revisions to the draft recommendations based on public comments received at these meetings; and will ask the Planning Commission for their recommendation before the full Board of Supervisors is asked to accept the report and direct Public Works staff to amend the Watercourse Protection Ordinance in accord with the Task Force's recommendations.

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Attachment A:

Alameda County Watercourse Protection Ordinance

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Attachment B:
Minority Report by Rex Warren

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Creek Task Force Recommendation Minority Report

My name is Rex Warren and I am on the Creek Task Force. I am a third generation agricultural property owner in Cull Canyon. Along with Kristy Piexoto, I have been a member of this Task Force since the beginning representing the Agricultural Property Owners. There seems to be a misconception that the Task Force actually studied the issues. The correct term, that should be used, is that the Task Force discussed the issues. Not one report or data set was generated on the San Lorenzo Creek Watershed for this Task Force to study. One of the first and only consultants brought in to speak to the Task Force was the group that worked on the Napa County Creek Ordinance Update. They stressed that we produce plenty of data so there were no holes or gaps to question the Task Force recommendations. That was never done. The EPA website has a link to the "Handbook for Developing Watershed Plans to Restore and Protect Our Waters". Two of the first chapters explain how to Build Partnerships, identify and engage the stakeholders and gather existing data and create an Inventory to determine a base point so progress can be measured. The Task Force did not use either the EPA Guidelines or the chapter recommendations.

Kristy and I have had numerous meetings with the many Rural Property Owners in Cull Canyon to discuss this Creek Ordinance Update, and the Cull Canyon property owners, along with the Alameda County Agricultural Advisory Committee and the Alameda Contra Costa Cattleman's Association, are opposed to many aspects of the update. In speaking to other Canyon Property Owners in Crow, Norris, Eden and Palomares Canyons we have found few people in favor of these recommendations. We have about 100 signatures from Rural Property owners opposing the Updates and the process, and many more who are willing to sign. At the District 4 Agricultural Meeting, hosted by Supervisor Miley in Castro Valley, the overwhelming majority of attendees opposed these recommendations. Not one agricultural property owner at the meeting was identified as being in favor of the Task Force Recommendations. The Agricultural Property Owners concerns were never fully addressed in this final draft of recommendations which should be part of the procedure.

What we are asking for tonight is for the Planning Commission to make a recommendation to County Staff to work with the Alameda County Agricultural Advisory Committee to come up with a workable Creek Ordinance Update for the properties outside the Urban Growth Boundary. Studies should be done to provide us with real data to determine what is affecting the Creeks in the Canyon Lands and what can be done to improve their health. Agricultural Property Owners are not against healthy Creeks in fact we can be rewarded for them through more productive property and through State and Federal Programs. Is it too much to ask that this be done correctly the first time?

The present Ordinance treats Agricultural Properties differently. The Board of Supervisors adopted an interim ordinance on May 4, 2006, which placed a moratorium on certain types of creek side development in the urban Unincorporated Alameda County.

Agricultural Properties were exempted from that Moratorium so the precedent already exists.

This whole process with the TF started because of the approval of Crow Creek a 28 home residential development on 8.5 acres in the urban area on a creek that people were upset about. The overwhelming majority of the issues identified by the TF are in the urban areas.

Never once during the Task Force meetings has an Agricultural/Canyon Land Property in these areas been identified as in violation to the Creek Ordinance. Throughout the process all violations that were mentioned were issues covered under the Grading Ordinance, not the Creek Ordinance. Never once was a building in the rural areas noted or mentioned in violation.

Some of the issues of concern are:

The inclusion of the term ephemeral stream and the definition. One of the only experts brought in for a presentation was Terry Huff of the NRCS and he recommended against the inclusion of this term because of its ambiguous definition and until more studies can be done. Problems with urban creeks are relatively easy to identify and address by the Ordinance; however, problems with rural creeks are not as clear; especially with ephemeral streams. Thus the impacts of including ephemeral streams in the ordinance are not clearly defined or understood, potentially placing undue burdens on rural property owners. The Task Force didn't recognize that on a 100 acre parcel over 98% of the property is left as open space for water to filter and percolate back into the ground or creeks.

In town for new development there are State and City water quality control requirements for storm water runoff. The recommendations encourage less use of concrete for curbs, gutters and driveways. They encourage the construction of grassy swales so the water can slow down and percolate back into the ground. In the canyon lands we don't have concrete curbs, gutters or side walks and most driveways are gravel and we have plenty of grassy swales that occur naturally to absorb the water. The Task Force Recommendations do not recognize this, and don't give credit to the properties that provide this.

Measure D already limits us to where and what we can build on the properties. We are allowed a two acre building envelope to site all structures in and the remainder of the property is open space. In the Canyon lands where it's steep and narrow it's already challenging to find a suitable 2 acre building site that's feasible. Under Measure D the two acre gross building site does not allow a property owner to net out any creek area or setbacks. So the 2 buildable acres is not really two buildable acres. Rural property owners already know how challenging and expensive it is to get an approved building site. This new ordinance will only make it more challenging and costlier.

No actionable Science or Data with regards to the Canyon Lands watersheds were used to make these recommendations. New scientific reports and data have to be generated to provide an accurate assessment of the present problems and health of the creeks. This way we can measure what affects the recommendations have on improving the health of the creeks. If pollution is a concern identify what pollutants are of concern. If Silt loads are the concern identify areas of concern. These same Canyon Lands are identified on USGS maps as some of the most landslide prone areas in the State. There is a new report by the San Francisco Estuary Institute called "The pulse of the Estuary 2010". According to Jay Davis, a senior scientist at the institute and author of the report, "Ten years ago we didn't have good hard data." One of the studies in the report said that a decade ago, scientists estimated that 24% of the sediment and pollution getting into the Bay came from urban creeks and storm water. New data suggests that figure is now 56%. The Agricultural Industry as a whole knows how to work with science and data on watersheds and we presently do with State and Federal conservation programs.

The problem with the present creek ordinance is not in the document, it is in the definition and different department interpretations of that document. These interpretations should be standardized. Because of the TF, new procedures at the County have been implemented. Measure the effects these new procedures have and determine if they have a positive effect.

The County should identify the specific problems that agricultural properties or properties outside the UGB have caused or are causing to the creeks. Included in this would be actual scientific data and reports. This way the land owners can better understand what the TF is trying to accomplish, and could work towards improvement in those areas.

The County should work with the Rural Property Owners and NRCS on outreach and education of the watersheds and programs available to enhance them. Best Management Practices should be encouraged and used.

It's already tough enough to keep the legacy agricultural owners on the properties. Adding more costly regulations must be weighed against the adverse effects to the agricultural community, particularly if the problem is not identified or defined. The Agricultural Property Owners have never once said they wouldn't approve of a Watercourse Ordinance update, it's just that we want our input considered in the document. Please recommend that County Staff work with the Alameda County Agricultural Advisory Committee to produce workable document that address the real issues, and if not please explain to us the reasons why. Thank you for your time.