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Ms. Marie Meredith
City of Santa Rosa
Community Development Department
Post Office Box 1678
Santa Rosa, CA 95402-1678

10/6/96

re: DEIR / DEIS comments

Dear Ms. Meredith,

Please find the attached documents:

- 1) "Commentary on the Santa Rosa Subregional Wastewater Treatment Project DEIR / DEIS" by Tom Yarish, and
- 2) "Anticipated Severe Erosional / Sedimentation Impacts of the Proposed Reservoirs and Associated Irrigation" by Eugene Kojan, Ph.D.

These documents are submitted on behalf of Friends of the Esteros / Environmental Action Committee of West Marin and on my own behalf.



Tom Yarish, Co-chair
Friends of the Esteros.

CITY OF SANTA ROSA
P.O. Box 1678
Santa Rosa, CA 95402

OCT 07 1996

DEPARTMENT OF
COMMUNITY DEVELOPMENT

**COMMENTARY ON THE SANTA ROSA SUBREGIONAL
WASTEWATER TREATMENT PROJECT DEIR / DEIS**

**SUBMITTED BY
TOM YARISH, CO-CHAIR
FRIENDS OF THE ESTEROS**

10/6/96

Accompanying Document:

**"ANTICIPATED SEVERE EROSIONAL / SEDIMENTATION
IMPACTS OF THE PROPOSED RESERVOIRS AND ASSOCIATED
IRRIGATION", by Eugene Kojan, Ph.D. (29 Sept 1996).**

The following commentary is organized under ten general topics. This commentary incorporates by reference all of my previous testimony and commentary, both written and spoken, related to the current and previous program and project DEIR / DEIS documents.

001

The issues discussed are considered to be deficiencies or inadequacies in the DEIR / DEIS that must be answered and resolved. The DEIR / DEIS is hereinafter cited as "the document."

1) WATER QUALITY

002

The document in general discusses impacts of identified chemicals and pollutants in the wastewater but fails to discuss cumulative impacts of the wastewater when released, irrigated, or accumulated in specific aquifers, waterways, storage sites and habitats where the wastewater constituents may be accumulated, magnified, synergized or combined by pre-existing natural and man-made compounds. The section on Environmental Estrogens explicitly stipulates to the potency of many of these conditions, even though there are few regulatory objective standards for this class of

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pollutants. The document asserts that the evidence of direct adverse biological
estrogenic impacts remains anecdotal, ambiguous or controversial. However, the
growing body of science on the hazards of low-level and even below-detection level
pollutants raises extremely serious questions about the impacts of wastewater on the
longevity and health of all species. Therefore it is a key deficiency of the document to
ignore the characterization of potential interactions of the wastewater in the context of
receiving watersheds and biology. | 003 (cont.)

QUESTION: What are the thresholds of significance used to determine adverse
short-term and long-term effects for each class of pollutant identified in the
wastewater and the related receiving waters? By what methods were these thresholds
of significance determined and validated? | 004

Similarly, wastewater irrigated into the watersheds of the Esteros Americano
and de San Antonio not only carries its own load of pollutants and constituents but also
poses the possibility of combining with existing levels of toxins, pollutants and nutrients
already accumulated in the receiving soils and waterways. The document must answer
these questions prior to advancing any credible range of mitigations; mitigations must
be identified and fully described prior to any credible cost estimates. Regulatory and
agricultural mitigations, programs and practices have to protect critical watersheds
and habitats, not just in the lifetime of the project, but into perpetuity. Although the
document identifies many the problems and potential short-term remedies, these
findings are mere recommendations without specific project-based programs and
implementations. Sources of funding for agricultural management, education,
monitoring and enforcement are described without any sense of long-term commitment
or viability, and no credible assurances of environmental protection are implicitly or
explicitly given. | 005 006 007

These same considerations apply to the Russian River and its watershed where
pollutants from all sources--agriculture, non-point sources, highway runoff, leaking
private septic systems and large upstream municipal dischargers--combine in the
Russian River and are directly fed into the major supply of human drinking water for
Marin and Sonoma Counties. A singular characterization of the project wastewater
quality is important but lacks the crucial analysis of cumulative impacts in the common
| 008

watershed. Additional mitigations, such as advanced water treatment at all downstream water systems—public and private—are not analyzed and therefore cost projections for projects that impact drinking water supplies are not credible in this document. | 009

2) POPULATION GROWTH INDUCING FACTORS.

The document claims that it will have minimal growth inducing impacts, that it merely serves the growth projections established by the constituent jurisdictions of the project. In this matter the document inadequately reflects that its design parameters are based on future growth projections that were generated in the context of assumptions about the environmental carrying capacity for a wide range of human activities and man-made pollutants. It is plainly apparent from existing levels of traffic congestion, air and water pollution, habitat loss, endangered species and a general degradation of the quality of urban and sub-urban living conditions that many of these key planning assumptions were erroneous and destructive. Other assumptions that population growth and urban sprawl are necessary for real economic growth exist only as moribund myths. This document is flawed by its reliance upon such myths. | 010

In fact, the document, by failing to acknowledge the questionable rationales of the growth projections, also fails to analyze key elements of environmental degradation that will directly result from the completion of any one of the four alternatives that realize the regional growth projections. | 011

Proposals for large scale storage projects appear not to consider the compelling need for constant improvement in water conservation and recycling measures. Projects such as the Two Rock/Button Ranch dam facility have the capacity to serve unlimited growth in the urban corridor, particularly after the projected population figures are exceeded. Advanced conservation measures, advanced recycling, and unlimited discharge and storage capacity in one or more massive storage sites leaves the issue of population growth management wide-open into the indefinite future. Based on current trends, population growth is a negative impact in local, regional and global contexts. The document is wholly inadequate in this aspect. | 013

QUESTION: What is the document's rationale for continued urban expansion 015
within the service area of the project? What rationale is used to isolate the document
from the adverse effects of continued urban expansion?

3) INDUCED SEISMICITY

Appendix F-2 totally ignores the subject of induced seismicity in the West 016
County Alternative. Using the CD-ROM search utility no other references are shown in
the document. According to Dr. Kojan, the issue of induced seismicity and consequent
soil instabilities due to storage for West County alternatives is a very significant
inadequacy in the analysis of geologic impacts. 017
There is no scientific dispute that
reservoirs create seismic activity, and Dr. Kojan asserts that it is imperative that the
document contain analyses of cumulative impacts of reservoir loading, and in the case
of the Two Rock site, the combined and cumulative effects of reservoir loading and the
adjacent Sonoma County landfill/dump. 018
Induced seismic activity in the area poses
definite threats to water quality and soil stability from leaks from the reservoirs and
from the landfill itself.

So-called "inactive" faults, like the Bloomfield Fault, cannot be discounted as 019
likely sources of earthquake activity. Storage and irrigation-induced changes in pore
water pressures pose serious threats that the document has not analyzed.]

QUESTION: What is the potential for induced seismicity in the West County 020
Alternative?]

4) GEOLOGY--WEST COUNTY

The document discounts the landfill as a potential source of water pollution 021
because it is lined and because it is allegedly not in the watershed of likely storage sites.
Yet the document does not support this finding (as far as I can determine using the CD-
ROM index). Others have suggested that hydrostatic pressure of water in the Two
Rock storage site would cause leachate to percolate out of the landfill. Lined landfills
apparently are notoriously leaky, and therefore increased pressures in the aquifers of

the Two Rock/Button Ranch site could conceivably reach the landfill. The document 021 (cont.)
does not give adequate treatment to this possibility.

The attached commentary by Dr. Kojan describes serious inadequacies in the 022
West County geologic analysis. Also lacking are specific mitigations and related costs. 023
It is likely that once these costs are identified, irrigation and storage in West County
will be infeasible from both a cost and environmental point of view. The document is
wholly inadequate in this regard.]

QUESTION: What specific assurances can be given that seismic activity and / 024
or hydrostatic pressure will not increase the level of leachates from the landfill?]

5) JOINT PROJECTS WITH THE CITY OF PETALUMA.

Although project consultants have met with the City of Petaluma on possible 025
joint usage of a South County project none of the aspects of joint usage have been
identified in the document. A search of the CD-ROM does not show any citations.

The document does not identify or analyze the conditions, opportunities and
environmental / land use planning benefits (growth control, agricultural production,
open space, water conservation and reuse) posed by such a project and therefore is
wholly inadequate on this issue. There is no question that this matter was
appropriately discussed and identified in the course of the scoping process.

QUESTION: What was the rationale for not including the proposed joint
project in the document?]

6) STAKEHOLDERS CONSENSUS ON REUSE (SCOR).

In spite of over a year of active communications with the City of Santa Rosa 026
officials and consultants, the findings and recommendations of SCOR are not included
in the draft document. This is a serious omission and inadequacy in the document and
the scoping process.

The document must consider the recommendations of SCOR for:
1) phased, incremental project expansion; 2) public/private investment in agricultural
storage and reuse projects; 3) support for the most productive use of agricultural

irrigation; 4) avoidance of condemnation of agricultural properties; 5) long-term environmental protections and minimal discharges to the Russian River. 026 (cont.)

QUESTION: Why were the stakeholders discussions and recommendations not reflected in the document?

7) COASTAL SANCTUARIES AND ESTEROS.

The document identifies possible sources of pollution and changing estuarine conditions caused by irrigation, discharge, seepage and runoff, but gives little specific information or detail related to protective measures and mitigations. Irrigation-induced runoff and pollution from inadequately designed and managed agricultural operations remain a prime threat to the conditions of the federally-protected estuaries. (The document explicitly recognizes that many of these serious and significant impacts are impossible to mitigate.) 027 028

The document is inadequate in its descriptions of protections and mitigations and related long-term costs. Once these costs of operation, management, enforcement and liability are identified a West County project will not be feasible from the environmental or cost point of view. 029

QUESTION: In view of these insurmountable cost and environmental considerations should not the document explicitly disqualify or "deselect" the West County components as individually and collectively infeasible? What rationale remains for further consideration? 030

8) AGRICULTURAL PRACTICES

The document identifies but fails to describe, quantify and cost-estimate the long-term agricultural management practices, operations and mitigations required to insure environmental protections in perpetuity. The issues of monitoring, enforcement, liability and management programs are outlined as recommendations, but are lacking in specifics and commitment. The document is seriously inadequate in these crucial aspects of agricultural irrigation in the West County. 031 032

The document is inadequate in its analysis of the sediment carrying capacity of waters released either through direct discharge or through irrigation projects. This is a 033

critical issue bearing on the rates of erosion and sedimentation in all receiving watersheds, waterways and riparian and estuarine habitats subject to erosion and siltation. | 033 (cont.)

| It must be noted that literally hundreds of West County property owners and ranchers representing a large portion of the designated irrigation areas are opposed to a West County project. | 034

| QUESTION: Under what credible scenarios could West County agriculture compete with other areas in the range and value of agricultural products and in the volume of irrigated wastewater? | 035

9) RUSSIAN RIVER WATERSHED

| Cumulative nutrient and pollutant loading of waters in the jurisdiction of the Sonoma County Water Agency may require additional treatment of downstream water supplies. | 036

| The cumulative impact of the project on the Russian River and long-term biological health has not been adequately analyzed. Testing methodology, such as statistical averaging, short-term acute mortality fish studies, and controversial water quality models are inadequate measures of long-term and cumulative impacts, particularly in the context of low-level pollutants, notably the "environmental estrogens." | 037

| QUESTION: What means are recommended to protect the health of downstream users and biology (Marin and Sonoma Counties) from long-term adverse cumulative impacts of known pollutants? | 038

10) PUBLIC ACCESS.

| There have been a wide range of complaints about public access to the complete document. The costs of the publications have served to restrict general public access to the complete document. The cost of the CD-ROM (\$125) is prohibitive to most of the public, and the full set of printed volumes at over \$1,500 has served to severely limit distribution. Some designated libraries were either unable or unwilling to provide adequate access to CD-ROMs and / or the full set of volumes. | 039

None of the distribution documents includes the scoping report, the last two 039 (cont.)
volumes. Where the CD-ROM has been put in libraries, the public has had little or no
access due to technical problems, limited computer time, or limited personal time.

In my experience the index provided with the CD-ROM failed to work on some 040
key words like, "landfill", with the consequence that searches and references have been
problematical and uncertain. In some cases charts and tables were nearly unreadable.

Many others have complained that the format of the document has made it very 041
difficult to evaluate specific alternatives, since the alternatives are only defined in
generalized terms with insufficient detail for evaluation (see the above commentary.)

Respectfully submitted,



Tom Yarish, Co-chair
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