Local Agency Formation Commission of Mendocino County--LAFCO
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Ukiah, CA 95482
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March 23, 2011

Mr. Roger Mobley
County of Mendocino
Planning and Building Services Dept.
Ukiah, CA 95482

Re: DEIR for Ukiah Valley Area Plan

There are a number of issues or circumstances that exist today that will have an effect on land use planning and development and the UVAP. The two most critical issues are availability of water and wastewater capacity.

Water

I have historically sent two letters regarding the County's Water Supply Assessment Report. The first one was sent in response to the West Yost effort and the second was sent for the WSA created by Roland Sanford after the West Yost draft report was rejected by the County. I am therefore attaching both of those letters to this letter for purpose of comments for the DEIR about the circumstances of water within the Ukiah Valley. Accordingly, please include those letters as part of my comments.

As you will see from the letters, it is my belief that we have a critical circumstance for water for existing development within the Ukiah Valley and until and unless new sources of water are accomplished, new development should not be allowed. The primary evidence for this is evidenced by the need to reduce water consumption for existing development during the last drought. The letters provide greater explanation of this viewpoint.

Wastewater

There are two issues associated with development and wastewater service ability: (1) Growth and septage issues from onsite septic systems and; (2) Growth and wastewater capacity of existing service agencies..

Septage in Ukiah Valley

One of the larger existing issues affecting future land use planning in the Ukiah Valley is the ability to deal with septage from existing developments or future developments that use onsite septic systems. An onsite septic system consists of a septic tank and a leach field. A septic tank requires the periodic removal of solids for disposal. Existing development on private septic systems are dependent on the legal disposal of the septic tank contents, usually to a WWTP. All WWTPs in Mendocino County are publicly owned and operated. For reasons of negative impact

to the WWTP (e.g. hazardous material contamination disposed via the toilet), costs, and permit/regulatory issues, many agencies that historically accepted septage are not now doing so. Because of this, septage disposal is a County wide issue.

Historically, a significant amount of development has occurred in the Ukiah Valley on septic systems. The County's General Plan states that the City and UVSD are projected to grow by 10 to 60 percent over the next twenty-year period. It also indicates that the total employment is expected to grow by approximately 21 percent between 2000 and 2010, and then by another 21 percent again between 2010 and 2020. The Mendocino Council of Governments (MCOG) expects most of the employment growth to occur in the Ukiah Valley/Highway 101 corridor. This would be equivalent to over 2 percent growth in employment per year in the unincorporated Ukiah Valley area.

Many past developments in the Ukiah Valley area utilizing on-site septic systems are now reaching the limits of their useful life. Increased regulatory requirements for onsite systems have occurred since many of these areas were developed; therefore locations that were historically able to meet regulatory requirements may not now be able to do so. This circumstance will likely provide pressure for connection to the collection system of the UVSD. Past studies and reports have acknowledged this issue. Consider the following:

1. A 1977 Kennedy Engineers Report[1] made these statements on page II-I regarding growth and septage: *"The City of Ukiah and the Ukiah Valley Sanitation District provide facilities for collection and treatment of wastewater in the Ukiah Valley, serving an area of approximately 7.5 square miles. Three quarters of the present (service) population of 14,200 persons reside in the City of Ukiah, located in the central portion of the Valley. The Sanitation District extends to the north and south of the city limits and serves the unincorporated urban area and a portion of the area within the city limits. In addition, the present treatment facilities are used for treatment and disposal of septic tank pumpage for a large area in the vicinity of Ukiah.*"

   "The communities of Talmage and Rogina Heights are within the study area. Existing residences in Talmage and Rogina Heights have individual septic tanks and leach field disposal."

   "In an area of suitable soil conditions and soil percolation requirements, it is probable that development will continue without immediate need for extending collecting sewers into the development areas. In this case, septic tank pumpage can be accepted by the expanded and improved Ukiah treatment facilities."

2. A 1993 Kennedy/Jenks Report made the following observations (page 1.3) about the wastewater system and septage:[2] *"It is expected that the wastewater collection service area will be expanded by 2005 from the present 9.81 square miles to 11.2 square miles to include urbanizing areas west of Lake Mendocino into the East Valley areas of*

[1] Wastewater Collection System and Treatment Improvements, Project Report, August 1977, Kennedy Engineers
[2] Wastewater Treatment Plant Upgrade Facilities Plan, Final Report, May 1991, Kennedy-Jenks Consultants

Deerwood, Rogina Heights and Talmage; and to the area south of the plant up Boonville Road and to Burke Hill.

The growth rate is projected at 2% annual increase. This will result in a sewered population growth from the present 19,600 to 25,550 by 2005. In addition, the approximately 4,500 people served by septage disposal at the plant is expected to increase to 5,850 in the contiguous Ukiah Valley environs, while if all of the septage unsewered area in the County is disposed at the Ukiah Wastewater Treatment Plant, the population served by septage would be 45,000 by the year 2005."

3. In 2006, in response to a LAFCO Questionnaire[3] requesting a narrative description of probable need for additional public facilities and service in the next five years, this response was provided by UVSD: *"Areas that are currently developed but not connected to the sewer system are shown in the attached map of a possible extended service area because of the limited future capacity and ability of onsite septic tank/leachfield systems and community treatment ponds in those areas. These areas include Talmage, Rogina Heights and Deerwood."*

Currently, there are a limited number of locations in Mendocino County that will accept septage from other locations and for various reasons these locations may soon stop accepting septage. The following information was gathered in 2009 and therefore may be slightly out of date but are the present known circumstances for this issue for LAFCO:

1. The City of Ukiah recently finished an upgrade to their WWTP; a septage receiving station was not constructed.[4]
2. The City of Fort Bragg is not presently accepting septage at its plant and has no future plans to do so.[5]
3. The City of Willits is presently accepting septage at their existing plant. However, the City of Willits is in the process of building a new plant; anticipated completion is by the end of 2011. In 2009, Paul Caylor, Willits City Manager, indicated that a septage receiving station was not in the present design for the new plant and was not a present priority for the City; getting the plant completed for the City's need was first priority. He indicated that City staff had discussed the possibility and provided that it would be cost effective, would like to install a septage receiving station at a future time. He also indicated that if the City pursued development of a septage station, because of capital/investment issues, the cost of the project had to be self supporting; it would have to demonstrate the ability to pay for all associated costs. Nnone of the costs could be placed on ratepayers.[6]
4. Covelo CWD recently completed an upgrade to its WWTP. The upgrade included a septage receiving station but because of WWTP's size there are limitations as to the amount of septage that can be processed. The primary service area for the WWTP is the Covelo/Round Valley area with additional septage being imported from the Laytonville,

[3] Ukiah Valley Wastewater Municipal Service Review General Information Questionnaire
[4] Confirmed by phone interview with Ann Burke, Deputy Director of Public Works-Water and Sewer Division, City of Ukiah on 12/02/09
[5] Confirmed by phone interview with Dave Goble, Public Works Director, City of Fort Bragg, 12/02/09
[6] Summary of phone conversation with Paul Caylor, City Manager, City of Willits, 12/15/09

Willits area. Imports of septage from the Ukiah Valley area or other parts of the County would overwhelm the WWTP's septage receiving capacity.

5. In the past, Westport accepted septage but according to RWQCB staff, their permit does not provide for the receiving of septage.
6. Until recently, Hopland PUD was one of the largest receivers of septage local to the Ukiah Valley, but because of regulatory issues it can no longer accept septage.[7] It is my understanding that Hopland is now engaged in a high cost clean-up required by state regulatory agency for past septage received at the plant.
7. Calpella CWD also does not accept septage to their plant.[8]
8. According to RWQCB staff, there are two private septage disposal locations in the County; the Tunzi ranch in Comptche and the Hays ranch in the Pt. Arena area. These two locations receive septage from areas local to the ranch locations (e.g. coast and Boonville/Comptche area). Their permits allow the septage to be deposited to holding ponds for purposes of evaporation. Once evaporated, these operations land-apply the solids to their property. RWQCB staff also indicated that the Tunzi ranch limits its acceptance volume and limits its use to trusted local haulers. The County is a co-permittee to the Hays ranch operation and is responsible for monitoring and reporting for both operations. However, RWQCB staff indicated that the County has not been providing timely reports for these operations so they are unaware of the present circumstances of these operations.

As an observation, it would seem that this type of septage disposal is necessarily limited in location and limited in potential acceptance volume. Because of odor issues from the holding ponds and land application of the solids, large size locations remote from surrounding communities and neighbors are usually required. Unless the holding ponds are very large, input volume would necessarily be limited in the winter months because of lack of evaporation. The potential of rain storm events causing overflow would also provide limitations to the septage volume within any given holding pond during this time period. My present understanding is that these two locations do not receive during the rain months for this reason. Additionally, concerns about hazardous material contamination or an actual event could cause these property owners to terminate operations similar to decisions made by public agencies.

There is a growing national awareness of the potential of toxics being in sludge. A past analysis of sewage sludge by the Environmental Working Group[9] found:

1. Over 100 synthetic organic compounds including phthalates, toluene, and chlorobenzene.
2. Dioxins in sludge from 179 out of 208 systems studied.
3. 42 different pesticides – an average of 12 pesticides per sample.
4. Nine heavy metals, often in high concentrations

There is no reason to think that these types of compounds are not in Mendocino County sludge. Therefore, spreading sludge on land is very high risk activity that has potential for contamination of soil, groundwater and surface water. As might be recalled, it was sewage sludge that was partly blamed in 2009 for contaminating the White House lawn, and First Lady Michelle

[7] Calpella and Hopland confirmed by phone interview with Dave Redding, District Manager, 12/03/09
[8] IBID
[9] Environmental Working Group, Why USDA Should Just Say No, April 1998

Obama's organic garden with lead. Presumably, concerns about these types of contaminants are why the City of Ukiah sends its biosolids (sludge) to an approved landfill.

This lack of availability of local septage processing for existing and proposed growth within the Ukiah Valley poses a significant constraint on growth and likely provides a significant potential environmental impact for additional growth in the Ukiah Valley outside the boundaries of either the City or the District

Ukiah Valley Sanitation District Potential Demand

The Ukiah Valley Area Plan (UVAP) is planning for significant growth in the unincorporated area of the Ukiah Valley over the next 20-year period. Some of the proposed growth areas are outside of the present boundaries of the Ukiah Valley Sanitation District. Private septic systems are anticipated to be used for some of this growth for these areas or it was assumed that annexations to the District would occur. However, based on the capacity circumstances of the District and the need for the available ESSUs to be utilized within present boundaries, it is unlikely that annexations can be justified by LAFCO. If annexations are allowed, it will be for connection of existing development that have septic failures and cannot meet present regulatory requirements (e.g. Fireside Village or Rogina Heigt).

A few years ago, LAFCO had County Geographical Information Services develop a Potential Development Report for the territory of the UVSD. This type of report counts the number of undeveloped parcels and/or parcels that are not fully developed to existing zoning and then calculates the total number of connections that would be needed, if developed to the limits of the zoning. For example, a ten acre parcel zoned for one acre minimums would be counted as ten potential connections. The Report was based on the present boundaries and the present zoning of the District; it indicated that there are 6,700 potential demand "connections". This means that if all of the undeveloped parcels that presently exist within the boundaries of the District were developed to the maximum levels allowed by present zoning this amount of connections would be needed. 6,700 new accounts/connections represent nearly a 100% increase in accounts over that presently provided by both the City and the District combined.

Regarding the number of connections, it is important to note that "connections" are not the same as Equivalent Sewer Service Units (ESSU. For example, the Rural Communities Housing Development Corporation (RCHDC) multi-family apartment development on approximately eight acres in the Brush Street/Orchard area would require only one connection but could consume up to 150 ESSUs.

An ESSU can generally be thought of as the amount of impact that a single-family, 2 bedroom home would create on the wastewater system which would equate to a equivalent flow of 6,400 gallons per month. According to UVSD's Ordinance No. 12 one ESSU equals 7,800 gallons per month for commercial, office, fairgrounds, public and private schools and other uses not specifically listed, and 3,000 gallons per month for restaurants and bars. One motel room equals 0.5 ESSU per Ordinance No. 27.

The combined wastewater system of the City and UVSD presently serves 6,930 sewer accounts which total 11,894.79 Equivalent Sewer Service Units (ESSU)[10]. A "sewer account" is generally equivalent to a "connection." On a purely mathematical averaging basis, this therefore means that the present system has approximately 1.75 ESSUs per account. The total number of ESSUs needed for 6,700 potential new connections would be some multiple of the total number of connections. For growth projection purposes, using the 1.75 multiple would mean that approximately 11,725 ESSUs would be needed to service the potential connections identified in the Potential Development Report. The total ESSUs presently being consumed by the District is 5,644. 4 ESSUs; so this future needs projection represents a doubling of the present amount of ESSUs in service.

Assuming a 20 year cycle for this level of development and assuming equal amounts of development occur each year would mean that approximately 586 ESSUs would be needed annually (assuming a 40 year cycle would reduce that amount by half to 293 per year). In March of 2010, UVSD had unassigned or unobligated capacity of approximately 724 ESSUs. It therefore can be readily seen that the UVSD does not have sufficient capacity to fulfill the potential demand as represented by the present zoning and boundaries of the District. Future changes of zoning such as proposed for the UVAP or future changes of boundaries for the District (if allowed), would have additional negative impact.

Given the past development history of the District, the available ESSUs were thought to be able to satisfy the needs of the District for the next 20 years. Simple math indicates that the available capacity of 724 connections divided by 20 years equal approximately 36 ESSUs per year which would equate to a consumption rate of 5% per year of the available ESSUs; this is near the recent decadal growth rates.

The average household size in the Ukiah area is between 2 to 3 people per household. A growth rate of 36 ESSUs per year represents a population growth rate of approximately 72-108 people a year. Provided that all of the ESSUs are consumed by single family homes, consumption of the total 724 ESSUs available to the District would represent approximately 700 new homes and a population increase of approximately 2,000 people.

However, consumption of ESSUs by very large commercial developments such as was proposed by Development Diversified Realty for the old Masonite site or for the zoning being proposed by the UVAP for the old Masonite site or such as was required for the proposed Pinoleville Indian Casino would substantially reduce the potential total number of homes and thus population increase.

Recently, an upgrade and capacity expansion to the Wastewater Treatment Plant (WWTP) was completed. The overall cost for the WWTP improvement project will have a total cost of almost 142 million dollars over the length of the 30-year loan. Because UVSD shares the use of this facility, the District shares in the cost of the overall project. Based on present cost allocation formulas, UVSD will be responsible for approximately 53% of that overall cost; this responsibility includes the costs for the upgrade portion and the capacity expansion portion.

[10] ESSU Statistics Report March, 2010

It was planned that current users would pay for the upgrade portion and future users would pay for the capacity expansion portion. The upgrade portion to be paid by current users is collected via the monthly service charge. The capacity expansion portion of the bond payment was to be collected through connection fees charged to new users. Both the City and the District therefore have connection fees per ESSU; the fee for one ESSU is presently $10,911.00.

In order to meet its commitments for the bond payment for the capacity expansion portion of the WWTP, UVSD needs the connection fees from 58.5 new connections per year. For the past three years the District has been unable to sell this amount of connections and has been making payments for the expansion portion of the bond payments from its Capital Reserves; after the March 2010 payment it will not have sufficient funds to make this payment.

If this portion of the bond payment cannot be paid by connection fees, the Finance Agreement requires the District to pay for these costs from whatever source of income that the District has; therefore the District ratepayers are liable for both the upgrade costs and the capacity expansion costs. Monthly sewer system charges have had to be substantially increased to pay for the costs for the WWTP upgrade portion of the overall project. Many older ratepayers on fixed incomes bitterly complained to the past UVSD appointed board that they were unable to afford these increases. Clearly, the ratepayers will not be able to afford another substantial increase in fees; whatever its source of demand.

If the District is able to sell connections at the needed 58.5 ESSUs per year rate, the available ESSUs will be consumed in approximately 12 years. A consumption rate of 58.5 connections a year represents a growth rate of approximately 1% per year of the present ESSUs in service. This is a manageable level of growth for the Ukiah Valley Area. Once the ESSUs are consumed, the District will likely not be able to afford or obtain bonding for additional expansions of the existing WWTP or for a new plant; especially given the need to address the aging infrastructure of the collection system and the need to address the percolation/evaporation ponds issue at the existing WWTP. Thus, it can be seen that while the District needs to sell connections to make its bond payments for the capacity portion of the recent WWTP project, once these ESSUs are sold it will have no future ability for expansion.

If the District sells its limited number of ESSUs to a few large developments, it will have no future ability to service smaller demand needs. If this occurs, this would mean that small local developers and parcel owners will be excluded from developing their property because of the lack of available capacity. Given the above parameters and given the potential future demand within the District under present zoning and present boundaries, it can be argued that the District should carefully meter its distribution of available ESSUs such that infill growth and timely planned growth occurs.

Also, the County in evaluating future development proposals for approval should carefully evaluate the long term impacts of immediate consumption of ESSUs versus allowing growth to occur in a more controlled manner. This same consideration should be part of the determination of the level of growth allowed by the UVAP.

Summary

Existing development is presently consuming all of our presently available local water. During dry years, present development will have its water supplies severely curtailed. There is no presently available "new" water for any new development. It is absolutely critical that the EIR acknowledge that water capacity must be available prior to any development. Potential new water projects have been discussed, however, any realistic projection of successfully completing these projects indicate that it will be at least 20 years or more before availability of new water occurs, if at all.

Citing possible future projects such as raising the Lake Mendocino Dam or development of other reservoirs as potential mitigation to the present circumstances would be insufficient and unjustified. Citing groundwater as a potential source would be equally unjustified in that it is clear that the State considers all groundwater in the Ukiah Valley as underflow to the Russian River which has been fully allocated for nearly two decades.

There is no septage capacity within the Ukiah Valley or adjacent areas. Some haulers are traveling to Lincoln, CA, a journey of over 200 miles, for disposal of septage.
This is a significant impact.

There is extremely limited capacity within the UVSD for existing zoning. Zoning changes that will allow higher density or changed impacts will only exacerbate the existing circumstance. Lack of sewer capacity and lack of future ability to obtain more capacity is a significant impact. It should not be treated lightly by indicating that service agencies should develop more capacity.

Sincerely,

Frank McMichael
Executive Officer

Attachments for inclusion to my comments to this DEIR:

- Letter dated August 31, 2010 to Roland Sanford, Mendocino County Water Agency, providing comments to the Draft Water Supply Assessment for the Ukiah Valley Area Plan prepared by Roland Sanford
- Letter dated February 4, 2010 to Nash Gonzalez, Director of Planning, Mendocino County regarding Water Supply Assessment for Ukiah Valley Area Plan Prepared by West Yost.