

The OWTS Residents of the Russian River

A committee representing the legacy non-sewer-served riverfront communities
of the lower Russian River ("OWTS-RRR")

OCT 7 - 2015

<input type="checkbox"/> EO	<input type="checkbox"/> WMgmt	<input type="checkbox"/> Admin
<input type="checkbox"/> AEO	<input type="checkbox"/> Timber	<input type="checkbox"/> Legal
<input type="checkbox"/> Reg/NPS	<input type="checkbox"/> Cleanups	<input type="checkbox"/> Other

Jim Christian, resident of Summerhome Park
Dan Fein, resident of Monte Rio
Bart Deamer, resident of Northwood
Candace Healy, Northwood Property Owners Association
Dave Henderson, President of Fitch Mountain Association
Richard Holmer, resident of Villa Grande
Sarah Yardley, Hacienda Improvement Association
Pam Rianda, Hacienda Improvement Association

October 5, 2015

California Regional Water Quality Control Board, North Coast Region
ATTN: Charles Reed
5550 Skylane Blvd., Suite A
Santa Rosa, California 95403

Re: Comments on Draft Action Plan for the Russian River Watershed Pathogen Indicator
Bacteria Total Maximum Daily Load

Dear Water Board,

Our communities all are potentially affected by the proposed TMDL as "high-priority" OWTS communities. We have prepared this letter to offer comments on four topics - scientific findings, performance criteria, public outreach, and CEQA - from the perspective of high-priority OWTS communities:

- 1) Scientific findings –
 - a) TMDL data show that the main stem of the Russian River does not exceed EPA criteria for pathogens from human waste, though there are hot-spots in the tributaries.
 - b) The TMDL did not compare its pathogen impairment data to that assumed in support of the AB885/APMP regulation for similar rivers and watersheds in California.
 - c) The main stem, where primary human recreation in the river occurs, is not in violation of State Water Board REC-1 criteria.
 - d) In the supposedly "impaired" reach from Fife Creek to Dutch Bill Creek, the E. coli and enterococci measurements are already both below the target levels, using the normal sampling periods and frequencies and using the worst-case assumptions on their sources and freshness.
 - e) We understand Sonoma County has a dearth of public health complaints or beach closures to corroborate a "real-world" pathogen issue or REC-1 issue. This absence of complaints is consistent with testimony given at the 9-25-2015 hearing by Peter Lescure that travel time for pathogens to travel through most OWTS and soils to tributaries is long enough to render pathogens non-viable.
 - f) The TMDL assumes all OWTS are sources of pathogens without identifying pathogen-contributing septic types, ages, soils profiles, or distances to recreational water. The areas of the river abutting named high-priority communities were not individually identified as pathogen-impacted beaches.

The 303(d) listing of the main stem was based solely on samples of fecal coliform bacteria, which were proven by the EPA's epidemiological studies in the 1980's to have no statistical

relationship with swimmer health risk. This legacy evidence for impairment is weak at best. The entire main stem meets EPA E. coli standards. As to enterococci, even if all the enterococci sampled in the main stem were human-source, which is highly unlikely¹, the sampled levels do not indicate impairment as impairment is to be measured scientifically (geometric mean or STV of a time-related group of samples), as opposed to the TMDL's isolated, individual grab samples.

- 2) Performance standards - the TMDL standards for high-priority OWTS systems exceed both baseline AB885 and the AB885/APMP criteria adopted statewide for pathogen-impaired waterways. The TMDL summarily re-classifies all existing, functional OWTS in the high-priority named communities from AB885's Tier 1 (i.e. no action needed) and Tier 2 (low-risk) to Tier 3 and 4. Given that AB885 has not been implemented in this watershed pending the TMDL completion, and given that the TMDL compliance array significantly exceeds AB885, the case must be made that individual and community-level AB885 performance is inadequate. This case has not been made.
 - a) High-priority OWTS includes all that would be Tier 1 and Tier 2 OWTS in non-impaired watersheds.
 - b) The performance standards for high-priority OWTS exceed AB885/APMP criteria for waterways impaired for pathogens. These marginally stricter standards have not been justified. Marginal pathogen or REC-1 attainment from the requirements is not predicted.
 - c) There is no cost-benefit analysis of the much higher cost of a compliant Option #1 OWTS compared to the basically zero-cost of continuing a Tier 1 OWTS, the unknown cost of Option #2, and the unknown cost of Option #3 (the existence of which is not certain).

The case for stricter OWTS measures than AB885 calls for has not been made in the TMDL.

Taking #1 and #2, the case is not made that the pathogen levels are such as to require stricter OWTS performance criteria and costs than the AB885 measures. The TMDL fails to substantiate that the OWTS performance being demanded in High Priority areas will remediate contamination in the Russian River to be compliant with the EPA pathogen criteria and REC-1 uses.

Attached is a tally comparing the AB885 regulations to the proposed TMDL. The Option 1 supplemental treatment OWTS with permanent monitoring are many times more costly than a minimal tank + leachpit or leachfield system, especially for Tier 1 OWTS versus the TMDL, and the stricter supplemental treatment metrics of the TMDL exacerbate this. The TMDL must justify this.

- 3) Public Outreach - The Regional Board has underperformed its obligation to provide public notice, information, and opportunity for citizens to comment on the TMDL. Awareness

¹ The current science emphasizes the many sources and reservoirs of enterococci in heavily-forested, wildlife-rich natural areas like the Russian River, and therefore the importance of reliably sourcing the enterococci before burdensome remedial measures are imposed in such areas. Non-human-source enterococci have no value as indicator bacteria, and even human-source enterococci that persist and grow in sediment and on algae and other plants lose their validity as indicators because the pathogens they're supposed to indicate don't persist and grow in the same manner. To our knowledge, this sourcing has not been done in the Russian River, and sourcing methods to do it are still under development. The Board's refusal to submit its proposed enterococci standard to scientific peer review appears to indicate that staff recognizes the current ambiguity of enterococci readings in an area like the Russian River; indeed, the Board's staff has repeatedly recommended against using enterococci as indicator bacteria.

levels among affected homeowners (both private, and public, e.g. the riverfront parks and beaches) are near zero. The Board has not mailed notice to affected owners, nor clearly plotted and defined boundaries of affected OWTS properties. This must be remedied.

4) CEQA -

- a) General - A full EIR is appropriate as the impacts are grossly understated. Project alternatives, including no-project and less-stringent alternatives, should be considered.
- b) True scope of the Project - Staff stated in the September 24, 2015 public meeting it intends to modify the TMDL at some point to achieve "natural background" conditions, and has identified several streams in watersheds with no known human habitation or livestock operations from which it intends to sample to develop a definition of "natural background" conditions for the Russian River (i.e. without humans). This implies a "wild river" mission well beyond relieving 303(d) impairment or attaining REC-1 water standards. Having been publicly stated "in-context," this expansion in scope and its cumulative impacts need CEQA review.
- c) Economic considerations
 - i) Cost of Compliance - the TMDL touches too lightly on the subject of compliance costs among the predominantly low-income residents of the named high-priority communities. The Board's presentation of funding assistance is unrealistic and inadequate, and there has been no analysis of residents' ability/inability to bear the costs.
 - ii) Housing displacement - the costs of compliance relative to housing and rent values, even with low-interest loans, will lead to displacements for which CEQA review is appropriate
 - iii) Disparate economic impact /social justice - TMDL compliance is likely to result in sewer/septic costs in high-priority communities multiple times higher than neighboring communities, for which CEQA review is appropriate.
- d) Growth-inducing impacts - Presently, lack of sewers combined with stringent requirements for new septic systems all but eliminate new development in the high-priority named communities. With the TMDL, new sewers or a LAMP may relax this limitation, allowing the cumulative impacts of the development of housing on potentially thousands of existing unbuilt lots in these communities. Growth impacts could include access to new housing on existing narrow, steep roads, access for fire protection, school construction, air quality, noise and dislocation of current residents.

Stepping back, we see that the statewide AB885 regs are "prescriptive" for the most part, i.e. that OWTS systems can be designed pursuant to fixed criteria without a need for individual site-specific engineering to meet "performance" criteria. We also see that the statewide tiered approach isn't reflected in the TMDL (except and unless a LAMP were to be approved with a tier system).

TMDL Option #1 imposes onerous categorical requirements for supplemental treatment and perpetual monitoring. For existing Tier 1 and 2 systems, these new costs, and possibly recalibrating the system after monitoring, could lead to large scale red-tagging of properties.

TMDL Option #2 requires a commitment to an extension of sewers into high-priority area(s). We caution that such an endeavor may lead to urbanization in the affected areas, as owners of unbuilt land and lots clamor for sewer hook-up. An OWTS-based approach would not go there. We think most residents of high-priority OWTS communities would prefer an OWTS-based approach.

TMDL Option #3 requires changes to Sonoma County's LAMP requirements imposed pursuant to AB 885, and is not a current option for property owners. The County's current program addresses new and replacement OWTS but does not include a permitting program for existing OWTS in an Advanced Protection Management Area.

We accept that a menu of choices in this watershed, particularly a LAMP, may be quite appropriate as an OWTS-based approach alternative to AB885 or TMDL Option #1. By the LAMP option, sub-priorities may be established in the high-priority OWTS areas, and the monitoring/feedback process can focus on pathogens arriving in creeks and rivers rather than every single individual up-gradient OWTS's septage. To be affordable and manageable, a LAMP must deal with a wide variety of existing conditions, balancing the costs and benefits of each. Yet, the LAMP option requires existing agencies to apply to the Regional Board very quickly. The reality is that existing agencies may not have the resources to move quickly, and if they fail to do so they and the OWTS in their jurisdiction would be shut out of Option #3, as currently written. We recommend that the Board accept process-oriented LAMPs that allow the agencies to develop affordable, manageable and health-justified measures within a reasonable time frame. As currently written, Option #3 isn't really viable.

In short, we suggest that as to OWTS in High Priority areas, the TMDL be revised as follows:

- 1) Re-visit the definition of the project scope and perform appropriate environmental analysis (CEQA).
- 2) Determine whether the OWTS-sourced pathogen levels entering the Russian River exceed baseline levels in accordance with AB885, and whether REC-1 standards are exceeded in the Russian River adjacent to high-priority areas.
- 3) For identified named communities, provide evidence whether they contribute to pathogen impairment, and define appropriate OWTS response(s) considering proximity to the river, soils profiles, existing septic systems, etc.
- 4) Provide evidence that the marginal OWTS compliance criteria are needed, i.e. that AB885 criteria alone won't reduce the pollutant load to EPA or REC-1 criteria.
- 5) Reconsider and justify the marginal cost:benefit of all performance criteria, versus the simpler prescriptive approach.
- 6) For this watershed, consider making the LAMP more attractive to the implementing agencies and the OWTS owners, by specifically *pre-approving* a wide-range of specific and conceptual steps and approaches so that affordable, manageable and health-justified measures can be developed.

We thank you and wish to continue to work with you on making this a successful endeavor.

Sincerely,

The OWTS Residents of the Russian River



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Comparison of Residential OWTS provisions of Statewide Regs to TMDL proposal

Item	AB885 Regs	TMDL Russian River
Regulatory basis	Statewide, risk-based, tiered approach toward expected performance and protection	Watershed-specific uniform 3-part performance criteria. A tiered approach is speculative (it may reside in a LAMP)
OWTS Design Standard	Prescriptive standards, statewide	Individual Performance design to be met by each site
Existing OWTS Operations	Tier 1 (existing, functional, not adjacent to polluted surface waters) are grandfathered	Not grandfathered. Requires either Option #1 (supplemental treatment and monitoring to 3-part operating performance criteria), Option #2 connection to sewer, or Option #3 inclusion in a LAMP
	Tier 2 (new or replacement meeting low-risk siting criteria) have prescriptive design standard for sizing and percolation	Same as above. Operating performance standard supercedes prescriptive design standard. Perpetual monitoring.
	Tier 2 in a LAMP area are subject to the LAMP watershed-based monitoring for design criteria	Same as above
	Tier 3 (new and existing associated with impaired waterways) - design to TMDL criteria.	Same as above
	Tier 4 (failing systems requiring corrective action) - must fix what is broken, may need to upgrade	Same as above. Upgrade all but certain to an operating performance standard and perpetual monitoring
Supplemental Treatment OWTS	If within a APMP program area impaired for pathogens, then criteria not to exceed (i) 30-day average of 30 mg/L of TSS and (ii) fecal coliform at/below 200 MPN per 100 mL)	All OWTS (Option #1) are part of APMP, but criteria change to (i) 30-day average of 30 mg/L of TSS, (ii) e.Coli at/below 100 MPN/100 mL, and (iii) enterococci at/below 30 MPN/100 mL.