ISSUES IN THE SONOMA COUNTY OWTS POLICY THAT AFFECT THE MONTE RIO/VILLA GRANDE AREA.

Although there are many changes in the OWTS policy that affect property owners in this area, there are a few that we, the Lower Russian River Wastewater Citizens Advisory Group, feel most directly impact local property owners.

**1. Best Practical System for a Specific Property**

Issue:

The ability to install the "Best Practical System" has not been included in OWTS Manual even though PRMD has repeatedly stated that they are willing to work on an approach to replacement of a system that would allow for the "best practical system" if the lot cannot comply with the terms of the OWTS policy.

The current draft does not include this, nor does there appear to have been progress in developing this option. Given that the APMP is likely to go into effect early next year, it is imperative to the area residents that the OWTS policy includes this provision. The historic development patterns in the lower river area and in the APMP make compliance with the OWTS policy extremely difficult.

Solution:

A process needs to be developed which allows property owners to correct sewage disposal systems problems without costly and time-consuming variance application and approval processes. *PRMD should give this immediate attention.*

**Response:**

**Agreed. The Regional Water Board staff are open to a "best practical system" or a "substantial conformance" approach and a new section is being added to the OWTS Manual. The concept is to provide the best possible system that the site will support. This idea is being pursued because the TMDL will require many landowners to upgrade their systems and many developed sites may not support a fully conforming system. With concurrence from the Regional Water Board staff, Permit Sonoma has drafted a new section for substantial conformance to be included in the upcoming OWTS Manual for just such an approach.**

**Also in the draft manual, staff have moved individual variances out of Section 17 Variances to specific locations in the body of the OWTS Manual and propose treating these as exceptions to the rule or standard. This new approach will have the rule or standard presented followed by the exception. Each variance being deleted from Section 17 has been shifted to this format. This shift eliminates the need for a separate variance application which will increase efficiencies in the plan review process and reduce the number of applications and fees.**

## 2. Interim Solutions to OWTS Issues

Issue:

What happens when a system fails during the 15 to 20-year period that the TMDL has given property owners to comply? This is not addressed in the proposed OWTS policy. The communities in the APMP area have been given 15 years by the Water Quality Control Board (WQCB) to comply with the APMP requirements or 20 years if a community solution is being developed. It is certain that there will be OWTS failures within these time frames. The CAG has been working with the RWQCB and the County interagency team for over two years to develop alternatives that can provide short-term solutions to OWTS problems while property owners are waiting for a community-wide solution to be implemented.

Solution:

Again, it is imperative that these alternatives be formally recognized as interim solutions in the county's OWTS policy prior to the APMP standards being put into place.

**Agreed. Staff are also working with the Regional Water Board to include interim solutions for failing systems within the same OWTS Manual section mentioned above. The concept is to provide a range of interim solutions including repairs, adding dispersal area under a repair permit, and replacing cesspools with a septic tank and seepage pit, but to a lesser standard and less costly than either an "alternative conformance" system or a fully conforming system and to limit the system in time to correspond with the TMDL implementation schedule.**

**It is presumed that prior to the deadline for conformance with the TMLD, or as otherwise required by the Regional Water Board, the interim system would then be upgraded to an "alternative conforming" system, be upgraded to a fully conforming system or connect to a community system.**

**3. Steep Slopes (Section 4.3)**

Issue:

If you live on a slope over 30%, there are only 2 possible dispersal systems allowed as a replacement system. The allowed systems are drip systems or shallow trench pressure distribution systems. Both of these system types are very expensive and require a pump chamber in addition to the septic tank. Installing additional tanks, pump chambers and treatment units on steep slopes is very difficult and is a particular issue for homes on Starrett Hill.

Solution:

This section should be provided with more flexibility if and when other types of dispersal systems can be approved.

**Response:**

**The State OWTS Policy prohibits OWTS on slopes greater than 30 percent unless accompanied by a slope stability report approved by a registered professional. Staff propose to revise the local OWTS Manual to be consistent with the State's OWTS Policy.**

**The concern is concentrating water/effluent on steep slopes and potentially triggering or being a contributing factor to slope failure. The two system types provide for more dispersion than a standard system or a typical mound system for example. Regardless, with the appropriate evaluation by a soils engineer or hydrogeologist or similar professional and with an appropriate septic design, a wider range of systems will be allowable.**

**4. Repairs to OWTS (Section 4.8.C.4)**

Issue:

The draft OWTS policy treats additions to a dispersal system as needing to comply with all requirements in the OWTS policy even if only a minor addition is proposed. Under the draft policy, repairs to dispersal systems are very limited in scope before full code compliance is mandated.

Solution:

The RWQCB has indicated that they may consider a revised section that will allow minor additions to an OWTS dispersal system (up to 25% of the exiting dispersal system [leachfield] size) without full compliance with the OWTS policy. The repair would be an in-kind addition to the existing disposal system where the repair follows the original design parameters for the OWTS. We encourage further discussion between PRMD and the RWQCB to allow this modification to the draft policy.

**Response:**

**Agreed. We also understand the RWB has tentatively accepted up to 25% dispersal replacement as a repair. Staff will revise the current draft OWTS Manual v8.4 to include the 25% value in the next iteration of the draft OWTS Manual. The next iteration of the OWTS Manual v8.5 is anticipated to be published in December 2023 and to the Board of Supervisors in March 2024.**

**5. Reserve Replacement Area For Building Permit Applications (Sections 6.4 to 6.6)**

Issue:

Owners must demonstrate a code complying reserve expansion area for building permits where the "encumbrance" for a dispersal system on the parcel exceeds 50% of the lot area. This applies to building permits which increase the building footprint, or which propose another structure on the lot such as a shed or swimming pool. This was removed by the Board of Supervisors in 2019 as it was felt to be too onerous. For many lots in the APMP this is nearly impossible as well as adding approximately $8,000 to the costs involved in obtaining a building permit.

Solution:

The OWTS policy should recognize the reserve expansion area requirements that are specified in the Uniform Plumbing Code. These requirements are based upon having an area equal to 100% of the originally installed dispersal system.

If there is not an existing approved reserve expansion area, a simple drawing showing that there is area on the lot to replace the existing dispersal system should suffice.

(See attached addendum for a detailed description of the solution, not included here for brevity.)

**Response:**

**Correct, the Board did remove the Section 6 provisions in 2019. The California Plumbing Code has a provision that a new structure cannot impair the usefulness of the 100% expansion area regardless of the size of the parcel or percent encumbrance (plumbing code citations are summarized below).**

**Absent local provisions as an alternative to the plumbing code, all parcels would be subject plumbing code requirements.**

**The Section 6 provisions were designed to comply with the plumbing code while allowing some local flexibility. The flexibility comes in the form of percent encumbrance. We recognize that some sites have plenty of area for development and future septic systems while other sites are relatively small or already built out.**

**When comparing the Section 6 provisions to the plumbing code, Section 6 allowed some projects to move forward without having to demonstrate**

**reserve areas, whereas the smaller parcel or built out parcels would need to address reserve areas regardless of which language is used.**

**The regulatory background is as follows:**

- **Sonoma County Code requires 100% replacement area for parcels created before 1971 and 200% replacement area for parcels created in 1971 and later.**
- **OWTS Manual Provision 4.11.A requires a primary and one reserve area for parcels created before October 1971 and a primary and two reserve areas for parcels created in October 1971 or later.**
- **OWTS Manual Provision 4.11.K states that a structural or building addition may not encumber any designated reserve replacement area. A revised designated reserve replacement area may be established if needed.**
- **The California plumbing code has several provisions regarding land development and septic systems. One provision states that a new structure cannot impair the usefulness of the 100% expansion area.**
- **A second provision states that no property shall be improved more than its capacity to absorb sewage effluent.**
- **A third provision states that where there is insufficient lot area or improper soil conditions for sewage disposal for the building or land use, no building permit shall be issued.**

**The regulations speak to evaluating a site for the land's ability to treat wastewater and, more specifically, that a proposed structure does not interfere with that ability. This not only includes the primary septic system but also for future systems, or reserve areas, so the parcel remains viable into the future, perhaps in perpetuity.**

**With this intent, staff deviated from the plumbing code and proposed the "encumbrance method" that takes lot size, the amount of existing development, streams, topography, and other site constraints into account. Under this method, evaluation for a reserve area may not be needed for every parcel or every proposed structure or building permit as suggested by plumbing code.**

**The "encumbrance method" would only require the reserve area evaluation when ½ of the parcel was developed or otherwise unsuitable for wastewater disposal. A strict interpretation of the plumbing code would require locating the primary system and the reserve area to ensure**

**the proposed structure was not adversely affecting these dispersal areas.**

**Building within a setback or an encumbered area would not count twice towards the total encumbrance on the property. Further, the proposed structure would have to increase the encumbrance for the reserve area evaluation to take place. The draft manual clarifies these points.**

**Conversely allowing development in an encumbered area can be problematic. In some projects this area can be the last remaining area physically where an OWTS could be placed. We've seen clients move/destroy a well or mitigate the encumbered area with advanced treatment or system type (drip systems) that reduces the setback and then allows a system to be placed in the encumbered area. Placing a structure in this area eliminates that possibility down the road.**

**Reserve areas are critical to the long-term sustainability of a parcel and the current housing stock. The concept of having a primary system and a reserves area(s) is that the reserve area is dormant while the primary is in use. And when the reserve area is needed, the primary area is dormant and then has 30 plus years to recover. If there are two reserve areas (three dispersal areas in total), each dispersal area has 60-70 years to recover.**

**Reserve areas were not always properly established. Simply showing a ½ acre or ¼ acre of land and calling it a reserve area does not make it a viable reserve area. The land area needs to function as a dispersal area and key on-site parameters (soil type and depth, percolation rate and separation to groundwater) need to be evaluated to demonstrate a reserve dispersal area.**

**6. Reserve Replacement Area for Repairs or Replacement of a Dispersal System Serving an Existing OWTS**

Issue:

The OWTS policy needs clarification that a repair or replacement system installation does not trigger the need to find additional area for reserve expansion area (which will not exist on many parcels). The reserve area is designated for repair of the dispersal system. When the repair is installed, it has served its purpose.

Solution:

Clarify that repair or replacement of dispersal systems do not require additional reserve to be demonstrated in order to obtain an OWTS permit. A preferable alternative would be to design the repair or replacement system for extended longevity such as a dual dispersal system or a dosing system.

**Response:**

**Agreed. Placing an OWTS in the designated reserve area should not trigger the need for another reserve area. Staff also agree the current provisions are not explicit and thus subject to interpretation. We share to goal to provide clarity to the public and to staff.**

**We plan to provide clear language based on our practice of the following:**

- **A review of the reserve replacement area is not required for a repair. A repair is a fix to an existing system: broken valve; D-box; segment of leach line within existing trench.**
- **A review of the reserve replacement area is not required for a replacement system that is less than 50% (see note) of the current system as that replacement system is currently considered a repair and does not require a reserve replacement area. (Note: the 50% is likely to be revised downward to 25%.)**
- **A reserve replacement area may be reviewed, but is not required if the correct number of reserve areas were fully evaluated and documented, and the proposed replacement system is being placed in the designated reserve aera. In this scenario, no additional reserve area will be required.**
- **A reserve replacement area is required for a new or replacement system. This includes replacement of a cesspool. This assumes the reserve areas have not been evaluated or documented.**
- **A reserve replacement area is required for new development**

**exceeding the 50% land encumbrance rule. This assumes the reserve areas have not been evaluated or documented.**

- **A reserve replacement area is required when a parcel is developed for the first time, for example a vacant lot being developed.**

**The intent is to clarify in the OWTS Manual when a reserve area is required and when a review of the reserve area is required.**

**7. Altered Terrain (Section 7.2.4.B)**

Issue:

The draft policy does not allow for installing systems in areas subject to flood. This will render many current properties to be abandoned. There are many systems currently in the flood plain and/or flood way that need to be addressed in some way in the OWTS policy.

Solution:

Clarification is needed as to 10-year and 100-year flood plains. Replacement systems will be needed for a significant number of homes in these areas and should be expressly allowed. New systems for new construction should meet the required stream setback in the OWTS policy rather than a separation from a 10-year or 100-year flood plain.

**Response:**

**For developed sites that may have difficulty siting a system in an aera of flooding, we are creating the suite of solutions including interim solutions and alternative conformance systems.**

**Areas subject to flooding is not the same as areas in the floodplain or in the floodway. Floodplain and floodway are FEMA designated areas. FEMA also determines the flood elevation for various flood events including the 10-year and 100-year events.**

**The comment presumes the use of a setback from the 10-year and 100-year floodplain. The OWTS Manual does not rely on the FEMA designations for siting or locating of septic systems and the OWTS Manual does not use a setback from a 10-year or 100- year flood plain.**

**The OWTS Manual does use the "100 year flood plain" in section 13.1.B.1 which allows the use of a bottomless sand filter with the sand filter being at least 100 feet from the summertime bank.**

**Systems proposed to be placed in a FEMA mapped floodplain or floodway will be given the same consideration as any other system. Staff do not know of a single instance of denial solely because a system is in a FEMA floodplain or floodway.**

**It is recognized there may be future projects in an area of flooding that make a fully code compliant system problematic. The options discussed earlier (interim solutions and/or substantial conformance (best fit)) would be available since areas of flooding is considered a site constraint.**

**It is acknowledged the language with 7.2.B.1 is not entirely on point as flooding or geologic instability are not typically associated with "altered terrain." In some instances, localized flooded and/or geologic instability can result from altered terrain, but typically these are more natural versus manmade. Staff will move this language to a more appropriate location.**

**8. Setback Requirements for OWTS (Table 7.2.C)**

Issue:

Setback Requirements in the proposed draft are revised completely from current OWTS policy. The proposed regulations are unclear and may render current properties to be abandoned. More science and research is needed prior to implementation.

(See attached in depth analysis in the addendum)

Solution:

These revised setbacks will impact the area available for an OWTS and will create the need for variances. They should be pulled out of the standards and subjected to a peer review process. The justifications for the changes to table 7.2.C. are unclear. We suggest that changes that deviate from the State OWTS policy and adopted codes be clearly substantiated by scientific evidence that supports the need for the proposed requirement and be subject to a peer review process.

Alternatively, a simplified permit process should be developed for existing properties that cannot meet the required setbacks. Section 4.3.D. could be expanded to address all setback issues rather than just the setback from water courses.

**Response:**

**The current OWTS Manual has setbacks from streams using the top of bank as the starting point. The starting measuring point was inadvertently omitted in the draft OWTS Manual. The top of bank starting point will be added back to the draft manual.**

**Staff propose to revert to using perineal and epheral streams. One Technical Advisory Committee recommended switching to using mapped streams (blue line or dot-and-dashed streams). In more recent discussions with the Land Use Advisory Panel, it was agreed to revert to using perineal / ephermal streams.**

**For developed sites that may have difficulty meeting setback requirements, we are creating the suite of solutions ranging from repairs, interim solutions, alternative conformance systems and systems in full conformance with the standards.**

**Table 7.2c contains all the setback requirements in one location. The setbacks from public water well and systems are also listed in Section 4.3.D to demonstrate compliance with the State's OWTS Policy more readily.**

## 9. Other Communities

Issue:

The CAG has long recommended that the county develop a support infrastructure for all those in the county striving to implement effective, efficient and affordable wastewater solutions – not just those in the MRVG area, but across the county. The communities and individual property owners affected by the TMDL need a dedicated entity in the county focused on providing clarity, support, advocacy, solutions and resources to help citizens to move forward with effective and affordable wastewater solutions. Its role would include providing direct citizen support and assistance in the form of advice, information, grants and loans and support for communities in, among other things, the assessment of governance and management options, grant development, resource generation and distribution, preparation of RFPs, plan review and construction oversight. It would also be tasked with advocating for, researching and assessing new and emerging technologies and providing recommendations for implementing viable options through the county's OWTS approach.

Solution:

The Interagency Team should become a permanent group that works with the County Ombudsperson and a dedicated county-wide entity (perhaps newly formed) that focuses solely on advocating for and assisting county citizens and communities with implementing wastewater solutions in compliance with the APMP.

**Response: Staff does not disagree but question the source of funding for staffing and resources.**

**10. The Russian River APMP (Section 20.2)**

Issue:

This section should acknowledge that the basis for the APMP is the Regional Board's Basin Plan. Otherwise, a citizen unfamiliar with the history would assume the APMP is a creation of Permit Sonoma. The introduction (Section 1) does reference these authorities, but a citation still would be good in section 20. The Section also references the LAMP. The LAMP acronym is defined in definitions section, and referenced a dozen other places - but where is the LAMP itself? What does it cover? How does a citizen find it? Similarly, the OWTS Manual describes the APMP boundary. The description is, again, ambiguous in use of word "waterways."

Solution:

We recommend that the OWTS policy cite the Basin Plan as authority, perhaps give the web address to make it easy for a citizen to determine whether they live in the APMP area. It's easy to get lost in the verbal description of the boundary, and the map is easy to understand.

We further recommend that the OWTS Manual include a clear definition of the LAMP, why there is a LAMP, and where to find it. These issues might well be addressed as context for the OWTS Manual itself, in the form of an introduction or preamble.

**Response:**

**Agreed. The OWTS Ad Hoc has already provided direction to include intent language, legislative history and/or the rationale for various sections of the OWTS Manual.**

**11. Supplemental Treatment (Section D. Section 21) - waterless toilets (WT)**

Issue:

This section is aimed to allow homeowners to reduce the load on a system that would otherwise fail. We would like to see the County move towards a determination of how much septic tank volume and leachfield length can be reduced if a home relies on WT.

Solution:

Probably no one has figured this out yet, but it would be valuable to quantify the impact of WTs. This is a subject in need of research and statewide action. BTW, the State OWTS Policy is mute on subject of waterless toilets. WTs have the potential to greatly reduce water use and infrastructure needs statewide as we move into our desert future.

We recommend that the County and RWQCB approach State authorities and research institutions (University of California) advocating for research on the wastewater generation that can be potentially offset by use of WTs. The County should be a leader in statewide development and local adoption of standards and implementation of solutions that use innovative approaches to wastewater issues including WTs, innovative toilet systems, graywater systems and water reuse in households.

**Response:**

**The County has amended the Sonoma County Code to allow flush and non-flush toilets. Staff will reach out to RWQCB as allies in this effort.**

**12. Local Area Management Plan**

Issue:

The California OWTS policy allows for OWTS to qualify as Tier 2 if they are part of a Local Area Management Program (LAMP). Under this policy a LAMP may specify its own requirements for OWTS to comply with the requirements of the California OWTS policy, with approval from the Regional Water Board.

Sonoma County has designated Permit Sonoma to be the local agency with responsibilities for implementing the OWTS requirements under Tier 2. While Permit Sonoma has historically been the agency that regulates OWTS, it is by its own definition, not a management agency, but rather a regulatory agency. In its role of permitting new or replacement OWTS, it is bound to a view of OWTS as individual systems without a view to the overall objective of eliminating total discharge of pollutants. By its nature, it only regulates systems that come to its attention as a result of permitting requirements on a case-by-case basis.

The CAG respectfully submits that this is not a recipe for management of a system that includes OWTS. In communities like Monte Rio and Villa Grande, that are relatively densely populated and where OWTS are currently the only option for disposal and treatment of wastewater, we believe that a more hands-on approach is needed, in the form of a true management entity.

Solution:

We propose that a more effective solution is establish an agency that is dedicated to assuring that all properties in the community meet the State requirements on an ongoing basis with a systematic approach that includes periodic system inspections, assistance with compliance, support of the most current technologies and a persistent search and application for grant funding to provide financial assistance.

**Response:**

**This sounds very much like the on-site management system of the Sea Ranch development. The Sea Ranch development solved their**

**wastewater with two systems: one is a traditional wastewater treatment system similar to the Russian River CSD and the second is through an on-site wastewater disposal zone. The latter is formally known as the Sonoma County Service Area 41, Zone 2; Sea Ranch Association Onsite Wastewater Management Zone. This management zone has a management structure, staffing, equipment, annual fees, an annual budget, and manages approximately 1500 onsite systems. Permit Sonoma staff recommends modeling any such effort after the Sea Ranch model.**