



**Questions submitted during the OWTS Manual Public Outreach of October 17, 2018
Guerneville Veteran's Building**

- Q1. When a home is sold with a cesspool, do the new owners have to replace the cesspool if they are not doing any work on the house that requires a permit?
- A. The County does not get involved in private real estate transactions. We have no requirement to force you to upgrade. If that's a condition of the sale, that's a private matter. If that's a condition and they come in for a permit, then we get involved. But just a straight transaction, that's a private matter.
- Q2. Is the PowerPoint presentation available?
- A. It is posted online.
- Q3. If you remove the square footage addition threshold for upgrading a septic system will you apply the new standards retroactively to projects currently in process? Will you remove the pretreatment class II requirement for greater than 640 square foot non-bedroom additions in the fire-affected areas?
- A. We are in a world of changing regulations and typically the rule is you go by the rules in place at the time of application. It's a policy, kind of like a guideline. We're going to have to think about that, how we're going to deal with folks who are in the middle of the process right now.
- Q4. Does this OWTS manual allow construction of new leach line in the amount of up to 25% of the existing total length of leach line without requiring site evaluation and a licensed professional's involvement?
- A. Yes. We have three classes of permits now. We have a new septic system permit, a replacement permit and a repair permit. New is new. A replacement is like a new dispersal system for an existing dwelling. A brand-new trench for an existing SFD is a replacement. A repair is short segments of line, working in an existing trench, clearing a blockage—working in an existing trench profile can be done under a repair permit. Where they bleed over is we have a provision that says you can replace up to 25% of your existing linear footage under a repair permit. The repair permit does not require the design professional or the soil evaluation, ground water if needed, and those design parameters. So yes, you can go up to 25% under a repair permit.
- Q5. For flow chart: What about a bathroom remodel?
- A. Septic system, yes; cesspool, no; flow increase; no (that's based on bedrooms). Square footage increase, no. Then not affected.



- Q6. For flow chart: A pad available for a mobile home or tiny house and septic is supposed to be increased.
- A. Added bedroom is added flow. If ADU, you'll get flow increase. We'll evaluate existing to see if it can handle it. But there is laundry, kitchen, more flow than just a bedroom. It's a similar but different scenario to adding a bedroom. We would still evaluate the existing dispersal system to see if it can take the added flow and if it can, we would require an additional septic tank at the ADU to handle the additional flow from the laundry and kitchen. The original design, odds are, is not designed for an additional kitchen. If there's capacity, with the additional tank, the existing system could be used for the main house and the ADU.
- Q7. Would it include other projects that cover more ground?
- A. Yes, because of ground cover.
- Q8. On a small lot, 100% encumbrance, incinerator toilet.
- A. When I think about composting toilets, my analogy is with solid waste (three cans). Domestic setting black waste, solid waste, gray water, and kitchen waste. There are still foodborne pathogens coming from the kitchen. One of the concerns I have with graywater systems is in the wintertime, if that graywater is expected to operate year-round, it won't work well when the ground is saturated. It will run off with the saturated ground. A storage element may be needed if you want to use it year-round.
- Q9. What if an applicant for a building permit says "No, I do not have a cesspool" but the County has no record of a septic system on the property? How will PRMD proceed with the permit applications?
- A. The first step is to look for permit records, any kind of County septic permit record. If that's not there, then we default to physical work in the field—going out, hopefully finding the septic tank. And if you're in the arena of just showing that you've got a nonconforming septic tank and dispersal system, if you're in the situation where you need to determine a code-compliant system, you go physically find it and then you may have to do some soil work adjacent to where the leach line is and demonstrate that you've got the right type of soil, right depth of soil, etc.
- Q10. What if the owner of a large parcel, 40 acres, wants to build a barn or ag structure far away from the dwelling and the barn ag structure exceeds 50% of the square footage of the dwelling? Is a septic review going to be required?
- A. Under that scenario, yes, because you've exceeded the 50% threshold but I kind of question the question because it sounds like you've got a big lot and the barn is far away from your dwelling, so that means there's a lot of space in there. Let's just assume at face value that you've exceeded the 50% threshold for land encumbrance. We would want you to evaluate and perfect the reserve system, which would have to be a pretty extraordinary circumstance on a 40-acre site. But the 50% threshold is land encumbrance, not of the square footage of the dwelling.

- Q11. Is the riparian corridor setback a land constraint; i.e., part of the land encumbrance?
- A. Yes. Stream setback, riparian corridor, setback from a well, setback from a neighboring well, setback from a steep slope or a cut bank, these kind of things make up part of the land encumbrance. They don't have to be a physical thing. If it prevents you from putting a septic system in that location, it's a land encumbrance.
- Q12. Will PRMD be building a database of, and modeling groundwater depth, for use by permit applicants based upon septic permit submissions, monitoring well data, drinking water well data, etc.?
- A. We have a wealth of well permits and in those we have boring logs and the screening interval, the soil type. We started building a database when the four watersheds—when we had the drought and we were concerned about the four watersheds. And we shipped that data off to the water agency because they're supporting the Sustainable Groundwater Management Act implementation. They're the technical experts for monitoring groundwater, so we've shared our data with them. But our department is not building a groundwater model.
- Q13. Do all TMDL requirements have to be included into the OWTS manual? Which parts? And please explain.
- A. What local agencies normally do is incorporate the requirements that have been established in a TMDL APNP into their local program. The TMDL comes up with an APNP and that'll be incorporated into our ____ plan and any local program is supposed to be consistent with the ____ plan. So that's how it gets either implicitly or explicitly incorporated into a local program. Our OWTS manual applies countywide and our approach is when the TMDL standards are further along, we'll receive them, understand them, and we'll create our advanced protection management program around their standards to comply with the TMDL. Right now we're kind of working in the dark. We've talked to them, we know about their timeline and their process, and we feel it wouldn't be prudent or time efficient to start creating standards now or develop an advanced protection management program not knowing exactly what the final standards are going to be. So we're waiting for the standards to get further along before we produce our document to deal with the TMDL area. And the same goes for the Petaluma River TMDL. We don't know what they are yet so we can't anticipate. The Russian River TMDL just happened to coincide with the OWTS manual.
- Q14. Can the OWTS manual components be included in a TMDL? Will the County be implementing TMDL for septic systems?
- A. The Regional Board entered into a memorandum of understanding with the County back in December of '17 or '16 and in the MOU, we laid out expectations for each agency. The role that the Regional Board is going to play is we're going to take more of an enforcement and investigative role. We're going to do an assessment to find out where those systems are that are failing that are cesspools and then at that point, when we find them, we'll refer them to the

County for some corrective action. The role the County will be playing would be taking it from there under their normal procedures.

Q15. What is percentage contribution of pathogens in the Russian River from septic systems?

A. We don't know that and we didn't do the sort of monitoring that could provide that information and I'm not sure if that's possible. The approach we took was to try to identify all the sources we believed were contributing, and that was also based on some monitoring data we had. One of the special studies we did demonstrated at least to our satisfaction that areas with denser conglomerations of septic systems had a correlation with high bacteria downstream.

Q16. What happens if work is done without a permit and code enforcement is called in?

A. First, we would have received a complaint. Code enforcement will initialize a violation. We'll send a courtesy notice that we have a violation. You can engage us then. If not, we'll attempt to get on the site to verify the violation. There are some cases where we don't get access and if it's significant enough, we may have to get an inspection warrant to gain access to the property to verify the violation. Some of the violations, we can see from the road. Something like this, below ground, we probably can't readily observe from a public way and we might have to get an inspection warrant if we felt it was a public health risk. If we did determine that it was a violation, we would inform you as such and require that you come get a permit to permit it or to abandon it. And that kind of work with a septic system is extraordinary and very exceptional.

Q17. How will a septic upgrade/new system be assessed by the assessor's office (they are not currently adhering to prop 13)?

A. I'm not the assessor but my limited understanding is I thought they looked at structures for assessed value.

Q18. What will happen when the _____ bacteria is counted and the Russian River is no longer considered impaired (2019)?

A. We are aware that there are new water quality objectives from the State and the water quality objective only uses for fresh water E. coli. One of the reasons we've delayed this adoption hearing is that we're going back and looking at that data to see what might change as far as listing goes. There is still a lot of evidence of high levels of E. coli out there. We're looking at all our options and alternatives. If the water quality improves and there's no more impairment, there is a process for delisting streams just as there is a process for listing them. The APNP is going to be in effect once it's adopted and is not going to go away.

Q19. How can the State TMDL policy have differing requirements than the County? (I can have a functioning County system that doesn't comply with the State requirements.)

A. We may have to look at this in the context of tier 3 near an impaired water body. When that's the case, there has to be an advanced protection management program developed and the idea is to have additional protection to address that source. What we're doing with the Russian River

TMDL is really focusing on cesspools and failing systems, which are not authorized under the County's policy either. But the objective of the TMDL is to focus on those failing systems and cesspools.

Q20. How is the State going to know that that system is either a cesspool or failing? What's the County going to enforce? How will you know what's there? If you ask me, I'm going to say I don't know.

A. That will be part of the APNP. Those are the requirements that are in development. We're finishing up a draft now for what the options are when a system needs to be upgraded. It will depend on how far the system is from a water body. If you're very close, you may have to upgrade with some sort of supplemental treatment system, if you don't have the soils available for the treatment. We have the authority to get the information from you about whether you have a system. You certainly could lie to us but we will ask you to sign a certification that what you're telling us is correct. This is a resource-intensive thing but we're going to be sending out letters and a certain section of the water code gives us the ability to get that information from you and requires you to give that information to us—what kind of system you have. And if you don't know what kind of system you have, you're going to have to find out. We're not going to go on your property to find out what you have. It's really up to you to tell us what you have. We may do a certain percentage of responses and try to _____ to see that people are being honest but that's really the only way we could get that information is through a questionnaire or in the form of a letter. If the answer is you have a system that's failing, the State would then require that you upgrade your system. And then you would come to the County for a permit. You'd get a design and you'd come and we would plan review it and inspect it. We'd plan review it to our standards or the standards from the APNP and then we oversee the plan review, make sure it's in conformance with the appropriate code requirements, and then we would inspect it during construction. So we would contact you to see what kind of system you have, if it has a history of failure, if it's sized correctly for the number of people that use it and you'd give that information back to us and we would look at the three things that would make you not in compliance with the TMDL. If it's failing or has a chronic history of failing, or if it's a cesspool, or if it's hydraulically overloaded, we would write back to you and say it doesn't look like you're in compliance with the TMDL, you need to contact the County for corrective action. Then the County takes over and works with you to get in compliance. If you don't know, you'll need to get that information from an engineer who can inspect it and find out what you have. If you can't find anything, we might assume you have a cesspool since it's not identifiable. We're not going to go on your property to find out what you have. We have to get that information from you.

Q21. I have a cement box because I did get work that required permits. But a lot of my neighbors have redwood boxes. I don't like to call them cesspools. That you're doing this manual is all well and good but this is the stuff I needed to hear so I can tell my neighbors they're going to get a letter and then what are we going to do? This is the stuff I came here for. It feels scary. People are scared. (Comment)

Q22. Total coliform is used by public health as a standard for health impairments but the State Board uses only E. coli and enterococcus. How will the TMDL deal with this contradiction? What role will Bacteroides play in the TMDL?

A. They use coliform as a way to determine whether a system is functioning. They'll have monitoring wells and they'll monitor for coliform. It's an inexpensive test and a lot of times mound systems for instance will have a lot of wells and there will have to be a lot of sampling done. So it keeps the cost down. And if you're seeing coliform in monitoring wells which are typically about 3 feet deep, that's suggestive that your system is not filtering out bacteria as it should. As far as State Board using E. coli, that's the water quality standard for fresh water. For saline water or estuarine water, it's E. coli and enterococcus and fecal coliform in ocean waters. But for freshwaters, the coliform group, fecal and total coliform, which is the larger group under which coliform is one subset, is an outdated fecal indicator of bacteria and there are more recent ones that are better. E coli is now thought to be better than the fecal coliform. Total coliform is the big group. Fecal coliform is a subset of that. E coli is a subset of fecal coliform. So if you find E. coli, it's more likely to be from a human source, or a mammalian source. But it can grow in the environment so it's not a perfect indicator. But it's relatively inexpensive and easy to measure. Most practitioners will say the organisms of interest and the ones that are causing diseases are actually viruses, but those are fairly expensive to monitor so they use fecal indicator bacteria instead. And E. coli seems to be the best, for fresh water at least, and some other ones are good for saline waters. Bacteroides is something that we used as an indicator of sources of bacteria in the TMDL and this was a genetic-based test where you can differentiate between different kinds of sources—human sources versus bovine versus sheep, etc.—we used that to try to figure out what are the major sources of the bacteria seen in surface water. That will probably be used as part of the monitoring for the TMDL but not as a water quality standard.

Q23. The house burns down in either the floodway or the flood means. Can it be rebuilt if it's on a septic? There is a sewer access but it's within a quarter or half mile and we're all in the septic area. So is the house or the property a loss?

A. So you've had some sort of event—fire, tree fall, flood, damage—catastrophic event where you need a significant repair. We neglected to write this provision into the draft that's out but we later caught this and have this on review. We have two types of building permits—with plan review and without. This one would need one with plan review but because it was due to a catastrophic event, we will treat it as if it were without a plan review and will not route it to well and septic section to expedite the plan review process. There's a floodway and a wider flood plain. County plain regulations and somewhere buried in chapter 25 says you cannot build a new structure in the floodway. That's where you have a higher velocity of water, that's where more people are at risk, you put emergency responders at risk who are trying to rescue people who are in the high moving water, etc. That's the base of that policy. However, that doesn't apply if you're trying to elevate your home through the CEC flood elevation program or if you have a catastrophic event and you're rebuilding in same footprint. Floodplain, you just need to make

sure that it's elevated one foot above the flood elevation. The TMDL as it's drafted currently has that same sort of exception for catastrophic events, as long as it's not a cesspool and it's not failing chronically, and not hydraulically overloaded, you're not required to have additional treatment after a catastrophic event.

Q24. The septic on a lot of a couple acres has gone through the County permit process and was installed ten years ago but nobody's built on that lot. They ran out of money or whatever. Can they just go back to the County and say the whole septic system's never been used, or would that need a new upgrade or how would that work?

A. By constructing it, it's like you've vested it. We have a vesting certificate that you can buy but when you build and finish it, you can then come in later and get the building permit and we'll look up the record, and we'll ask if you have a septic system, yeah, it's built. We'll look it up. It was built in 2006 or 2007, finished.

Q25. How do you identify where problem systems are? Can you do a search that has criteria such as not in a sewer district, occupied (by showing who or exemption or whatever), and no permit history?

A. We've done that and we provided that to the Regional Water Board. It doesn't necessarily mean that there's no system there. It could've been built pre-code or without permit. It just means we don't have a permit record for it. So you'll get the questionnaire. You can still go look. Find out what you have, report that to the Water Board, and you go from there. And if you have a fairly new system that's not failing, not a cesspool, and not hydraulically overloaded, feel free to provide that information as early as you want because you'll be in compliance with the TMDL and you won't have anything else to do.

Q26. Is there a place where you can look up hydraulically overloaded and what those standards are? Is there like 2 people equals x gallon of tank? Is there a chart?

The way it's defined in the draft APNP is that if the projected flow from your house exceeds any of the components of your system, your septic tank or your leach lines. The way the APNP is written is it's the projected flow. The County estimates projected flow on the number of bedrooms but we are not specifying that. There could be other ways to estimate projected flow. The draft APNP will be produced and available once we learn what the standards will be. It will still say projected flow and you're welcome to say how in your jurisdiction you're going to determine projected flow. It is flexible.

Q27. We have a redwood tank and we have leach lines that go to our tank. Is that a cesspool?

A. It's not a cesspool because it has a tank and dispersal.

Q28. Tell us what a cesspool is.

A.

Q29. The old County stipulations were class 1, 2, 3 system. Are those still in effect?

A. Yes, until new policies get approved. After the State gives their standards. We anticipate spring of 2019 for our OWTS policy. The Water Board hasn't adopted their calendar for 2019 yet. They want to hold the hearings in Sonoma County but we don't know when that will be, but we anticipate spring of 2019. Right now, our policy is at draft level. We'll be taking all of these comments in, making revisions, and then it will be sent to the Board of Supervisors for adoption. Once the Board agrees to the draft, then that's going to be sent on to the Regional Board for consideration and adoption, and then they'll be effective approximately 30 days after that. The next Water Board meeting is in November but obviously the County's OWTS manual won't be adopted by then. The one after that we assume is going to be around the beginning of February. We also have a public process, provided the County adopts something in mid-November, that's not going to be enough time to prepare what we need to for that meeting in February so the adoption hearing by our Board should probably happen roughly April 2019.

Q30. In the TMDL, how are you going to define a failing system? Is it a surface discharge or is it one that doesn't maintain separation of groundwater?

A. The second, no, that's hard to estimate. There's a definition of failing septic system in tier 4 of the onsite system policy. If it's surfacing, obviously. If it's backing up chronically, that's indicative of a failing system. There's something wrong with your leach lines most likely. We would point to tier 4 of the OWTS policy.

Q31. If the County adopts this in November, just like in 2016 when they approved the OWTS manual, can it go into effect in the County or does it have to wait for the Water Board? When we've done changes before, it seems like when they're pending, we've gone with whatever benefits the applicant. We acknowledge that we're about to change a standard, it's going to change, and we let it go. Once it's adopted and you go through your public hearing, Sonoma County adopts it, right?

A. The way septic policies get approved is through our director and we have a public noticing requirement. We wait 15 to 60 days to receive comments and absent any comments, they go into effect. We could but it's somewhat of a risk because if it goes through the Water Board's process and they get substantial comments and have to modify it, then we have to go through our channels again. The Board of Supervisors are not really adopting it. What they're going to do is provide direction to staff to either submit it to the State for their review and approval. If this was code, the Board's adopting that code. But this is not code; they're policies. They're giving us direction to provide it to the State and then the way the septic policies work under the code is the director approves those through a process that's laid out.

What our public process is going to be is approving the County's LAMP and OWTS policy. It's going to be a Board's resolution. We're going to be giving the opportunity for the public to comment on the Board's resolution. It's not really a second bite at the OWTS manual. We're reviewing the OWTS manual and the LAMP to see that it's in compliance with the OWTS policy. A lot of the things we've talked about today are very internal things to your local agency.

Sonoma County has always had a good septic policy and going into this they were pretty much in compliance with the policy.

- Q32. This is a big change in practice. It's going to affect people in a big way. (Comment)
- Q33. I keep hearing Charles say that Sonoma County is far advanced in terms of what we currently have and I keep asking why we can't just keep what we currently have. I would love to see a forgiveness policy with the County where there's a time period in which people can voluntarily come in to change their cesspools to a class 3 system with a minimal amount of fuss and muss, a streamlined system, much like you did with forgiveness several years ago for building codes. It would so far advance where we are now in terms of where we are and what the position of the County is going to be. I really want to support seeing that. If you have a cesspool, and people come in and voluntarily do a voluntary repair now under current codes, it will be less expensive, less cumbersome, less time consuming and will in theory comply with some TMDL, correct?
- A. What I think is better in this are the triggers for the plan review. Are you increasing flow, are you physically encroaching into a field, or are you encumbering a space that's needed for reserve. I don't know if it will comply with the TMDL. What you're suggesting is similar to the current voluntary repair. We don't know about the soils, we're not getting designs. And I understand your perspective and your input but my thought is there's no design, no element of the science behind that. The theory is that's better than a cesspool but how much better?
- Q34. I think there's a lot of emphasis being put on the problem and not enough emphasis being put on the solution. I think it's really bad to not have solutions already in place for something that's going to be mandatory. I live in an area where most of the houses are right on the creek, which is a tributary into the Russian river. They're all old. I would say 95% of them are cesspool. Most people that live there are older, low-income, will not have the money to do anything about their situation. So it just seems kind of like a lose-lose to me. We need to improve the quality of our water but people are going to find ways to not comply. And it's not only a financial consideration because the houses are right on the bank of the creek and then there's a steep cliff so what you're talking about with the encumbrances, there's no way they're going to be able to put in a leach line or system.
- A. From the County's perspective, if they're the type of individual you just described and they're not making a change to their house, they have no issue with the County. Regarding the State Board, we've contested on a number of occasions where we think the process does need to include financial assistance for people, if they're going to fall into this regulatory situation. We want to make sure all those things are in place beforehand. One of the things we're looking for actively is not one solution. There are cluster systems, with the septic system off site from the home and shared by multiple residences, and package treatment systems, and maybe for some, hooking up to an existing sewer system. Different parts of it are probably going to be paid for in different ways but there are state funds available for disadvantaged communities. We're working together and putting pressure on our state legislators to say that this should be included in new bonds. For the TMDL, we're allowing for a time schedule to comply up to ten

years for financial hardship, if you're involved in some sort of community upgrade, or if you're fortunate enough to be close enough to connect to an established sanitary sewer system.

- Q35. My biggest concern about these new standards is that what we've done is we've removed the incentive for upgrading septic systems. What we had before was cumbersome with multiple iterations of the remodel policy to trigger an upgrade but we've removed the incentive and putting the upgrade requirement on people who wake up one morning with a failed system, I don't think we're going to get compliance like we did with remodeled houses. It's not a drip system, it's not those things. When you tied the remodel policy to the class 3, how many permits did you get for voluntary repairs? Tons. That tells me we have a lot of systems that didn't even meet a minimum standard. What I'm afraid we're going to see is get people to stay under that big huge standard and go in and put weekend cesspools in. They go in every month around here. I'm afraid we've raised the bar so high when people need to fix some things. We used to say at least come in, don't build a cesspool—we're going to work with you to get a leach line, something other than a cesspool or putting it in the creek. So we had minimum standards.
- A. I look at those triggers and say this is a big shift in the law that actually respects the property owner by saying we are not starting with the presumption that what you have is deficient or illegal. We're using are you adding flow, are you physically affecting the dispersal field, are you leaving enough room for reserve? I think it's good when the government trusts the people for whom it works and says when there's a deficient condition on your property, we have standards and you know what they are and we expect you to comply with them. We're not there as big brother to compel people directly or indirectly. I find that as a refreshing change in this. I think it's going to help us from a business perspective to really be able to focus on those challenging situations when you folks bring us systems that are complex for good reason and we actually have the time to process them in an efficient manner. I think there are some exceptional improvements that are coming with this system. It won't be perfect and we will have to make adjustments. This is our seventh community outreach and this is our second major rewrite. We're trying to work with the community to find the best sense of equity and efficiency.
- Q36. If you have a trailer or a mini-house that's totally self-contained ____ graywater system, is that something that you're looking at approving and working with people on? Especially if you've got a small lot that's 100% encumbrance?
- A. That's a fairly unique and narrow question. We haven't designed a program or a policy for that. But when I started thinking about composting toilets, my analogy is with solid waste. We have green waste, recycling, and trash. And the parallel is the domestic setting, with black waste, solid waste, you have your graywater and you have your kitchen waste. There's still foodborne pathogens coming out of your kitchen and you need to deal with them. I can envision a system one day where we will separate out the waste, much like we do with solid waste, and we may have a composting toilet, incinerator toilet maybe with the black waste, a graywater system for showers and faucets, and then a small septic system, classic septic tank and a dispersal system, maybe at a different depth of soil because it's a different waste than a combined system. But we haven't perfected that. It's just something we've talked about. And I would throw it to the

community. If anybody wants to help design something like that, we're open to it, but we don't have that design perfected to put it in this manual right now. And one of the concerns I have with graywater systems is in the wintertime. We do get rains, the ground gets saturated, and if that graywater system is expected to operate year-round, it's not going to operate well when the ground is saturated. It's going to run off with the saturated groundwater. But also, the rain starts and stops. So there is a storage element that may be needed for graywater if you want to use it year-round. And that mathematical mapping would need to be done to figure out what's the optimum storage size. And if you _____ you're going to need some sort of air diffuser or something to keep it aerobic. Otherwise, _____ water is going to go to septic.