

Report on CASA Winter Conference Jan 24-26, 2024  
by Dwight Merrill

1. CSRMA meeting was same time as Fed. Leg, so I only caught the last part. One item: we should all visit CSRMA.org for a 15 minute explanation of what CSRMA is and what it does. It is a good intro for newer members and a good review for older members. Looking at the half year report, costs are up a little. After 2 years of modest profits we are, for the 1<sup>st</sup> half of the fiscal year 2024, running at a modest loss. The extra investment revenues from the captive insurance unit have not yet been rolled into the consolidated statement, however. And insurance costs over all are going up. Inflation is a major culprit. Due to increased valuations, the same accident that cost \$5000 a few years ago now cost \$10000, so insurance cost have doubled. A 14% increase for liability coverage is probable.

2. Roundtable Discussions Each session is one hour. After a break, you rotate to another table. The “DEI Efforts at Your Agency: Identifying What Works” was canceled. I had planned to attend. Instead, I first attended the “Agency Education and Outreach Programs” which was initially aimed at preventing SSOs by educating the public about what not to put into the sewers. We are already doing quite a bit, but some good suggestions came out of the roundtable. One, tailor brochures for each of the various groups you want do address, such as the construction industry. Some groups may be more attentive if the legal ramifications of illegal dumping are emphasized. One point a participant made was that the 218 notices are a chance to educate the public is you add information about sewer issues.

The second roundtable I attended was “The New SSS WDR” run by Paul Causey and Steve Jepsen. Rex seems to be up on the new rules, but the burden on smaller agencies is high. A report on an SSO should run 25 to 50 pages and should include staff interviews. An agency should audit these reports issue an audit report every three years after reviewing the reports. Note that you must legally certify all reports, which leaves the door open to 3<sup>rd</sup> party lawsuits. Since the WQC Boards have no money for enforcement (do they spend all their money issuing opaque Waste Discharge Requirements?) people like Baykeeper may jump in. Some regions are now requiring class 4 spills less than 50 gallons be reported even if they come from private laterals. Note that Rex’s annual “System Performance Report” covers a number of requirements in the current SSS WDR. Oh, and we also must have stormwater infrastructure on our maps—How do we get information out of the county for Kensington?

3. Federal Legislative Committee Meeting. The good news is that there is a bipartisan “Non-Flushable” and “Flushable” wipes bill that should pass out of this congress. Everything else is bad news. If Congress can’t pass a budget, all the reductions written into past bills become mandatory. The 1% reduction will be much more than 1% because government has been spending at a much higher rate than the base the 1% is calculated on. One deadline (which has been extended twice) hasn’t worked, so Speaker Johnson divided the bills into two separate groups each with a different deadline, apparently in the belief that two are better than one. PFAS issues are going to kick in without resolution on toxicity or any framework on who will pay for treatment or clean up. With another Republican House member hospitalized after a severe automobile accident, and George Santos gone with the replacement election scheduled for late Feb., when it is probable that the Democrat will win, Johnson will have a bare one vote majority of 218 votes. Things could blow up at any minute—forget about anything getting done. And the Democrats are predicted to lose the Senate in the November elections.

4. Thursday Morning Session. Jane Gajwani, NYC Office of Energy and Resource Recovery Programs, had some interesting comments on New York City’s efforts on improving efficiencies in operations, thus reducing carbon foot print, and improved recovery and use of biosolids. One potentially useful aspect is heat recovery from wastewater. In winter a heat pump using ambient air at

10 degrees F has to strain, but is happy to take heat out of 70 degree F water. How to cycle the heat back into homes hasn't been worked out. The next speaker discussed the Inflation Reduction Act (IRA) as a source of funds for projects which further environmental sustainability goals. The talk in the news was all about tax breaks, but non-profit organizations (like Stege) can get up to the 50% tax credit as a direct payment for such projects—report on form 3468.

5. Luncheon Speaker was Congressman Raul Ruiz MD, who represents the District immediately east of Palm Springs. He was able to tie together his background in medicine, the poverty in the Coachella Valley, and the work of CASA. He had worked in Haiti as a volunteer after the great earthquake and also in Serbia. He noted that diarrhea caused by poor sanitation is the greatest cause of infant mortality in the developing world, and here in the Coachella Valley you can see above ground septic tanks overflowing when it rains, spilling sewage onto the ground, where farm workers must toil. He was thus able to remind us that CASA Agencies are doing important work.

6. Permitting Innovation Panel Discussion. We heard how permitting is often a terrible problem (don't we know!) especially with non-traditional projects. You must have (1) clarity from the beginning. The regulators must have (2) the capacity to evaluate the proposal; if necessary build knowledge with the regulators and public. You need (3) continuity; if there is turnover in personnel you may need to start over. You must have (4) trust that everybody is playing with an open deck, and everyone needs some (5) flexibility, although it is understood that flexibility is always bounded. Within this framework Sharon Green discussed the chloride issue around the Los Angeles County Sanitation Districts which got hit with a series of set backs like a law suit which overturned a water softener ban in new construction and science studies on chloride levels which came in too late ease the regulators demands. She note seven stages of feelings and actions in such a process. 1. Disbelief 2. Mediation 3. Addressing the lowest hanging fruit 4. Look to science to change requirements 5. Double down on source control 6. Develop an out of the box approach (which in this case failed at the last minute) 7. Finally accept that end of the pipe treatment would have to be used.

Here in the Bay Area we have a similarly developing issue with ammonia. Jackie Zipkin and Lorien Fono outlined aspects of the issue. The sewage treatment plants ringing the bay are under pressure to reduce ammonia levels in their effluent. I would argue that there is a strong feeling among the regulators and NGOs that nutrient removal is a holy grail we must obtain. Scare articles in the San Francisco Chronicle about massive algal blooms and fish kills must be taken with a grain of salt. I'm not an ammonia denier, but I'm a Bay Area native, lived here most of my life, and almost every summer in hot weather we do have dead fish in Lake Merritt. The nitrogen levels in the Bay are high enough (it is said) to cause algal blooms. The fact that they haven't occurred, they say, may be due to turbidity, preventing enough sunlight to get deeper into the water. The situation is, they say, a powder keg waiting to explode. And they are always vague about the science. They say ammonia, but they are really talking about total dissolved available nitrogen compounds—ammonia, nitrate, and nitrite. They are holding back on insoluble nitrogen in cellular matter, although they may pull this out later. They have aerial spectrophotometry which picks up Chlorophyll A from some algae, but these levels are no longer rising. How much ammonia more ammonia they want removed (a good portion of the ammonia and phosphorous end up in the biosolids) is vague. Ammonia can be precipitated as magnesium ammonium phosphate, yielding a valuable fertilizer, but will this satisfy the regulators if it gets to 6 ppm instead of 2 ppm? The conventional denitrification process is biological. Ammonia is oxidized to nitrite/nitrate, then oxygen levels are lowered, and some organisms can utilize nitrate and nitrite as an oxidant instead of oxygen, reducing the nitrate/nitrite to nitrogen gas. Unfortunately, a side reaction is the formation nitrous oxide, a powerful greenhouse gas and surprisingly long lived in the atmosphere. Although this is a drawback, the regulators are so intent on requiring denitrification that they insist on it even when it is clearly inappropriate. Ironhouse Sanitary District, out here in Antioch, had to upsize

their plant a few years ago. They have an interesting set up. They don't discharge their treated waste water to the Delta, instead they use it to irrigate 1700 acres of grassland where they raise organic beef cattle. Dis-spite these facts, the regulators required denitrification be added. Now they destroy the ammonia, releasing nitrous oxide, then buy nitrogen fertilizer, a high carbon footprint commodity. So there is a double whammy to the environment. I'm still at the disbelief stage, but I fear we will be stuck with an end of the pipe solution.

Questions?