Research Priorities Ranking Workshop 2010

RRAC Member/Alternate Name:

Process:
1. Individuals brainstorm up to 5 ideas for potential research projects
2. Round robin - each person recites his or her responses, which are written down
3. Clarification - the group discusses the remarks
4. Selection and ranking - each person selects and ranks in priority order the top 5 ideas
5. Final selection and ranking - results are tallied and reported

Number	Issue (Scope; B-9 funding)	Weight: Choose top five projects (highest priority = 5, lowest priority = 1)
1	Continuation of inventory of OSTDS in Florida. Update the state database system, update with the latest Department of Revenue information on parcel data, update with the latest DEP wastewater treatment plant (WWTP) information, send letters to WWTP to gather up-to-date information on who's on sewer, work with county health departments to resolve unknowns.	
2	Study on grease sludge waste in establishments on OSTDS generating commercial strength sewage waste. Develop and verify best management practices for grease reduction and reuse in these types of facilities. First identify the scale of the problem, the survey current practices from both businesses on OSTDS and businesses on centralized sewer, perform case studies by implementing changes and characterizing the results, and perform education and outreach.	
3	Look at loading rates for drip irrigation / low pressure dosing / conventional and effective soil depths.	
4	Blackwater / graywater concentrations exceeding domestic sewage waste if separated? Water conservation effecting this?	
5	Residential flow strength higher now than previously due to low flow fixtures. Is the code still adequate? Is domestic strength sewage flow definition still adequate? The definition doesn't take into account dilution, less flow = stronger sewage. The biomat will have less permeability. Loading might not be more to the drainfield and this might be taken care of in the tank. Possibly look at this vs. the restaurant study and do sampling.	
6	Research on convenience store restrooms and flow data to make sure sizing in code is OK (strength and flow)	
7	Study to determine effects water saving fixtures have on influent / effluent concentrations and flow amounts for residential and various commercial establishments (sampling of systems that do not have water saving fixtures, then install the fixtures and resample)	
8	GIS study of correlations between water quality in wells, health effects, and types of septic tanks (FAMU intern worked on this in 2004)	

9	Relationship between soils, failure rates, and treatment effectiveness	
10	Research energy efficiency in OSTDS	
11	Research emerging contaminants (endocrine disputing chemicals, pharmaceuticals in personal care products) in OSTDS	
12	Research virus removal in OSTDS	
13	Research urine source separation in OSTDS	
14	Develop an informational training program that can be used to inform planning and county government meetings on decentralized systems	
15	Verify how significant the linkages are between optical brighteners and other wastewater indicators such as coliforms and nutrients.	
16	Research the effectiveness of outlet filters.	
17	How representative are repair rates for the frequency of failure and non-conformance of OSTDS to standards? Are there categories (which) of systems that get repaired less frequently (could do survey, or build on SB550 inspections) ?	
18	What is the life expectancy of a septic tank and various kinds of drainfields? Are there factors that are important?	
19	Are there best practices of "designing for maintenance" that warrant being turned into code requirements?	
20	How much groundwater mounding occurs under drainfields that then can impact drainfield performance? (survey a sample of systems in high groundwater conditions, compare to existing model predictions)	
21	How much phosphorus removal occurs under drainfields?	
22	Many systems are stressed by overloading from vacation rental and/or other short term overloading. What is the performance of systems under such conditions (peak factor relative to average or median flow); what is the performance of mitigating factors, such as over-design or time-dosing, both under the peak conditions and under average conditions?	
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