



Florida Department of Health
Bureau of Onsite Sewage Programs
Research Review and Advisory Committee Meeting

DATE AND TIME: March 23, 2010 at 9:30 am

PLACE: via Conference Call: 1-888-808-6959
Conference Code: 1454070#

Or
Florida Department of Health Southwood Complex
4042 Bald Cypress Way; Room 240 P
Tallahassee, FL 32399

This meeting is open to the public

AGENDA: FINAL

1. Introductions and Housekeeping
2. Review Minutes of Meeting September 10, 2009
3. Review Minutes of Meeting December 16, 2009
4. Nitrogen study
 - a. Department's Final Report on Nitrogen Reduction Strategies Study: Review, Comment, and Next Steps
 - b. Nitrogen Reduction Strategies Study: Comment on Deliverables and Next Steps
5. Section 319 Study Update:
 - a. Review of Site Selection Process
 - b. Review Final Surveys to Interest Groups
6. Suwannee Study Update
7. Discussion on Pollution Prevention Program Grant Proposal Draft
8. Premature Failure Rates Discussion
9. Other Business
10. Public Comment
11. Closing Comments, Next Meeting, and Adjournment

Research Review and Advisory Committee for the Bureau of Onsite Sewage Programs

Approved Minutes of the Meeting held at the Southwood Office Complex, Tallahassee, FL

March 23, 2010

Approved by RRAC on 6/10/2010

In attendance:

- **Committee Membership and Alternates:**
 - **In person:** Anthony Gaudio (vice chairman, member, Septic Tank Industry); Carl Ludecke (alternate, Home Building Industry); Bill Melton (member, Consumer); Eanix Poole (alternate, Consumer)
 - **Via teleconference:** Sam Averett (alternate, Septic Tank Industry); Quentin (Bob) Beitel (alternate, Real Estate Profession); David Carter (chairman, member, Home Building Industry); Kim Dove (member, Division of Environmental Health); John Dryden (alternate, State University System); Jim Peters (alternate, Professional Engineer); Patti Sanzone (member, Environmental Interest Group); John Schert (member, State University System); Vince Seibold (alternate, Local Government); and Pam Tucker (member, Real Estate Profession)
- **Not represented:** Restaurant Industry
- **Visitors:**
 - In person: Mark Hooks (Tallahassee Community College); Bruce French (York ISG); Brian King (York ISG); Bruce Ritchie (The Florida Tribune)
 - Via teleconference: Damann Anderson (Hazen and Sawyer); Neil Campbell (Florida Department of Environmental Protection); Marc Dick (Tallahassee Community College); Josefin Edeback (Hazen and Sawyer); Gina Herron; Bruce Higginbotham; Daniel Smith (Applied Environmental Technologies); Walter Wood (Lake County)
- **Department of Health (DOH), Bureau of Onsite Sewage Programs:**
 - Paul Booher; Dale Holcomb; Debra Roberts; Eberhard Roeder; and Elke Ursin

1. **Introductions** – Nine out of ten groups were present, representing a quorum. Chairman Carter called the meeting to order at 9:40 a.m. Introductions were made and some housekeeping issues were discussed.

2. **Review of Previous Meeting Minutes** – The minutes of September 10, 2009 were reviewed. **Motion by Vincent Seibold and seconded by Eanix Poole to approve the minutes as submitted. All were in favor with none opposed and the motion passed unanimously.**

The minutes of December 16, 2009 were reviewed. Anthony Gaudio had some suggestions to clarify some of the comments he made during this meeting.

Motion by Eanix Poole and seconded by Vincent Seibold to approve the minutes as corrected. All were in favor with none opposed and the motion passed unanimously.

3. Nitrogen Study

- a. **Department's Final Report on Nitrogen Reduction Strategies Study: Review, Comment, and Next Steps** – Elke Ursin introduced the study. The draft report was

submitted to the legislature on March 1, 2010. The report that was distributed along with the material for this meeting included a copy of the March 1st report with some tracked changes to show what is proposed in the final report that is due May 1st. The committee is to consider the report and make comments now prior to it going to the legislature. Specific feedback was requested on the following points:

- Does the committee want the proposed recommendations in the report?
- Does the committee want to incorporate other research efforts into the report?

Regarding the recommendations, Damann Anderson stated that he has no problem with the content of recommendations but pointed out that they do not come as a result of the project and it seems premature to include these at this time. Pam Tucker stated that the recommendations should be delayed and considered at a later time. Eberhard Roeder stated that now is as good a time as any to make these recommendations.

There was much discussion on the report and several suggestions were made on how to wordsmith the document. Eberhard Roeder edited the report live on the Adobe Connect Pro web conference.

Anthony Gaudio made a motion, seconded by Jim Peters, to accept the executive summary of the report with the following changes:

- **Move the last paragraph ahead of the recommendations**
- **Edit the introduction to the recommendations to clarify that the recommendations are from the Department**
- **Insert a header to the recommendations section**

The majority were in favor with one opposed (Pam Tucker who did not want the recommendations in the executive summary) and the motion passed.

Regarding the incorporation of other research efforts into the report, it was decided to add a paragraph to the report about these other studies. Damann Anderson stated that the literature review report will be brought up to date before the project is finished.

There was a discussion on the process forward for how to get the report edited and approved by the RRAC, and the following motion was passed:

Anthony Gaudio made a motion, seconded by Bill Melton, to accept the draft report as final as amended, plus add a paragraph on the other research efforts. All were in favor with none opposed and the motion passed unanimously.

- b) Nitrogen Reduction Strategies Study: Comment on Deliverables and Next Steps –** An overview was given outlining what has happened since the last meeting. The final quality assurance project plans (QAPP) for the passive nitrogen removal study phase II and the field and test center sites have been submitted. The contract amendment to update some of the tasks and their associated costs has been executed. Construction is well underway for the test center in Wimauma. Damann Anderson went over the most recent construction progress report and several photos were shown.

4. **Section 319 Study Update** – Elke Ursin introduced the study. The draft summary report for the Monroe County portion of this project is being drafted. The database is mostly complete identifying 16,802 advanced systems in the state. Summary statistics are being developed. The QAPP for the sampling portion of this project is being finalized. After an Invitation to Bid had been advertised, and several competitive bids came in, a provider was selected based on cost, and the contract with the lab has been executed. The original budgeted cost for this task was over \$125,000 and the contracted cost ended up being just over \$30,000.
 - a. **Review of Site Selection Process** – A flowchart was created to outline the sample selection process. This flowchart was discussed. First a pure random sample was selected from all the systems, and then additional systems will be selected as needed based on specific subcategories such as treatment method. 700 systems were selected which included 600 main sites and 100 backup sites. From this selection, Monroe County was over-represented by 2.7%, which ended up being 19 systems. Upon discussions within DOH and with the grant manager at DEP, it was decided to make the representation equal and those 19 systems were replaced with randomly selected non-Monroe County sites. Monroe, Brevard, Charlotte, and Franklin counties were the counties with the highest number of systems. At least one system was selected to be sampled from 53 out of 67 counties.
 - b. **Review Final Surveys to Interest Groups** – The final surveys for each of the interest groups was presented. The interest groups were system owners and users, regulators, engineers, installers, maintenance entities, and manufacturers. These surveys have been mailed out.
5. **Town of Suwannee Study** – Elke Ursin presented a brief overview of the status of this project. The second round of sampling was completed in November and December of 2009. The provider is working on analyzing the results.
6. **Pollution Prevention Grant Proposal** – Elke Ursin presented on a grant proposal for the EPA's P2 program. The objective will be to develop and verify best management practices for grease reduction and reuse in facilities generating commercial strength sewage waste. There was a discussion on the grant proposal outline.

Anthony Gaudio made a motion, seconded by Eanix Poole, for staff to draft a letter of support and the chairperson for the RRAC to sign to submit with the grant application and to have RRAC monitor the project on an ongoing basis. All were in favor with none opposed and the motion passed unanimously.
7. **Premature Failure Rates and Alternative Drainfield Products** – Availability of data on the longevity and effectiveness of alternative drainfield projects is limited. Before diving into a contract, staff looked into what kind of information we already have. Bill Melton gave a brief overview of the problem from his perspective as the consumer representative. Many alternative drainfield product manufacturers make certain claims, and it is difficult for the consumer to know what claims are true and which are false. At one time we were going to do a side-by-side study and there were some issues with doing this type of study. Now we are trying to figure out whether

the information that DOH captures when issuing a permit can help with making this kind of decision. An outline was developed by staff showing some of the current efforts and issues and was submitted to the RRAC in their meeting packets. This outline was discussed. Anthony Gaudio mentioned that certain things like method of installation are not tracked at all and make a big difference in how well the system works. Dale Holcomb said that this was considered and it was determined that every system will have confounding factors like this and maybe the best approach is to back away from those types of details. He said that some of the data may be skewed, for example if one product is only used in slightly limited soils it make look like it has a great longevity when compared to another type that is installed in both soil types. The next steps were discussed and staff will look into them and get back to RRAC at a future meeting. Specifically, some budget numbers and a proposed scope of work will need to be determined.

- 8. Other Business** – FDEP’s Wekiva River Basin Nitrate Sourcing Study report is available. Also, a map of the results from the Inventory Study from last year will soon be available for the public to view, search, and download from the FDOH website. The strategic plan for the research program was submitted to the RRAC for information. This plan is updated yearly. Quentin Beitel thanked the Florida Association of Realtors and Pam Tucker for his recent appointment to the RRAC and is looking forward to serving on the RRAC. The nitrogen study report will be sent to the RRAC once it has been finalized.
- 9. Public Comment** – The public were allowed to comment throughout the meeting. There was no public comment.
- 10. Next Meeting** – The next meeting will be scheduled for sometime after the legislative session ends. The meeting location may be at the Gulf Coast Research Facility and/or via teleconference/webconference. The focus of the next meeting will be to discuss the Nitrogen Reduction Strategies Study funding and project future as well as discuss current and proposed research projects.

Anthony Gaudio made a motion to adjourn, seconded by Bill Melton, and the meeting adjourned at 2:50 p.m.



Department of Health
Bureau of Onsite Sewage Programs
Research Review and Advisory Committee

Tuesday March 23, 2010

9:30 am - 3 pm



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Introductions & Housekeeping

- Roll call
- Identification of audience
- How to view web conference
- How to “raise your hand” to speak
- Download reports:

<http://www.myfloridaeh.com/ostds/research/Index.html>



Review Minutes of Meeting September 10, 2009

- See draft minutes



Review Minutes of Meeting December 16, 2009

- See draft minutes



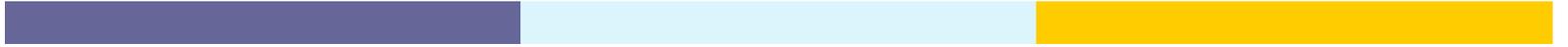
Florida Onsite Sewage Nitrogen Reduction Strategies Study

Purpose: Develop passive strategies for nitrogen reduction that complement use of conventional onsite sewage treatment and disposal systems, and further develop cost-effective nitrogen reduction strategies



Draft Final Report on Nitrogen Reduction Strategies Study:

- Questions:
 - Recommendations?
 - Decreased densities in nitrogen sensitive areas: details?
 - Incorporation of other research efforts
 - UCF's Interim Report
 - WERF Project and Soil Treatment Effectiveness
 - Wakulla PBTS Sampling
 - Manatee
- Comments
- Next Steps: Routing within the Department in early April



Switch to Final Draft Report



Florida Onsite Sewage Nitrogen Reduction Strategies Study

Recent Progress:

- Interim progress report submitted
- Reports have been submitted:
 - Final QAPP for PNRS II
 - Final QAPP for Field and Test Center Sites
- Contract amendment has been executed
- Construction has begun for Test Center (switch to construction progress report)



Florida Onsite Sewage Nitrogen Reduction Strategies Study

Next steps:

- Routing of Final Report to Legislature
- \$2-million being discussed in the Legislature
- Opportunities
 - Utilization of Wakulla sampling sites
 - Cooperation with Onsite Wastewater Decentralized Demonstration Project in the Keys



319 Project on Performance and Management of Advanced Onsite Systems

Purpose: Assess water quality protection by advanced OSTDS throughout Florida

Progress:

- Monroe County Project
 - Draft summary report being drafted
- Database
 - Mostly complete
 - 16,802 identified advanced systems in the state
 - Summary statistics to be developed and presented at next meeting



319 Project on Performance and Management of Advanced Onsite Systems

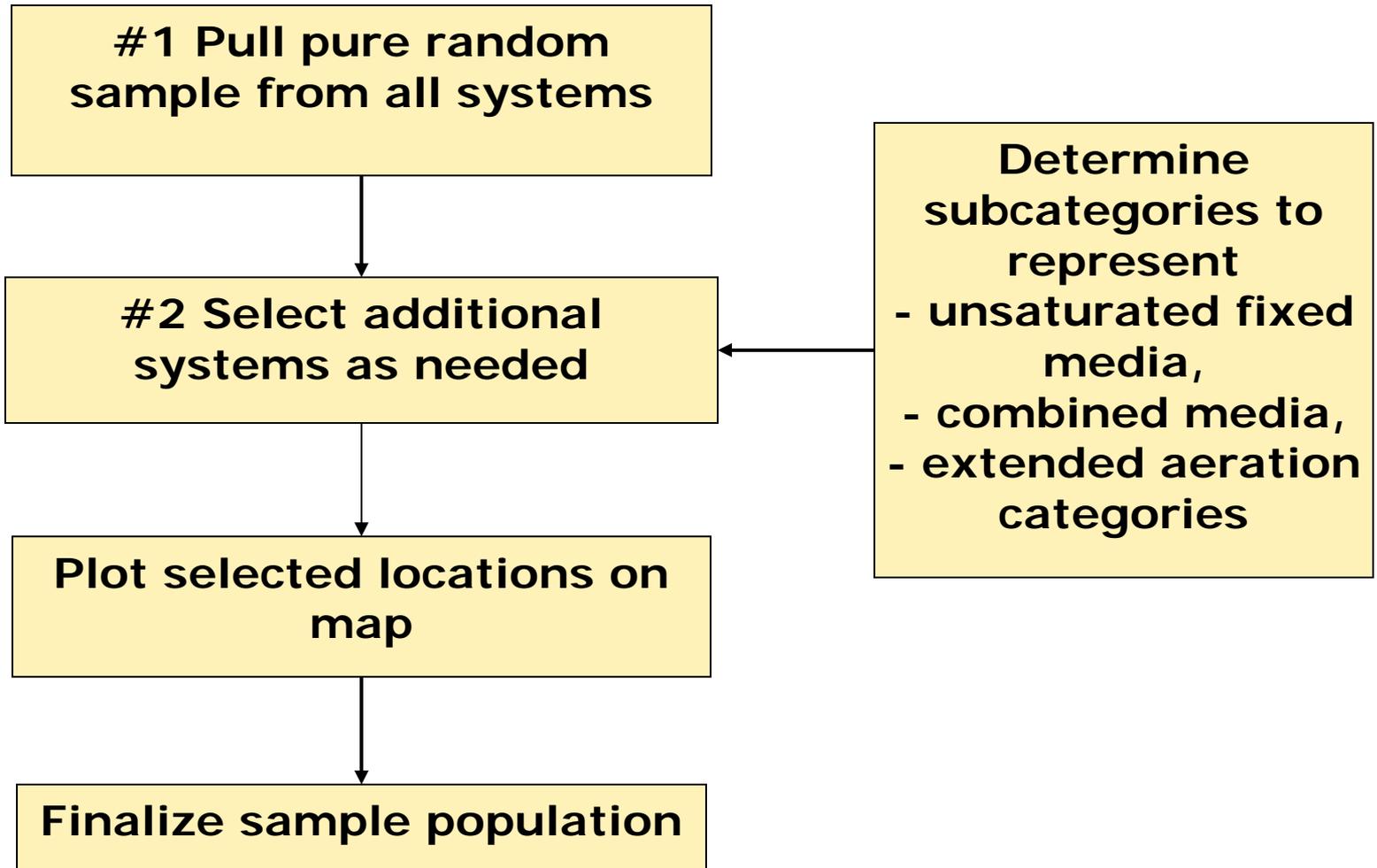
Progress cont. :

- Sampling
 - QAPP is being finalized
 - Contract with lab has been executed
 - Budgeted: \$127,925
 - Contracted cost: \$30,120
 - Sample selection flowchart created



Sample Selection Flowchart

Advanced System Performance Eval.





Sample Selection Results

- Randomly selected 700 systems (600 main sites with 100 backups)
- Monroe County was over-represented by 2.7% (19 systems) and upon discussion it was decided to make the representation equal
- Top counties:
 - Monroe (148 systems)
 - Brevard (99 systems)
 - Charlotte (95 systems)
 - Franklin (47 systems)
- 53 out of 67 counties have at least one system to be sampled

Distribution of Sample Sites





319 Project on Performance and Management of Advanced Onsite Systems

- Surveys of interest groups
 - Surveys have been finalized and mailed to interest groups
 - Any comments?



Town of Suwannee Study

Purpose: Test the difference in water quality after central sewer has been installed in an area previously served by onsite sewage systems

Progress:

- Second round of sampling (Nov - Dec) has been completed
- Provider working on analyzing the results



Pollution Prevention Grant Proposal

Grease Sludge Waste in Establishments on Onsite Sewage Treatment and Disposal Systems Generating Commercial Strength Sewage Waste

- **Objective:** Develop and verify best management practices for grease reduction and reuse in facilities generating commercial strength sewage waste
- Requires 50% match
- Go through task list and prioritize and discuss



Premature Failure Rates and Alternative Drainfield Products

- **Problem statement:** Since approximately 2004 alternative drainfield products are installed at rates higher than aggregate. System field longevity and effectiveness of minimum drainfield size are untested. Availability of data is limited.
- Current efforts and issues (see outline in meeting packet)
- How old should the data be?
- Where do we go from here?
 - look at what was installed, how many failed, and in what timeframe the systems failed
 - design something that could capture the failure rate for systems
 - initiate quality control checks / recommendations to ensure consistent data entry and gathering
 - is this a stepping stone to determine if we need to pursue another contract similar to the Alternative Drainfield Products contract?
- How much do we want to spend?



Other Business

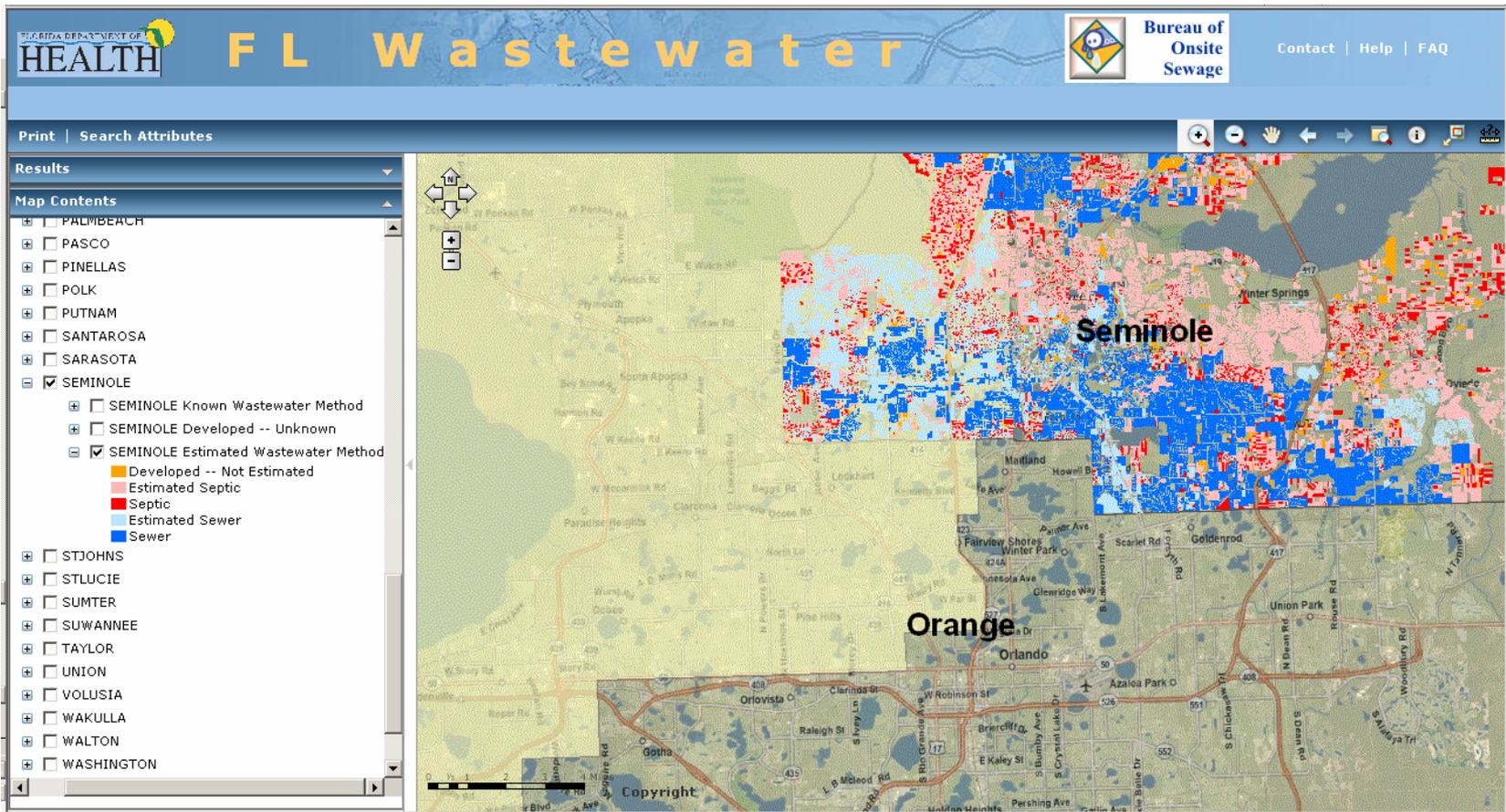
- FDEP's Wekiva River Basin Nitrate Sourcing Study report is available:

<http://www.dep.state.fl.us/water/wekiva/index.htm>



Other Business

- Map of results from Inventory Study will soon be available for the public to view, search, and download on the FDOH website





Public Comment



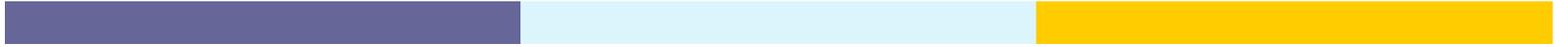
Next Meeting

Upcoming meeting topics:

- RRAC Priorities
- RRAC Budget
- Nitrogen Study process forward (depends on funding)
- Tour of test center when complete
- Suwannee data analysis
- Inventory study phase II discussion
- Wekiva

Proposed dates for next meeting:

- Suggestions?



Closing Comments and Adjournment