

**Upper Wakulla River and Wakulla Springs Basin Management Action Plan Meeting  
Onsite Sewage Treatment and Disposal Systems (OSTDS) Advisory Committee**

*Tuesday January 16, 2018*

*2:00 PM ET*

*Woodville Community Center*

*8000 Old Woodville Rd. Tallahassee, FL 32305*

**Attendees**

*Advisory Committee Members Present*

Curtis Baynes, Homeowner

John Buss, City

Melissa Corbett, County

Katherine Davis, DOH

Stan Derzypulski, Other Interests

Bob Deyle, Environmental Interests

Anthony Gaudio, Other Interests

Roxanne Grover, Other Interests

John Hallas, Public Utilities

Theresa Heiker, County

*Others*

Bart Bibler, WSA

Catherine Bray, City of Tallahassee

Tiffany Busby, Wildwood Consulting

Greg DeAngelo, DEP

Tina Gordon, Wildwood Consulting

Pam Hall, Citizen

Janet Hearn, ATM

Mark Heidecker, City of Tallahassee

Carlos Herd, NFWFMD

Moiria Homann, DEP

Cal Jamison, Water Resources Technology

Brian Katz, DEP

Allan Layne, Mott MacDonald

Debbie Lightsey, WSA

Celeste Lyon, DEP

Sean McGlynn, Audubon/WSA

Mike Murphy, Mott MacDonald

Steve Peene, ATM/DOT

Debby Preble, City of Dewberry

James Rachal, DOH Wakulla County

Johnny Richardson, Leon County

Mark Thomasson, W Source Group

Debbie Tipton, DOH

Edgar Wade, Leon County

**Welcome and Opening Remarks**

Tiffany Busby welcomed the attendees and thanked them for attending. Tiffany thanked Leon County for the use of the facility and introduced herself. She reminded everyone to sign in and check the accuracy of their information and informed them that signing in would get them added to the email list for updates. Tiffany introduced the OSTDS committee and informed attendees that although the meeting is public, it is also a committee meeting and as such we would be taking questions and answers from the committee first and then the public attendees. She asked the committee members to direct questions to the presenters and not the audience to keep with the format of the committee meeting. Tiffany reviewed the agenda and spoke about what we would be doing. Tiffany introduced Moira Homann as the basin coordinator for the Wakulla springshed and directed participants and committee members to use her as their point of contact should they have questions after the meeting. Moira thanked everyone for coming and turned it over to Greg DeAngelo for timeline overview.

Greg put the discussion of today in context in regards to the Nitrogen Source Inventory Loading Tool (NSILT) and the statutory deadline for certain springs to have adopted basin management

## **Upper Wakulla River and Wakulla Springs Basin Management Action Plan**

action plans (BMAPs) adopted by July 1, 2018. He reminded everyone that we will be updating the NSILT/BMAP every five years and taking project updates annually. He stated that although it is important to get the NSILT correct, it does not give us exact numbers, such as how many septic tanks need to be connected. The NSILT and other tools, such as the gap analysis, will tell us what the right policy will be going forward. Greg explained the four potential policy options for OSTDS (also referred to as "septic tanks"). The four common policy options used in BMAPs are to require enhancement or sewerage for lots less than one within the priority focus area (PFA), all lot sizes within PFA, lots less than one acre in the BMAP area, or all lots in the BMAP area. Greg stated that each BMAP is different and DEP needs to choose the policy that will fulfill its reduction goals. Greg also stated that although the NSILT will need to be refined over time as more information is gathered, that will probably not be needed before the adoption deadline of July 1, 2018 unless information came available that would impact the policy option that the BMAP would choose. If it will not change the option, it would be best to think about whether it is more efficient to refine at the five-year milestone when the NSILT is due to be reevaluated.

Debbie Lightsey asked if these policy numbers are written down somewhere. Moira responded that they are, and that we would be going over them today. Greg stated that with any of the policies, there will be a range of options to achieve the reduction goals and that the stakeholders and DEP will work together to find the option that works best.

Bart Bibler asked what legal options are there in regard to requiring inspections/pump out maintenance programs and whether it would still be legal to use this policy to help meet the load reductions. Moira indicated that a DEP study overseen Rick Hicks showed a negligible difference in nitrogen loading from pump out versus not pumped out septic systems. Mr. Bibler indicated that only by inspection can we see things like illegal waste disposal and system failures; he wanted to know if the legislature would prohibit the Florida Department of Health (FDOH) from doing this now. Greg responded that he wasn't sure about the current status of the statutory limitations on new pump out and inspection programs.

Stan Derzypulski asked if Wakulla County has provided a list of planned projects to connect to sewer to the Florida Department of Environmental Protection (DEP) for the Wakulla BMAP. Moira stated that we are in the process of collecting projects for the current BMAP report and would continue to repeat project collection on an annual basis. She also stated that DEP has not received Wakulla County projects yet, so we don't know exactly what they will be doing and where at this time. Moira reminded participants that the deadline for project collection for this annual cycle is January 31, 2018 and that we would have information on projects and reductions for the group to review by the next meeting.

### **Refined NSILT – Celeste Lyon**

Moira informed everyone that these numbers are a bit different than the numbers from the last meeting. Celeste Lyon reviewed the refined NSILT changes since the last meeting, which included the elimination of the effective septic population numbers, updated golf courses fertilization rates from the City of Tallahassee, the elimination of the sinking lakes calculations and category, and corrections to the fertilized pastures acreage.

## Upper Wakulla River and Wakulla Springs Basin Management Action Plan

Celeste showed everyone the new pie charts for the percent contribution by source. Tiffany reminded everyone that these changes were in response to stakeholder comments received by DEP. Celeste also showed a slide with a comparison of the 2017 numbers previously presented and the new 2018 NSILT numbers presented today.

Stan asked if sinking lakes category was removed. Tiffany commented, yes, they were removed because of concerns of these loads already being included in the other loading categories.

Theresa stated that, in Leon County, almost everything goes to sinking lakes and streams. She asked where does the nitrogen from the organic sources, like vegetation decay, that is coming out at the spring vent get accounted for in the NSILT. Celeste responded that the NSILT looks at total nitrogen (TN). Tiffany reiterated that the question is how is the organic nitrogen accounted for and what is the final achievable reduction. Celeste said that we cannot do anything about decaying organic matter, but the numbers are based on what we can address by policy. We would still have to do the same projects to achieve the reductions needed.

Katherine Davis asked how the total for septic system loading increased. Celeste stated that it increased because of the effective septic population factor being removed from the calculation. Tiffany clarified that we were originally calculating the time people spent away from home for work or school, and when we took that out it increased the estimated load to the septic systems.

John Buss asked if this is the rework of the original 2014 NSILT or what was shown in late 2017. Celeste clarified that no, this is not the 2014 comparison. The comparison shown is between the 2017 NSILT numbers and the recently refined 2018 NSILT values being presented for the first time at this meeting. She further noted that the estimated septic system load is down from the initial 2014 estimates, but is more than the 2017 iteration.

John Buss asked if it was possible to calibrate this model with what we are seeing in the groundwater at the spring vent. Brian Katz from the DEP groundwater group explained that the 2014 NSILT overestimated the load to groundwater and that we have to use averages because all of these have variation in attenuation and that creates potential errors in calculations of load. Greg reminded everyone that the point of the NSILT is not to estimate the load at the spring vent, but to estimate the load to groundwater. However, without a groundwater flow model to use, the loading numbers will be estimates. He stated that to the 2014 NSILT load estimation loosely matching the vent load was coincidental. Tiffany stated that although the NSILT accounts for attenuation, some of that load may come out in other places too and that in this broad area the NSILT is looking at what is going into the groundwater, but does not account for fate and transport. Brian Katz clarified that the NSILT is not a nitrogen budget and that the load to groundwater and vent load will not usually match, as we don't know everything that is going on with the dynamics and transport of nitrogen underground.

Someone asked if there is a document that will show the new numbers. Celeste confirmed that there will be a revised document that describes the refined NSILT numbers.

Someone asked Bob Deyle what the load to spring was in 2014 and Bob responded that it was 175,000 kilograms per year (~386,000 pounds per year). Anthony stated that the reason the 2014

## **Upper Wakulla River and Wakulla Springs Basin Management Action Plan**

numbers got reduced was the number of septic systems became more accurate as a result of the FDOH study. The estimated number of OSTDS decreased from 2017 to the 2018 version because of a change in the effective population factor. Greg confirmed that in 2014 when the original NSILT was done, DEP did not have the FDOH comprehensive numbers on septic systems and were using other estimates.

Pam Hall asked if it was correct that there is a difference between how FDOH looked at confined versus unconfined areas. Kathryn Davis confirmed that, yes, FDOH has modified their approach over time.

### **Review of the Draft BMAPs – Crystal River/Kings Bay, Volusia Blue Spring**

Moira reminded everyone that she showed them some draft BMAP language at the last meeting. She stated that these drafts have changed some to reflect comments at their public meetings; however, she wanted to share them with the committee and the attendees to show examples of how the Wakulla BMAP could look. She reminded everyone that these are examples and not an indication of what policies should or would work for Wakulla.

Starting with Crystal River/Kings Bay, which is located in Citrus County, Moira pointed out that there are 12 specific projects addressing septic systems in this BMAP where the estimated load of 103,000 pounds of nitrogen per year (lbs-N/yr) from septic systems would be removed. Moira explained that, based on their BMAP numbers, all septic systems would need to be enhanced or sewer within 20 year to reach total maximum daily load (TMDL) in that basin. If sewer is coming to an area in the BMAP within 20 years, a conventional system could be installed, however all lots of all size in the BMAP would need to be sewer or enhanced (as defined by meeting at least the National Sanitation Foundation [NSF] 245 standard). Moira provided a list of options for enhancement in the presentation.

Moira then showed the Volusia BMAP example and explained that at the time the draft BMAP was done, there were no projects submitted to look at proposed reductions for septic system loads. She stated that it was determined here that all lots less than one acre would need to be enhanced or sewer, and only within the PFA. This is the minimum standard for all springs BMAPs as set by the legislation. She stated that since only an additional 997 pound reduction was needed beyond the current project list, that the minimum requirements would allow the BMAP approach to meet the TMDL.

Anthony was concerned about the presentation text that indicated a 24-inch separation to the water table was requirement for some enhancement technology and stated that FDOH did a study and it would not include separation as a potential solution in this area. Roxanne clarified that the separation is a requirement in some counties for new constructions and, in terms of the bullet, some technologies require 24 inches of separation. She stated that they realize that is not always possible depending on the depth of project and the water table height.

Bob Deyle wanted to know what the criterion was for getting a variance because sewer is projected, stating that there has been sewer in comprehensive plans since the 1990s and that there need to be more criteria than just having intentions to sewer an area. Bob shared that he is aware that a design study is underway for the Woodville area and \$26 million is the estimated

## **Upper Wakulla River and Wakulla Springs Basin Management Action Plan**

cost for that sewerage project, which will probably be performed in phases. He asked if we want to allow conventional septic when we really don't know when sewer will be funded and completed. Greg stated that DEP is looking at the life of a septic system being around 20 years and we don't want home owners to have to pay for advanced septic system and subsequently for sewer in a short span of time. Bob asked if DEP can require some estimation of when it will be completed that can be checked on. Greg stated that the project updates annually will include funding, start date, completion date, and other information. He indicated that it may be possible to require that completion date deadlines for areas where we are offering the option of conventional OSTDS install when sewerage is planned.

Bob stated that there is no accounting for population growth. Tiffany reminded everyone that the policies apply to existing and new development.

Anthony asked if consideration has been given to the FDOH variance process and whether there would be DEP rules when FDOH is the permitting entity. He further clarified his question to ask if someone could get a variance to install a conventional system without DEP approval. Greg indicated that DEP and FDOH were working together on the process and rules.

John Buss asked if the slides shown are just examples. Moira confirmed that the lists shown are just policy examples of what has been used, not what will be done in this BMAP necessarily. John Buss expressed his concern that conventional systems would be allowed at all and stated that continuing to develop lots while not requiring advanced septic systems was not something he felt he would be willing to accept as a part of the BMAP. He stated that although the cost is more for advanced systems, if they were connected to sewer already they would be paying fees that those with septic systems do not have to pay.

Roxanne Groover stated that she does not dispute the points made and that her group was pushing back on the timeline stating that if they put in a conventional OSTDS, they can keep that until repair and, when that comes, their repair should be to connect if sewer is there. She stated that all municipalities have plans for sewerage and that OSTDS people want to do the right thing, but given the option to do conventional or advanced systems builders and homeowners will always go with less expensive option. Roxanne further clarified that if sewer is not going to be there for a while, they should be able to use a conventional system until they need a repair.

Greg clarified that, in terms of new development, the policy would be consistent with the BMAP and that legislation says OSTDS on all lots less than one acre in the PFA for new development will need to be sewerage or have an advanced onsite system. Roxanne asked that if someone is not in PFA and has a lot bigger than one acre, can a conventional system be used. Greg stated it would depend on the BMAP policy chosen and suggested that the group look at the policy options and zero in on the policies that you think will be effective in Wakulla. Tiffany stated that we need to clarify the language and make sure it is clear when and where conventional systems are allowed to be installed and repaired.

Greg stated that there are two concepts that determine which septic systems the policy will to apply to. The first consideration is size and location with options A through D as follows: A - lots less than one acre located within the PFA; B – all lot sizes within the PFA; C – entire BMAP

## **Upper Wakulla River and Wakulla Springs Basin Management Action Plan**

springshed on lots less than one acre; and D – is the entire BMAP springshed regardless of lot size. The second consideration is whether it is new or existing. For new installation you cannot install or repair a conventional OSTDS if you fall under the area with the restrictive the policy. The only exception to that is if there is a sewer project planned and listed in the BMAP project list, and then you have options to use or keep a conventional system.

Roxanne stated that definitions of "new," "modification," and "repair" is under discussion between FDOH and DEP.

Bob asked Greg when he said lots in the policy, did that mean depending on what policy we pick in Wakulla. Greg replied that was correct. Greg clarified that the policy would be effective when the BMAP is adopted and that DEP is working with FDOH on BMAP implementation.

Curtis Baynes asked for clarification on how prescriptive the policy would be versus how it would be implemented locally. He requested confirmation that this would entail DEP determining the policy that goes into the BMAP and FDOH would need to ensure that within the BMAP the permitting approach is applied. Greg replied in the affirmative.

Stan stated that population growth in the area could negate the benefit any septic systems being taken off-line by adding to the nitrogen load more than what is taken off and suggested that the BMAP should have thresholds to ensure net reductions and that those be assessed annually. Greg replied that how growth is handled will be dependent on the decisions made in this BMAP and gave the example of the Volusia Blue BMAP defining the OSTDS policy as the statutory minimum because that will give them a larger reduction than needed to meet the TMDL, even with some growth. Greg suggested that the group could choose to be conservative or aggressive with their policy approach to account for factors like future growth.

Anthony stated that in Wakulla County, sewerage doesn't remove TN, but instead diverts it to disposal in a sprayfield. He wanted to know how this loading was accounted for. It was explained that permitted capacity of wastewater treatment facilities were taken into account and it is recognized that the number of people utilizing wastewater treatment facilities will go up.

Anthony also asked for clarification on what constitutes a repair that would trigger the BMAP policy to be enabled on a property. Greg clarified that this would be covered for repairs that require a permit, not general repairs that do not go through FDOH permitting. This means that if a homeowner needed a simple, non-regulated repair like pump replacement or hatch replacement, they would not need to do the upgrade.

Anthony stated that there had been previous concerns that if it only applied to replacement, the permitting agency and/or OSTDS owners would present everything as a modification/repair instead as a replacement to avoid legislative mandates. Greg stated that the current wording would require the policy for modification/repair that requires a permit and should close the loophole as presented by Anthony.

Debbie expressed concern about growth projection and how it would be accounted for in the BMAP and stated that DEP needs to be clear on how they are accounting for growth as the area

## **Upper Wakulla River and Wakulla Springs Basin Management Action Plan**

is seeing rapid growth. She recommended talking to planning departments to find out where in the BMAP growth is projected and at what rate. Greg stated that growth can be addressed within the OSTDS and BMAP policies selected, suggesting that if we knew what the growth would be and where, the committee should recommend a policy that would encompass that growth. He also clarified that DEP does not have statutory authority to tell entities that they cannot have development and can only put in rules that regulate how development addresses wastewater by saying whether they can have conventional OSTDS or whether they need advanced OSTDS or sewer within PFAs or BMAP boundaries.

Debbie also stated that there were concerns over what projected sewer would mean, indicating that if projections or plans were used to meet the statutory requirement, then goals may not be met, especially if the BMAP is only updated every five years. Greg clarified that part of the annual reporting process is to assess progress toward meeting the five-year goal and will include a requirement to update the status of projected projects. He stated that if in any of those years the goal is in jeopardy, responsible stakeholders will need to identify how they are going to get back on track.

Debbie asked if credit would be given for the sewer line as having the line there does not always result in connections. Greg stated that BMAP credit will be issued for the number of septic systems connected, not for running the sewer line. He also reiterated that the diverted load is added to wastewater treatment facilities estimates and does not just go away. Greg indicated that the concern of projection timelines and the stop gap that allows conventional system is a valid concern and DEP will clarify in the BMAP what the criteria is for the stop gap.

Greg stated that as projects come in we will look at anticipated reductions, the gap, and what policy will address it in this basin and at a minimum all lots under one acre in the PFA would need to have an advanced OSTDS or sewer. Pam stated that all that is predicated on the fact that the homeowner will only be subsidized for sewer costs and that the question of subsidy is important because they will not help them put in an advanced system, but will help with sewer. She asked if Leon County does something outside the PFAs that will make an impact, whether they will they get credit for that reduction. Moira stated that they would. Pam pointed out that the acreage is not relevant to the load. Moira agreed, but indicated that more densely populated areas would likely have more options, including sewer or the opportunity to get a group rated OSTDS advanced install.

Bart stated that his group has looked at the draft BMAPs and there are several concerns they have. He presented a draft list of issues in the form of a printout and handed them out to DEP and participants at the meeting. He stated that there are issues with the comments that have been made on each and that the agency needs to make changes in these. He said they took particular issue with the load calculations, Florida Department of Agriculture and Consumer Services (FDACS) loads, and policy reductions. Greg thanked him for his comments and received a copy of the handout he provided.

### **Current Load and TMDL Load Estimates**

Moira presented on the current load and TMDL load estimates and informed participants that the numbers presented are slightly different than what was discussed in May 2017, as there had been

## Upper Wakulla River and Wakulla Springs Basin Management Action Plan

refinement in what data were used and how calculations were done. This has been standardized in the springs BMAP process.

Moira explained that the total load reduction to meet the TMDL is calculated by the difference between the load reduction at the vent and the TMDL load. She went on to explain that reductions from projects will be calculated based on submissions received for existing and planned projects and attenuation and recharge factors will be applied. She emphasized that this is the reason accurate project locations are needed as attenuation and recharge will vary by project and location. She also noted that projects submitted or stakeholder estimates for reductions may end up being less than originally projected as the reductions will be determined for groundwater, not surface water.

Moira stated that, for this analysis, DEP looked at measured data from 2014 to 2017 for flow and concentration. She informed participants that this number is different from previous calculations because DEP used the upper 95 % confidence interval and the TMDL was calculated in the same way. This is the standardized procedure for springs BMAPs current loading estimates.

Bob asked if DEP used a longer period of record previously. Moira clarified that the period of record is slightly longer here in the previous estimates, as the old calculation used data through March 2017 and the new calculation used data further into 2017. Bob asked if the big difference was that they went to the upper 95th % confidence interval instead of the average, and Moira confirmed that was correct. Pam stated that using the upper 95th percentile is a conservative estimate that disregards the major data outliers and that using this approach made the necessary reduction go up.

Stan stated that the reductions are in there, but it does not account for increases in growth. Moira stated that growth could be addressed in the policy that the group selects, not in the calculated load and reduction.

Moira showed as slide and stated that the difference between the red bar (which is the load at the vent) and the green bar (which is the TMDL) is the required reduction to meet the TMDL. She stated that the load at the vent is real data from the spring vent and not an estimate or number obtained from a model.

Curtis stated that the estimated load going in was over 800,000 lbs-N/yr, but the load at the vent is only around 700,000 lbs-N/yr and asked why the load measured at the vent did not account for the whole load. Greg stated that Curtis' observation was correct and that the difference is accounted for through attenuation and recharge in the groundwater system. Moira added that we can measure what happens at the spring vent but only estimate what happens throughout the groundwater system.

Moira showed the required reduction of 139,564 lb-N/yr and stated that once we get project submissions from stakeholders, the projects estimated reductions will be subtracted and we will have a gap analysis that will be reviewed in the next meeting.

## Upper Wakulla River and Wakulla Springs Basin Management Action Plan

Tiffany reminded entities that they will need to have all projects submitted by January 31, 2018. Moira added that project lists will not be internal to DEP, but will also be submitted to the legislature as part of the new reporting requirements.

Moira reminded everyone that this is an iterative process with 5-10-15 year incremental goals to meet total reduction. She stated that as we update the NSILT and get better data, we will refine these reduction goals. She also stated that the process is designed to be aggressive in the 15 years, even though the BMAP is a 20-year plan, so that there is opportunity for adjustments or additional reductions in the last 5 years if needed.

Anthony asked if the BMAP goals could be adjusted downward if they exceed that first five year reduction goal, for example if 60 % of the reduction was achieved in the first five years, would the ten year milestone goal get smaller. Moira stated that goals will keep moving and will not get lower.

Curtis asked for clarification on the reduction needed and credit given. Tiffany stated that the OSTDS policy will be giving them credit for the load to groundwater, which will be attenuated, thereby discounting the reduction. She also stated that what the credit will be will vary depending on where it is due to different recharge rates.

Bob noted the differential between load to groundwater and the difference of the discharge at the spring. He stated that the estimates are 130,000 pounds more than what is being discharged at the spring because it is missing the discharge at Sally Ward and what comes in. He asked if we should be discounting our reduction credits by 5 % to account for that. Tiffany stated that Sally Ward does not have a separate groundwater system and is part of the same system, so whatever reductions we make in the Wakulla springshed will likely benefit Sally Ward as well. Bob stated that the estimate of the reduction gets credited to Wakulla, but 5 % of that will be impacting Sally Ward. Tiffany stated that if Wakulla spring vent concentration improves but Sally Ward doesn't then that tells us something new. Moira clarified that the TMDL is for Wakulla Spring vent and Sally Ward is coming downstream into the run and that we have the TN from Sally Ward and can track that now. Greg stated that we need 139,000 pound reduction at the vent, but we need more than that in projects to see the reduction at the vent due to attenuation and recharge. He clarified that if we had a groundwater transport model, we would be able to more accurately account for the Wakulla Spring load and Sally Ward Spring load. He further explained that the NSILT was designed to look at the load to groundwater and projects are discounted based on recharge and attenuation. This means we are relying upon what we are going to see in the vent data at 5-10-15 years from now and if we are still seeing the 5 % difference when we get to the milestones, we can reconsider that then.

Bob asked if anyone back calculated the T.P. Smith wastewater facility (WWTF) upgrade from what the NSILT thought it was and what it actually was to get a sense of what the actual reduction was to calibrate the NSILT. Greg stated that they would take that into consideration. Brian Katz added that comparison would just be that one snapshot in time and between the incremental changes and the lag time, you would have to do more than that to calibrate the model.

## **Upper Wakulla River and Wakulla Springs Basin Management Action Plan**

Debbie stated that there are two goals--a measurable reduction in nitrate and the restoration of the health of the biological community. She asked how the second item is taken into account. Greg stated that the biological criteria was outside of the scope of this BMAP, but he would discuss it with interested parties after the meeting or offline.

Moira showed the gap example for Crystal River/Kings Bay and stated that we would have the Wakulla gap analysis at the next meeting and look at what policies we will need to achieve the reduction goal.

### **OSTDS Source Reductions Approaches**

Moira presented the OSTDS source reduction approaches and the potential reductions estimated for Wakulla under the various options. Moira presented the 50 % attenuation, low, medium, and high recharge factors from NSILT and the load per tank per person. She described the methodology for estimating the load to groundwater accounting for attenuation, recharge, and population and the estimates of reduction for either enhancement or sewer. She pointed out that the population calculation had an error and would be adjusted to reflect the actual average population for the watershed.

Bob asked if DEP could use a geographic information system (GIS) to figure out what the average number of persons is in PFA1, PFA2, or outside PFAs. Pam responded that the person per household estimate from the U.S. Census is done by county and getting it down to PFA versus non PFA areas is not feasible.

John Buss stated that when you write "enhanced" versus "replaced" it is confusing as "replaced" makes some people think they just mean replace the septic with a conventional system. The group agreed and decided to change the wording to "sewering" instead of "replaced" and to use "advanced wastewater treatment (AWT)" instead of "enhanced."

Moira showed the flow chart with policy options and clarified that, for this BMAP, the springshed means the whole BMAP and Option A is the minimum per the statutory requirements.

Bob suggested that "springshed" should be replaced with "BMAP area" because the springshed extends into Georgia which we do not have jurisdiction over. The group agreed.

Moira stated showed what the potential reduction estimates would be for the different policy options and stated that, as it stands now, if we used AWT OSTDS or sewer lots of less than one acre inside the PFA, we would fall short of our goal. Options were presented as sewer or AWT OSTDS under the various policy guidelines. The group asked that the table be changed to add a total reduction for sewer and total reduction for AWT OSTDS column for each area.

Pam stated that the policy should ignore the low recharge area, because you won't get much reduction and you won't have subsidization so the homeowner in a low recharge area, so it would not be cost effective. She recommended when looking at all BMAP area, that the low recharge be taken out. She stated that decision makers need to know that there are a group of people with little impact that would be effected by an all BMAP policy.

## Upper Wakulla River and Wakulla Springs Basin Management Action Plan

Curtis asked for clarification on where the size boundary applies, for example what about lots equal to one acre. Moira stated that the current wording is "lots less than one acre."

Bob stated that if you sewer all lots in the PFA, you would fall 48,000 pounds short. If you enhanced all in PFA, you would fall 77,000 pounds short.

Pam stated that if you went outside the PFA in lots less than one acre, with just high and medium recharge, you are already just about there. There was some further discussion about what the different policy totals would result in and what changes could be made to fit the basin. Concerns were shared that potential reductions could be overestimated since they could sewer OR install AWT OSTDS, as this would make a significant difference in the reduction total.

Pam asked why there were high and medium recharge areas outside of the PFA.

Theresa added up the load reduction for sewer in all OSTDS and subtracted from total load of septic tanks, which would leave a gap of 81,280 lb-N/yr. She reasoned that would be shifted to WWTFs, which is three times the current load limit for WWTF but the population distinction is not that much. Once you take out the treatment you have the remainder ( $100K - 211K = 81K$  lbs) that has to be going someplace. That is 3 times what we have allocated to WWTFs. Greg said that we would look into that issue. It appears that part of this discrepancy was due to the incorrect average population per household number being used.

John Buss stated that it is possible that these are reduction credits from OSTDS and the WWTF number is the discharge. There is a disparity between what is currently assigned to the treatment plants. For example, at the city's T.P. Smith WWTF, the discharge right now is 1.2 mg/L, not 3 mg/L. For reductions, the city is achieving averages at 95 % , but if we are getting that much disparity, maybe we need to look at that.

John Hallas stated that you would need to look at the incoming TN to the WWTF, not the discharge. Theresa agreed and asked if the WWTF discharge is actual or estimated. Celeste stated that water facility regulation (WAFR) data are used, so the numbers reflect actual discharges, not estimated discharges.

Moira stated that at the next meeting we would walk through how credits are applied to the different sources and at how we estimate WWTF contributions, which will be a bit higher to account for growth.

John Buss pointed out that flow rate and concentration are not at permitted capacity.

Greg stated that the remaining slides had already been addressed. He explained that when discussing which group(s) should be included in the envelope, one of the options is expanding the PFA. Especially in this current BMAP where PFAs were done before the Florida Springs Act. He stated that if we look at the medium and high recharge area, we could expand the PFA out to include those. He reminded the group that DEP is required to set easily identifiable political boundaries for the PFAs.

## **Upper Wakulla River and Wakulla Springs Basin Management Action Plan**

Pam stated that there is a local springs protection zone makes sense and is squared off nicely.

John Buss asked if that 65 % nitrogen reduction that is being used for enhanced is a statewide number. Greg stated that yes it is, but there are technologies that can do better than 65 % nitrogen treatment. Roxanne informed the group that in Rainbow and Silver Springs they are looking at systems that achieve 80 %, and there are technologies that can do that, whereas 65 % is the minimum for the NSF 245 standard. Greg stated the NSF 245 is the best performance standard that is readily accepted. John Buss suggested if that is a number that makes sense that is fine, but before we start dragging in medium and low recharge, we could look at raising the 65 % reduction and asked that a 3rd column for 80 % reduction be added to the tables so the group could see what reductions that could result in. There was additional discussion of where the attenuation was accounted for in the OSTDS reductions for AWT. Moira reminded everyone that although we can do what Bob suggested and have the 65 % column, and columns with higher reductions, we could not make recommendations on specific technologies. Moira stated that she would check on how they are doing it in Silver and Rainbow springs.

Moira reminded the group that project updates are due by January 31, 2018 and will be in an annual report submitted to the legislature. She presented a slide on what that will include and told participants to contact her with questions. She reiterated that project tables should be filled out with as much detail as possible and that the annual report is for the time period of January 1, 2017 through December 31, 2017.

### **Public Comments**

Moira stated that the next meeting would be of the OSTDS committee and would be followed by public meeting and would include the revised NSILT document and present on the gap analysis. She went on to state that in March or April the draft BMAP would be released with the goal of giving stakeholders advanced notice of our April meeting. The April meeting will be a public comment meeting for the draft BMAP. The draft BMAP document will not be released before the March meeting.

Pam asked in other draft BMAPs, they do not assign numbers to sources and will we use that approach in this BMAP. Moira responded that was correct and that we will talk at the next meeting about other reductions like agriculture, fertilizer, sports turf grass, etc. to achieve the reductions, but there will not be source category reductions. Pam asked if they could add those if the group chose.

Someone asked if going forward we will only be looking at the gap. Greg responded that the gap will be continually calculated. The stakeholder asked if they will be giving them credit on any project they submit and get full credit before the projects are implemented. Greg stated that is not different from how they have been done in previous BMAPs and that once it is in the BMAP, it is legally binding and the entities need to achieve that.

Debbie stated that we did not get to the biological health criteria question. Greg replied that he would stay after the official meeting ended to address this concern with any interested stakeholders.

## Upper Wakulla River and Wakulla Springs Basin Management Action Plan

Catherine Bray asked if the planned projects need to add up the reductions and, if so, would the responsible stakeholders be asked to come up with additional projects to cover the entire needed reduction between now and the next meeting if the project totals do not meet the requirement. Greg replied no, DEP will look at what we have for long term projects and see if we have enough credible ideas to achieve the BMAP in 20 years. We will have a portion of it covered by projects and the rest will be covered by policies we think can address the gap in 20 years. In our previous BMAPs we could be open-ended for the first 5 years, but with the new process we have to have enough policies to cover the gap.

The group discussed the next meeting date and tentatively scheduled it for March 6, 2018.

### Adjourn

The meeting adjourned at 5:00 PM.

### Action Items

- Tina – Change source reduction workbooks to reflect the nitrogen input as 9.012\*average number of people per household. *Completed 1/17/18*
- Celeste – Work on updated NSILT narrative to be provided to stakeholders before the next meeting on March 6, 2018.
- Greg/Tiffany - Clarify the rules and DEP position on new lot development and sewer projection.
  - Review what details are needed for a BMAP sewer project which would allow conventional systems to be repaired or newly installed. Does there need to be a start date? Completion date? Funding? Or just listed? What level of commitment is needed?
- Moira/Tina – For OSTDS terms, consider changing "enhanced" to "advanced wastewater treatment" and change "replaced" to "sewered" – *Completed 1/17/18*
- Moira/Greg--Does the BMAP prevent homeowners from getting a variance for a FDOH permit? Review whether language needed about that in the BMAP. It is possible that variances are commonly granted, which could be problematic.
- Moira/Tina/Celeste – Replace the word "springshed" with BMAP in documents and presentations since there are areas of the springshed outside the BMAP. (*Completed for Source Reduction Workbook 1/17/18*)
- Moira – Look into how Silver/Rainbow are doing the additional OSTDS AWT requirements.
  - Tina – Add an 80 % reduction from AWT to the tables in the source reduction workbook and add column for OSTDS totals for all lot sizes (right now there is only total OSTDS, need total reduction if all are sewerred or get AWT).
- Greg/Moira--Look into the issue brought up by Theresa of the WWTF reductions.
- Moira – Reserve room and sent out save the date notices for March 6, 2018 meeting.