WPP STAKEHOLDER MAKEUP MEETING MINUTES SEPTEMBER 9, 2014

ATTENDEES:

- Terry Bowie, Tim Cade, Peter Czerwinski, Ron Gunter, Jim Haymon, Kathy Janhnsen, Kimberly Kembro, Paul Nelson, Carol Reed, Todd Running and Scott Taylor
- Randy Acreman, Lorena Anderson, Wendy Hurtado, Gary Montgomery, Davies Mtundu, David Parkhill, Bret Raley, Michelle Simpson, Shane Simpson and Karen Thomas

AGENDA:

- Introduction Bret Raley
- BMP Discussion David Parkhill
- Guest Speaker-Kathy Janhsen
- Stakeholder Discussion Michelle Simpson

Introduction:

- Welcome Bret Raley
 - o Review of Stakeholder meetings to date
 - What's next BMP's, Draft Plan, Final Plan
 - $\circ~$ Introduction of Guest Speakers, Michelle Simpson, SJRA and Kathy Janhsen with HGAC

PRESENTATIONS:

HGAC Public Education Efforts - Kathy Janhsen

DISCUSSION TOPICS:

- BMP's David Parkhill
- Maximizing public education and outreach Michelle Simpson

Discussion Dialogue:

David Parkhill: Presented a list of some best management practices for owners of On Site Sewage Facilities. One of our primary goals, in terms of public education, should be to educate owners of onsite facilities as to what they can do to improve the operations of their onsite septic systems.

Peter Czerwinski: The Engineering society is not sure if it is a good idea to use low flow devices. From a loading standpoint, low flow devices tend to result in higher load concentrations. In the past, treatment plants were designed for 200 mg per liter BOD. With the increased use of low flow fixtures, we are seeing 250/300mg per liter BOD. We are not really reducing the load, just the hydraulics. When you reduce the hydraulics, it creates all sorts of issues.

David Parkhill: That really demonstrates how much water we waste. You don't need that much water to push the loads into the plants. We need to take this into consideration in the design of our plants.

Scott Taylor: I back up Peter here because we are in the process of designing a new waste water

treatment plant our old plant was designed for 210 BOD and we are designing a plant for 310 BOD which is increasing the cost for construction for us. Not saying we are here to save dollars. **David Parkhill:** That is a good point and I think Paul is going to agree with you, the real benefit is the lower water use.

Paul Nelson: We may need to pay more to design better or stronger plants. On on the other hand it's sinful, to me, to waste 5 gallons of drinking water to flush a load down the toilet. **Scott Taylor:** Let me put it this way, you save money on the water side but we are going to pass

increased construction costs, due to higher loads, on to the consumer.

David Parkhill: So it may not be as great a cost savings as you would initially think

Peter Czerwinski: If we pass a 1000 gallons thru a water meter at home were only going to get 35% of that water back as wastewater so where is that other 75% going. It's going to what we call irrigation. I'm all for saving water but, when you have high BOD loads this causes digesters to get a lot bigger and you have to have a lot more electrical power. Our low flow fixtures are like 1 gallon per flush. Traditional fixtures are 1.5 gallons per flush. Realistically though, you may have to flush that low flow fixture twice because it's not capable of pushing the load. So now you've wasted water with a low flow fixture.

David Parkhill: Well, they are doing what they were designed to do. However, it appears there are other issues that are created as a result.

Paul Nelson: It costs more to treat surface water then to pump ground water. The more we flush, the more we use the aquifer.

Bret Raley: Who would have known that one little bullet point would lead to such a discussion?

Peter Czerwinski: How many times does a toilet get flushed in a day? Not very often. I'd say an average toilet never gets flushed ten times a day. One reason is because we have both adults working. They're not washing clothes every day. Low flow devise have increased BOD loads per liter of flow.

David Parkhill: Toilets are only 10 to 15% of our flow to the wastewater plant. Washing machines, dishwashers, showers, and other fixtures add to that load. All of those fixtures are using less water.

Todd Running: Were we not really talking about OSSF's though? With these the higher BOD is not going into a treatment plant. The big thing we have seen with OSSF systems is that low flow devices greatly reduce the amount of water coming up into people's yard. So low flow devices do help w/ OSSF's by reducing the hydraulics (if they're working properly).

Peter Czerwinski: Onsite sewage systems are really no different than a centralized waste water treatment plant. It uses exactly the same design principals. Where onsite sewage systems fail, is when you have a party on the weekend and you have 25 people in your house when you normally have 2 and all your fixtures get used a whole lot more that's when you get the hydraulic flush and you wash the solids out of the system. What we should do is build septic systems that have multiple tanks in series so when we wash the solids from one tank we have the second tank to catch what's left. In wastewater plants we have a big clarifier which is simply a liquid solid separation.

David Parkhill: Good point that you make. Fundamentally, OSSF's and treatment plants generally work the same way. This is why SJRA has developed the Patty Potty PR campaign. It's all about reducing that amount of inappropriate materials that get flushed down the systems. This should benefit both types of systems. Patty Potty is a perfect example of how public education and outreach is one of our best opportunities to see immediate impacts. You know, low-flow plumbing devices are all you can buy these days.

Peter Czerwinski: At the moment your right but, at some point the regulation may change back. **David Parkhill:** Yes, maybe we don't want to emphasize the use of low-flow usage in our outreach efforts.

Peter Czerwinski: All these systems are exactly the same whether it's an ossf or a centralized plant. Every centralized plant that gets TCEQ approval has to have stand-by power. That is, a generator. Very few home owners have stand by power. When you lose power, every ossf system is in a failure mode because they are aerobic. They have to have a blower to help keep the oxygen up to keep the bacteria alive. When that blower shuts off, the bacteria die. When the bacteria die, the tank turns anaerobic. Then, there is startup period where you start putting air back in in order to re-grow the bacteria. Is this consequential? Yes. Look at Grand Harbor. Every house in there is on a septic system. When they have a power failure, every house is polluting. We can't make homeowners buy a generator but, we can make wastewater plants buy them.

David Parkhill: We can have a BMP that encourages people to have generators if they have onsite systems

Bret Raley: In this part of the world, as close as we are to the gulf, people often do have backup generators for other reasons. We need to encourage people to power their onsite systems as well. We can include this in our public education.

Todd Running: If you don't give them any water, they can't make any sewer

David Parkhill: True, in Grand Harbor we could have a rule, that in the event of a power failure, water companies, even if they have stand by generators, must begin rationing water.

Todd Running: We did that for years in our district before we had stand by power. There was nothing to worry about because everything was shut down. But it's better to have the generator. I'm not an engineer but why can't you take some effluent out of the waste water treatment plant and recycle it back to increase the flow and cut down on the % of BOD?

Scott Taylor: When you recycle it tends to concentrate.

Todd Running: Even though it's clean coming out

Scott Taylor: Relatively Clean

Randy Acreman: I made this OSSF BMP slide, and the point I was trying to make was that standard OSSF systems (leach lines) are altogether different then aerobic systems. Low flow devices certainly help with conventional systems.

Peter Czerwinski: I won't say one way or the other but, the BOD does lead to the bio mass. Now you could be right with an anaerobic system, at least you don't lose the system in a power failure because the system doesn't have air in it.

Gary Montgomery: What % of septic systems around the lake are aerobic?

Randy: 75% are aerobic and 25% are standard. Standards have been phased out through the years because they have failed and the soil around here is mostly clay so they don't meet the states requirement for what type of soil you need for a conventional system.

Gary Montgomery: So Pete's right. The majority will require a recovery period.

David Parkhill: In truth most of our public education is probably be oriented towards property owners and not necessarily OSSF owners. A lot of our efforts she probably be focused on issues that come up during construction and be directed towards the contracting community. We can highlight the tools that are commonly recognized to help with reducing silt runoff that results when vegetation is disturbed during construction.

Ron Gunter: What about in-lake dredging? What if an individual or group applies for a permit to dredge a canal or deepen water? Is there a concern about stirring up that sedimentation?

Bret Raley: Concern? Yes. Mark Webb, our fellow stake holder, is concerned about this issue. He and I spoke about this recently. The pervasive conception is that the army core of engineers is concerned about that. I think maybe in times past they were more concerned about it then then now. I don't know why there has been a shift in emphasis. These days, if you ask the Army Core in Galveston, they would say that they are not really concerned with dredging. They are more concerned with filling the waters of the U.S. An obvious exception is that if dredge material is disposed of onto "wetlands", then they are concerned about that. However, we should be concerned with what can get stirred up during the dredging process.

Scott Taylor: Dredging can result in Biohazards and other things that can get stirred up **David Parkhill:** When you look at it from the environmental standpoint, the benthic that layer of mud in an area that is important for the eco system. Dredging activities can disrupt the eco system. In some cases, removing siltation may improve the ecosystem by getting back to the natural layer.

Bret Raley: Couldn't we have some sort of requirement for containment around the dredging areas

Scott Taylor: I have had experience dredging a lake. There was a check dam constructed and it allowed the water to run off from the dredging but the materials were prohibited from running back into the lake.

David Parkhill: So we need to encourage the use of all these techniques, silt fences, etc...

David Parkhill: Taking us back to public education, we have contractors and home owners that we need to educate about these kinds of issues. After land has been developed, we need to have materials that can help educate owners as to how their behaviors can have an effect on water quality. We need to provide BMP's that address the first flush of water to reduce the amount of pollutants that ever reach the water.

Scott Taylor: For the City of Conroe to make this effective it would have to be part of the city ordinance for storm water management. We are looking at "greener" ways to detain. We do not have any discharge limits nor are we required to monitor our discharge since we are a MS4, phase-two city. Phase 1 cities do have to monitor. Instead, we are using the best management practices.

David Parkhill: The City's MS4 program will apply to parts of our watershed where the city has planning-area limits. SJRA can adopt rules to extend areas where MS4 requirements are not enforced around the reservoir.

Paul Nelson: All these things can lead to decreased detention requirements

Scott Taylor: Several elected officials have recently addressed the issue of "ugly" detention ponds. I think we will see more and more "green" designs that make use of biological treatment through plant filtration.

Paul Nelson: We need to get developers to understand that it's a plus and that they can end up with more land to build on while also helping to reduce pollution.

David Parkhill: Harris County has been blazing the trail for us. We can piggyback and benefit from that education.

Kathy Janhsen: I help facilitate on other projects similar to the LC WPP. In fact the East and West fork San Jacinto River TMDL coordination committee is looking at trying to find ways to incentivize developers to use low impact strategies. We're trying to find a "fast track" to help expedite the permitting process. For example, if a developer meets a certain number of low impact criteria, then their permit application goes to the top of the list. This is still in the planning phase. There has been success with this type of fast track program in Washington

State.

David Parkhill: The real purpose of today's meeting is public education and outreach directed at things that owners can do and how we can encourage that for the different groups of owners we have around the reservoir.

Ron Gunter: Would the committee endorse a littoral zone of native aquatic vegetation? That would be a second safety net. We can address with not only home owners, but even the golf course community. Really anywhere there is runoff. A riparian buffer and a littoral buffer would certainly help protect water quality.

David Parkhill: Excellent point. It's critical for this watershed. The frontier of development is pushing out into the upper parts of the watershed. Creating buffers is critical for environmental reasons. We need to work with the county to develop and handle better.

Ron Gunter: If you don't promote healthy species, you end up with invasive species. Then you have to attack that with herbicides. Invasive species can even impact water intake systems. Once we start using this reservoir for drinking water purposes, I'm certain that this will become a high priority item. We need the stress to the community the importance of filtrating runoff.

David Parkhill: As we've stated, the real goal for today's meeting was to talk about the details of public education and outreach. HGAC has been doing this for years. We want to go-to-school on them.

Paul Nelson: We did not mention much about pesticides, herbicides and fertilizers with regards to property owner's irrigation runoff.

Bret Raley: We are going to have multiple media outlets that we can take advantage of.

David Parkhill: We plan on addressing this issue.

Michelle Simpson: Just because it is not on the slide does not mean that it will not be addressed.

David Parkhill: Ok Kathy, you're up.

Kathy Janhsen: Thank you. My name is Kathy Janhsen. I'm the Public Outreach and Education planner for HGAC's Water Recourses group. We are going to be talking about some of the programs and public education campaigns that HGAC has been involved with. The key thing is that no matter the subject, we need to help people change behaviors. Are you guys familiar with Cease the Grease?

Michelle Simpson: We recently implemented our FOG (Fats, Oils, and Grease) program for the Woodlands Division.

Scott Taylor: The City of Conroe has a grease program also

Kathy Janhsen: Fats, oils, and grease are one of the largest contributors to sanitary sewer overflows. We educate people about the consequences of pouring grease down the sink. It is apparent that there are a lot of independent efforts going on in terms of outreach. Just look the number of fats, oils, and grease programs there are in a 60 mile radius of here. We will get a bigger bang for our bucks if we share recourses. We need more inclusive outreach efforts. We need to partner on things. These slides highlight some of the cool branding that has come out of the Cease the Grease campaign. HGAC will help implement in outlying areas. The, "Back-the-Bay" effort is another good example of cooperative efforts and pooling resources.

Another program is "Nothing but Rain down the Drain". This talks about all the chemicals that run off from fertilizers, washing your car, etc...

Paul Nelson: Does Houston still have its stork and frog

Todd Running: Catfish and stork

Kathy Janhsen: yes

David Parkhill: In central Texas they use Salamanders and frogs on their storm drain decals **Michelle Simpson:** Our group met the other day and talked about the exact same thing. We want to develop a "Wanda Watershed" character.

Ron Gunter: do you have coalitions in place where you're at near Galveston in Harris County? **Kathy Janhsen:** Yes

Ron Gunter: do any of your coalitions involve the GCCA or sierra club?

Kathy Jahnsen: Yes, in fact Brandt Manche of the Sierra club is on every committee that I sit on and then some. I don't attend a meeting where he is not present.

Ron Gunter: you go thru these organizations to promote BMP's?

Kathy Janhsen: Absolutely, we typically prefer to use the piggy back method because even though HGAC has many resources, it's kind of like me and then all of the science people. So it's a lot easier if we help create the tool box and then empower entities to disseminate the information. HGAC's purpose is to help bridge gaps. Assuming I get approval from Todd, I would be more than happy to work with you guys in developing your plan.

Paul Nelson: Todd's never failed to help us

Kathy Janhsen: One more thing that we can learn from Back the Bay is the benefits of a welldefined brand. Ok, Trash Bash. Trash Bash is the largest single day of waterway clean up in Texas. It has won several awards for the level of impact that it has. The Texas Stream Team is another opportunity for volunteerism. It's about developing citizen scientists to help provide basic water quality data. This data can help identify trends. Training Resources: We recently did a training here at SJRA. It was for home inspectors, and it provided CEU's for attendees. The goal was to educate them on what to look for when inspecting homes with OSSF systems. It is generally a well-attended course. It helps inspectors expand their business offerings.

Terry Bowie: Can anyone attend?

Kathy Janhsen: yes, anyone can attend. You just won't get credit because you're not on the books

Bret Raley: We need to inform the public that the local Aggrilife extension does offer an aerobic system maintenance class.

Kathy Janhsen: The Clean Waters Initiative is a serious of workshops that inform the public about different water quality strategies. These workshops address a wide range of water quality topics. It's an opportunity to share information.

Bret Raley: We need to host events like this here at SJRA. We have the room and the staff to do so.

Kathy Janhsen: Absolutely. One of the important things that we've learned is that it's important to be very intentional in planning. It's important to develop implantation plans just for public education and outreach. It's critical to your success. Another interesting resource is the "Water Resources Information Map" (WRIM). A large percentage of the WQ data that we collect in the region lives in this interactive GIS format. You can zoom in on an area and highlight just the bits of data that you're interested in. "How's the water" is an I-phone app that has all of the data from the WRIM. This is for users on the go.

Bret Raley: Can we put all of the material that you've shared with us today on our website? **Kathy Janhsen:** Absolutely

Karen Thomas: SJRA has updated this information in our GIS

Kathy Janhsen: OSSF's are tracked in a separate system. HGAC has the most dynamic OSSF

database in region.

Todd Running: All permitted OSSF's are in the region are in the system and mapped.

Kathy Janhsen: The biggest hurdle that you face is maintaining interest in the program.

Ron Gunter: Does your jurisdiction include the Trinity River Systems as well?

Kathy Janhsen: No

David Parkhill: Liberty County, Chambers County?

Todd Running: Liberty and Chambers are part of our HGAC service area but when we look at water quality issues like Clean Rivers program, the Trinity River Authority does there portion and the Brazos does there's. Now that doesn't mean that we can't do implementation plans or watershed protection plans but, for water quality, we are limited to our clean rivers program.

Ron Gunter: So you don't have outreach programs in the Trinity system?

Todd Running: No the entire state of Texas is covered by the clean rivers program but, the river authorities have it in their jurisdiction. Now we do interact with Stream Team members in the Brazos river basin. Since their home town is Waco, they're not going to come down here to train volunteers so we'll actually do that. BRA might pay for the monitoring kits. So we do kind of an intergovernmental agreement type thing.

Ron Gunter: Would the Luce bayou fall into your jurisdiction at some point

Todd Running; yes, that's our jurisdiction

Kathy Jahnsen: do you have something specific in mind that need to be shared

Ron Gunter: no, I was just wondering if you had any issues with that Luce bayou situation it will benefit us here

Todd Running: not to this point

Paul Nelson: it's finally permitted so their moving forward

Bret Raley: so with that we will go to Michelle and let her take us to the finish line

Michelle Simpson: A lot of this stuff I am going to cover was already brought up by Kathy Jahnsen. We want information and feedback from y'all. We want to know what you think might help us be successful with our education and outreach efforts. I'm going to break down the different outlets that will all feed one program. We're trying to build partnerships by increasing public outreach and education. That's the only way we will be successful in our watershed protection plan. SJRA's small PR group cannot reach as many people as all of you can. So with your help, we can reach a wider audience. I'm sure you are all of ware of some of the things our PR group does offer. For example, we offer informative tours to local schools and non-profits. Shane gives tours of his WQ lab.

Michelle Simpson: Some of the different outlets that we have include: press releases, articles, advertisements, our website, social media, handouts, pamphlets, flyers, mail outs, etc. We can attend public speaking engagements and community events like Trash Bash. We can make use of Signage to get our messages out. We've also talked about maintaining a "hotline" for people to call in about environmental concerns that they might related to water quality. We would like to implement some form of storm drain decal program as well. These are all just pieces of an overall campaign. We can decide what we choose to use or not use. How would the group prefer to give us your feedback on which avenues we should pursue?

Carol Reed: Surveys work well for me personally

David Parkhill: One of our challenges is a finite budget. We want to reach the most people for the least cost.

Carol Reed: Sometimes at these community wide events, you end up preaching to the choir.

Those in attendance are the ones already willing to help. We've had good success with the boys and girls club. They're always willing for us to do a presentation to the kids. That may be something to consider.

Gary Montgomery: What's the purpose of surveys?

Michelle Simpson: To get feedback from stakeholders

Bret Raley: Just to get input from Stakeholders. For example, should we spend effort on radio spots, brochures, or what?

Peter Czerwinski: One common problem that I see is residents that have their lawn mown, and the landscape company blows yard clippings into the storm sewer.

Peter Czerwinski: It's not just the residents its landscaping companies.

David Parkhill: We may need a regulation that says you may receive a fine and we may have to have the constable issue citations to landscape companies to get their attention.

Paul Nelson: I think the City of Houston has an ordinance about that

Todd Running: The city of Jersey village has an ordinance not only do they fine the landscaping company but they fine the resident

Terry Bowie: Usually it is a violation of the deed restrictions of the HOA. If a landscape provider violates that deed restriction, the property owner will pay for it.

David Parkhill: So we need to go to the HOA/POA and get them to adopt a provision and educate their residents

Tim Cade: HOA/POA are extremely powerful and they can enforce things that law enforcement can't.

Bret Raley: Yeah and if you can get into the big ones like, April Sound, Walden, and Bentwater you reach the majority.

David Parkhill: If you hit the big ones then the same landscapers are working both sides then you accomplish your objective and hit 80% of landscaping companies understanding the issue.

Kathy Janhsen: Where I live, they require you to bag your trimmings with their special bio degradable bags.

Paul Nelson: That goes back to watering your lawn the less you water the less you have to mow. **Peter Czerwinski:** If I'm a landscape provider, do I have a convenient place to take landscape clippings?

Michelle Simpson: We bag ours and our neighborhood has a truck that picks them up

Kathy Janhsen: There is a heavy trash day in most neighborhoods

Peter Czerwinski: do we want those in our landfill

Kathy Janhsen: they are biodegradable bags

Karen Thomas: It actually does help decompose everything if it is biodegradable

David Parkhill: but it does add to the bulk

Karen Thomas: I guess fat, oils and grease will end up in the land fill too

David Parkhill: most of the fat, oils and grease go to recycling plants

Michelle Simpson: We want to create a campaign that's successful in protecting our watershed.

David Parkhill: One of my hopes is that we can find coalition, and form partnerships to join that will do PSA's. Things like Dock-Line articles and brochures just don't get into enough hands.

Television is best. But we need to go with a bigger coalition like Back the Bay.

Karen Thomas: I always see the lone star ads at the movie theatre

Paul Nelson: Yeah! SJRA joined us on that.

Paul Nelson: We have an ad running before the movie starts about water conservation. **David Parkhill:** Here is a 60 second commercial that the City of San Antonio river authority created which I thought was good. It's about trash. It's very simple. It catches your attention. **Michelle Simpson:** It's these kinds of things that we can piggyback on. A lot of the organizations will allow us to use them and to add our own logo to them. So we don't have to spend all the money and we can put them all over the internet in addition to TV spots. These are the kinds of things that we want to do. The rest of the slides just reiterate the reason why we chose the people that we did to serve on our stakeholders group. You represent different areas and different interest groups. We need your input.

Bret Raley: Thank you for coming we appreciate it