

**Dickinson Bayou
DRAFT Meeting Summary –
March 25, 2010**

ATTENDING: 3-25-10 MEETING:

Cynthia	Brum	Galveston Bay Estuary Program
R.J.	Christie	Citizen
Pat	Christie	Citizen
Cindy	Coker	Friends of Cedar Bayou United
Phil	Cone	Citizen
Jan	Culbertson	TPWD
Louis	Decker	Resident
Winston	Denton	TPWD
Steve	Duitacher	Citizen
Mary	Dunbaugh	City of Dickinson/Keep Dickinson Beautiful
Harold	Engelke	Citizen
Tore	Fossum	Citizen
John & Lisa	Gay	Citizen
Gerhard	Meinecke	Citizen
Teri	Goodman	Rep. for State Representative Larry Taylor
Jeannette	Gregory	Resident
Hoi P	Heldt	Citizen
Rick	Johnson	Co-Chair
Steven	Johnston	TCEQ/GBEP
Bridget	Long	Resident
Corey	Magliolo	Resident
Julie	Masters	City of Dickinson/Keep Dickinson Beautiful
Curtis	Mayfield	Citizen
Lisa	Miller-Marshall	Galveston Bay Foundation
Steve	Muculencak	TX Agriculture and TX Sea Grant
Jack	Murphy	League City DBWSC
Ed	Odenwalder	Citizen
Wes	Padgett	Co-Chair Dickinson Bayou Watershed Partnership
K & K	Past	Citizen
John C	Patterson	Tropical Gardens
Tom & Connie	Pothier	Citizen
Joe	Priunt	DBFBA
Ken & Annette	Rowan	Citizen
Ronnie	Schultz	GCHD
Mary	Stringer	Resident
Roberta & Troy	Sunkel	Citizen

Gary	Templeton	Citizen
Lauri	Thauheiton	Citizen
Mark	Townsend	Citizen
Lisa	Tuck	Citizen
Jenny	Wrast	Environmental Institute of Houston
Peggy	Wright	Tropical Gardens
Jean	Wright	H-GAC
Charriss	York	AgriLife Ext. Svc & TX Sea Grant

Texas Commission on Environmental Quality (TCEQ) Staff:

Kelly Keel – (KK) Division Director, Water Quality Planning
Charles Maguire –(CM) Division Director, Water Permitting
Earlene Lambeth – (EL) TMDL Outreach
Ron Stein (RS) TMDL Team Leader
Kim Laird – (KL) Field Operations/Region 12 Houston
Linda Broach – (LB) Field Operations/Region 12 Houston
Roger Miranda – (RM) Project Manager
Tara Drissell – (TD) Office of Public Assistance
Emily Boyd (EM)– Office of Public Assistance

CALL TO ORDER/WELCOME/INTRODUCTIONS:

Tara Drissell opened the water quality meeting of the Dickinson Bayou with introductions. Tara gave a special thank you to Mayor Julie Masters who through “Keep Dickinson Beautiful” provided refreshments for the meeting. Tara also recognized Teri Goodman who was present and was representing State Representative Larry Taylor.

DICKINSON BAYOU WATERSHED PARTNERSHIP/WATERSHED PROTECTION PLAN UPDATE

Charris York said that the Watershed Partnership was formed in 2004. She said that the Texas AgriLife Ext. Svc & TX Sea Grant had been facilitating the group which is comprised of stakeholders, citizens, various agencies, non profits, cities, etc. Charriss said the mission statement for the Partnership is to protect, preserve and restore the quality of the Dickinson Bayou watershed and its communities (the watershed encompasses approximately 105 square miles and includes the city of Dickinson, and portions of League City, Alvin, Santa Fe, a tiny portion of Manville, and Texas City). The purpose of the Partnership was to develop and implement a voluntary consensus-based watershed protection plan (WPP) for the Dickinson Bayou watershed. The current draft WPP document was completed approximated a year ago. The document includes a snapshot of the watershed as it is now and outlines strategies and goals for the future of the watershed. Charriss stressed that this is a living document that will continue to grow and change with the community and its needs and that the partnership would be revising it periodically as the stakeholders and communities needs change.

Some of the goals in the WPP are to preserve wildlife habitat and water quality, implementing storm water best management practices, building and maintaining wetlands, encouraging thoughtful development and ordinances to ensure such development. There have been conversations of possibly transitioning the Dickinson Bayou Partnership to an independent 501(c)(3) and hiring a permanent watershed coordinator funded through the various cities in the watershed, etc.

Charris reported that one of the accomplishments of the WPP are new regulations for storm water management through the local cities. Charriss also reported on a 319 grant (through the year 2011) from the TCEQ and the EPA to begin implementation projects included in the WPP. Projects in the grant are broken down by “on the ground projects” and “educational projects”. The “on the ground projects” include building habitat areas using native plants, using best management practices and developing storm water wetlands. She also spoke about a super sized rain garden – or storm water treatment wetland system. She briefly spoke and explained how wetlands filter and clean the water through a natural process with microbes. She reported that she had met with representatives from Clear Creek ISD and about a possible demonstration project at a new educational area they are building.

Charriss expressed concern about the aging septic systems in the area. She is currently working with the Houston-Galveston Area Council (H-GAC) and other local communities to plan a workshop for the fall on wastewater disposal not regulated directly by the TCEQ.

Charris thanked the stakeholders present and asked them to let others know about the Partnership’s efforts and she encourages more local participation in the watershed protection efforts. A copy of the plan can be viewed on line at the following web address: <http://www.dickinsonbayou.org>.

Charriss York can be reached at (281) 218-6329 or e-mail cyork@tamu.edu.

PROJECT OVERVIEW

Roger Miranda, with the TCEQ Total Maximum Daily Load (TMDL) Program, was the next presenter on the agenda. He discussed the TMDL (i.e., the specific amount of pollutant a water body can accept and still met its water quality standard) for bacteria and dissolved oxygen. Roger briefly reviewed the uses and standards for the water bodies in the Dickinson Bayou watershed and the Clean Water Act requirements and the state’s **303(d)** List of impaired water bodies. The segments of Dickinson Bayou (i.e., the Tidal Segment 1103 and the Above Tidal Segment 1104) have been listed on the State of Texas **303(d)** List since 1996 as impaired for low dissolved oxygen (DO). Work began on the TMDL project in the year 2000 with detailed data collection, water quality monitoring, public participation through the Clean Rivers’ program and watershed modeling. The tidal and above tidal portions of Dickinson Bayou are also listed for bacteria. The DO impairments for the above tidal portion of Dickinson Bayou has not been verified. He also indicated the monitoring stations in the water bodies which are monitored quarterly.

Roger explained that in June 2008 the TCEQ released a draft document presenting a TMDL for dissolved oxygen for public comment and submitted it to the EPA for preliminary review. The EPA communicated that they would not approve the TMDL as presented and suggested several changes and courses of action for the changes. Roger reported that the items that needed to be completed for

the dissolved oxygen TMDL were the following: complete the biological and habitat assessment, currently being planned by the University of Houston Clear Lake (including 2 years of warm weather sampling), complete additional modeling (another year subsequent to biological study), and review the standards if, as the draft TMDL suggests, a lower frequency of attainment of the DO criteria is appropriate. Roger reported that, given these tasks, the adoption of the revised TMDL would happen no sooner than 2015.

Roger then began to report on the status of the bacteria TMDL and said the TMDL was on schedule. The historical data analysis, TMDL sampling and modeling had been completed for the project. The sampling included storm water and pipe locations and tributaries that drain portions of the watershed. Roger explained the load duration curve model (HSPF) in detail. A copy of Roger's presentation can be viewed on line at the Dickinson Bayou project web site named below. Roger is scheduling for the TCEQ and the EPA to release the bacteria TMDL for public comment this year (2010).

For more information on Dickinson Bayou project can be found at the TCEQ web page:
<http://www.tceq.state.tx.us/implementation/water/tmdl>.

Question and Answer Period

Question-: The change that is being asked for in the standards now, where would the red line (from the slide presentation) be?

Answer-: In this water body it would not change the fact that we need the TMDLs, Dickinson Bayou would still be listed on the 303(d) listing.

Question-BL: My name is Bridgette Long and I am the lady that has the Gum Bayou case to stop sewer plants from being built on Gum and Dickinson Bayou. While everybody is studying, just this month, we have now granted the 13th sewer plant, the Dolphin Cove was approved. I would like to know, in view of all these studies we have seen here tonight, how in the world are we still granting permits on a dead body – and please don't tell me Gum Bayou isn't impaired. This week you could have walked across Dickinson Bayou. There was no water in it. There was no water in Gum Bayou. How is it going to handle 500 million gallons of fluid – sewer a day?

Answer-CM: I think there is a couple of important things to understand about the permitting process, particularly as it relates to impaired water bodies. It is clear from Roger's presentation and the data that is available, that the entire Dickinson Bayou is not impaired, only parts of it are impaired. When we deal with impaired water bodies in the permitting process, we have to address the effluent limits of the permit on the basis of making sure we implement water quality standards. Usually what it amount to is if the water body is impaired for dissolved oxygen (DO) is a very restrictive set of effluent limits so that the discharge from the wastewater (WW) treatment plant is not contributing to the impairment. The bulk of the new WW treatment plant permits are in portions of Dickinson Bayou that is not impaired. Those permits are issued according to the rules. I am always amazed at the amount of authority that people seem to think that I have in terms of determining who can have a permit and who can't. The framework is bound by our rules that are developed in public forum and conform with, meet or exceed EPA rules, and conform to things that the Legislature instructs us to put into our rules. By and large they are developed in a public forum that includes scientist, other state agencies, stakeholders and affected parties. We have a rule

development process. When my staff is developing a set of effluent limits they are developing for a wastewater treatment plant, first and foremost, that effluent is set, the language in the permit, absolutely conform to the rules. We also have standard operating procedures that my staff follows. Those standard operating procedures are to guide them and in terms of looking at data that we receive in a permit application and give them the ability to translate some of that data into what we would call their best professional judgment in terms of making recommendations for that permit. Generally speaking, with a applications for a wastewater plant, we do have the ability to put more restrictive effluent limits into that permit based on site specific conditions. The site specific conditions would look at the water quality specific at the point of discharge. The other part of the framework we engage sound science. Anytime you are dealing with a water body that has a dissolved oxygen issue, modeling becomes a major part of our attempt to understand “what is an acceptable effluent set for a particular WW treatment plant”. We use models and data that we have gathered. In this particular bayou there is a significant amount of data that has been gathered over the years. We have a framework that includes sound science, our rules, standard operating procedures, and management review. We make sure we have layer, upon layer, of review with our staff. I manage just over 100 people. On a yearly basis we deal with close to 30,000 permit applications so being able to do that with my staff I make sure that at the team level they are going to their peers and asking them for counsel and advice in terms of developing a permit. They go to their team leader. Their team leader goes to their section manager, section manager comes to me. Before any permit is issued we have an executive review committee that is basically looking at the ingredients that have gone into that permit to make sure that we are comfortable, that is protective of the environment and health. Those permits are then put in public notice and sometimes when it is put in public notice we find out new information. Sometimes everything we needed to know about an application is not in the application that we have received and we find out things in public notice that causes us to change the conditions in the permit, effluent set that the permit has to conform to. Sometimes even after it is completed public notice and we have chosen to issue the permit there is a request for a contested case hearing. That goes to the state office of administrative hearings and once again, that entire process that I have just describe to you, is reviewed to make sure there is conformity to the rules and regulations. I think that is fairly a long answer to the question of “how can you continue to issue permits in a impaired water body”. I would say, only on the conformity to the rules, only on the basis of making sure that that permit does in fact protect the environment and public health. We do not issue it unless we think it does. The TMDL that Roger is talking about, and a lot of times in the permitting program, when a TMDL is complete, the effluent set has to change. The effluent set would reflect measures set in the TMDL. Roger showed you the slide on the bacteria TMDL he showed you a waste load allocation that said, 120 colony forming units per hundred milliliters for that waste load allocation. That would say to the permitting program, the limit for bacteria discharges for that permit would be set at 120. Right now, the water quality standard is 126 colony forming units so the bacteria limit in a permit now would be set a 126 so there is a reduction in the permit limit as a result of the TMDL. Relative to dissolved oxygen issues, we do modeling to see the impact of that particular permit but we consider cumulative impacts of the other permits that are in the area and we design our model to show us the impact of that WW treatment plants discharge and if the effluent set will meet the water quality standard that is set. And if can develop an effluent set, the rules would provide for approval and it to be issued on that basis. If modeling doesn’t indicate there is an effluent set that will work at that point of discharge then often the permit applicant has to find a new point of discharge or a new place to establish their plant.

Question: I am John Gay, I'm a resident of Dickinson. Who else lives here in this watershed area? Most of us. We know that you are comfortable with your models, and we appreciate the science that went into this. I wanted to ask a couple of questions. On that chart, did you say that was a mean or median line?

Answer: Median.

Question: OK, so median does not mean – mean does it? It doesn't mean average.

Answer: No it doesn't.

Question: If I can show you, (walked away from microphone) – inaudible.

It is not an average, it is the middle number. It looks like you are presenting something here to make us feel comfortable, that it's the average. But this median, could be a very high number. I don't want to confuse people with median and mean being the same thing, it is not.

Since most of us live here I bet we could get a fish fry together and we could catch some fish there in Dickinson Bayou, and we could have you down to our houses along the bayou and you could go swimming. We would like to invite all of you. The 100 staff and all their supervisors and scientist that have not been dealing with the buzzards to come down and go swimming with us and have a fish fry in our back yard. We would love to invite you. Could we get ya'll to come? Have a fish fry with us and go swimming. We would love to.

Comment: The reason we do the median is because the standard is based on the geometric mean. The geometric mean approximates the median. Water quality data is not normally distributed. We cannot use normal parametric methods to analyze natural resource data.

Question: My name is Tore Fossin and I have 1 question and a comment. Relating to building sewage plants, how clean is the water coming out of the sewage plant relative to the cleanliness that is in the bayou? Is the water coming out of the sewage plant cleaner than the bayou?

Answer – CM: Depending on what pollutant you are talking about, let's talk about bacteria. It would be. It definitely would be or they would be violating their permit. If you are talking about dissolved oxygen, dissolved oxygen is something we measure in the bayou, we don't measure dissolved oxygen coming out of the sewer plant. We measure the things that would affect dissolved oxygen levels. So the pollutants entering the water body from the WW treatment plant would be less than what currently exists in the bayou that is creating demand for oxygen.

Question: So, under normal circumstances, water that is coming from a sewage plant is not degrading the quality of the water in the bayou? The water that is coming out of the WW treatment plant is actually cleaner than what is in the bayou. Not relative to bacteria.

Answer – CM: I think you have to look at it pollutant by pollutant and there are people that are worried about certain elements that gets flushed down peoples toilets, don't want to be too gross here, but there are things that go into a WW treatment plant that would not naturally exist in the bayou. In terms of what we deem the bayou to be impaired for, a WW treatment plant certainly is not contributing to that impairment if the effluent set is correct.

Comment: I swim in the bayou all the time. I swam in it last week. During the summer I swim in the bayou almost every day. It is below Highway 3, downstream of the sewage plant. The lady who mentioned that the water all went out and it went down? That was a phenomenon, natural phenomenon due to the strong wind coming from the northwest blowing for several days. The water was down 2 feet in Galveston Bay and on the tidal flats – it is a natural phenomenon and you will see when the wind blows in the other direction it actually raises the level in Galveston Bay and

the bayou. The other thing I would like to mention is as my experience of swimming in the bayou is that in the summer the water on the top gets fairly warm and there is a thermal cline down below. Typically it is about 6-7 feet down. The temperature in that thermal cline is 10-15 degrees lower than it is up above. It is also anaerobic. No oxygen is in it. It has a strong smell of hydrogen sulfide. It is a natural process. The anaerobic is something we probably don't want; it is all that organic matter on the bottom. I don't know if you can address that, maybe in the overall idea of trying to improve the water quality in Dickinson Bayou.

Answer – RM: You are very correct. In fact, you have characterized the stratification that occurs literally every summer in Dickinson Bayou. Part of the reason the model we have for Dickinson Bayou dissolved oxygen isn't able to meet the water quality standards that we apply to it. There is a natural tendency for the water column to stratify during the summer, low flow conditions and high temperature.

Question: Do you measure temperature in the layers?

Answer- RM: We measure four parameters, temperature, PH, conductivity, and dissolved oxygen at the different levels.

Question: I think I am clear that your curve is the TMDL?

Answer-RM: Yes

Question: It appears to me that there is an infinite number of TMDLs depending on what the flow rate is? You are going to have three different limits depending on the flow?

Answer-RM: Just one – where it is the highest percentage that is required.

Question: I am just wondering if you are a regulated entity, what is your numeric number going to be?

Answer-RM: You can look at the total amount allowed in the water body as the area under the curve (pointing to presentation slide). The WW treatment facilities are basically going to be permitted at a steady flow across all flow regimes.

Question: So the only regulated entity that you have is WW treatment plants?

Answer- RM: No, they also involve storm water permits. They are basically variable flow, not a steady flow out of a pipe. That encompasses all non point sources – all regulated non point sources, storm water permits, and non-regulated non point sources.

Comment: I do environmental compliance for a living and that is not confusing. My experience has been in a city, this is the regulated community. The table is the city. So you start retching down and down and down on the group you actually have authority over when everyone else in there is contributing to the storm water and the problems so then it goes back to the city. You may want to pass ordinance so that the people in the city quit washing our cars in the street and you really have to get more than just these people contributing to those solutions. If there is a lot more non regulated people than regulated it is going to take everybody if we are really going to change Dickinson Bayou.

Comment – RS: That is the most important point that has been developed. The Implementation Plan that will be initiated with all the stakeholders in the watershed is similar to the implementation effort currently that Gerhardt is involved in for Galveston Bay. We are going to get all the representatives, all the interested parties in the watershed, including the municipalities, including

those folks that are not in municipal areas, all the representative groups, all the interest groups, to sit around the table and develop a plan to address all the different sources of bacteria within the watershed and get the people in the watershed to work together to start regulating their car washing, to start regulating their pet waste, to start dealing with their habits and where they can contribute, so that we can work toward improving the water quality in Dickinson Bayou and its tributaries. So this Implementation Plan effort is very important for everybody to get involved in so that we have the ability to effect changes throughout the watershed to the regulated sources and those not regulated. And so we will make a very extensive effort to address all of the different sources and get all of the different interest groups and people in the watershed engaged in improving water quality in Dickinson. So what we are not going to do is to simply focus on the regulated entities, we are going to engage the entire watershed, all the people in the watershed to improve the water quality.

Question: My name is Gerhard Meinecke. I know this is a bacteria study. In general I want to say something. I have to say that some of things we are all concerned about I wish that we would get done. Most of the people, some of people I hear from at the TCEQ privately are in agreement with our request. The general climate though is something we are all responsible for. In this area, all stakeholders want something more something bigger. As we have all the ethnic coming in and new developments there will be a lot of pressure on allowing things to have a standard to allow more and more on things. We are all a party to that and have to admit to that. In order to avoid some things that I believe were not quite well done, on the dissolved oxygen TMDL, I believe some things were left out because they are either politically or economically not feasible. The Houston Ship Channel has a plowing effect on bringing up the sediment in the area that actually lowers the depth of the bay so that all the flow is becoming impaired all around the bay. When the Houston Power Plant was permitted here there was suppose to be some kind of regulation imposed they were suppose to participate in the dredging so the channel had better flow to it. But again, those kind of things are not modeled because it can't be done anyway. The approach I saw in the TMDL oxygen, well, you said EPA didn't accept it. EPA didn't really reject it, 'cause you never really ever submitted it to the EPA. You brought it and gave it to them to give you some advice and comments on the draft – you never fully submitted it. I believe there was never any aggressive action by the TCEQ. OK, it does not get us 90% but it gets us a step closer to it. EPA never took any action on it. EPA just gave some comments to the TCEQ and delayed the whole thing again. I am afraid something could happen with the bacterial TMDL too. In the modeling of the oxygen, because of the nutrient reduction, we have more bottom vegetation again. The modeling is really limited. We need to see what could be done on the supply and the demand. We have a Mayor here and I have heard her say she swims in the bayou. We don't really have anyone we can go to. The standard now is for contact recreation. They always say, oh, it is not really impaired. I don't believe it. There is no proactive communication – jurisdictional bodies around this water body. Look, it is unsafe for recreational use and you need to do something. If you are the Texas Commission on Environmental Quality then I think you have a responsibility to environmental quality. If the environmental quality is not suitable for personal contact recreation then a clear statement needs to be made for that and either we say ban personal contact recreation for this bayou, and that would probably mobilize a lot of things, because once you declare that then you will have a big uproar. But on the other hand, it will eventually say we have to do something about it. As long as there is no clear directive or statement saying this is not permissible for personal contact recreation because it exceed the standard. Nothing is going to happen, there is no clear directive unless there is some

ordnance or jurisdiction or some real binding agreement. All these new standards that the review period has just finished and is now under revision, where will that place 1104 and 1103? We still have more on going studies. The plan has not been approved yet. It baffles me that EPA says the number should be one thing and we are still where we are. Texas is supposed to be the big and best – right? So, we get the biggest standard that allows the most in it. Right? Now you're excluding single readings, excluding high flow, and you are going to 126. The human body – you know if 126 and that is great. That is not great. If you have any immunity problems, penicillin not being effective and all these other things. Now you are saying you can have nearly twice as much bacteria in the water body. How is the new standard going to affect it? After you are through with these new studies all these limits will be raised. Which bodies will actually be impaired? No impairment here after all by raising those standards?

Answer – RM: The tidal portion is not going to be affected by the standards change.

Comments: That is considered saline.

Answer – RM: That is not being considered for change. *Enterococci* is not being affected by the standard change. The above tidal portion is being tiered for a contact recreational use. There is no plan to change the TMDL calculation, it is based on 126 and as far as I know it will be released for public comment at the 126.

Question: What if it gets changed by the EPA before it gets approved? What will keep it from going to 206?

Answer – RM: The TMDL is going to be based on 126.

Question: When is the current proposed water quality standards suppose to go into effect?

Answer – KK: We will take them before the Commission for them to consider in June of 2010. After that, we will submit them to the EPA, and that is contingent upon EPA time frame.

Question: I wish the Commissioners were here and then I wouldn't have to be so polite.

Answer – RS: The important thing is that even if the standard changes, the 126 limit placed on WW treatment plants will remain the same.

Comment – CM: Another thing to understand, even when the standard is approved by the EPA, whenever that could be, we cannot delist the water body based on this current impairment until we do another assessment. The earliest that assessment could be would be 2012.

Comment – GM: I want those new standards reject.

Comment – CM: There are certainly people who support the change to 206 and those who reject the change and feel it should stay at 126. That is why we have a public participation process. It helps us get it right.

Comment – BL: They say a picture is worth a thousand words. I would like everybody to see this picture. Can you see it? It is a bacterial infection that is on a gentleman's body that came to city hall, Mayor Masters is here, she was present when he was sitting on the council chair, and Teri Goodman was there, when people from Tropical Gardens stood up and talked about this bacterial infection. My husband being one of them. The only reason they use to say that people got these bacterial infections were because they were seniors, or they had diabetes, well wrong. Seven kids go this infection too. This is a picture of when it first started but by the time he got to Dickinson City Hall, and by the way, I invited the health department to come, and they wouldn't come to see this gentleman, by the time he got there; it was all over his body including his genitals. My husband fell into the Dickinson Bayou in front of our house, and you keep telling us it is not polluted. It is darn sure polluted. We see human waste in there. We see dead fish in there. And yet I get contradicting statements from TCEQ and the City of Dickinson if there is a fish kill or not

a fish kill. I want to address you about Gum Bayou. Are you aware that a plant had to be removed from Gum Bayou? Gum Bayou could not handle the sewer plant. What has changed that is going to allow a new sewer plant?

Comment – CM: I am not sure what the question was? I am very aware and familiar with bacterial infections.

Question – BL: Why are these people still getting it? Our dermatologist cannot even find out what was on my husband body and now my husbands got cancer. Thank you.

Answer – CM: We rely on our framework and it is based on sound science. We have to rely on what scientists develop in terms of how we evaluate things. The 206 standard and 106 are based on extensive research. Not research not done in Gum Bayou, but research done in the Great Lakes for the most part. But that is the research that we have to rely on. That research says that 1 % health risk with e-coli levels that are established with the standard. EPA has said that is protective. We have a hard time justifying being more protective than what EPA would say is protective.

Comment – BL: Are you going to endanger again Gum Bayou by putting another sewer plant when you removed it?

Answer – CM: I didn't think the problem was in Gum Bayou. The things you describe are not sewer plant related problems. Unless the sewer plant has violated its permit there is not going to be human waste.

Comment – BL: Let me read the quote from the gentleman, Mike, "he said, after a swim people were smelling like feces and within an hour we developed the sores." How did he smell like feces if there is not feces in the water? I don't know, I am not a scientist.

Answer- CM: There are a lot of sources of feces beside WW treatment. It should not be coming out of a WW treatment plant unless they are violating their permit. If it is violating its permit, I can promise you our regional folks –

Comment – BL: You have now granted 13 permits on the Dickinson Bayou

Answer – CM: and all of them are protecting the health and the environment....

Comment – BL: Does that look like health to you?

Answer – CM: I have never seen anything like that that would identify that with a WW treatment plant. If you have data that does we would like to see it.

Comments – BL: Comments back and forth continue.

Comment – GM: The design and inspection of WW treatment plants leave a lot to be desired. I believe we should not have more development in the area that is going to generate the need for treatment and additional pollutants. The general thing here is not whether it came from the treatment plant, is Dickinson Bayou a clean water body that can be used freely under the recreational use standard without any risk to peoples health? Is it?

Answer – RM: It is a defined risk. There is an inherent risk in swimming in any water body. Whether is it Dickinson Bayou or a creek behind your house. You have an elevated risk of getting an intestinal disturbance. We define that risk with the standard. There is an 8 in a thousand risk or higher of getting an intestinal upset by swimming in Dickinson Bayou. That is all we can tell you.

Comment – GM: I eat too many leftovers – I get that. You are the people that read standard better than me. There are certain defined levels, right? Does Dickinson meet that safe level or does it not?

Answer – RM: It does not meet our contact recreation standard.

Comment – GM: So, it could show and cause some of those things that lady has shown?

Answer – RM: No, the standard is set on intestinal disturbances. It is not based on skin contact.

Question – GM: Are you saying that the only way that bayou is a risk to me is if I drink that water? My skin is safe?

Answer – RS: There is always a risk. The contact recreational standard is the risk of ingestion.

Question – GM: My wife works at the hospital, there are lots of cases with that flesh eating bacteria. If you have a cut, an abrasion, and you come into contact with water bodies in this area. If a person that has a cut or abrasion at a higher risk in the bayou?

Answer – RS: We don't know that and we can't say that.

Comment- GM: Then who can? Otherwise it is safe, just don't drink it.

Comment – RS: Those risks are in every part of the world. You are talking more about a health department. Our standards are based on ingestion from contact recreation. Not from wading, not from any other exposure, the assessment of that kind of risk would be the health department. The meeting concluded with a thank you for the presentations and comments and the stakeholders participation.

Question: How much do you know about the depth and width of Gum Bayou, I am curious? The hearing that was held in Galveston in 2007, are you familiar with that?

Answer – CM: Sorta of. I followed the activities because there is an impact with the permitting area so when there are stakeholder activities in the watershed I try and follow those.

Answer – Well, the hearing that was in August 2007 they had an engineer that testified on the side of Marlin Atlantis White (about putting a sewage plant on Gum Bayou). The engineer that was hired by Marlin Atlantis White, the developer, he used aerial photographs to measure the depth and the width of the bayou. Which none of ya'll would do that...I mean you're a PhD.

Answer – CM: The modeling exercise that we do does take into consideration some of that kind of data but no, we don't go out and survey the geomorphology.

Question: What I am saying is that if you were requested to give the depth and the width of a body of water you wouldn't do it using aerial photographs, correct?

Answer – CM: I don't know, I might.

Comment: I hope not.

Comment – CM: I would use what ever I had available.

Comment – RM: Charles, I know how that was modeled. We did not use aerial photographs. The permitting was based on modeling done by TCEQ staff that relied on actual measured values. I am pretty sure that Mark used....

Comment: Mark Randolph?

Comment – RM: No, Mark Rudolph.

Comment: No, he did not; he said in the Galveston County Daily News that he used aerial photographs.

Comment – TD: Since none of these people participated in that hearing they are having to guess. What is your point?

Comment: Mr. Maguire, you said that TCEQ follows rules and regulations and everything, but from what I have read, and studied on the internet, it is decided by the three Commissioners.

Comment – CM: The Commission has ultimate authority to rule on permit action, particularly as it would relate to a contested case hearing. On the Executive Director's side of the agency, which is

the side I work on we have a process we put a draft permit in notice, we take public comments, the Executive Director makes a decision after that, issue or not issue the permit.

Comment: Ultimately, the Commissioners can decide yea or nay. They had someone on the board named Soward that had water board experience; he is not on there any more. He was replaced by someone who has a degree in political science, Buddy Garcia. He had worked for Perry when he was Lt. Governor. Ok, so it is like why you aren't putting someone in there...

Comment – TD: The Governor appoints the Commissioner.

Comment: Yes, I know he does, that is why I will not be voting for Rick Perry.

Question: I just wanted to say that I know it was very serious what this person had, but when the gentleman was trying to get criteria about whether to swim in the bayou or not – you are trying to establish a level of hazard or whatever. We as people can either do it or is it our own risk? It is kind of like going to the pool and you swim at your own risk? So, you can take 10 people in this room, maybe has a cut, and that increases our susceptibility to infection. You can argue that but you are only trying to establish a risk factor. We have brains, we can – take that risk. That is your privilege.

Comment – BL: The gentleman that came to the city hall that night had 7 children with him. He testified that those children were healthy children, not sickly. And they contacted it. That is what made him angry and that is what made him come to city hall. So that people could see it and talk to him and the health department could come out there while it was on his body to see it. The health department did not want to see it, so how can we document it.

Tara closed the meeting saying that staff would be available for question or private comments. She thanked the stakeholders for their participation and comments.