

LOWER ST. JOHNS TECHNICAL ADVISORY COMMITTEE (TAC) MEETING
Jacksonville University
Davis College of Business, Room 174
Jacksonville, Florida
December 1, 2009

Participants

Brian Bendis, YSI Errol Bos, ETM Dave Briglio, MACTEC Russell Brodie, FWC Richard Bryant, Timucuan Preserve Towns Burgess, UF Robert Burke, SJRWMD Brian Burket, FDEP/CAMA Derek Busby, SJRWMD Tiffany Busby, Wildwood Consulting Dean Campbell, SJRWMD Ed Cordova, JEA Mike Corning, WSEA/CMC Tony Cubbedge, St. Johns County Betsy Deuerling, COJ Joe DeVivo, NPS Rick Gleeson, GTM Trisha Gramajo-St. John, TNC Tim Gross, ERC John Higman, SJRWMD	Mike Hollingsworth, USACE Jay Kamys, St. Johns County Phyl Kimball, Kimball Environmental Justin Levine, COJ Melissa Long, FDEP Nicole Love, FDEP/CAMA Jim Maher, FDEP Claudia McLeroy, FDEP/CAMA Dana Morton, COJ George Myers, FDEP/CAMA Alan Obaigbena, FDOT Ying Ouyang, SJRWMD April Patterson, USACE Marcy Policastro, Wildwood Consulting Ron Roberson, COJ Lucy Sonnenberg, JU Angelo Speno, Putnam County Scott Turner, DCHD Pat Welsh, UNF
--	--

Welcome and Introductions

Lucy Sonnenberg welcomed everyone to the meeting and to Jacksonville University (JU). The participants introduced themselves and the entity they represent.

Wildlife Effects and Biological Community Studies at Georgia-Pacific

Tim Gross presented a summary of the biological effects studies at the Georgia-Pacific (G-P) facility in Palatka from 1998-2009. The purpose of the studies has been to monitor and characterize the effects on organisms from the discharge at the G-P facility. This project started about ten years ago when the facility started to undergo upgrades, many of which were required. The upgrades include modifications to the bleaching process, black liquor recovery, and brown stock water upgrade. In addition, a lot of water conservation measures have been implemented at the facility over the last ten years. There is also a project to relocate the discharge pipe, which has been delayed until 2012. The study focused mainly on the molecular and cellular levels with some organism level studies. The lower biological levels are where the changes occur; however, this information is difficult to apply to the ecosystem level. Therefore, future studies are moving towards the community level.

Largemouth bass were studied in both captive-controlled exposure studies and field exposure assessments. In the captive-controlled studies, the largemouth bass were exposed to 0%, 10%, 20%, 40%, and 80% effluent concentrations for 56 days. For each treatment, there were two replicate tanks that each had 15 male and 15 female bass. Effluent was pulled from the retention ponds to fill the tanks. The hormone levels, Gonadal Somatic Index (GSI), reproductive stage, ovarian egg numbers, and sperm motility were assessed for each exposure level.

The study found that hormone levels diminish in response to higher concentrations in effluent. While there were still some negative effects in 2008, they were not as extreme as past years (2000, 2002, and 2005), which indicates that the plant upgrades are helping to reduce biological impacts. The impact on hormone levels was less in the male bass than the females. John Higman asked what this reduction in hormone levels means for reproduction. Tim responded that they found a change greater than 25% is significant in terms of the effects on populations.

The results for GSI showed a less of dramatic response than the biochemical responses. There was less of an effect in 2008 for females. However, the change in the effect for males was observed in 2005 after the bleaching process at the facility was modified. This relationship has not been studied in detail because multiple process changes were made each year so it is difficult to correlate the reduced effects with a specific facility modification. The reproductive stage data showed that there was more of a reduction in females than in males and the least effects were seen in both in 2008.

As part of the study, they also looked at what exposure is necessary to reduce a specific biomarker by 25%, at which point significant impacts on the population would be observed. This was determined using a regression analysis to extrapolate the effects. Through this analysis, great impacts on the females were observed in 2002, which appear to be due to the fact that some of the clarifiers at the facility were down for several months that year. The analysis showed that once the process improvements were made at the facility, the largemouth bass were only affected at higher effluent concentrations.

For the natural exposure assessments, four sites were consistently monitored over the last ten years: Green Cove Springs, Rice Creek Deep, Rice Creek Mouth, and Welaka. Largemouth bass were only found at the Rice Creek Deep site in the last five years. The Green Cove Springs site was always an outlier, which could be because the environment is saltier than the other sites. Dana Morton asked if bass mainly stay in one location. Tim responded that bass move around quite a bit depending on the reproduction cycle. They do tend to stay in certain areas; therefore, the Welaka population is not contiguous with the Palatka population. There is probably a small resident population in Rice Creek that increases when the bass move in to spawn. Towns Burgess added that he conducted a home range study and found that bass typically stay within a 2 to 3 kilometer area. Tim noted that the sites for the study were selected with enough distance so that different groups could be studied. The catch per unit effort (minutes per bass collected) results showed that there has been an increase in the populations in these areas over time.

In addition to studying largemouth bass, assessments were also conducted on gambusia (mosquitofish) from 1999-2009. These assessments were related to G-P permit conditions for the facility. The gambusia males are typically smaller with a longer anal fin than the females. Studies have shown that when these fish are exposed to effluent from a mill, the females can begin to look more like the males with elongated anal fins. For the gambusia study, three sites were sampled: upstream, downstream of AR1, and downstream of AR2 (AR1 and AR2 are aerator sites). These are all located in Rice Creek with robust populations at all sites, the greatest at AR1.

The male anal fin index is typically between 2.5-3.0 and all males appeared normal in the study. The female anal fin index is lower and is typically around 1.0. Significant changes in the index were observed between 1.25-1.4 in females at AR1 and AR2. Over time, a diminishing response is observed and it appears to be improving with the upgrades at the facility. There were no impacts to reproductive success observed during the times where females had a longer anal fin.

Overall, as the G-P plant upgrades occurred, there was a decrease in biological effects observed. However, it is difficult to determine which changes at the plant resulted in the improvements. The upgrades to the bleaching process seemed to have the least effect whereas the brown stock improvements seemed to have a greater impact. In addition, the study to assess masculinization in gambusia was not

very useful. Future studies are moving towards the community level of the biological system to help answer regulatory questions related to the discharge pipe relocation into the St. Johns River.

Phyl Kimball asked if there are any ongoing studies in Rice Creek related to submerged aquatic vegetation (SAV) and fish populations. Tim responded that there is very little historical data and he started a study about 1.5 years ago. Most of the techniques used to assess biological communities were developed for wadeable streams and Rice Creek is not wadeable. There is a lack of baseline data for the system but these data are being developed now. John Higman noted that a lot of the area downstream is dredged or channelized and the upstream area is dark water and shaded. Neither of these provides good habitat for SAV. Phyl asked if there are any studies to examine the sediment chemical components. Tim noted that some dioxin work has been completed in the past and that John Higman has done some sediment studies. Every few years there seems to be a study but there is no long term, consistent work.

John noted that the G-P study provided a lot of good data and trends but that there are a number of biomarkers which are available to look at responses of organisms. He asked why more of these biomarkers were not used in the study. Tim responded that funding limitations have prohibited their use. John stated that it appears from these results that there are chronic toxicity effects and he asked if the long term effects were determined. Tim responded that the conclusions have been limited to the concentrations and 56 days of exposure used in the study. Tiffany asked how the 56 day period was selected. Tim responded that they tested different timeframes at the beginning of the study and they selected 56 days to cover a reasonable period of the reproductive season for gambusia. Dana asked how the concentrations were selected. Tim responded that the concentrations were selected to be consistent with conditions in Rice Creek. Concentrations at the mouth are approximately 10%-20% and about 80% in the creek.

Towns presented the preliminary data for the biological community monitoring related to the pipeline relocation in October 2012. This monitoring is required by the G-P permit and the Florida Department of Environmental Protection (FDEP) approved the monitoring methods that have been set up so far. The purpose of the study is to determine if there are any biological community effects from the pipeline discharging directly into the river instead of through Rice Creek to the river. The study includes an adaptive management approach that allows for the sampling procedures to be changed as deemed necessary. This is important because many of the procedures were developed for wadeable streams, which does not apply to the St. Johns River. The study began in October 2008 and the first two year period extends through September 2010. During this time, they will look at habitat characterization, site selection, technique selection and validation, and the number of replicates needed. From October 2010 – September 2012, monitoring will be conducted for the pre-pipeline period. Monitoring will also occur for two years post relocation from October 2012 – September 2014.

The monitoring sites were chosen at 0, 1, 3, 5, 7, and 10 kilometers upstream and downstream of the discharge point. The habitat at each of locations was determined. The primary habitats include snag (natural bank, wood debris) and MAST (manmade structures). The secondary habitats include eel grass, tall marsh, and low marsh. Dana asked if all of this sampling is part of the G-P permit conditions. Towns responded that the permit requires that submerged grasses, macroinvertebrates, and fish be monitored. This study is funded by G-P to meet this requirement.

Several trophic levels are studied including plankton, epiphytic algae, periphyton, SAV, macroinvertebrates, and fish. The graphs in the presentation showing abundance and diversity of each organism represent preliminary data and also reflect some methods testing. They have seen about 42 different species that are a mix of marine and freshwater and native and exotic. Larger numbers of species are observed in the summer. Rice Creek typically has the lowest numbers of species; however, this is a small system.

For fish, minnow traps, hoop nets, and trawl nets are used for collection. The minnow traps showed some seasonal differences but the number of species was consistent across the sites. The hoop nets yielded 15 different species and large seasonal differences were observed. In the trawl nets, 20 species were captured with some seasonal differences and what appears to be a trend in diversity from north to south. Macroinvertebrates are useful to evaluate disturbances to system due to toxics, temperature, light, sediment, and load. Samples were collected in both the channel and littoral sites. Ponar dredges were used in the channel and artificial substrate sampling was used in the littoral areas. There were some seasonal and site differences in abundance and diversity in the channel. The plankton monitoring also occurred in both the littoral and channel sites. Plankton tows and integrated sampling of the entire water column were used for assessment. Both seasonal and site differences were observed. There was also the issue of natural versus artificial substrate for the periphyton sampling and the artificial was used. Seasonal and site differences in abundance and diversity were found. A direct fluorescence method was used for chlorophyll-a, which showed seasonal and site differences. For this study, SAV will be analyzed using Geographic Information Systems (GIS). In addition, water chemistry is analyzed.

This study includes multiple trophic levels. The goal is to sample frequently enough to determine what changes are due to the natural system and to help identify an effect from the pipeline, if one were to occur. This process may need to be applied basin-wide or in a larger area of the Lower St. Johns River because there are many other permitted point sources and nonpoint sources along river, which could affect the biological community.

Water and Sediment Sampling Results in the Timucuan Preserve

Joe DeVivo provided information on the Southeast Coast Inventory and Monitoring at the Timucuan Preserve. A Federal Act passed in 1998 required that the National Park Service (NPS) start monitoring its resources in all the parks in the system on a long term scale. The Inventory and Monitoring Program is a nationwide effort that consists of 32 networks, which cover more than 200 parks. Joe is the coordinator for Southeast Coast Network (SECN), which includes 14 parks along the coast, one of them being the Timucuan Preserve. The first part of the program is an inventory of available information to create a common baseline of knowledge for all parks. The inventory included a literature review of science on the parks, basic GIS layers, and species lists. Most of the inventories for the parks are completed or close to completion. The majority of funding for the program is for the long-term monitoring component. The monitoring uses key indicators or vital signs to determine the health of the parks. There are 25 vital signs that cover air and climate, geology and soils, water, biological integrity, human use, ecosystem pattern, and process. The monitoring program uses existing monitoring to the extent possible and any new monitoring is at the community and system levels.

For the Timucuan Preserve, one of the vital signs that is being monitored is marine water quality. The fixed monitoring includes four sites in the park. The datalogger used in the monitoring is an YSI probe that collects data every 30 minutes. Monthly nutrient analysis also occurs with quarterly efforts to determine nutrient fractions. The data are reported annually to the U.S. Environmental Protection Agency (EPA) STORET. The first two fixed sites were established in 2005 with the remaining two sites added in 2006 and August 2009. All fixed sites are maintained by FDEP/Coastal and Aquatic Managed Areas (CAMA) and SECN manages all the data. The City of Jacksonville, The Nature Conservancy, and the Timucuan Preserve help with the monthly sampling. The existing City of Jacksonville stations are used for the monthly water quality sampling with SECN adding the chlorophyll-a analysis for these sites. There are a total of 13 water quality sites, which is much more than at most parks (typically, they have two sites).

In addition, EPA coastal assessment methods are used to determine the status and conditions of park water quality. These assessments involve 30 randomly selected stations that are sampled for standard analytes for both water and sediments. The water analyses occur every five years and the sediment

analyses occur every ten years. A total of 60 sites have been selected to provide alternate locations in case there are sites that cannot be sampled. The sampling is designed to determine an assessment score for each analyte, site, and the park as a whole. This process allows for comparison of results in the park to areas outside of park. The first assessment found that water quality in the park is “fair.” Lucy asked how good, fair, and poor are defined. Joe responded that EPA created the definitions and because they are based on national standards, they do not always match with state standards. For example, dissolved oxygen was rated fair at six sites; however, none of these sites were below state standards. Total dissolved phosphorus, chlorophyll-a, and total organic carbon appear to be the drivers of the fair and poor sites. The sediment chemistry was found to be good with less than 5% of sites in poor condition. Total organic carbon was the driver of the fair and poor sites; the results were not contaminants driven.

The sites in the park that were ranked most frequently as poor were concentrated in the headwaters of the Nassau River. The overall park assessment as fair is in line with rest of the southeast coast both in park waters and outside. However, the Timucuan Preserve had less poor values than the surrounding areas. In addition to marine water quality, many other vital signs are being assessed. There are seven vital signs that have already been implemented at the park with six more in development. Data acquisition from other agencies for seven more vital signs is underway. In 2010, salt marsh elevation stations and bird communities monitoring will start. In 2011, birds, amphibians, plants, and land cover/land use will be implemented. The next coastal assessment will occur in Fiscal Year 2012.

Data from these efforts can be obtained from the NPS data store at <http://science.nature.nps.gov/nrdata/>. In March, this website will transition to the Natural Resource Information Portal. The SECN website includes all published reports, staff contact information, and annual data summaries for all vital signs. This site can be accessed at <http://science.nature.nps.gov/im/units/secn>. SECN is also on Twitter at <http://twitter.com/SECoastNetwkNPS>, and they will advertise when reports are released and post meeting notices. In addition, the Southeast Coastal Water Quality Monitoring Metadata Project includes data from 41 agencies (academic, state, and federal) with tools to pull from STORET and National Oceanic and Atmospheric Administration (NOAA) databases. There are more than 16,000 monitoring stations in the database (<http://www.gcrc.uga.edu/wqmeta>).

Pat Welsh asked what the baseline is for the climate change studies. Joe responded that they do not know yet because the additional focus on climate change will be starting this year. There will be discussions with other agencies to determine the best baseline for the climate change vital sign. Nicole Love asked if similar monitoring is being implemented in Castillo and Matanzas. Joe responded that they have not started monitoring in those areas yet but they may be added as part of the climate change study.

Richard Bryant noted that during the next coastal assessment, additional sites in the Nassau River should be added because there is currently little development there and it would be good to determine a baseline before development. This was considered during the last assessment; however, the SECN was limited in where their funding could be spent. Joe added that at the time they were legally bound to keep sampling within the park boundaries. The law has since changed and modifying the sampling design in future can be done. Dana asked what toxic and metal constituents were found in the sediments. Joe responded that there were two DDT hits and arsenic, cadmium and silver were found at a few sites. Tiffany asked if they were surprised by the sediment results. Richard responded that the results came out better than expected since more contamination was found in past studies.

Technical Updates and Announcements

Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR) Update

Nicole stated that the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center will be offering some workshops this year and she will send information to Tiffany to provide to the TAC as the workshops come up. The training is shifting to a watershed focus and what changes to

land use activities can be made to protect water quality. A management advisory committee was formed that will meet to discuss a training program for coastal managers and decision-makers. If any TAC members have ideas for this training, they can send this information to Nicole. There is a living shorelines workshop coming up that is a spinoff from a workshop that was held in Port Orange. The attendees expressed interest in a case studies workshop to discuss actual projects. This workshop is still in development and will be held in January or February 2010.

The Green Industries Best Management Practices (BMPs) train-the-trainer program will help meet the new fertilizer rule requirement that all applicators be certified by 2014. The University of Florida Institute of Food and Agricultural Sciences (IFAS) certifies applicators and this training will have to be completed first. Then, the applicators will enter another training day to learn to be a trainer. This allows people to take the information back to their company so that not all of the employees have to be sent to the training. This program will be a coordinated agency effort with train-the-trainer in CAMA, EPA providing funding to the program through the nonpoint source group, IFAS doing BMP training, and the Florida Department of Agriculture and Consumer Services (FDACS) giving final certification. The details of the program are still being worked out with these agencies. There will be three regional coordinators and Claudia McLeroy is the northeast and central Florida regional coordinator. Claudia will be holding some of the training courses in Spanish.

Rick Gleeson stated that a study on mercury bioaccumulation has been started and is coordinated through several National Estuarine Research Reserves (NERRs) on the east coast. The research coordinators met in January 2009 to discuss the study, which is focused on several organisms. The samples have been sent to the laboratory in Beaufort, North Carolina for analysis. The focus of the study is on the amount of methylmercury in these organisms to determine if the levels of mercury from atmospheric deposition correlate to the levels in the organisms. Samples were collected over the summer and fall and the analyses are in process. Rick will update the TAC once the results are available.

St. Johns River Alliance Update

Tiffany stated that the Alliance Board meeting will be on December 16th and they are preparing for a River Summit in September 2010. Dean Campbell noted that the river license plate initiative is moving forward. Tiffany added that the license plate seems to have a good chance for passing in this upcoming legislative session, partially to honor the late Senator King. If the plate does pass then it will increase the visibility of the river and the revenues will be used to fund projects along the entire river.

U.S. Army Corps of Engineers Update

Mike Hollingsworth stated the Corps received funding for ecosystem restoration projects in Big Fishweir Creek and Hogan Creek. However, when they went to use the funding to organize meetings on these projects they found out that the money was not available. The funding is being held up on the federal level pending the outcome of the current budgeting session. The funds should be disbursed once this is completed and the Corps should have the money in February or March 2010. For the Hogan Creek project, the Corps is participating with the City of Jacksonville, Parks and Recreation, and JEA. The Task Force met a few weeks ago and they will meet again next week. There is enough funding now to maintain the Hogan Creek project meetings but the larger funding is necessary to implement the project.

The Jacksonville Harbor deepening project at the Port is being analyzed by the Corps economics team. These analyses include modeling and ship simulations, which will take several months to complete. The Corps and St. Johns River Water Management District (SJRWMD) hydrologists are looking at models to determine what effects the deepening will have. The ecological impacts of this project will also be studied in conjunction with SJRWMD staff who are modeling the effects of the proposed water withdrawals. It will be many months before a national economic project depth, the depth which is in the federal interest, will be determined. Any further deepening would be the financial responsibility of the

Port. Increments from one to ten feet are being studied. The Corps is also conducting an economic analysis for the project to remove the jetty at the intersection of the Intracoastal Waterway and the St. Johns River. The Corps recently submitted the application for the Naval Station Mayport project. The 30 day timeline for the permit is ending soon so they should be receiving a request for additional information. The Environmental Impact Statement for the project is posted on the Navy's website and the application can be reviewed on the FDEP beaches and coastal website. The Navy has targeted award for construction of the project in August 2010, although construction funds have not been allocated yet. The dredging for the Jacksonville Harbor Phase 3 deepening has started. The deepening project on the Intracoastal Waterway in the Palm Valley North Reach is also underway. In addition, the regular maintenance dredging for Jacksonville Harbor from the mouth of the river to Blount Island is also scheduled.

Richard stated that the 2007 Water Resources Development Act (WRDA) included a project to study the Fort George River, which included the funding. Mike responded that Steve Ross is the project manager and can provide information on the status. John asked if the spoil from the Phase 3 dredging will go to Bartram. Richard noted that he heard some of the spoil needs to go to Buck Island. Mike responded that all the spoil from the Phase 3 dredging will go to Bartram and the Corps is looking to raise the dikes at Bartram. Buck Island is being used strictly for an operations and maintenance project with a set amount of load. Jim Maher stated that the Corps will need to notify FDEP if they are raising Bartram.

John asked about the Marine Corps project at Blount Island. Mike stated that this project is under development and the Corps is collecting sediment samples. The draft report should be completed in early 2010. There are also geotechnical analyses for the concrete sill and structural analyses for the pier and adjacent facilities to ensure they are sound in case blasting is needed. The Marine Corps has been having issues with frequent siltation in their slipway and they are looking to deepen the slipway. The old retaining wall from an offshore power systems project to build nuclear facilities is causing problems because it is a very thick, reinforced piece of concrete meant to hold back nuclear blasts. The Corps is working on finding a way to remove this sill.

Pat asked if there are any considerations to increase current and wind monitoring so that the big ships do not get surprised by storms. Mike responded that this is part of the ship simulation that the Corps is working on. Lucy asked if the goal of the dredging is to increase shipping. Jim responded that it is being considered more to maintain the current levels of shipping once the Panama Canal is open. Mike noted that there may be a decrease in the number of ships once the dredging is completed because larger ships with more cargo can move through.

Fisheries Data Collection Update

Russ Brodie stated that they are still conducting the monthly sampling and they recently submitted the annual summary report on the expansion sampling. Russ will provide this report to Tiffany for the TAC website. Russ' group recently completed a paper on the St. Marys, Nassau, and Lower St. Johns rivers and they are working on a report related to minimum flows. This report was contracted by SJRWMD to determine freshwater inflow impacts associated with the proposed water withdrawals. A draft of this report was recently submitted to SJRWMD and it will be finalized in the first part of 2010. This report utilizes all the information on fisheries that has been collected in the past and analyzes the relationship to salinity changes. Dean added that having all the data was key to the water withdrawal analyses.

Fecal Coliform Total Maximum Daily Load (TMDL) Update

Dana stated that the last tributaries meeting included a presentation from Cheryl Wapnick at PBS&J on the detailed assessment of ten tributaries that was conducted over the last year. A representative from the University of South Florida was also at the meeting and presented on different microbial source tracking (MST) techniques. The stakeholders are currently working on the basin management action plan

(BMAP) for the next 15 tributaries. The City of Jacksonville laboratory is almost ready to run fecal coliform samples. They should be certified by this time next year, which will help save money on analyzing samples. Melissa Long noted that the next tributaries meeting will be held on December 10th from 10:30 AM – 12:00 PM. Tiffany added that the first BMAP on ten tributaries is completed and will be presented to the FDEP Assistant Secretary this week before going to the FDEP Secretary for approval. The second BMAP is in the project collection process and should be completed next summer. The links to the technical reports that are the basis for the BMAPs are included on the TAC website. Dana added that there is also an FTP site established for the Hogan Creek Working Group.

George Myers asked if there is any possibility of harvesting oysters in these areas in the future. Some people are doing that now and it is not legal or safe. It also appears that some people are even harvesting the oysters to sell commercially. Jim responded that there are no current proposals to reclassify this area for harvesting. FDACS should be notified of the unauthorized commercial activities. Dana added that they have tried to reopen the beds in the past but the amount of monitoring required is cost prohibitive.

Lower St. Johns River Main Stem TMDL Update

Melissa stated that all the data for the annual progress report has been collected. October was the one year mark for BMAP adoption. An Executive Committee meeting is planned for January 13, 2010, to provide an update on the progress made so far. If there any entities that are not meeting their schedules, this issue will also be discussed. FDEP staff are currently reviewing the draft report and it will be sent to the stakeholders before the meeting. It appears that good progress has been made in the first year. Jim noted that the Jacksonville Port may expand and they will not be able to meet all the stormwater treatment requirements on site. Therefore, they will need compensating treatment downtown where there are high nutrient concentrations. This could benefit the City of Jacksonville and their allocation in the BMAP.

Other Member Updates

Scott Turner noted that the Duval County Health Department (DCHD) is continuing with their Surface Water Improvement and Management (SWIM) inspections in septic tank failure areas. With the help of FDEP and SJRWMD, DCHD was able to start a new program in support of the tributaries fecal coliform BMAP. Additional funding was needed to inspect the septic tanks within the tributaries watershed boundaries. DCHD received Section 319 funding, which will allow them to inspect all ten BMAP tributaries. They started the inspections in November and the contract is good through September 30, 2010, which should provide enough time to look at the parcels in these areas. There are currently no residential mandated inspection programs so these proactive inspections will be useful to identify any potential issues. In addition, DCHD is working to educate homeowners on proper septic tank maintenance and what to do in case of a failure.

Next Meeting Date

The next meeting will be held in March 2010 and will be hosted by SJRWMD. Tiffany will send out information to the TAC once a date and location have been determined. Anyone with presentation ideas or information for the TAC distribution list can email Tiffany.

Adjourn

The meeting was adjourned at 2:35 PM.