

**City of Fort Lauderdale
 Infrastructure Task Force Committee
 May 6, 2019
 2:00pm to 5:00pm
 Fort Lauderdale City Hall
 100 N. Andrews Avenue
 8th Floor Conference Room
 Fort Lauderdale, FL 33301**

MEMBERS		PRESENT	ABSENT
Marilyn Mammano	P	24	1
Ralph Zeltman	P	24	1
Peter Partington	P	5	0
Roosevelt Walters	P	23	2
Fred Stresau	A	20	5
Norm Ostrau	P	22	1
David Orshefsky	A	21	1
Jacquelyn Scott	P	9	1
Gerald Angeli	P	1	0

Staff Present

Paul Berg, Director-Public Works
 Joe Kenney, Assistant Public Works Director-Engineering
 Talal Abi-Karam, Assistant Public Works Director-Utilities
 Brandy Leighton, Sr. Project Manager
 Jill Prizlee, Chief Engineer
 Meredith Shuster, Senior Administrative Assistant

Consultant

Patricia Carney, PE, Hazen & Sawyer, P.C.

Roll was called at 2:02 p.m. and a quorum was established.

1. Call to Order:
 - **Roll Call**

2. Approval of Agenda

Motion to approve the May 6, 2019 Agenda with corrections made by Mr. Walters and seconded by Mr. Zeltman

Chairperson Mammano requested to add an item regarding a technology called Zonar that can create a visualization of Future Land Use Maps being presented to the City Commission by the Gridics Company at its May 7th Conference Meeting. In discussion it was decided to add this item to the June agenda.

Item 5 New Business A. on the status of the Consent Order will be held prior to the General Discussion portion of the agenda to facilitate the consultant.

Motion to approve the agenda approved unanimously by voice vote

3. Approval of Previous Meeting Minutes
 - A. March 7, 2019

Motion to approve the March 7, 2019 Minutes made by Mr. Partington and seconded by Mr. Walters

Motion to approve the March 7, 2019 minutes approved unanimously by show of hands

B. April 1, 2019

Motion to approve the April 1, 2019 Minutes with or without corrections made by Mr. Walters and seconded by Mr. Zeltman

Ms. Shuster stated the minutes are in summary format and diligent effort is made to summarize the topic. [At the request of the Committee], names of the participants are added but the statements made will not be verbatim. Mr. Walters reminded the Committee that one cannot go back and adjust the minutes to add what was “meant or intended” to be said. The Committee agreed it did not want to return to a verbatim form of minutes.

Motion to approve the April 7, 2019 minutes approved unanimously by voice vote

4. General Discussion and Comments by Committee Members

A. Welcome Gerald Angeli

Mr. Angeli (Gerry) was welcomed to the Committee as the representative appointed by the Chamber of Commerce. He is a resident of Victoria Park with an industrial background.

B. The July 1st meeting hold as scheduled, cancel or reschedule to July 18th, due to the Fourth of July Holiday

Motion to reschedule the July 1, 2019 Meeting to July 18th due to the 4th of July Holiday made by Ms. Scott and seconded by Mr. Walters

Motion to reschedule approved unanimously by show of hands

C. The September 2nd meeting move to Thursday, September 5th due to the Labor Day Holiday

Motion to reschedule the September 2, 2019 Meeting to September 5th due to the Labor Day Holiday made by Mr. Partington and seconded by Mr. Zeltman

Motion to reschedule approved unanimously by voice vote

D. Discuss Open Space, Parks

Mr. Stresau forwarded his view via memo on Open Space and Parks to the Committee members to introduce the subject for discussion. He also forwarded photographic examples of the City of Houston showing wide sidewalks and open space plazas.

Ms. Mammano mentioned the active outreach being done to update the Comprehensive Plan. Her feedback from the community indicates this is one of the top issues.

The question was asked to define the difference between “parks” vs “open space” as they often are used interchangeably. Also asked, did the 5 acres include street plazas, medians, and the like?

Mr. Zeltman gave several reasons why an “open space” may not be suitable for a park; therefore the use of “park” and “open space” should not be interchangeable. It was agreed.

Ms. Mammano explained the 5 acres per 1,000 residents is essentially the land under the jurisdiction of the Parks Department. She asked how the 5 acres of open space/parks per 1,000 residents was determined and should that be the correct ratio? Does an area with large backyards and swales need as much parkland as perhaps a higher density area such as downtown?

Mr. Kenney stated there is 950 acres of parkland maintained by the City's Parks Department. He offered a general definition of a park as "open space available to all". He will obtain a more specific definition for the Committee. It was clarified that the actual residential population of the City is used as the metric in the calculation. Tourists are not included. Also, State and County parks are not included in the 950 acres of parkland maintained by the City's Park's Department.

Discussion included the planning for future population growth and the ability to maintain the current standard. The chairperson expressed a comfort level if the 950 acreage of actual parks is the basis of the 5 acres per 1,000 residents. Mr. Kenney stated currently, the actual figure is 5.3 acres per 1,000 residents.

Mr. Walters commented that accommodation of the future growth will be vertical due to lack of available land and Mr. Ostrau was wondering at what point the population will cap out, if ever.

Mr. Partington mentioned the decrease to around 3 acres per 1,000 residents mentioned in the Comprehensive Plan presentation. In order to maintain the 5/1000 ratio, by 2045 the City would need to add another 281 acres to maintain that ratio.

Ms. Mammano stated now may be the time to land bank land for the future or add open space requirements to the developer; otherwise by 2045 we will be 281 acres short. She emphasized that now is the proper time for the Committee to make recommendations to the Commission on all the infrastructure elements of the Comprehensive Plan.

There was general consensus that parks and open space will be added to the June agenda with the goal being a recommendation to the Commission.

Five questions presented to staff were:

1. What comprises the 950 acres?
2. Where does the ratio of 5 acres per 1,000 residents come from?
3. Is the ratio based on a safety or health factor?
4. How does the seasonal population figure in?
5. Discern the difference between "open space" and "parks"

E. FAU Traffic Study

Mr. Ostrau mentioned that FAU is doing a traffic study using personal devices that is incredible in its scope. The data can be gathered inexpensively and is extensive.

Ms. Mammano was aware of the study method and stated the City has been using it on 17th Street. Using technology to deal with an issue to visualize it is a move forward.

5. New Business

- A. Consent Order – Update – Hazen and Sawyer, P.C. [2:15 PM] [Meeting Videos](#)
Brandy Leighton, Sr. Project Manager for the Consent Order and Patricia Carney, the Program Manager with Hazen and Sawyer did the presentation.

The Consent Order effective from September 29, 2017 to September 30, 2026 was a negotiated agreement amicably entered with FDEP ("Florida Department of Environmental Protection") to improve the infrastructure of the City. It includes 51 milestones which include planning and capital projects. There are 24 milestones in the first 21 months and to date, 24 milestones have been reached, 13 are in progress and the balance are mainly administrative milestones including the semi-annual reports.

It was asked if the State [of Florida] comes in to inspect a project once it is finished. Ms. Carney explained usually there are no inspections. When a project is completed, it is

certified and signed off by the consultant and the City. The documents are submitted and comments can be made; however, the State trusts the certifications.

Mr. Berg added all work is done according to the permits and plans. Plans are sealed and certified. The submitted documents are carefully reviewed. At some point; however, the State may choose to spot check.

Mr. Zeltman added there are certain tests performed on construction projects to verify the construction work.

Mr. Partington inquired about the bidding process.

Ms. Leighton stated it is a combination of design/bid/build and design/build. Ms. Carney stated the majority of the projects completed have been design/bid/build and the upcoming projects will be more design/build.

To respond to the use of design/bid/build which is generally more expensive, Ms. Leighton explained that many projects were already being planned prior to the Consent Order. The use of bond money mandates that the quickest delivery method be utilized. It also utilizes the City's team more for quality functions.

Mr. Partington asked if there were enough funds using these methods. Ms. Carney explained that the cost models built by Hazen and Sawyer took into account the projects that were thought to be design/bid/build and design/build.

Ms. Mammano asked about the difference between the \$200 Million bond and the \$135 Million cost of the Consent Order. Ms. Leighton confirmed that the balance was used for water and sewer projects per the master plan.

Mr. Walters asked about the pending 14 milestones if they were pending due to lack of funds or some other reason.

Ms. Leighton answered that the pending milestones are mainly administrative. The City is required to submit semi-annual reports. The 14 milestones include 12 that are these reports due over the next six years.

It was asked about the benchmarks showing on a map in the presentation. Ms. Carney described a benchmark as a point where everyone agrees on a certain elevation. These points are certified by the State. When laying out a plan, one then relates it to these benchmarks of common agreement.

Ms. Leighton and Ms. Carney explained the City's benchmarks were from old datum. The State uses a new datum system. The City's benchmarks are now entered into the new datum system.

It was asked if the exhibits indicated that the entire sewer system has been mapped. Ms. Carney confirmed it does. The mapping is due at the end of June and so it is close to being complete. She confirmed Ms. Mammano's inquiry that by the end of June, the City will have all of its sewer system mapped. The City will know location at that time but not the condition. The conditions come with the capacity assessment. The modeling portion determines if a pipe is over capacity or not. The asset management part will look at the condition of the pumps etc. to determine condition assessments.

Ms. Mammano confirmed with Ms. Carney that the City will have the location and condition of the pipes for the entire City. Ms. Carney confirmed it is in the process now of doing so. The City will have a gravity model for the basins where it is known there will be a lot of development. It will be a tool that as allocations are requested, a model can be made to see if the capacity of the current infrastructure is sufficient. If not, conversation about whether new infrastructure needs can occur.

Ms. Leighton added the City needs to report pipes that are exceeding capacity to FDEP.

Mr. Partington brought up that impact fees are fixed and made the point that the impact fees, whether current or proposed, are the same regardless of where the development is. Will there be a different fee for different basins?

Mr. Kenney stated the rate study increases all impact fees but does not use a basin by basin approach.

Ms. Mammano asked about I/I and what percentage of the gravity lines will have been treated by the end of this project.

Ms. Carney stated there are 186 basins and the 6 highest priorities are being addressed right now. Mr. Kenney added that about 10% of the City's sewer system will be done by this project ending in September of 2020. He further answered that the 10% includes both the Consent Order projects and other projects outside the Consent Order.

Ms. Mammano followed up with asking if 10% was a "good number". Mr. Kenney stated it was the 10% that was of the highest priority. It's addressing the oldest and worst systems. It addresses the areas where operations continually have to address issues after any rain event.

Mr. Zeltman added that it is only 10% of the system but represents a higher percentage of flows being handled by the system.

Ms. Carney confirmed and explained the map showing the peaks that occur during the day and after a rain event. By doing a calculation of the GPD ("Gallons per Day") per inch per diameter mile flowing in and over the entire length and diameter of a given piece in the system; its capacity can be determined and ranked. There is an acceptable standard level. Anything above that level needs to be addressed and below that level does not have to be addressed.

She further explained the mathematics and process used in determining the condition and capacity, including the different terrains found in the different basins of the City. In conclusion confirmed with Ms. Mammano's inquiry that the results are hard data the City can use in determining its priorities and spending.

Mr. Zeltman stated in defense of design/build, it can also save money because of the time saved through a more collaborative relationship between the contractor and engineer. Problems are more easily resolved. His experience in managing design/build projects was coming in ahead of schedule and under budget.

Ms. Leighton confirmed that an advantage of the contractor working with the engineer is plans can be reviewed prior to final completion to discover problems and figure out solutions.

Ms. Mammano confirmed that the Committee will see the next semi-annual report due to the FDEP by July 31st. Mr. Kenney confirmed it would.

B. Stantec Report on Water and Wastewater Rate Study [3:16 PM] [Meeting Videos](#)

Mr. Kenney reviewed with the Committee the presentation given by the consultant to the City Commission on April 15th and slightly updated when given to Budget Advisory Board (“BAB”) on April 16th.

Mr. Kenney expressed the rate study addresses the Committee’s recommendations for long term funding of infrastructure, the phase out of the ROI and the analysis and recommendation to increase impact fees.

A summary of the presentation includes:

- No rate increase for 2020
- A 5% total rate increase thereafter with the increase higher for wastewater than water
- Rate will be able to fund the CIP and proposed new debt
- Sewer rates will increase more than water.
 1. Water revenue exceeds expenses
 2. Sewer revenue falls short of expenses
 3. Impact fee update: The study used a “buy-in” system meaning the system is built and New Development would buy-in to it

Ms. Mammano asked about the timing needed to put this new rate structure in effect with the concern that it be an extensive timeframe of perhaps years.

Mr. Berg explained although it will not take years if adopted by the Commission, there will be a work load issue of rewriting the ordinance and calculating the new rate structures for water and wastewater along with restructuring the system accordingly. It will be a comprehensive adjustment that will go along with the budget process. The 5% increase needs to be removed for FY 2020 and the new rate structure amounts will need to be projected for future years. If approved, the goal is to begin the new rate structure on October 1, 2019.

The Commission has seen the presentation twice and requested further information to be presented at the May 21st meeting. He encouraged the Committee to attend or watch.

In answer to the question of why there will be no 5% increase in 2020, he stated it wasn’t a political decision. Although it was known there was a disparity between water and sewer, it was not known how much of an impact it would have. Time was needed to work out the new rate structure and get it accurate. It was decided to implement the rate structure first in order for people to have time to understand it.

In response to Ms. Mammano summarizing this as a “timeout” on the 5% increase, Mr. Berg stated the 5% is still needed to fund the additional \$200 Million in bond increments that will occur in the future to implement the water and sewer master plan.

On behalf of Commissioner Moraitis, Ms. Mammano asked why the ROI being redeemed wasn’t enough to stop the 5% increases during those years, or even lower the rates.

Mr. Berg explained that in this fiscal year after Hurricane Irma there were major repairs needed at the cryogenic plant for GTL causing a large expense and the hurricane caused the power sources from FPL going into the plant to become unreliable. Those two projects cost about \$30 Million. The amount gets averaged over 20 years. The \$5 Million saved this year from the ROI was pretty much used up.

Ms. Mammano asked what would have happened if the \$5 Million hadn’t been there.

Mr. Berg explained the money would have needed to be raised possibly by increasing fees. The increase would have amounted to a 19% increase in 2021. The rate study addressed what would happen without the return of the ROI. The return of the ROI funds to water and sewer currently provided for these unexpected expenses. In agreement with Mr. Partington, with proper management there is a possibility that it could aid in reducing rates in the future.

Mr. Angeli stated the rate study did not mention cost efficiencies to deliver the services and what reductions in water rates could be had. Discussion included the increases in other overhead costs; however, Mr. Berg explained that efficiencies are built into the system. As an example, this year the City saved \$240,000 in power consumption at GTL. Efficiencies get built into the rate structure because it is based on the cost of running the plants. Per the ordinance, true costs are determined on an annual basis. If certain criteria are met, a rebate is issued.

Staff will provide the criteria for rebates to the Board members.

Mr. Partington asked if the funding in the rate structure took into account the funding recommendations in the Reiss Report. Mr. Kenney confirmed long term funding needs have been built in.

Mr. Walters asked about any pushback from the neighbors. Mr. Berg stated that there have been speakers questioning the 55% the multi-dwelling residents pay; however, it is because they use about 55% of what a single family home uses.

Ms. Mammano expressed equity has always been a focal point of this Committee to ensure everyone pays their fair share.

The rate structure includes a fixed user fee of \$2.49 charged to everyone who hooks up to get water from Fort Lauderdale.

Mr. Partington pointed out the need to have a fixed fee to assist in securing bonds as cost increases may induce consumption decrease.

Mr. Berg directed the Committee to another portion of the report. For a 5/8" meter at the average usage of 5,000 gallons of combined water and wastewater, the current rate is \$66.27. Under the new structure it would increase to \$67.13. The same size meter using 2,000 gallons of combined water and sewer currently pays \$31.49. Under the new rate structure that amount would decrease to \$30.01. Overall, the midpoint is 5,000 GPD if less is used, bills should decrease between 0 – 2%. It encourages conservation. The consumptive use permit for water and the structure of the water rates are required to accelerate with higher usage.

The Committee decided to communicate its favor with adopting the rate study to the Commission at the May 21st meeting. There was discussion if the recommendation should pertain specifically to the fixed fees for all users or be expanded to support the rate study in total. The decision was to endorse the rate study in its totality.

- 1. Member Ms. Jacquelyn Scott made the motion, seconded by member Mr. Roosevelt Walters recommending the City Commission:**

Support the recommendation of the Water and Sewer Rate Study of April 16, 2019.

In a voice vote, the motion carried unanimously.

6. Old Business
 - A. Commission Discussion on ITF Recommendation

Ms. Mammano reported that she was at the Commission Conference Meeting April 16th during the Commissioners discussion of the Committee's recommendation regarding the future of an infrastructure advisory board. The conclusion was the Commission will take action closer to the end of the term of this Task Force which ends on March 7, 2020.

Mr. Angeli was of the opinion that the Commission placed value on this Committee and that it should continue in some manner.

B. Recommendations to the Comprehensive Plan Elements: Infrastructure, Transportation and Community Investment

Mr. Partington suggested the Committee look at the "big picture issues" such as parks and including funding when reviewing the Comprehensive Plan to avoid getting bogged down. The Committee had made several suggestions during the presentations and was invited to make individual suggestions through the website.

Ms. Mammano acknowledged the attempt to remain at the 30,000 foot level; but regardless of the level of recommendation it is worth the discussion. Infrastructure needs to be included in future consideration.

In reference to the Comprehensive Plan, the discussion of capacity assessment and the use of Zonar technology, Ms. Mammano asked, if the information provided on the capacity of the system is just given to the City to use as it will or is it projected into the current and future development of the City.

Mr. Kenney responded there are assumptions about future growth already embedded in the model. As an example, if one looks at the Zonar depiction of the City at its current growth level, it would be beyond the capacity of the current system. He stated it would be a good discussion to include. Models take into consideration future project population growth and different scenarios.

Mr. Partington reiterated his earlier point that as basins get near development capacity and new infrastructure is needed, impact fees outside of that basin may be subsidizing it. Approaches to fund new capacity may need to be addressed outside of the impact fees or the impact fees for that basin may need to be addressed differently.

Ms. Mammano mentioned in her experience, where there was capacity at the plant but not in the lateral between the plant and the project, the developer was required to pay for its replacement in addition to the impact fees. She pointed out that there are project specific things development has to do.

Mr. Kenney affirmed that is the current policy.

Ms. Scott knew of a situation that came in front of the Planning and Zoning Board where a developer wanted to bypass one pump station and go to a different one because of age and capacity. It was not allowed.

Mr. Kenney was familiar with that development which is in the review process. The developer will not be replacing the pump station in question but will be required to install about 5-6 blocks of new sewer main.

7. Informational Items -

A. Update on the Differences between Capacity Calculations

Mr. Partington reported on the question from the April meeting as to why there were differences in deriving the capacity numbers for the George T. Lohmeyer Plant ("GTL"). After reviewing the issue with Joe Kenney, he reported that the most recent capacity numbers being used for development

use a more conservative approach. Using 48 MGD AADF (millions of gallons per day average annual daily flow) for GTL is the better number to use. The remaining capacity of 7.5 MGD is more conservative. He added per the Reiss report, if growth continued at the same pace, a new injection well would be needed by 2020.

Mr. Kenney presented a capacity letter from the FDEP on GTL, Fiveash and Peele Dixie. He explained there is a State standard and a County Standard and both are calculated a little differently. The City staff looks at both and is publishing the more conservative. He expressed using the more conservative calculation is the current City policy. It is an administrative decision and a recommendation to the Commission would not be needed.

8. Public Comments

Mr. Boyd Corbin agreed with the Committee on its comments concerning ROI. He spoke of the dirt in the aquifer water. He suggested using GAC or membrane filtration instead of treating with flushing and ammonia. He states using ammonia creates a biofilm which leads to nitrification meaning bacteria is in the drinking water. Turning off the ammonia to rid the biofilm is called a free chlorination burn, which he states the City is not doing. He stated the process was stopped last year because the City was getting six times the level above EPA safe water standards of these bad toxic chemicals. He found out that the City is increasing the amount of chloramine to combat the nitrification caused by the chloramine added to the water. What is the City's current plan for inhibiting nitrification in the drinking water since the City stopped these burns, he asked? He believes it could work if there was a whole lot of flushing but stated the City isn't doing that. In order for it to work, he states the City must increase oxidation reduction potential when the ammonia is increased. He then asked about accounts referenced in the presentation showing increases between 17% and 90% and asked which accounts those were.

Mr. Kenney didn't have an immediate answer but will get back to the Committee and Mr. Corbin. Mr. Corbin requested the following be answered:

1. How are we increasing the ORP (Oxidation Reduction Potential)?
2. What is the past schedule and future schedule for increased chloramine in time and quantity?
3. What level is the chloramine being raised to when the chloramine is increased?

9. Adjournment 4:14 PM

Motion to adjourn: Chair entertained a motion to adjourn – Mr. Zeltman “so moved” and Mr. Ostrau seconded.

Motion approved unanimously by voice vote

Next Regular Meeting June 3, 2019

3D Zoning Map:

- View development potential of each parcel, according to zoning
- Quickly visualize context of each area relative to neighboring zones.



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