GTF Minutes - 3 19-2015

Order - 3:02

Introductions:

*Sierra Club, Melissa*

Speaking this evening: Dr. Robert Bullard on environmental justice at 5 p.m. Where?

Note 1

Subcommittee notes:

Sub-note 1

* Gary Wozniak explained at the meeting the *Recovery Park* infrastructure techniques.
* Their parcels where this will happen are publicly owned.
* Rain-gardens, retention, and other related services will be in the project—sounds like a great project in the city!
* Wozniak asserted too that we know what is going on with this project. He discussed and finalized goals.

Sub-note 2

* Drainage charge will be implemented and given credits—slated for April of next year.
* The draft of the Stormwater Policy was done with the Mayor’s office and Tetra Tech.
* There was a discussion about maps specifically concerning where functioning GIS (geographic information system) items can be mapped so that we can see where the networking of the systems are. This will help us to determine our next steps.

Sub-note 3

* Upcoming events: The Detroit River Water Festival at Belle Isle, April 30th 2015 will have the 8th graders participate in this event.
* Rick Bowers explained the GIST plan for the city.
* Charter Mandated Plan

Note 2

Parjana Distribution Presentation

* Greg McPartlin, CEO, and Joe A. Kramer, Managing Partner, emphasized that this is not an idea or concept—proven technology. Parjana is a Detroit start up with 150 worldwide installations. Parjana has studied nature and determined the dynamics of bio-mimicry so that the stalks are like tree roots.
* (Listed the places that these are installed)
* Parjana wants to make this a Detroit story. We can do this if we work together with thought leaders like you (GTF). (Shows video)
* 3,300 roots were place in Belle Isle about 15 months ago; 3 months after project, 3.5 inches of rain fell on a 24 acre site—the result: No standing water! Testing and monitoring by a third party research team shows a 63% standing water runoff reduction. 982 acres is all of island will have the rods installed.
* “Rain is not a liability, we change it into the asset that water is; it creates at paradigm shift in thinking”, Parjana.
* Joe shows map of how the rods are installed. This should show a 90% water reduction over a period of time.

Other Parjana Testimonies

* Edgbaston Cricket Stadium in Europe showed field was playable in 2 hours after 1.5 inches of rain.
* Coleman A. Young Municipal Airport shows positive influence of stalks; all clay site can be clean enough to walk on after one hour.
* Another test: bromide test shows, water moves on a horizontal basis and not vertical so that infiltration can be taken to another place, not just downward. Over time infiltration increases with time instead of depleting or degrading!
* MDOT at airport shows fore bays were not working properly. After Parjana installation, 14 acres can be nearly completely cleared after 72 hours from one inch of water.
* 1 inch rainfall in ball field can make ball playable in 3 hours after installation.

Parjana QUESTIONS

How is technology compared to tree root? Where does water go, especially on Belle Isle?

Detroit city airport water discharged 60 feet away - capillary reaction like tree root condition soil on a 12 foot hole for 10 foot stalk; normal filtration through soil.

**3 principals** - gravity takes water vertically, hydrostatic pressure from too much water, and pressure differential from the earth. Like capillaries in your body, we maximize the principals of the earth to create movement.

Water is dumped downstream like ground stream effect. All water is still filtrating like mother-nature created it, we maximize the organic rain event to create quicker movement, creating macrospores, bigger pores, so that the clay layers can communicate. Water is discharged into the river on Belle Isle.

What is cost per acre?

No standard; site specific

How long will it last?

The device is in ground about 150 years—25 year warranty for each specific site.

Total operating cost is usually 1-2 years end payback.

Does it limit you in building on the land or is it for areas that are not being developed?

GPS cap so rods can be removed and replaced or the lot can be measured around its perimeter so that the install is not affected but the effect is the same.

Do you create it so that it flows if there is no slope?

No, slope can be created or you can keep the water install done like ti was on Belle Isle

Can water be discharged to create the fulfillment of a need?

Not yet, but it is being spoken about, especially in desert areas.

Greg: We are controlling the directional flow, so we can do it, though it hasn’t been done yet.

Water discharged does not come back to the devices or flow in the wrong direction.

PH neutral, 5 different composites, made in cooperation’s with the EPA; the safest plastic available, basically makes it go into the ground faster

Does this effect well water?

Requirements are being tested and working in cooperation with all necessary government requirements. With this engineering we’re no longer creating algae bloom.

Melissa/Allysa: is it bio-degradable? What happens after 150 years?

There’s no leaching off plastic—it’s all been studied. If it’s designed without it isn’t broken down in the earth. It reacts with the earth, not against it; all materials in the stalk are found in the earth.

Each one has a GPS node?

Greg explains the name -

Note 3

Kathy Klein of Waste Management Explains Recycling Problems

*How many people recycle at home and when was the last time you checked what is allowed?*

* The industry is dynamic right now and facing challenges.
* The changes are complicated and changing every day. No standardization yet, so each day things can be changed.
* Waste management has to adhere to the guidelines of the facility they are taking it to.
* Encourage everyone you know to check: *#3 & #6 plastics are no longer allowed*.
* 40% of our recyclables go overseas. Some countries have gotten tired of contaminates, so they were rejecting lots, there was a labor dispute where things were being held due to
* Tech is working very quickly to learn how to repurpose; we are still trying to catch up so that we don’t have to send them over… policy must be changed so that we can be challenged to do more recycling.
* Waste generation and recover rates in the U.S. have doubled
* The key to make sure that we remain a sustainable industry: We must adhere to the standards so that we don’t have so many ‘contaminants’. Anything we can’t recycle costs money.
  + Such as curling irons with 2 components, (metal and plastic), this muddies the waters—takes longer at the plant.
* Evolving packaging - think about environmental engineering in the form of packaging
* Education is the key to keeping things moving
* We want the recycling industry to be sustainable.
* Green Biz and EPA now have the latest information
* In the schools, people want fast and easy. Teach the kids that life is changeable and we have to change things often.

Waste Management: QUESTIONS

Can we go back to giving guideline sheets to the drivers? Can the municipality write it into their guidelines? Who's responsibility is it in the city to let people know?

We are working on that. Green living science has been educating the young people.

It seems easier to teach the kids and get to the parents that way.

Waste Management Industry Concerns…FINAL NOTE

* Industry cannot take on the promotion of Recycle often.
* Recycle Right website gives the best education for all of this as a tool.

Note 4

Blue Green update

* Met yesterday, working on a draft of guiding principles and key concepts to P&D staff (?)
* Goal is to have a draft for their feedback by the end of next month.
* 2 page document being finalized by their next meeting.

Good of the order:

* Sierra club is having rain barrels on the Riverfront on April 25 (10-12 am) - free workshop from [mirainbarrel.com](http://mirainbarrel.com). Purchase of barrel, $50.00, delivered to the riverfront to be taken with you after conversion.
* Race/culture/diversity flier - sense that environmental organizations don’t have a lot of diversity and inclusion discussion on environmental justice and inclusion. Wane county campus March 26, 4-8 pm.
* General mills green giant brand is being sold off due to frozen foods being less in demand as people are eating local and fresh
* McDonalds is marketing their fish as sustainable!
* Congratulations, 3rd district for animal laboratory; USDA inspection certification and established relationship with many affiliated organizations. 7 mile and I-75 farm Pingree Farms.
  + *Definition of laboratory?* 
    - Livestock and exotic animals are not allowed unless you define it.

## END MEETING

**$:33 adjourned**

**Next meeting April 23rd**