SUMMARY OF MINUTES FOR 5/22/14 STAKEHOLDERS MEETING

I. Parking Lot Issues and Summary of 4/10/14 Minutes (pp.5-20)

Mr. Brueckner summarized the *Parking Lot Issues* brought up at the previous meeting which included the following:

- EPA Guidance on Affordability and Water Quality Standards- To be addressed at 5/22 meeting
- Does MWH know of any models to assess sewer rates for most impacted neighborhoods MWH to look into
- Phase III is preordained-reevaluation is to determine if Phase III is still needed and, if so, should it be modified
- Life of the system issues in terms of durability and consideration of future rainfall and weather patterns due to climate change

Mr. Brueckner summarized *Minutes of Previous Meeting*:

• MWH presented grey infrastructure technologies to be considered for evaluation which were sewer separation, tunnels and interceptors, and near surface storage/screening and disinfection.

Discussion (pp.21-36)

Mr. Bishop: Asked about distinction between CSO's and SSO's

Ms. Karp: The CSO Program is being managed on bacteria but was concerned about the extent to which CSO's address other issues such as nano particles and triclosan, etc.

Mr. Gadon: Wasn't it decided that Phase III was needed because Phases I and II did not meet water quality?

Mr. Colt: Questions regarding level of treatment with Near Surface Storage and Screening and disinfection and on the tunnel adit alternative vs. pump station/force main alternative for OF 220. Could GIS alternatives be adequate to reduce the surcharge problem on the Branch Ave.

Interceptor. Why did NBC do sewer separation in the first place?

Ms. Karp: Could you give us some data at some point on projected precipitation changes which may affect sizing of the facilities.

Mr. Bishop: Suggested that it may be better to capture a bigger storm for the larger outflows and relatively low cost solutions for the smaller overflows.

II. Presentation by Michael Wagner of EPA on Affordability Issues and Water Quality Standards (pp.37-

A summary of Mr. Wagner's presentation is as follows:

- The goal of the Clean Water Act is to have water quality that allows for recreation and wildlife obligation wherever achievable
- After the CSO Program is implemented they will evaluate results and determine if there is a higher level of control that is affordable and achievable and at what the schedule should be.

- How EPA decides now what is affordable is not substantially different then how they have been doing it all along
- EPA determines the right level of CSO control effort for a community based on affordability.
- Water Quality standards can be varied if achieving water quality standards would cause widespread social and economic impact. Boston is the only place to date where there has been a change in water quality standards based on social and economic impact because there were a handful of communities where rates were going over 2 percent (of the MHI)
- Other factors such as economic opportunities, environmental pressures and anything that is going to impact the amount of resources available for that community to determine if water quality standards can be changed.

Discussion (pp. 47-88)

Mr. Walker: When and where does the impact on the nonresidential consumer factor into affordability? Response by **Mr. Wagner:** The impact of rates on nonresidential users is one of the factors that can be included in the affordability analysis. The notion that EPA is going to make NBC spend up to 2% of MHI without consideration of anything else is not accurate. **Mr. Brueckner:** Who makes the decision about whether or not what we're proposing is affordable, the Sate or EPA? Response by **Mr. Wagner:** It is the state recommendation to which

EPA will react.

Mr. Liberti: At the end of the first stakeholder's process RIDEM sought to change water quality standards to include a partial use designation for CSO's because RIDEM thought we had met the EPA affordability criteria but his change was not approved by EPA. At the end of this reassessment we can again request a change to the standards from EPA (and if we get approval) it will only be good for three years.

Mr. Domenica: To summarize, you obtain a three year variance on water quality standards (based on affordability) and as soon as the affordability picture changes you could then spend up to the affordability level to get to the ultimate fishable, swimmable goal. Is that a correct characterization? Response by **Mr. Wagner**: I don't want to say that's correct but I am not going to disagree.

Ms. Karp: It's not bacteria that's causing harm in Narragansett Bay, it's toxics. EPA and RIDEM should say what we should do to protect the ecosystem from toxics and what it will cost. **Mr. Reitsma:** We should not design upgrades in such a way that 3 or 5 years later we're doing it all over again. There are beginnings of ideas here that could be much more proactive, much more long term solution if we do things different...if, in fact, we optimize proactive alternative

solutions instead of only the hard technology solutions.

Mr. Mancini: NBC's debt service right now is about \$800 million and the rate base is closing in on \$100 million. There are people that just can't afford the rates being so high and I understand the project but the debt service needs to be looked at.

III. Presentation by MWH on Green Infrastructure

The MWH Power Point presentation for Green Infrastructure is posted on the NBC website.

A summary of Mr. Raiche's presentation is as follows (pp. 88-106)

- In very few rare instances could GSI be the total encompassing solution for the CSO program. EPA's experience nationwide is that GSI can help reduce the size of associated grey infrastructure...but in almost no cases are there any examples where the green storm water control can entirely eliminate the grey alternatives.
- There are three general types of GSI control: **infiltration**, keeping rain water as close to where it falls as possible and infiltrating it into the ground; **detention**, temporarily hold the water until it can be released to the sewer; **retention**, keep the water on site and then reuse it for some other purpose.
- Technical considerations for GSI are types of soils and slope

A summary of **Mr. Lindgren's** presentation is as follows:

- Discussed different types of GSI storm water infrastructure that could realistically be implemented such as rain gardens, tree box filters, dry well catch basins, infiltration chambers, pervious pavement
- Focused on OF's 039 and 056 which have good soils and slopes and presented some examples of technologies that could be implanted in those overflow areas
- Pervious pavement has definite maintenance criteria

Discussion (pp. 106-120)

Mr. Reitsma: Is there a way to take into account co-benefits when you consider the advantages of one solution compared to others? Response by **Mr. Raiche**: yes, we will be discussing evaluation criteria at the June meeting.

Mr. Holmes: Problems he sees with infiltration is contamination of ground water and maintenance.

Mr. Bishop: Is there any sense in looking at these alternatives at all because of the maintenance. **Ms. Karp:** How do green technologies deal with floatables? Response by **Mr. Lindgren:** This would need to be addressed in design.

A summary of Mr. Anderson's presentation is as follows (pp. 120-137)

• By implementing green approaches the peak of the hydrograph can be shaved and the grey alternatives can be made smaller.

Discussion (p.137)

Mr. Gagnon: Ratepayers in communities without CSO's shouldn't be paying for the CSO project. Response by **Mr. Marshall:** That issue has already been addressed in the RI Supreme Court and the Supreme Court has said it's one district, one rate.