Monroe Street Green Infrastructure Focus Group Meeting Notes

Date: February 16, 2017	Time: 3:00-5:00 p.m.
Recorded by: Zia Brucaya, Urban Assets	Attendees: Ezra Meyer (Clean Wisconsin), Monroe Street Green), Roger Bannerman (Friends of Lake Wingra, USGS), Paul Dearlove (Clean Lakes Alliance), Ben Yahr (Friends of Lake Wingra), Laura Rozumalski (Freshwater Engineering), Lauren Brown (LVBrown Studio), Jim Lorman (Edgewood College), Tyler Leeper (DMNA, Wingra Boats), Peter Nause (DMNA), John Imes (Wisconsin Environmental Initiative), John Armstrong (WI DNR), Jim Wolfe (City of Madison), Phil Gaebler (City of Madison), Zia Brucaya (Urban Assets), Zach Meyer (student), Anna Eliese Scott (student)

Agenda Item	Discussion	To-Do (City)

Overview	Phil Gaebler, City of Madison Water Resources Engineer, provided a PowerPoint presentation (available at www.cityofmadison.com/engineering/projects/monroe-street), that shared background data from the Wingra Watershed on:
	- Baseline total suspended solids (TSS) and Phosporous loading to Wingra
	- Existing treatments:
	  o Catch basins
	  o Glenway Pond	

Proposed Treatments	Phil explained the following proposed treatment options:
	- **Wingra Treatment Options**
	  o Underground retention basin: cost estimated to be $1.2 million
	  o Underground screen structure in Wingra Park: Madison currently has five, monitored by USGS, seeing approximately 40% TSS reduction; would cost approximately $300,000 to install; would likely need to be vacuumed out 2-3 times per year.
	- **Side Street Rain Gardens**
	  o Proposing to construct them as bioretention devices, sized to treat approximately one acre of medium-density residential development.
	  o There are approximately 20 suitable locations along the side streets; property owners must make the decision to install.
	  o These would be over twice the cost of the screen structure, but something that the City would like to do and is willing to construct.
	  o The life span could be only one year or up to thirteen based on maintenance and other factors; having them constructed as bioretention devices makes a big difference.
	  o **Comments:**
	  ▪ The criteria for evaluating the cost-benefit of the rain gardens should be comprehensive, including benefits related to education, aesthetics, habitat, cost per pound of P reduced, TSS reduction, etc.
	- **PBLT – "Phil's" Bed Load Trap**
	  o The City will pilot one of these in the Gregory/Knickerbocker reconstruction this year.
	  o Expected to perform at a level somewhere between the catch basin and screen structure.
		Perform a cost-benefit analysis of adding catch basins vs. vacuuming the existing basins more often
		
		Explore underground storage in the terrace (rock trenches) to improve infiltration and water quality.
		
		Look at innovative practices in MN and Ontario.
		
		Explore option of daylighting the stormwater pipe in Wingra Park to create an open water feature,

	○ **Discussion:** ▪ Roger: Take a look at proprietary devices. Can you accomplish the same by vacuuming the existing catch basins more often? Perform a cost-benefit analysis. - **Extending Treatment Area of Glenway Pond** ○ The cost per pound of Phosphorous removed with the pipe extension is very high. ○ Tyler: Will the stormwater pipes be replaced at the end? There has been some flooding. Phil: The stormwater plan for the reconstruction is not done yet, but we would not go all the way to the ridge. - **Discussion** ○ Monroe Street terraces are too narrow to do standard procedures. ○ Would it be possible to do more clear stone under sidewalks with Silva cells in the terrace? ○ Jim: City engineering's standard subsection includes 3" of clear stone, but can look into adding more. ○ Phil: The cons of tree trenches include that the street is a bus route and salted. We did look at precedents in other similar cities. One treatment being used is iron-doped sand in bioretention that strips a lot of phosphorous and still allows some plants to grow. ○ Roger: Sometimes the drainage areas are designed too large and the trees fail. The environment can be too harsh for trees; the people who created this concept are moving away from trees and toward other types of plants. Look at precedents in MN. ○ Laura: Consider installing rock trenches with no vegetation; preferable to turn these off in the winter to keep them from failing. ○ What are the total benefits of the proposed treatments in aggregate? - Can we take the screen at Wingra Park and turn it into more than just a box underground? Do a design competition? - What opportunity does Wingra Park present? ○ The Parks Department would like the park to be put back the same as it is today. People have a tendency to want to eat up/develop open park space. ○ There are good recreation fields, yes, but also dead spaces, such as the area right off the bike path, and the space in the oak grove area where there is currently a large depression. ○ The Wingra Park Orchard garden concept was ranked highly as a desired improvement in the community survey. ○ Would it be possible to open up the raised area where the storm pipe is? This could involve plants, small pedestrian bridges, picnic tables, etc.? ▪ Yes, the elevation change in the park makes it physically possible to daylight. The City did something similar to this at Ester Beach – we daylighted the pipe and created a bioswale. Maintenance staff will be harder to convince. Phil will discuss with Parks. ▪ It would be dry most of the time, but when there is a storm there is a lot of water, so the design needs to be able to handle that. Would it be possible to only treat the low-flow? ▪ If there may be city resistance to green infrastructure and placemaking ideas like this, how can we as members of the community create a stronger voice to move these ideas forward?	possibly just treat the low flow. Explore ways to promote community education and interaction with the underground screen structure in Wingra Park (could this become the water source for the open water feature?). Perform a benefits analysis of each stormwater management practice and the practices in aggregate.
Crazy Legs Stormwater	Phil described future green infrastructure related opportunities at Crazy Legs Triangle: - Rain garden, pervious pavers, water reuse, bioretention. - There is currently $60,000 from the stormwater utility budget for this project.	Explore fountain opportunities at Crazy

Management Showcase	**Discussion:** - Include educational signage to explain how the different treatment devices are different. - Use different types of pervious pavers to visually delineate areas such as street vending stalls, while also testing the pavers' effectiveness. - This is a noisy area where a fountain would be beneficial o All previous fountain projects that the City has tried have not worked out well, so this would be a hard sell with maintenance staff. - There is a small memorial to Bob Herman at Crazy Legs Triangle; his family did the previous landscaping. Peter told them about this project and Julie Herman is the contact. - Use this as an opportunity to showcase green technology and multimodal transportation. - Look at additional funding opportunities to make this a unique and innovative space that other cities will look to. - The property owner at the corner of Oakland and Monroe (?) is applying for a conditional use for Associated Bank to move there and have a drive-through. If this goes forward, they are very interested in getting involved with improvements at Crazy Legs Triangle. - Consider how Madison can have a project that will show up in magazines that other cities read. This is a major opportunity to push the boundaries. - Love the showcase idea and would like it to be more than just a stormwater showcase. - Concept of daylighting stormwater infrastructure so that people can see infrastructure that they normally don't is important. - Look into concept of moveable parklets in the business districts that use parking spaces for seating, dining, etc. during non-peak times. Often there is a sloped curb that allows a smooth transition between the sidewalk and street. Opportunity to include temporary bike corrals within these spaces.	Legs and/or Wingra Park. Connect with Julie Herman about the Bob Herman memorial at Crazy Legs. Connect with UW Athletics re: design. Planning department: explore design competitions for Crazy Legs and Wingra Park. Explore additional funding options for Crazy Legs Triangle (e.g., parks impact fees, grants, etc.)

Tree Survivability Enhancement	Phil shared goals and opportunities related to:
	- Soil improvement
	- Compaction reduction
	- "Oversized" tree grates
	- **Discussion**
	  o This will help the trees a lot.
	  o What about permeable pavement on sidewalks?
	  ▪ Phil: If the option is the same as it was for Jenifer Street, the City would pay the difference in cost to install, but adjacent property owners would need to agree to take on the maintenance. It may be surprising how many people are not interested; there was no interest when this was offered on Jenifer Street (for example, one homeowner was concerned that the water would end up in their basement).
	  ▪ Tyler: DMNA can help with outreach and education on this.
	  o Utility undergrounding in the commercial areas is still in the budget and will allow for larger trees to be planted.
		Explore options for pervious sidewalks.

Treatment Options	- **Green Infrastructure Support Policy**	Run cost and impact numbers for the policy

Outside of the Rights of Way	○ This would be a brand new policy to subsidize treatment structures on private property in the Lake Wingra and Monona Bay watersheds. The maintenance agreement will need to be worked out, and the policy will need to be approved by the Common Council. ○ City would be responsible for designing the system, and property owner would bid it out. ○ Discussion: ▪ This is a very exciting idea. ▪ Can this be structured so that it does not look just at Phosphorous reduction? Phosphorus is the main cost driver for TMDL compliance. ▪ What opposition might be expected? Funds would come from the stormwater utility. There may be opposition from people outside of the geographic scope who would like to be included. - **Gilmore Street Rain Gardens** ○ There is an opportunity here, and Wingra School is interested in working with the City to look at ideas. ○ This is a great spot for kids, right by the Oak Savannah. The DMNA parks committee has a strong relationship with Wingra faculty and there is a strong interest in looking at more natural design opportunities.	for a typical parking lot along Monroe Street.
Other	- Would still like to test the two-lane option (no rush hour lanes) after reconstruction – this could provide many more placemaking and green infrastructure opportunities. - Will there be additional opportunities for this group or another group to get together, help review design ideas and move these ideas forward with the City? There will be two public workshops and several design reviews of the UW student concepts with staff; Urban Assets and staff will also look for additional opportunities. - Can we participate in the UW student design reviews? Yes, Zia will invite this group to join the student review with the Monroe Street Engagement Resource Team (yet to be scheduled) in April.	Invite green infrastructure group to student review with ERT.