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|  | ***LGROW Technical Committee*** |

Grand Valley Metropolitan Council – 678 Front Ave NW, Suite 200

Wednesday, June 19, 2019, 1:00 p.m. – 2:30 p.m.

***Minutes***

1. Welcome and Introductions
   1. Doug Sporte, KCRC
   2. Morgan McBain, KCDC
   3. Angie Latvaitis, KCDC
   4. Carrie Rivette, City of GR
   5. Dan Taber, City of GR
   6. Carrie Turner, LimnoTech
   7. Dave Dilks, LimnoTech
   8. Aaron Vis, City of Wyoming
   9. Rachel Frantz, GVMC
   10. Tom Smith, Prein & Newhof
   11. Al Steinman, GVSU/Annis WR
   12. Shannon Sullivan, GVSU
   13. Rachell Nagorsen, City of Walker
   14. Carlos Calderon, GVMC
   15. Courtney Cromley, GVMC
   16. Cara Decker, GVMC
   17. Wendy Ogilvie, GVMC
2. LGROW Update
   1. MS4 Permits
      1. The drain office received a draft permit last week which means we have some comments to get back to EGLE. The date on the permit was August 1, 2019. It does follow the timeline that EGLE had previously stated to get permits issued before Oct. 1 2019. This will be a three year permit cycle instead of a five year cycle. The reporting timeline will change as well, reporting will now happen at the end of April (CORRECTION: April 1). First reporting cycle would be April 1 2021. New MS4 permits run from 2020-2022.
      2. Cara has sent out GVMC scope of work and contracts, please review and sign by July 1st. Please forward all permit emails from EGLE to Cara.
   2. Adopt a Drain
      1. The Grand River Adopt-a-Drain website is now live. There will be a big marketing push in the fall for Adopt-a-Drain. LGROW will provide materials to share. We will also work with DGRI (Downtown Grand Rapids Inc.) to do advertising in the City of GR.
      2. <https://www.adoptadrain-lgrow.org/>
   3. Committee Updates
      1. Public Engagement Committee has been updating the Public Education Plan (PEP). Next meeting is in September.
      2. Sustainability Committee working with KCD with outreach for RCPP, working on the Grand River Water Trail, and green infrastructure layer/natural connections story map.
      3. Subwatershed Committee will be hosting the 2nd Annual Watershed Jamboree on Thursday, September 19 at Wilcox Park.
      4. SWOrd Committee recently met to discuss modifications to the LGROW Design Spreadsheet. The Spreadsheet will aid developers to meet the new stormwater standards.
3. LimnoTech/TMDL Update
   1. Cara gave an overview of the TMDL allocations in the LGRW. Kent and Ottawa County TMDLs are listed for *E. coli* and/or Biota (TSS). TMDLs were assigned to MS4s in 2012 in the permit application letter. MS4 communities with TMDLs are listed in the SWMP. The Technical Committee previously worked on a TMDL Monitoring Manual which was submitted with the original permit application. LimnoTech is helping us with the new manual which will be incorporated into the new permits once EGLE approves. LimnoTech has been asked to update the implementation plan and revise and update the watershed monitoring manual, recommend sampling locations, and actions that MS4s can take to reduce pollutant loading.
   2. LimnoTech presentation: Purpose – introduce project, report progress, and solicit feedback. About 8 months into the project now. The model Grand River used in this begins at the confluence of the Rogue River and extends to Lake Michigan. The idea was to integrate this model with the model that LimnoTech produced for the City of Grand Rapids, that would allow holistic management of Grand Rapids’ water systems. ZBy expanding on Grand Rapid’s model, this watershed model can be used as a regional planning tool. The model was finished in 2018, this model shows climate, land cover, soils, topography and then runs it thought a process simulation and gives model outputs like water, sediment and bacteria. LGR model calibration consisted of compiling and synthesizing all relevant geospatial data, water quality data, and special studies, develop upstream boundary methods for flow and water quality, and to apply models for 2000-2017 to calibrate and validate.
      1. MS4 Implementation project goals are to identify load reductions necessary to meet WQS, to identify reasonable actions, and then work that into a monitoring strategy. New permits + water quality model = plan.
      2. There are 4 waterbodies with *E. coli* TMDLs and 6 with biota TMDLs in the watershed. The *E. coli* target is 130 cfu/100ml for a 30 day GM and 300 cfu/100ml as a daily max. Biota = TSS
      3. The model needed to be calibrated so that MS4 community boundaries and watershed boundaries could be combined.
      4. The model was tested using hypothetical load reduction scenarios using combinations of MS4 and non-MS4 % reductions. Ie, what if we reduce this load by 25%, 50%, 75%, etc.?
      5. A matrix of scenarios was used to run the model for reducing loads from MS4 and non-MS4 contributing areas
      6. Biota: TSS data analysis
         1. The median for all sites were below the 30mg/L WQS
         2. Using the model there were no load reductions needed anywhere to meet targets. The annual average concentrations were below 30 mg/L in all biota-impaired streams. TSS predictions in this model are rarely > 80 mg/L during the highest flows. The model is similar to the data. However, much of the data we have is old.
         3. Just because we have met TSS standards, doesn’t mean that the waterbodies are healthy- the biotic condition is still poor, so there is still more work to be done. Does that mean that we need to choose a different target?
      7. Bacteria: *E. coli*
         1. We need >90% reductions to meet WQS (May – Oct)
         2. The baseline model predictions of WQS exceedance showed the majority of water bodies require 100% reduction needed for TBC 30 day, 60-95% for TBC Daily, and >30% for PBC.
         3. Alternatively, Site Geometric Mean, which shows all water bodies, excluding two, exceed the 30 day and daily TBC.
         4. We would have to have about 100% load reduction from MS4 areas and non-MS4 areas in order to achieve any sort of *E. coli* reduction.
         5. Public education about when it is safe to use the river is just as important as installing BMPs to reduce *E. coli*
         6. We should think about how *E. coli* monitoring could be better in the future, ie using source tracking
      8. LimnoTech wants to know where are prioritized areas for BMPs?
      9. To capture new BMP implementation quantify how much of that area is being treated, stormwater captured, %, etc.
      10. Previously, LGROW was required to take one sample per permit cycle per waterbody. This group agreed previously that we would like to sample more frequently. With new technology, we will be able to do more monitoring with higher confidence levels for *E. coli* including source tracking.
      11. In the future, it would be possible to incorporate new BMPs into the model by using the area that is treated with the REGIS GI layer, or if you know how much of the area in a model subcatchment will be treated.
      12. Next steps: LimnoTech will follow up with LGROW, and can us the data from the model runs to start to edit the TMDL Implementation Plan. Future TMDL sampling locations should be downstream, but close to implemented BMPs.
          1. move from hypothetical scenarios to more realistic (implementable) scenarios
          2. prioritize areas for BMPs based on; stream conditions, loading rates, access to stream, community interest, regulatory policy/permit requirements
          3. identify sampling locations and frequency
          4. update monitoring manual
          5. solicit feedback of LGROW Technical Committee
             1. what are you doing with BMPs and/or monitoring
4. 2019 Meeting Schedule
   1. August 21, 2019
   2. October 16, 2019
   3. December 18, 2019
5. Events
   1. Grand River Water Festival, Sat. June 22, 12-9pm at Riverside Park, Grand Rapids
      1. Volunteers needed!
   2. Gravel Bottom Paddlefest, Sun. June 30, 9am, Lowell to Ada <https://www.tickettailor.com/events/gravelbottombrewery/267180/>
   3. Green Infrastructure Bus Tour with the MACC, July 18, 9am at GVMC Offices \*new stops! RSVP to Cara
   4. Bark in the Park @ Whitecaps, Sun. July 28, 6pm - Volunteer with us for an hour, we’ll buy you a ticket!
   5. Watershed Jamboree, Thur. Sept. 19 at Wilcox Park
6. Adjourn

**MS4 Website: https://www.lgrow.org/ms4communities**