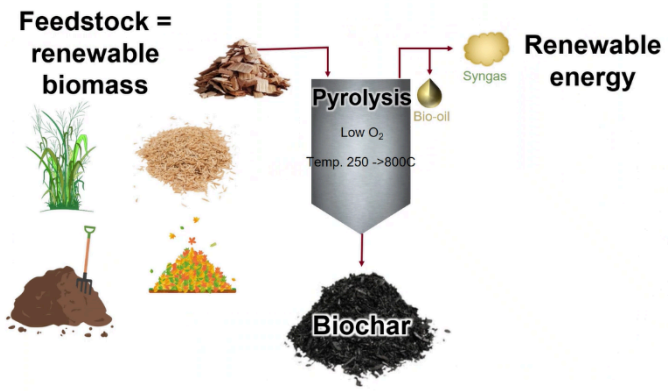
Regional Stormwater Protection Team (RSPT) Meeting Agenda

Wednesday, 2/15/23, 1:00 – 2:30 PM

- **Guest Speaker - Bridget Ulrich, NRRI Aqueous Geochemist**
  - Introduction to biochar + Q&A
  - What is Biochar?
    - Charcoal like substance- long used as a soil amendment
    - add carbon to soil and can improve plant growth and soil health
    - Newer- using it as a filter treatment for water
  - Not all biochars will be useful filter materials
  - Not well suited for negatively charged contaminates like phosphate and chloride

How is Biochar Produced?



High **fixed carbon** content = avoided emissions
High intraparticle porosity and **surface area** = good **sorbent**
Potentially a more **cost-effective and sustainable** alternative to **activated carbon**

What contaminants can biochar remove from runoff?

Contaminant	Can be removed, *under certain circumstances*	Removal is unlikely
E. Coli	x	
Oil, hydrocarbons	x	
Other organic contaminants (e.g., pesticides)	x	
Organic matter (TOC)	x	
Heavy metals	x	
Nitrate	x	
Phosphate		x
Chloride		x
Sediments / turbidity		x

- ✓ Effective removal will depend on selection of an appropriate biochar, hydraulic conditions, water chemistry, and many other factors
- ✓ Standardized selection criteria do not yet exist, testing is necessary to confirm performance

Take home messages

- ➢ All biochars are not created equal!
- ➢ Biochar production affects biochar properties, which in turn affect the biochar's contaminant removal potential
- ➢ Biochar can enhanced removal of some contaminants from runoff, but not all contaminants
- ➢ Effective removal will depend on selection of an appropriate biochar, hydraulic conditions, water chemistry, and many other factors
- ➢ Standardized biochar selection criteria do not yet exist, testing is necessary to confirm performance

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More resources

- Reduce Pollution boxes - Coon Creek Watershed District (cooncreekwd.org)
- Phosphorus export- good idea to check leaching. Plants added to the system can negatively impact performance of ecoli removal for example.
- Not a lot of easily accessible research for choosing yet. There is a beginning effort to update the stormwater manual**.**
- **https://stormwater.pca.state.mn.us/index.php?search=biochar**
- **https://www.renanvalenca.com/files/biocharecoli.pdf**

- **Review & Approve Jan meeting minutes – All**
  - Carol moves to approve the minutes. Ryan 2nd. None oppose. **Motion passed**

- **MS4 Annual Reporting 2023 - Ryan**
  - Notice from MPCA that 2023 reporting will be postponed until 2024.
  - Doesn't mean you don't need to track, just not reporting at the same time.
  - 2024 probably going to require both years, might take longer and be in a new system!

- **RSPT No Poop Fairy Game Show Update - Ryan**
  - Prizes were awarded from the MS4 public input
  - Shoreview natives and $50 gift card awarded
  - Winner of boots/$200 value- opted to not receive a prize and donate to a local food shelf in Duluth. They requested smaller amount gift cards would work better for their mission and 20, $10 gift cards were purchased for the organization to give out.

- **WI MS4 Annual Report Public Feedback Incentive Update - Lisa**
  - Scavenger Hunt & Hybrid Public Meeting
  - Experimenting with having a scavenger hunt and hybrid public meeting

- **Media Team update - Megan**
  - Encouraged anyone to join the next Media Team Meeting.
    - Friday the 17th from 9-10 am
    - Talk about tentative work plan
  - 2023 work plan for RSPT outreach

- **2023 RSPT Annual Feedback Survey Results - Lisa**
  - New date for monthly meetings: Third Wednesday
  - Meeting format check-in: 50/50 split between virtual and in-person
  - RSPT outreach material preferences: #NoPoopFairy cutout (67%), lawn signs (67%), reusable grocery bags (47%)
  - Suggestions: Annual summary report (one-pager), happy hours, regular request for agenda content, more information funneled to RSPT social media from members.

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RSPT February 2023 meeting Roundtable		
Name	Representing	Update notes
Andrea Crouse	Zeitgeist	Recently learned the city of Duluth is doing city resurfacing -opportunity to test out between curb redesign etc. Still looking into it with Ryan. Snow removal- accessibility- not much conversation about salt smarting.
Ashley Vande Voort	Douglas County Land	
Becca Reiss	North St Louis Co SWCD	
Carol Andrews	St. Louis County Public Works	Attended Jan 24th MS4 training ○ Emphasis on outreach to sheriffs, city police, fire departments ○ Snow storage sites- ○ Smart salt certification- good for 5 years but offering yearly refresh ○ Partial audit no longer allowed ○ Public meetings- in person or via website- reiterated that it was fine how it was approached DNR Lake Superior Coastal Program STAR grant project to identify potential green infrastructure sites just kicked off. We're contracting with Barr Engineering who have done similar work elsewhere. We can report results hopefully in July. Copying City of Duluth
Derrick Passe	Lake SWCD	Have two cities with stormwater plans even though not MS4. Also work on projects to improve stormwater. Carol noted the impressive stormwater plan for Two Harbors.
Erik Larson	UMD	
James Aird	Midway Township	Nothing to report
Joe Jurewicz	AE2S	
Jonna Korpi	UMD	Campus outreach, accessibility inventoy and snow
Julie McDonnell	DNR	Coastal program asked pca to host another program for local leaders on Feb 8th. Association of floodplain manager project kicking off thinking about overboard flooding on park point? 1 year plus project.
Karina Heim	National Estuarium Reserve	Check out this year's St. Louis River Summit agenda and register by March 1 if you'd like to attend! The Summit is March 8-10 at the UWS campus. https://lakesuperiornerr.org/summit/

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Lisa DeGuire	Superior (City of)	Annual public report Thursday 2/16 evening. Doing the drawing on Friday. Recognize Tom Estabrooks for suggesting the comic book or infographic idea. Date for annual contractor training- April 5th at the Estuarium.
Lydia Peterson	City of Duluth (Office of Sustain.)	
Maggie Karschnia	MN Sea Grant	
Megan Högfeldt	Superior (City of)	Ice fest success! Valvoline backup pipe filled with oils, fats and greases. Facebook event https://fb.me/e/5BQR0op7f for stormdrain art- food – want everyone and anyone to come! June 29th pm
Robin Murphy	Rice Lake	
Ryan Granlund	Duluth (City of)	wastewater treatment tour plan for students- 10-12th grade
Ryan Ihrke	WLSSD	
Sam Lobby	WLSSD	
Tammy Wilman	LSC	I am excited for everyone to check out our heated sidewalks next month for our next meeting here at LSC
Tom Estabrooks	MPCA	MS4 mn stormwater newsletter. https://public.govdelivery.com/accounts/MNPCA/subscriber/new?topic_id=MNPCA_363
Val Brady	Sea Grant/NRRI	
Will Bomier	Carlton County	