



Hinkson Creek

Collaborative Adaptive Management

Chloride Task Force Meeting Minutes

Date: October 7, 2022

Time: 8:00- 9:30 am

Location: Teams

Present: Pete Millier, Jessica Scholz, Tom Trabue, Cody Luebbering, Rusty Strodman, Georganne Bowman, Tom Boland, Richard Stone, Mark Woodward, Greg Edington, Alba Argerich, Mark Fuchs

Absent: Doug Coley, Hannah Wichern, Stacy Salter

❖ Introduction

- a. Approval of Minutes
 - i. The team will vote on the minutes at the next meeting to give them more time to review
- b. Mark Fushg from Weather Service joined the meeting

❖ Chlorides Impact on Streams

- a. Dr Alba Argerich gave a presentation of the work her lab has completed on Spatial and Temporal Variability in Water Quality along a Rural to Urban Gradient.
 - i. Completing synoptic sampling on the Hinkson Creek Watershed
 - ii. Testing within a two-hour window four times a year since 2018 sampling 35 samples at the main stem and 11 sites at tributaries
 - iii. Base flow testing
 - iv. Chlorides persist in the watershed through winter, spring, summer, and fall
 - v. More flow dilutes chloride concentration except after a snow event
 - vi. Chlorides are related to urban land use and increase in the Columbia area
 - vii. Flat Brach is a major contributor to chlorides and the area has 28% impervious surfaces
- b. They are developing a more affordable way to test chloride levels by modifying light and temperature sensors to detect conductivity
 - i. They deployed the sensors between November 2021 to March 2022 in Flat Branch near to Forum
 - ii. They are seeing the amount of chlorides dilute after a rain, but when there is a snow melt event they see and immediate spike in conductivity (chloride) in Flat Brach at a rate that maxed out the detector because it was so to high
 - iii. These sensors may help detect conductive in the stream but not a high concentration events

- c. Flat Brach is a source of concentration however, as Cody's presentation noted from the September Meeting the stream is already highly loaded with chloride before it the Flat Brach Tributary
- d. Chloride is a problem throughout the urban watershed, but some tributaries are contributing more
- e. Chloride is higher in Hinkson than reference and control streams
- f. During the baseflow monitoring they were surpassing the toxicity levels

It was brought up that the power plant is close to the area and may be a source of conductivity contribution to Flat Brach. They do not longer discharge to the stream and have a no exposer exemption for stormwater monitoring. Up stream may be a good place to monitor to see if the power plant has an impact on the stream

❖ **Liability and Insurances**

Mark Woodward with Missouri Employers Mutual (they provide workman comp insurance) gave a presentation on slips, trips, and fall liability

- a. Slip, trips, and falls are the second most common claim they see
 - i. From multiple sources not only ice/snow
- b. Average MEM claim \$13,000 and it goes up to \$11 million
- c. An average slip MEM claim is \$20,000 but the injured parties can file a property liability insurance in addition to the MEM claim
- d. When MEM takes a client, they look at a building, surrounding areas, number of stairs, and the level they address and minimize risks to the
- e. They will be inspected business to ensure that they are properly removing risks such as snow and ice. And provide recommendation to improve safety
- f. Head and neck injure are the major concern and cost

When a slip occurs, an investigation is completed

- g. Components of a slip investigation include; footwear, floor surface, if safety rules are enforced, are the walkways clear of snow, deterioration of building components. Maintenance of parking lot, drainage, training and education
- h. Injury prevention methodology is key to increases traction and ice removal
- i. Boone Hospital has used a method of having salt readily available for employees to salt ice in parking lot in order to improve safety
- j. However, too much ice melt can also be a slip hazard outside and in the building

❖ **The question was asked if the office is closed when a "drive by" inspection occurs, and snow was not removed how does this impact insurance rates**

- a. The under writer will make the decision on the rates and the policy

❖ **The question was asked what happens if EME dissolves**

- a. They are insured if anything happens to them as a company to continue payment on claims and for large claims for example if 15 people got hurt at once

❖ **Who maintains the area is who is responsible for example a city may own the sidewalk but an investigation could find business owner liable for the slip on the side walk**

- a. Additionally on a workman comp will investigate if the worker was on duty and if EME needs to submit a general liability claim for the property site of the incident

❖ **There is a city ordinance requiring sidewalks to be clean however many business owners will not be willing to remove the snow.**

- a. However, this reduction in removal can be costly in claims

- b. Documentation is key to determining liability
- ❖ **The question is asked why does MO Dot and other municipality roads not have the same liability as a private business owner?**
 - a. **There seems to be a discrepancy in liability between municipalities and property owners.** If a person trespasses and gets injured in a parking lot the property owner can be liable but if a person crashed on the highway the same liability does not seem to be applied
 - b. It was stated that court desertion may be the reason.
 - c. County and MoDot reps were not away of settlements or liability claims but were going to look into it more.
 - i. Greg with the county believes that if they are actively trying to remove the snow than that absolves them of the liability
- ❖ **Motor vehicle crashes have gone up the last few years due to distractions and speeding**
- ❖ **Next Steps**
 - a. Next meeting (November 16th at MU General Services Building)
 - i. Synthesizing information from the first three meetings
 - ii. Members of the group volunteered to look into other community programs to gain an understanding of successful actions and methods
- ❖ Program evaluation