

**Saw Kill Watershed Community Meeting**  
**Wednesday, May 17, 2017, 7:00-8:30 PM**  
***CHANGE OF LOCATION: Red Hook Town Hall, Red Hook, NY***

7:00 – 7:10pm            **Welcome and Introductions**

7:10 – 7:25pm            **Nitrate Loading in the Saw Kill Watershed**  
                                 - Marco Spodek, Bard College, Class of 2017

Presentation Notes:

- We all inhabit the Saw Kill watershed
- Saw Kill is classified as a class Bt (t for trout) stream but should be classified as A because Bard sources drinking water from it
- Saw Kill has a history of people interested in water quality
  - Historical sampling from 70's and 80's (19 sites)
  - New year old sampling (15 sites)
  - some overlapping sites between old and new
- Marco's research:
  - Used data from old and new regimes to examine nutrient loading of nitrates into the Saw Kill
  - Water quality influenced by land cover
    - 3 classes of land cover → forest (control as a nutrient sink), agriculture (excess nutrients from fertilizers), and developed areas (impervious surfaces and waste nutrients)
    - Mapped 3 site specific buffers (area of land that surrounds sampling site) to shows impactful land cover
    - One significant finding for 500x500 buffer of developed land → shows if there is a nitrate issue in future then we could focus on development projects
    - Potential that with higher agriculture zone, nitrate levels go down
  - Examined 2004 study that deems Saw Kill as a high nitrate stream (6.75 median nitrate value in comparison to other streams, and non impacted streams .087)
    - Where did that discrepancy come from?
    - Cannot be explained by rain variation
- Future directions:
  - data set from this project will be available
  - could examine the links of nitrate to dissolved oxygen and temperature protocols
  - could obtain more land cover data for more sampling years
  - look at seasonal rain data for flushing or dilution
- Q and A
  - Why high nitrate levels in Saw Kill?
    - could be a mistake in recording of numbers → what are the impacts of such a mistake?
    - we often blame agriculture in this area
      - however, we see potentially a downward trend of nitrate in agricultural land?
        - Changing practices of agriculture
        - funding available for best management practices
        - very few farmers in this town who use commercial fertilizers
        - residential land development includes lawns

7:25 – 7:40pm

### **Water Security in the Village of Red Hook, NY**

- Kyle Feldman, Bard College Class of 2017

Presentation Notes:

- Red Hook operates mostly on septic systems for wastewater treatment → how does this effect the subsurface gravel aquifer where they retrieve their drinking water from wells
- Research:
  - Collected samples from several wells during drought conditions
  - Looked for optical brighteners (in products like laundry detergent), enterococcus and turbidity
  - wells located at varying points in the village will show different contamination (hypothesis)
  - only one well within epa drinking water standard, two in recreational water standard
  - New waste treatment center development could alleviate some of this pressure
  - Q and A
    - Discussed connection to new town sewer system
    - Discussed connection to Benner Road → if that is where effluent is going
    - Kyle developed protocol for optical brighteners that could be exciting for future water lab research

7:40 – 7:50pm

### **Stream Classification and Reclassification**

Sheila led conversation:

- Naming streams → if stream doesn't have a name than it is not on certain maps , which means it is not protected
- process to naming
  - part of geological survey
  - form for stream name → specify the area covered, description of the geographic feature, and show sources
  - We could do a contest for name?
  - There are several small streams in the SK watershed that don't currently have names
  -

Stream classification

- Sources of drinking water are A or AA, B is best usage for swimming or recreation,, t classification indicates trout population, t/s is trout spawning
- Saw Kill is classified as B but should be A
- All waterways get a class and a standard designation, and are protected by the state based on their classification → A, AA or B, or t/ts then it is a protected stream
- Tributaries receive same classification as main stream (if you reclassify stream then you reclassify tributaries)
- Reclassifying
  - DEC has authority through the Bureau of Water Assessment Management
  - Cannot change classification until they are done classifying other streams, which could be years down the road
  - We should still work on filing request to get process started
  - We want to know if the stream classification will pose a problem for Bard using Saw Kill drinking water
- Why reclassify?
  - Streams are qualified on intended use not on water quality
  - Higher classification equals higher protection
  - Impacts level of permitting - need to make aware to planning boards

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- Q and A

- Discussed the odd difference between tributaries and main stream classification → why are some of Saw Kill's tributaries classified lower than the Saw Kill?

7:50 – 8:15pm                    **Community Conversation**

- The march for science in April was so important that we should do it every year
  - Great to see people talking about science in a political way
  - We could have a community celebration of science
- How can our group reach out to kids and schools?
  - hands on activities with environment
  - create a Saw Kill program
  - talk to other teachers or principals in area
- Paving of Oriole Mills Road
  - Coming up on town board → 5/24 at 7:30 pm
  - Culvert crossings → any road work done should think about improving culverts
  - How would paving effect salt use?
  - Robert Mckeeon will share documents concerning project

8:15 – 8:25pm

**Updates:**

- **Apple Blossom Day**
  - rained out
- **HVRC Workshop**
  - working on creating workshop for the watershed community on source water protection hopefully in the early fall
  - invite surrounding watershed groups
- **Watershed Assessment**
  - It has been one year of the monthly water monitoring program! A huge thanks to all of our volunteers!

8:25 – 8:30pm

**Wrap up and Adjournment**

**Upcoming SKWC events:**

- Water Quality Monitoring of the Saw Kill on June 9, 2017
- Next SKWC Meeting is June 21, 2017

**Other Events of Interest:**

The Crowd & the Cloud Movie Screening: “Discover the power of citizen science in the digital age in a screening of the documentary *The Crowd & The Cloud*” at the Cary Institute on Friday, May 19<sup>th</sup> at 7pm.