

**Saw Kill Watershed Community Meeting**  
**Wednesday, February 15, 2017, 7:00-8:30 PM**  
**Elmendorph Inn, Red Hook, NY**

7:00 – 7:05pm            **Welcome and Introductions**

7:05 – 7:45pm            **Micro-Hydropower on the Saw Kill: Presentation and Discussion**  
– *Laurie Husted & Monique Segarra, Bard College*

**Notes:**

- 2 historic dams on Saw Kill
- Three options:
  - Leave dam in place/repair
  - Remove dam
  - Access feasibility of micro-hydro → currently doing assessment with recent grant
- Goal of meeting :
  - summary/bring everyone up to date
  - Hear community concerns/interests
- Historical Context:
  - Livingston Dam
  - Annandale Dam (historic irrigation dam) --history of hydropower use, but currently not being used.
- Whole watershed in mind during assessment
- Creating an assessment for dam owners to assess pros and cons when making decisions concerning dam
- Social and cultural impacts, expense of putting in a dam
- Teaching tool for the State of New York
  - There are close to 6000 unused dams in New York awaiting assessment
- Micro-Hydro
  - Generates less than 100kW
  - Small scale, distributed renewable energy
  - Run of river flow management → uses natural flow of river
  - Flow in bypass reach is ecologically maintained
  - Reservoir size is not changed
  - No new dams → uses current infrastructure
  - River will run through a powerhouse → natural flow of the river is diverted in part through a turbine
  - The hydropower cannot overtake the natural course of the river
  - 12 kilowatt goal → small footprint, minimizes ecological impact
  - Lowest greenhouse gas emitter option for renewable energy

- Runs 24 hours a day
- Considerations:
  - water quality, flow change, operation maintenance, water chemistry, bypass reach temperature (increase), dissolved oxygen (increased), construction (sediment, disturbance), habitat, bypass reach flow, eel/fish passage, rare/protected species, noise/aesthetics
  - Annandale Dam → potential loss of water, near mouth of Saw Kill (a plus), loss of energy to waterway, need for consistent water quality monitoring to see effects of hydropower (ie. DO)
- Regulations
  - Federal energy commission or DEC
  - Building permit, zoning

#### Community Questions/Discussion:

- What's the timeline on this? How long would construction take?
  - Zoning is a three (ish) month long process, waiting to hear whether this is a federal jurisdiction process (another couple months) before moving on. Lots of time for public comments
- What are alternatives to Hydro power? When do you have to make decision (to take the dam down or continue the project)?
  - Before anything is decided, the zoning board has to do decide whether it is allowed or not. Every option is still on the table.
- What are zoning regulations?
  - Water conservation district currently does not allow non residential or dock/marina development, therefore would need amendment to allow hydro-power
- Is only option a bypass reach system, or could we use dam?
  - Only 9ft of drop on dam
  - Gravitational vortex turbine - allows water to be put back near dam
- Baseline data for water quality?
  - Yes! Watershed community has monthly monitoring, and continual data (upstream of dam)
- Eel ladder would not address other species? How effective would it be?
  - Lower dam eel ladder is successful
  - No other migratory fish besides eels
  - Both dams are already listed as priority dams by the estuary program
- Very few dams are classified like ours....how could removal help migratory fish? Seems like this could be an opportunity for college to be leader in restoring watershed, especially by removing priority dams?
  - there are benefits to species and in-stream habitat in removing dams
  - there are other considerations such as the marsh above annandale dam, economic considerations, etc...
  - no assumption that we will get micro hydro- all options are on table
  - We need to know costs of both

- The discussion seems framed towards micro hydro, and ignores what it means to be a dam owner. There is an obligation to do a good job on this to set a good precedent for other dams . . . Every dam is different, therefore need clear picture of pitfalls/ considerations for dam owners, how is it going to be presented/framed for a dam owner?

- make hydro website for more information, develop it as a tool
- Where is the power going? Bard? over all grid?
  - working on now, need economic assessment
- Monique is the stakeholder leader, and welcomes people to contact her directly with questions or concerns.

7:45 – 8:00pm                    **Community Conversation**

- Looking at our position in the larger Hudson River watershed
  - How do we connect with our larger watershed?
  - Oil transport on Hudson River
  - Join with other communities as a river town
- Looking at the National level → Dept. of Interior put forth stream protection act (debris deposition from coal mining)
  - Protects people downstream of mining operations
  - Recently voted out in past weeks
  - Take local action?
  - We can do more at a community level than waiting for the higher up levels

8:00 – 8:10pm                    **What's to come in 2017: A summary and discussion of your responses**

- Productive water monitoring
- HUGE thanks to everyone involved!
- Concerns/Ideas --> fecal indicator bacteria, site 6, env ed at mill street, bio blitz (experts come in) at montgomery place, check the drinking water status, mlk day, citizen science at bard college, tabling
- Reach out to → fishing community, farmers, more schools

Community input:

- More water tests, ways to make sampling go smoother
- Expand audience/ community engagement
- Important to keep monitoring
- Tabling at hardscrabble day was great
- Day in the life of the river was great!
- DEC should get back into monitoring the streams for quality and regrading
- Amphibians in the spring
- Sister Saw Kill event
- Partner with ducks unlimited-active in wetlands conservation

- Trees for tribes
- More parameters for water testing (depth, metals)
- Engage with other communities
- Bringing more kids into environment, red hook camp

8:15– 8:25pm           **Updates**

·           **Barge Anchorage on the Hudson**

Still under discussion/consideration phase, no decision. Reaching out to other communities to join together and make a proposal, months are probably going to pass before we hear anything back

·           **Saw Kill Water Monitoring Program**

We had our February sampling, and got all the samples despite the crazy weather! Noticed temp. went down since last time, turbidity went down, less fecal bacteria

·           **Flood Resiliency Work with Fuss & O’Neil**

Good news! Looking for someone to apply for money....company Fuss & O’Neil got a grant to look at flood mitigation in the watershed . Map known flooding problems in the watershed. Will shortly be under official contract.

·           **Amphibian Monitoring**

Trying to organize a large scale study of vernal pools where salamanders could be coming from ...does anybody want to help with the salamanders?

8:25 – 8:30pm           **Wrap up and Adjournment**

**Upcoming SKWC events:**

Ø Water Quality Monitoring of the Saw Kill on March 10, 2017

Ø Next SKWC Meeting is March 15, 2017

**Other Events of Interest:**

Ø *Citizen Science for Learning and Discovery* – Scientific Seminar by Mary Ford of the National Geographic Society on February 16, 2017 at 11:00am at the Cary Institute

Ø *Hudson River Environmental Futures: Film Screening & Discussion*. Short films in the *Hudson River: A River at Risk* series by Jon Bowermaster. Riverkeeper staff and others lead discussion. Bard College – Campus Center (Weis Cinema). March 7, 2017 at 4:45 PM.

Ø *Our Other Blue Planet: Earth’s Diverse Fresh Waters* – Lecture by the Cary Institute’s Dave Strayer on Friday, March 10, 2017 at 7:00pm at the Cary Institute