

Town of Shandaken

S.A.F.A.R.I. Meeting Agenda

Shandaken Area Flood Assessment and Remediation Initiative

Tuesday March 28, 2023 10:00am - 1:00pm

In-Person at AWSMP Office, Shokan, NY

Remotely: <https://meet.goto.com/186340189>

In Attendance:

In Person

Peter DiSclafani, Shandaken Town Supervisor
Eric Hoffmeister, Shandaken Highway
Superintendent
Leslie Zucker, Program Leader, AWSMP
Adam Doan, Stream Project Manager, AWSMP
Heidi Emrich, Ulster Co. Environmental Planner
Andrew Emrich, Sr. Engineer, Ulster Co. DPW
Mark Carabetta, Principal Environmental
Scientist, SLR

Virtual

Kevin VanBlarcum, Shandaken Deputy
Supervisor
Matt Trueheart, Water Resources Engineer,
SLR
Aaron Bennett, Deputy Chief, NYCDEP
Watershed Lands & Community Planning

Town of Shandaken Updates

- Floodplain Administrator outreach, assistance, permits, issues, etc
 - Working with landowner of Mt. Tremper parcel - Landowner wants to install a pool
 - Looking at Firelight Campground – is SLR working with developer?
 - Discussion on status of floodplain development permit application and no-rise certificate. One of the engineering firms on the project, Brinnier & Larios have shared with Heidi recently that each of the design professionals is submitting their development information to Lead Engineer so that a comprehensive application can be submitted to the town.
 - The developer is looking to log the property now. No Rise requirements are a bit “grey” on logging. So long as they’re not removing stumps, for this phase of the project, a no-rise might not be required.
 - Landowner on Rte. 42 doing some roof work and construction; Peter asks if that area was an LFA area? Yes, LFA area extended past the Glenbrook Park and included the police station. Peter says he may recommend a buy out for this home.

Design & Implementation Project Updates

- **Design & Feasibility Phoenicia Bridge Street Bridge Project** - Ulster County DPW (partially funded by AWSMP)
 - Andrew reports that since the first public information meeting, only 3 public comments / questions have come in.
 - DPW is planning to meet with the town next month re: water line.
 - Next steps: April - meet with the homeowners; will reach out and set up initial meetings.
 - SLR: working to schedule geotechnical borings. Targeting summer for 30% design report.
 - Once at 30% design (Fall 2023) – hold 2nd information meeting. Andrew suggests holding at Community Center with maps and posters with concept drawings; an interactive format where members of the community can just stop by.
 - Post updates on the town website, have a summary available.
 - AWSMP can support and provide some public outreach.

- AWSMP has reached out to their designer to host a dedicated page on Ashokanstreams.org
- **Design & Engineering Phoenicia Floodplain Bench** – A look at the modelling with SLR exploration of potential flood-reduction benefits.
 - Matt, SLR walks through slides – floodplain options with bridge alternatives 2 and 3. (the main difference lies within south bank)
 - Modelled with floodplains, you get benefits upstream and downstream.
 - 1-1.5 foot downstream
 - 1-1.5 feet upstream of bridge.
 - *HOWEVER*, if you look at the future 100-year flows, on both Main St & Bridge St bridges, with the Main Street bridge removed, model **does not pass** the flows over “new” Bridge Street bridge Alternative 2 without floodplain bench.
 - Alternative 3 does pass the future 100-year flow (when you replace/remove Main Street bridge- more water does stay in the channel)
 - Are we still overtopping on non-future flows if the town were to someday replace Main Street bridge?
 - Current model: 100-year storm on Stony Clove / 100-year storm on Esopus is a high design standard and not very likely to occur, since the creeks will likely peak at different times, and experience different return-interval flows. (That is already above and beyond 100-year future flow of the Esopus itself. That’s why DPW went with 100-year / 100-year to be conservative.
 - Committee looks at depth grids on Main Street in Phoenicia between the various scenarios.
 - Alternative 3, with Main Street Bridge removed: 1-3 feet of water in Phoenicia.
 - Existing Conditions: Up to 6.3 feet of water along Main Street– goes down by 4 feet when you remove the Main Street bridge.
 - How big would that bridge have to be to see those 4ft-flood reduction benefits?
 - Leslie points out that we’re staging decisions for the next 50-75 years.
 - IPCC reports we’re going to get more rain, more flooding.
 - **With** floodplain bench, Bridge Street Bridge Alternative 2 passes a Main Street bridge replacement scenario with future 100-year flows on Stony Clove and Future 100-year flows on Esopus.
 - Alternative 3 passes flow w/ main street bridge replacement with out without floodplain bench.
 - Leslie: is there anything that we should study **now** to see if there are any concerns or variables with the installation of a floodplain bench. Because the use or non-use of floodplain bench may impact county decision on which Alternative to use?
 - Mark: Landowners are the major factor, in his mind.
 - What is SLR using for the low chord for Bridge Street Bridge? SLR is modeling a channel-spanning bridge which has a ½ foot thinner lower chord. (Ran with 4.5 ft rather than 5 ft depth).
 - [reference: New Paltz bridge spans 196 ft. Its superstructure is 3 ft in depth]
 - SLR is planning to prepare a sediment transport analysis and stable channel analysis but can’t run that for wide range of hydraulic scenarios; the scope needs to be narrowed down.
 - If the committee felt the floodplain bench would have usefulness, at what point do we start design? Are we there now? Should an application be made for a grant funding?
 - Eric suggests the scope needs to be narrowed to the selected alternative before they go that route. Bridge girder depths could make a big difference too.

- Aaron: would there be any benefit to creating a floodplain bench along High Street or consideration for removing the road?
 - Floodplains that SLR modelled (for now), were based on LFA – they haven't taken a deep dive into what the best floodplain model scenario is.
- If we do the floodplain bench – construction is a MAJOR cost. Is there enough flood-reduction benefit on Main Street, or just around the floodplains themselves?
- Eric: Have we surveyed aggradation?
 - Adam responds yes, UCSWCD has gone out and surveyed periodically.
- Eric: Is there any way to design something between Alternatives 2 and 3?
 - No, because of Station Road; the road either ramps up to the bridge or is removed from intersection.
- At the Town Board meeting, the public asked about backwatering due to higher bridge approaches.
 - SLR will model it once they know which way we're going.
- Does the town feel they have all (or enough) information at this point to weigh in on the presented alternatives? And looking towards the future.
 - If the town is looking 20-50 years into the future, does it look like Main Street bridge will have to be replaced some day? Likely yes...
 - And if so, is it better to plan for floodplain benches now, or wait until that time?
 - And do these considerations affect which alternative the town would prefer?
- The benefits between Alternative 2 and 3 need to be articulated – now.
 - What can be done with Station Road?
 - How much participation/support will the project see from landowners?
 - Weigh flood-reduction benefits with possible cost of construction (Alt 3 will be a more costly project).
 - The low bridge chord / deck thickness may impact the benefits
 - Should we be modelling Alternative 2 with significant debris blockages to see how it responds? SLR already knows that Alternative cannot pass significant blockages at future 100 flows
- The committee briefly discusses the rail line and what needs to be preserved. How might existing rail line and/or turntable affect or limit the design alternatives?
- SLR and the committee summarize the initial findings of the flood bench preliminary modeling: Alternative 3 offers better flood reduction, a bit more freeboard, more opportunity for floodplain; and with the addition of said floodplain bench, the alternative yields moderate additional benefits, over Alternative 2. Alternative 3 also allows for the most flexibility for additional infrastructure improvements throughout Phoenicia in the future.
 - Committee discusses the weight stakeholder opinion may have in the decision between selecting either Alternative 2 or 3.
- **Mount Tremper Bridge LOMR Update (funded by AWSMP)**
 - Aaron provided Adam with additional contact information at DOT. SLR has never received the as-built data, only incomplete layout drawings.
 - The group discusses the best way forward. Adam and Shandaken are both going to reach out and apply some pressure. Or else the site will have to be re-surveyed by SLR (costly).

- **Pine Hill LFA**

- SLR presents a brief presentation describing the methodology at Bonnie View Avenue crossing at Station Road
- Summary is, that in order to theoretically meet all DOT requirements at this site, with the limited FEMA modeling available, the bridge would likely need to be in the vicinity of 35 feet to eliminate hydraulic constrictions and pass 100-year future flows
- County can only install a culvert (under 20 feet – measured from end to end along the centerline of the road), which they could mobilize this summer. If the town moves forward with a bridge, the county will not be able to provide assistance. (The culvert scenario is something of an in-kind service, so they may access their bridge further up the road, which will have its superstructure replaced).
- The committee discusses installing a temporary fix over the jack-arch bridge until more analysis and perhaps a full design can be completed.
- There are LFA implementation funds still available which may be used to do a full design on the bridge. CWC could likely fund the construction of the final bridge.
- The group also reviews SLRs analysis of a 20-ft culvert scenario which may pass the 50-year future flow, but not the 100-year.
- SLR suggests doing additional survey work to perform a complete hydraulic analysis. This way the town and partners can make an informed decision on which is the best pathway forward.
 - This is a reasonable add-on to the Pine Hill LFA
 - Town must obtain a quote for additional services from the selected engineer (SLR) and supply an estimate to AWSMP for funding.

Adjourn

Next Meeting: Tuesday, May 9th, 2023 @ 10:00am