

Public Scoping Meetings November 2016

Public scoping meetings were held in November 2016 for the study in three different municipalities. Two meetings were held in Owego Village on November 21, 2016. Two scoping meetings were held in the Town of Chenango on November 22, 2016. One meeting was held in the Village of Sidney on November 30, 2016. For each meeting, attendees signed a sign-in sheet and viewed displays prior to the start of the meeting. Comment cards were available for attendees who wished to submit written comments. Then, USACE and NYSDEC staff introduced PDT attendees and provided a brief overview of the study and introduction to the meeting. Then, USACE staff gave a slide presentation covering study history, process, and status. Following the slide presentation, USACE and NYSDEC staff answered questions from the audience. Study questions from the audience and resultant discussions at each meeting were general in nature. A paraphrased record of questions and discussion from each meeting is presented in tables below.

Meeting minutes were prepared by USACE and reviewed and edited by NYSDEC staff in December 2016. No comments were received by mail, presumably because ample time was available at the meeting for questions and answers.

Owego Village Meeting 1: 11/21/2016 130-3 PM. 22 people in audience. 4 USACE and 3 NYSDEC staff also present.

Questions/Comments from Audience	Responses from USACE/NYSDEC
How much does study cost?	\$3,000,000 cost-shared between USACE and NYSDEC
What are specific locations for projects that would be built?	Need to identify high-risk areas and what can be done within federal, state, and local budgets. Multiple areas possible. BCR will be critical consideration.
Does USACE have any similar past studies with projects that were implemented?	Congressional funding critical. Wyoming Valley and Sunbury PA. Also, Minnesota Watershed out west.
After 1972 floods, several huge dams were quickly built to reduce future flood problems. Slow speed things are moving now will doom the Southern Tier of NY.	Tioga Hammond was expedited under procedures different from current study. Not applicable. USACE has process that it follows which is time-consuming.
Rumors that the East Sidney and Whitney Point Dams would fail were in the papers. There were very high water levels downstream.	Not correct. The reservoir levels are regulated by standard operating procedures for releases. Dams were operated properly.
When is it right to restoration versus flooding mitigation? Floods occur again and problems occur again. Should there be a mission statement for flooding like there is for the Chesapeake Bay Program for nutrients and sediment? Lots of different citizens and hunter wetland groups interested in wetlands restoration to hold water. Also, many would like dams to hold more water upstream and reduce floodwater velocity and volume.	Mission to evaluate flood risk, not looking to provide environmental benefits or meet TMDLs. Structural measures could include storage impoundments. Need to look at volumes of water that could be stored at different places. Not sure enough floodplain area to make much difference via wetlands restoration.
Are we looking into why people continue filling in floodplain and wetlands that hold water? Also, shouldn't be bulldozing creeks because that causes erosion and sends water downstream quickly. Should consider ways to get streams and floodplains to function more naturally.	Watershed very large. Storage a local zoning issue. Many of those changes have to come from local level efforts.
Less places for water to get into the ground as more pavement put in with development. Can more porous pavement be used instead?	
Where is information available on local vs state vs federal costs/benefits for effects of big floods?	USACE had costs repairing damaged FRM infrastructure.
Flood losses include many problems not captured in estimates. Many people didn't have flood insurance. Businesses shut down for long periods with lost income. Many homes are abandoned. Raising old houses very expensive. Flood	

insurance very costly. Owners can't sell their houses, no one wants to buy the houses. This is killing the Southern Tier.	
This is a regional study? But choosing projects depends on local benefits, doesn't that doom smaller communities? Almost no flood risk management structures around here until you get into Broome County. Tioga County doesn't have the industry and infrastructure that Broome County does. Business interests will favor high dollar populated areas. Small villages will get lost in the shuffle. Recommendations should consider small villages. (Combination of similar questions/comments from multiple members of audience).	USACE rules don't restrict work in smaller communities, but often benefits in small communities are too limited to support Federal investment. Maybe need smaller scale community studies that consider non-structural measures.
Putting numerous small impoundments in upstream areas of watershed would be useful to slow water down. Newer development in area with fill and elevation increase in floodplain has caused other older areas to flood. Levees and floodwalls cause other areas to flood.	Levee raisings will be considered, but induced flooding risk would be analyzed for to prevent that. Storage alternatives benefits and costs would have to be thought through. Would there be enough storage areas?
Watershed has lots of land to work with for storage.	
Is Congressional approval needed for non-structural as well as structural projects?	If non-structural recommended would be getting Congressional approval for that as well as if structural projects recommended.
Boundary of study at state boundaries may not allow us to fix problems originating in PA.	We would model river in PA, but wouldn't be able to consider projects there.
Tioga County has done lots of planning since 2006 and 2011 big floods.	
Who would cost-share with USACE? Some towns would be willing to contribute and build small water holding places and assist with construction.	Local municipalities would be desired as partners/sponsors.
USACE could be umbrella agency and do the big projects while bringing smaller projects back to the towns.	
How far beyond the river proper does the study extend? There's not a one size fits all approach for Tioga County. There's flooding from mainstem river as well as from tributaries. Problems from tributary streams should be considered to help figure out where to put weirs. Every area has a different percolation rate. (Combination of similar questions/comments from multiple members of audience).	Working with FEMA floodplain mapping. Are combining all FEMA models. Although not going get every tributary do have objective of having big model that captures everything.
What happens next, more citizen input, more forms to fill out?	All information USACE/NYSDEC receive is part of public record and will be considered and

	evaluated. Webpage and email provide a means of continuing information exchange.
Is USACE working with Southern Tier Development Committee? Would be important for any big corporations that might want to locate here.	They're not on team, but we should coordinate with them.

Other note: Continuing education training certificates were given out by Tioga County to municipal volunteer planning or zoning board members. NYS mandates through Village and Town law that they obtain 4 training credit hours per year.

Owego Village Meeting 2: 11/21/2016 630-8 PM. 5 people in audience. 4 USACE and 3 NYSDEC staff also present.

Questions/Comments from Audience	Responses from USACE/NYSDEC
Does this USACE study compliment/supplement what FEMA did after the 2011 floods?	FEMA updated hazard mitigation plan. USACE would use that in planning process for this study.
USACE study concept and FEMA FIRM updating were already in consideration before 2011 floods.	
What is NYSDEC role in floodplain management?	In Tioga County, code enforcers are the floodplain managers. NYSDEC provides community assistance and reviews community floodplain permitting under the National Flood Insurance Program.
Where is USACE getting flooding information from?	Various mapping sources.
In meetings after 2011 floods, FEMA was shying away from floodwalls. USACE is open to them? Confusing contradiction between federal agencies for citizens.	FEMA generally does not fund projects, such as flood walls, that are within the USACE's jurisdiction. However, USACE will evaluate all cost effective options.
Is there an established figure of damages that resulted from 2011 flood? It was a big deal, damages were greater to people than most think.	USACE identified costs to repair FRM structures. FEMA prepared estimates of economic damages. Preventing future damages estimates are easier to figure out than figuring out damage estimates.
Amount of water and speed that it rises are the cause of problems. Key solutions are restoring wetlands and using pervious pavement. Floodwalls make us unable to see our neighbors.	State has comprehensive SWM regulations. In Tioga County, only municipality of Owego has its own SWM regulations.
If more floods occur, Owego won't be here. Population has declined from 5,000 to 3,700. Activities in Vestal are causing problems for Owego. They pave over wetlands there and Owego suffers.	
Professor Peter Knuepfer, Professor at Binghamton University, has studied flooding issues for decades. Spoke at Living Waters Summit.	
We don't learn from the past. Levees built after 1930s overtopped. We forget after 2011, it became a big concern about building schools in flood prone areas. Had been a concern historically, but we forgot and kept building them there anyway.	
In 2011 lots of flooding occurred from small creeks rising rapidly rather than from flooding from the river.	Ellicott City MD recently had 10 inches of rain in 7 hours, about a once per 1,000 year event.

Perfect storm occurring of development, climate change, and even road ditch crews cleaning upstream ditches to let water drain more quickly. Most local officials not experts.	
People will be upset if all work proposed is in Broome County but not Tioga County.	If report presents comprehensive view, then some projects that Federal government won't do could be done by towns, or counties.
Can USACE construct wetlands for flood control and use pervious pavement on a large scale to replace impervious surfaces?	Under FRM mission USACE can recommend detention basins. NYSDEC regulations don't go into pervious pavement. Installing pervious pavement would be local issue/decision.
These counties want development, aren't going to have onerous requirements for developers. Parking regulations in area date from 1960s. Swales and basins are cheaper than pervious pavement.	
Floods created serious concerns for Lourdes Hospital in Binghamton and for nursing home patients that were in buildings at risk.	
No medical care was available in Owego during 2011 flood. Health care then an issue, people can't get to hospitals and clinics.	
In Owego, courthouse flooded in 2011, that might have been the first time ever. Flooding came from the river. Firehouse also flooded in that event.	
Creek flowing through town meanders and has filled with sediment under the railroad tracks. Creek was dredged out, but sediment bars reformed in 9 months.	Broome Soil and Water has information on ongoing sediment management. Wendy Walsh good contact.
Almost no stormwater runoff pipes here, other than in Owego Village and some in town. Most people have dry wells, aren't on stormwater conveyance system. Most water here just infiltrates into ground, but in big rains the village ponds and becomes part of the flood. River very shallow here.	
In Owego, the two major grocery shops were inaccessible during 2011 floods. Volunteers got together to get food in. Owego Village was isolated for several days by flooding. Nichols was also an island, they received food by National Guard drop. Some issues have since been worked out in the towns to get various emergency management staff to interact more effectively. They have disabled vulnerable people	

that they'll have to relocate, not sure whether state can take them.	
In 2011 flood, Salvation Army was one of first relief organizations in. They fed 100s of people using food from state prison. Partner with Red Cross and Salvation Army to provide emergency relief.	
Distributing food was a problem. Had to work off limited high ground.	
What cost figures are going to be used?	Would use structures and contents now to estimate damages to be prevented.
Owego Heat Treat metal plant had to be bailed out twice. Since then out of business. That's an environmental concern.	It is currently an environmental remediation site.
Soft damages such as inconveniences to people's lives, are these considered in damages?	Would focus on direct costs, but would do our best to consider them. USACE models evaluate direct. FEMA has such a model.
Owego Village has historic district that should be considered. Lots of floors destroyed that character of village now lost, although only about two buildings actually lost. Historic districts tend to exist next to rivers where people would build. What value does historic district have?	

Town of Chenango Meeting 1: 11/22/2016 130-3 PM. 22 people in audience. 4 USACE and 3 NYSDEC staff also present.

Questions/Comments from Audience	Responses from USACE/NYSDEC
What are boundaries of study area?	Upper Susquehanna Basin in NY. We would do H&H modeling for Big Bend area of river in PA, but not consider projects there.
What Federal program pays for this? What if it costs more than \$3,000,000?	General investigations of large civil works. Would have to go back to request additional funds.
It take too long for anything to happen. Federal government response too slow. Almost 10 years have elapsed since 2008 authorization.	
Need to explain to local and county governments so they can be prepared for whatever cost-share municipalities have to kick in. These governments need to be prepared for this versus other unfunded mandates.	In-kind services can be contributions in lieu of providing funds. New possibility could be public/private partnerships to leverage funds.
Other organizations are looking for wetland restoration sites where berms can be removed, particularly in Broome County. Make sure to use that information.	
What type of flood storage projects could be constructed? Could these be at multiple sites? Could be complicated for municipalities to cost share.	Could be at multiple sites. Feasibility study required to include consideration of non-structural alternatives.
"Rising Community Program" has summary of local impacts from recent big floods, as well as community efforts to overcome these.	
Reviewed record of major floods from 1900s onward. Now owners in flood prone areas can no longer sell their houses because of impacts of FIRMs on property values. Defoliation of Mount Prospect is now also big problem causing runoff which goes into populated area on Front Street. Vegetation was waist high in dike joints/seals. 2011 flood was bad next one could be even worse.	State DOT would have design information for the Mount Prospect project. Described USACE levee inspection program and maintenance responsibilities.
Waters Act has now put in exorbitant costs. Big recent floods get close to top of dike.	There are many potential grants available, it's a matter of tapping into the right source. Also should review FEMA and Silver Jackets information.
Need a maintenance program that provides a way for municipalities to do that. Too much paperwork to do maintenance.	Reviewed USACE and state O&M manuals. Cortland DEC would be appropriate agency contact for minor culvert work. NYSDEC doesn't regulate manual clearing of woody debris if that's all that's involved.

What data does USACE need? County collects construction data so could summarize that.	USACE determining that, then will reach out. Do need to figure out greatest factors causing runoff (precipitation, development, etc.), as well as vulnerable populations that get flooded.
A number of large-scale low-income housing areas are levee protected, but flooded last time. North side of Front Street has many low income homes also.	
Conklin/Kirkwood area along Route 7 residents could escape floods better if dips in the roads were taken out that flood. Floodwaters come in from PA.	
BCR formula needs to include human factor because people get flooded and they don't want to.	Explained National Economic Development Plan, including locally preferred plan.
NY Rising regional initiatives need to be coordinated with.	Need to leverage the various efforts underway and keep communication going.
Wetland losses basin-wide from farm practices, some development, some drainage.	
Is USACE using new high resolution land cover data developed for nutrient estimates?	Described H&H modeling and data collection work underway. HEC HMS doesn't incorporate new high resolution land cover data. Weren't going to incorporate land use as mostly interested in runoff causing floods. Model is completed and calibrated for 2011 flood using older land data. Model went through long process to make sure accurate for big storms. Are checking to see whether any additional tributaries need to be added. FEMA has had multiple LAMP meetings in the area.

Town of Chenango Meeting 2: 11/22/2016 630-8 PM. 2 people in audience (including county commissioner). 4 USACE and 3 NYSDEC staff also present.

Questions/Comments from Audience	Responses from USACE/NYSDEC
Wants to know future plan for watershed. Hoping for dredging or dams, but knows that probably won't happen.	
Does USACE cover sewage backups from floods?	No, local sponsor responsibility.
What does USACE consider in terms of benefits, taxes paid? Value of homes?	USACE doesn't capture lost wages, having to take off work, school closure effects, etc. These are indirect damages.
In Johnson City/Union, levee sunk behind Home Depot and that may have caused overtopping there. Affected BAE's boys club.	Are going to resurvey levee tops. It's possible that adjacent up/down areas were built to higher elevation in anticipation of settling that didn't occur.
Fairmont Park levee in Town of Union was supposed to have 2 gates, but only 1 built. Used temporary bladder structures that failed (blew out).	
How long after study completion would projects be built?	
Broome County has put together a report of all the FRM efforts and mapping. Will forward that to USACE.	
Would sites where buildings have been removed be good wetland restoration sites? Vestal's nursing center and BAE Systems site in town of Union are now open parcels in floodplain. These could be converted to open space (parks, ballfields, etc.)	
What SWM requirements are applicable.	Anything >1 acre needs a SWM plan. NY has gotten much stricter over the last two decades. Larger municipalities issue and monitor their own permits. For smaller municipalities there's state oversight, but overall probably less attention. SWM regulations have flexibility built into them.
Oakdale Mall has flooding problem. Could be because of improper management of runoff.	NRCS built about 19 detention basins in Broome County. These probably help, but were overwhelmed by big storms.

Sidney Village Meeting: 11/30/2016 630-8 PM. 41 people in audience. 4 USACE and 4 NYSDEC staff also present.

Questions/Comments from Audience	Responses from USACE/NYSDEC
<p>Frustrated over more studies and no action. Sidney flooded multiple times, lots of studies already completed. Library itself flooded in 2005. Expedite this study and get something done (Multiple people)</p>	<p>Reviewed USACE process and likely time required.</p>
<p>Separate meeting for buy-outs being handled by town in December.</p>	
<p>After 2011 flood, town got money from NY state. Sidney named a NY “rising community.” Mitigation strategies were identified including buyouts. Many homes being torn down and left vacant as green space. Many of these homes were destroyed/damaged in both floods. This will provide some increased storage space. Data/information on this available and should be used by USACE. Binghamton is another “NY Rising Community.”</p>	<p>USACE identifying data to use. Need to use existing data, including findings of USACE 2006 FPMS study.</p>
<p>Even with 26 homes proposed for removal, many are left behind. This shot-gun pattern is destroying neighborhood character. Town has green plan but not an engineering plan. Doesn’t think green plan will solve problem; need flood control dams. Environmental nonsense stops dam building, doesn’t solve flood problem. USACE did studies in past, and put forward project for Amphenol Corporation but NYS didn’t have funding for the project and it flooded. Amphenol since moved uphill. USACE studied specific causes of that problem and solutions, including dredging. Main Street bridge has two bays filled with sediment for years, nothing done about it. USACE identified potential for berm on NE side of town. When are meaningful projects going to get done?</p>	<p>USACE can’t do implementation under FPMS program. Will be looking into storage opportunities in this current study. Study is under GI program in which USACE can study and build.</p>
<p>Do effects for BCR consider businesses not coming in because of flood risk? Are environmental consequences of debris and pollution from flooding considered? Many projects get nixed because of BCR. FEMA BCR is antiquated.</p>	<p>USACE can’t include indirect damages such as businesses not coming in, not being able to work during flood event, etc. USACE would look at hazardous waste sites, gas stations, etc. as environmental risks.</p>

Can community rising funds be used as match?	These come from HUD. Normally USACE can't accept federal dollars as match, will need to check.
Stopping at NY boundary a problem. How about flooding from Susquehanna River that originates from Pennsylvania? (Great Bend area). When is PA going to come up with a plan? Flooding from PA has been a problem for Sidney before. Need better coordination between PA and NY.	USACE working with FEMA and Silver Jackets, so we are attempting to have bigger picture consideration. USACE will model effects of any projects proposed both up and downstream to avoid inducing flooding elsewhere. Can't otherwise evaluate entire basin, however.
Information available at public website only indicates one project to be constructed. What does that mean, one site or the entire basin is one?	Screening phase will identify that. Scope could change depending on how many areas we identify.
Headwater areas are a trickle compared to downstream. Floods here can have small effect down there. Feeder streams, such as in Cooperstown, are overflowed easily. Is study considering headwater areas?	Screening will consider such areas, but modeling is being done for main rivers.
Many small bridges and roads in headwaters washed out. Some because of undersize culverts. Financial impact of these huge. Unadilla effectively a flood storage there, they wouldn't dredge river because storage there would be lost.	Population centers and critical infrastructure major considerations for study for projects. For many other areas, study can generate recommendations on how to reduce flood risk, such as what could be accomplished using HUD grants. That way, that information is available for use by others. Watershed screening will identify risk and generally whether Federal solution.
Binghamton competing against Sidney for a single project site? Sidney would be disfavored against larger urban areas. Or, could it mean one project per river (like one per Chenango, one per Susquehanna, etc.)? However, storage up here could benefit Binghamton, would such a project to protect someplace else also potentially protect area where it is?	The study is not seeking to have places compete, but will look at BCR vis USACE procedures. Multiple projects in multiple areas may be recommended. If a project is built to protect Sidney, Binghamton benefits would be additional.
Was Binghamton used in FID determination? Does that mean it gets preference?	It was used for estimating purposes only. This is because it's a bigger system with bigger costs and benefits that helped study go forward. This does not screen out other smaller areas. The actual area(s) that the study recommends for further action may or may not include Binghamton.
Ranking system really important then. Is there going to be public participation in that?	Information will be provided on study website and public can provide feedback.
2006 flood took out section of 88, killed a couple of people. One house damaged here. Further downstream, tributaries were the problem though. In 2011, tributaries did lots of damage to	

roads and bridges. Floods in Binghamton are different than here.	
Many places working off old FEMA maps. Just got new maps today.	
Up here, lots of siltation problems also cause floods. Village of Sidney and Unadilla wouldn't have had 100 year flood if river was open and could flow better. Also, some bridges back up water.	
Companies used to be allowed to clear out river gravels so flow would be better. River beds have since aggraded and towns flood more easily. A little dredging could prevent a lot of the problems up river, although that could cause problems down in Binghamton. Dredging though would just be putting river bottom back where it was.	Dredging often not cost effective, often doesn't do as much as people think. Initially you get a little increase in volume capacity that helps with small flood events. In large events though the amount of water is too great and so goes out into the floodplain. Removing bridges often better means of improving flow than dredging. Opening up cells below bridge would help flow.
After 1972 floods, river upstream of Corning cleared of sediment and trees. If they just cleared near here in areas where river is a bunch of gravel bars and no longer exists, it'd solve problem. River in vicinity of Unadilla hits lots of farmland. Should clear river out and use farmland for storage. When river in Oneonta near 88 was straightened out it made things worse here. We know we can't dump water on Binghamton but dredging would help here.	
This area to Route 8 was substantially impacted by 2006 event. 124 homes will be torn down; 2 homes will be elevated. Still have people who haven't received money following the 2011 event. All these delays very frustrating. Trying to build new homes in village, but a lot of people have left the area. Enhancing our water system now, not sitting back and waiting. Community is of aged people, young people aren't staying here. They move to Binghamton and Oneonta.	Study will share information that might be useful. Comments we've received do ask about effects of diminishing tax base on BCR.
Sidney still has a manufacturing base. Amphenol has decided to stay. Have an industrial park; part is in floodplain though.	
During flooding, interstate and Route 6 shut down and had to go up the hills on smaller roads. Don't know that anybody got trapped though, but many small roads were washed out and impassable. After 2006 event, identified flood evacuation routes.	

<p>Water go to undercarriage of Main Street bridge which caught debris. USACE report identified advantage of raising bridge. Could also be ice issues.</p>	
<p>Town was cut in half during floods, but grocery stores stayed dry.</p>	
<p>Need to remove snags and debris, but need permits and that's frustrating for municipalities and farmers. Should be simple way to expedite that. (Another attendee disagreed and said that most such permits are issued in two weeks. It's a misconception.)</p>	
<p>Sidney is at confluence of two rivers, that meeting is where siltation problem is.</p>	