

TOWN OF WOODSTOCK CLIMATE SMART TASK FORCE

Erin Moran, Coordinator
Kenneth Panza, Secretary
Julie Blelock, Chair, Woodstock
Environmental Commission

Application for 10 Points

January 15, 2021

PE6 Action: Natural Resources Inventory

8 Points

10 Points



BRONZE PRIORITY

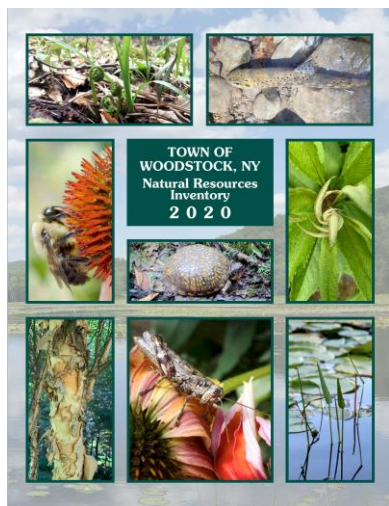


SILVER PRIORITY

Woodstock completed an NRI that covers the entire community. The inventory process and report content is substantially consistent as described by the DEC publication, *Creating a Natural Resources Inventory: A Guide for Communities in the Hudson River Estuary Watershed*. The NRI has been accepted and adopted by the Woodstock Town Board.

2020 Natural Resources Inventory (NRI)

The Town of Woodstock is often referred to as “The Most Famous Small Town in America,” for its cultural history as a haven for the arts, its eponymous (albeit wrongly sited) music festival, and its “Free Love” atmosphere. Located in the foothills of the Catskill Mountains, Woodstock is also home to some of region’s most important natural resources, which face threats both from a changing climate and changing demographics and development.



At the behest of the Woodstock Environmental Commission, and with the support of the Hudson River Estuary Program of the New York State Department of Environmental Conservation (DEC), a Natural Resources Inventory Working Group (NRIWG) was convened to take inventory of and detail the natural resources of the town in a natural resources inventory (NRI), which identifies valuable environmental assets so that we can better protect them in a changing environment.

The NRI consists of a series of maps, data tables, expository text, and analytical recommendations, which are intended as a tool for the Town Board, the Building Department, the Planning Board, and the Zoning Board of Appeals, as well as other municipal boards, property owners, contractors, conservation groups, and interested members of the public. Its purpose is to help Woodstock better plan future development projects, support future lawmaking, and inform

future land-use decisions by identifying sensitive ecological areas, areas which can serve as green infrastructure to support the town in the goal of mitigating the effects of climate change, and also cultural, historical, and recreational resources.

Furthermore, by highlighting our truly special ecosystem, its interconnectedness and its vulnerabilities, the working group hopes to inspire members of the public to participate in efforts to properly utilize their own lands and to gain an awareness of the importance of thoughtful

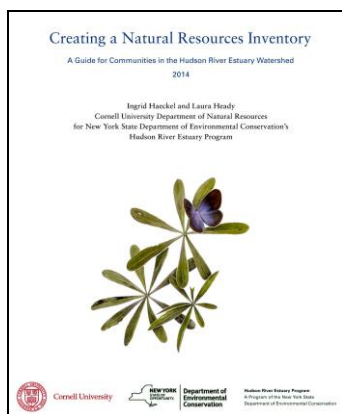
interactions with the natural world. To that end, the working group actively sought input from the Woodstock community throughout the process and will continue to present the NRI via educational outreach in the future.

[Woodstock Natural Resources Inventory](#)

NRI Working Group

The Town of Woodstock Natural Resources Inventory project was made possible by the generous work of the DEC Hudson River Estuary Program, in partnership with the Ashokan Watershed Stream Management Program, and Ulster County Department of the Environment.

Ingrid Haeckel from the Hudson River Estuary Program managed the overall project and kept us focused and on schedule. Much of the success of the NRI effort was due to her efforts and contributions. Ingrid was a major contributor to the Woodstock habitat study completed several years ago by Hudsonia.



Ingrid is one of the principal authors of DEC's comprehensive guide: *Creating a Natural Resources Inventory: A Guide for Communities in the Hudson River Estuary Watershed*, and the Woodstock NRI is consistent with the requirements of this guide.

Tim Koch of Cornell Cooperative Extension and Ashokan Watershed Stream Management Program created the Woodstock watershed maps and was an essential contributor to the new Woodstock Water District map showing water wells and the recommendations of the aquifer working group. Ben Ganon of the Ulster County Dept. of the Environment was responsible for many of the new Woodstock topographic maps, and Nate Nardi-Cyrus of the Hudson River Estuary Program also contributed to creating new maps for Woodstock.

A list of all local participants is included in the NRI.

January 15, 2020 – NRI Proposal

Ingrid Haeckel, NYSDEC, Hudson River Estuary Program/Cornell University, presented a proposal to the Woodstock Environmental Commission and Climate Smart Task Force about how best to proceed with developing a Natural Resource Inventory. The Natural Resource Inventory became a major new initiative for 2020 launched by the Environmental Commission.

January 21, 2020 – Town Board Resolution 64-2020

NOW, THEREFORE, BE IT RESOLVED as follows: That the Town Board of Woodstock does hereby agree to participate in the DEC Hudson River Estuary Program technical assistance opportunity and authorizes the WEC on behalf of the Town to work with DEC to create a Natural Resources Inventory.

February 13, 2020 – Joint Meeting with Town of Olive

The Natural Resource Inventory is a joint project with Woodstock and Olive under the direction of the Hudson River Estuary Program with technical assistance from the Ulster County Department of the Environment, the Ulster County Cornell Cooperative Extension, and the Ashokan Watershed Stream Management Program.

A joint meeting with all the participants was held in Shokan to agree on the overall NRI project plan for both towns.

NRI Project Plan

	Start: February 2020	2020												2021
Lead	Activity	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	
HREP	NRI committee meetings	X	X	X	X	X			X	X		X		
Local	Define goals and scope of NRI project	X												
Local	Provide feedback on draft base map and outline of maps	X												
Local	Establish scope of public outreach and engagement		X	X	X									
Local	Present NRI project to local boards	X			X	X								
	Create project webpage with description and regularly update with meeting minutes and draft materials		X	X										
Local	Locate and acquire any existing local map data	X	X	X										
Local	Fill in data gaps with new data collection - ???		X	X	X									
HREP	1st Draft Biological Resource Maps	X												
County	1st Draft Physical Setting Maps (Topo, Slopes, Geology, Soils)		X											
AWSMP	1st Draft Water Resource Maps			X										
County	1st Draft Land Use Maps				X									
County	1st Draft Conservation & Rec Areas Maps				X									
all	Provide feedback on 1st draft set of NRI maps	X	X	X	X									
all	2nd draft set of NRI maps			X	X	X								
Local	Public presentation of draft NRI maps					X								
all	Provide feedback on 2nd draft set of NRI maps						X	X						
	NRI maps are complete									X				
HREP	Establish a template for NRI report	X	X	X										
assigned	Research and compile background information	X	X	X	X	X								
	First draft NRI report complete								X					
all	Review/comments on draft NRI report sections								X	X				
assigned	Revise NRI report sections									X	X			
Local	Final edit and layout of NRI report											X		
Local	Public presentation of completed NRI, adoption, post to website												X	

March 12, 2020 – Planning Board

Peter Cross, Chair, Woodstock Planning Board attended the working group's meeting and provided his opinions of what is needed in the NRI. Peter Cross explained the need for a GIS based wetlands and watercourse map. As land use maps and planning documents become available on-line, Woodstock's wetlands and watercourse boundaries are missing from the new sources. An updated Wetlands & Watercourse map was not included in the inventory.

The recommended sources for planning information, the Ulster County Parcel Viewer and Hudson Valley Natural Resource Mapper, fail to identify protected areas in Woodstock. Developers and planners that depend on these sources receive incorrect information. A GIS based wetlands and watercourse map, which could be incorporated into the land use planning tools, would insure developers are receiving accurate information.

Also reviewed draft version of the topography and geology maps to be included in the Natural Resources Inventory. Maps included: topology, steep slopes, bedrock geology, and surficial geology with glacial deposits. A soil survey map will not be provided – the inventory of soil types is provided in the soil survey documentation.

April 9, 2020 – Review of Draft Water Resources Map

This month, the working group reviewed draft versions of the water resource maps that document Woodstock's watersheds, stream conditions, aquifers, and the water district.

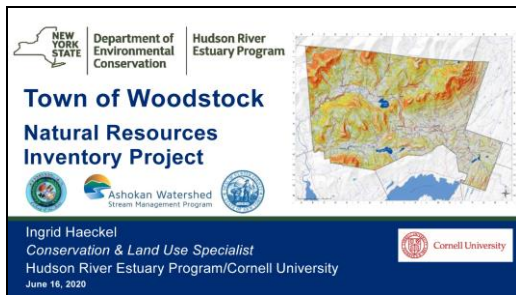
May 14, 2020 – Preparation for Town Board Presentation

Completed the review of the draft water resources maps. A status report and summary of work will be presented by Ingrid Haeckel, NYSDEC, to the Woodstock Town Board at its June 16, 2020

June 11, 2020 – Review of Town Board Presentation

The NRI working group completed a review of the draft natural inventory maps in preparation for a presentation to the Woodstock Town Board.

June 16, 2020 – NRI Update to Town Board



Ingrid Haeckel, NYSDEC Hudson River Estuary Program and NRI working group leader, reviewed the NRI maps with the Woodstock Town Board at its June 16, 2020 meeting. The next phase, as Ingrid explained, is to write the NRI document. The intention is to complete the NRI by the end of the year.

The Natural Resource Inventory is a major initiative launched with the Environmental Commission; Ingrid Haeckel, NYSDEC Hudson River Estuary

Program/Cornell University; Ashokan Watershed Stream management Program; Ulster County Department of the Environment; NYS Department of Health; and Woodstock's Climate Smart Task Force.

August 20, 2020 – NRI Document Review

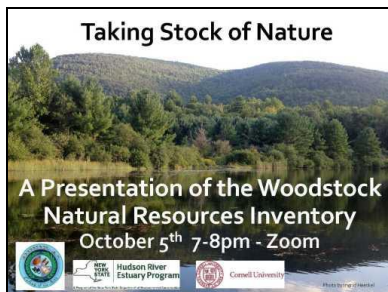
Review of outline with assignments and current status of each section.

September 24, 2020 – Review of NRI Public Presentation

The Natural Resources Inventory (NRI) is an initiative undertaken by the Woodstock Environmental Commission in partnership with Ingrid Haeckel of the NYSDEC Hudson River Estuary Program/Cornell University; Ashokan Watershed Stream management Program; Ulster County Department of the Environment; NYS Department of Health; and Woodstock's Climate Smart Task Force.

October 5, 2020 – NRI Public Presentation

"Taking Stock of Nature: The Woodstock Natural Resources Inventory"



Ingrid Haeckel from the NYSDEC Hudson River Estuary Program provided a 30-minute overview of the habitats and wildlife of Woodstock and explained the effort underway to create a Natural Resources Inventory (NRI) for the Town.

Ingrid Haeckel is a Conservation and Land Use Specialist at the New York State Department of Environmental Conservation's Hudson River Estuary Program in partnership with Cornell University. Ingrid works with Hudson Valley communities to promote conservation of important natural areas and habitat

through local land use planning. She holds degrees in Environmental Biology and Geography and worked previously for Hudsonia, where she was the lead biologist for the Woodstock habitat mapping project completed in 2012.

October 22, 2020 – Document and Presentation Reviews

Continued work on writing and reviewing the draft NRI

October 29, 2020 – NRI Presentation to Planning Board and ZBA

Ingrid Haeckel from the NYSDEC Hudson River Estuary Program provided a 15-minute overview presentation of the NRI to the Planning Board and ZBA.

November 12, 2020 – Final Reviews

Last review of the NRI document and Town Board presentation.

December 8, 2020 – Natural Resources Inventory Completed Presented to the Woodstock Town Board

The completed Natural Resources Inventory (NRI) was presented to the Town Board at its regularly scheduled December 8, 2020 meeting and a resolution accepting the NRI was adopted at its December 15th meeting.

Contributors

Ingrid Haeckel, NYS DEC Hudson River Estuary Program and Cornell University
Nate Nardi-Cyrus, NYS DEC Hudson River Estuary Program and Cornell University
Tim Koch, Ashokan Watershed Stream Management Program and Cornell Cooperative Extension of Ulster County
Ben Ganon, Ulster County Department of the Environment

Woodstock Environmental Commission (WEC) Members and Other Volunteers:

Julia Blelock, Chair, WEC
Arlene Weissman, Vice Chair, WEC
Alex Bolotow, Member, WEC
Erin Moran, Member, WEC and Coordinator, Town of Woodstock Climate Smart Task Force
Jim Hanson, Member, Comeau Stewardship Advisory Committee
Kenneth Panza, Secretary, Ulster County Environmental Management Council, Town of Woodstock
Supervisor's Liaison, Climate Smart Communities
George G. (Jerry) Washington, GIS Technician
Maxanne Resnick, Executive Director, Woodstock Land Conservancy
Grant Jiang, Environmental Analyst, NYS Department of Health

Acknowledgments

The Town of Woodstock Natural Resources Inventory was created with technical assistance from Cornell University, the NYS DEC Hudson River Estuary Program, Ulster County, and the Ashokan Watershed Stream Management Program.

We deeply appreciate the leadership and many contributions of our project coordinator, Ingrid Haeckel. We are also grateful for the expertise, input and mapping contributions of Nate Nardi-Cyrus, Tim Koch and Ben Ganon. Further, we'd like to thank Bill McKenna, Town Supervisor, for his support, and Peter Cross, Planning Board Chair, for his insights and advice. Finally, we are grateful to Ashley Slovensky, Assistant to the Town Supervisor, for her help with website and administrative matters.

Appendix: NRI Meeting Agendas & Minutes

**Town of Woodstock Natural Resources Inventory
Scoping Discussion
January 15, 2020**

Agenda

Participants:

1. Introductions
2. NRI Overview
3. Project Goals
 - Intermunicipal partnership with Olive; partnership among government agencies
 - Question – how is Town using existing inventories/data?
4. Estuary Program/AWSMP/County partnership and roles
 - Data gathering
 - GIS mapping
 - Meeting facilitation
 - Template material for report, biological & water resource descriptions
 - Review
5. Local committee roles and responsibilities
 - Local data gathering
 - Project outreach/coordination with local boards and public
 - Review maps and report
 - Fill gaps in report - TBD
 - Report layout, printing (if desired)
6. Draft Base Map
7. Draft project schedule, meeting dates
 - Kick-off w/Olive – Jan 30 or Feb 13?
8. Homework
 - Establish work group/sub-committee
 - Feedback on Base Map due by Jan 24
 - Review the NRI Guidebook
 - Review NRI examples (East Greenbush, Putnam Valley, Rosendale)

Towns of Olive and Woodstock Natural Resources Inventory Project

March 12, 2020, 6:00-8:00pm

Woodstock Town Hall, 76 Tinker St, Woodstock, NY 12498

Agenda

Participants:

Note-taker:

1. Introductions and Updates (5 min)
 - Website content posted
 - Information shared with local boards
 - Wetland/Watercourse map
2. Planning Board perspective on maps (10 min)
 - Peter Cross, Chair, Town of Woodstock Planning Board
3. Review draft maps (1 hour)
 - Topography
 - Steep Slopes
 - Bedrock Geology
 - Surficial Geology and Glacial Deposits
 - Natural Features for Climate Adaptation
 - Important Biodiversity Areas (recap)
 - Other comments on maps from Feb 24 meeting?
 - Size for large-format map layout
4. Public outreach brainstorm (30 min)
 - Media
 - Events
 - Feedback from local boards
5. Homework
 - Provide feedback on draft maps
 - Planning for public outreach
 - Next meeting: Thursday, April 9, 6-8pm at Ashokan Stream Program Office, Shokan
 - Reserve location in Woodstock for May 14 meeting

[illegible]

NRI Meeting 3/12/2020

Attended: Ingrid, Hudson River Estuary Program, Ben Gannon, Ulster County, Jim Hanson, Climate Smart Task Force; Peter Cross, Chair, Woodstock Planning Board, Julia, Chair, WEC; Dan White, Chair, Olive CAC; Jerry Washington; Ken Panza; Arlene Weissman, Deputy Chair, WEC

Updates:

Website content was posted in Woodstock on the Town website and Olive will be posting next week.

Planning Board perspective on Maps:

Peter Cross expressed that the NRI final product should be included in the Woodstock Comp plan. He said the maps will be able to be used in all projects if he can view with ArcGIS software to look at the individual layers. He feels it is most important to the planning board when creating site plans that they can now look at federal, state and Woodstock wetlands as well as the scenic overlay when determining where to locate their structure. It is important to be able to identify the geographic coordinates of regulated features shown on the maps, to alert property owners as well as for planning board members to field verify the criteria. He feels that the maps should be done using State Plane coordinates, which are commonly used by surveyors.

Ingrid will provide Jerry Washington with GIS shape files for data used in the maps.

Review Draft Maps:

- Wetlands will be taken off all maps in the series except the Base Map and Wetlands Map.
- Topo map has 50' contours, 500' reference lines, and includes the 1,200' overlay; a description of the contour lines will be added to the map legend. It was agreed that the wording would be changed to scenic overlay. Will also produce 24x36" version of the topo map.
- Steep Slope map is based on one meter elevation data. They will take off the wetlands. Will also produce 24x36" version of this map.
- Peter suggested including fragile soils on one map – glacial deposits that are difficult for development or septic systems. Jerry brought up that these are H2 and H3 soils. Ingrid said that they have the County soils data and will look into classifications for fragile soils for a new map.
- Biodiversity area map shows areas estimated to support populations of documented occurrences of rare animals or rare plants. Ingrid provided a list of species that these areas are modeled on, which will be described in the report. However, we cannot specify which areas correspond to which animals/insects on the map because the data are sensitive. Projects within the mapped "Important Areas" are encouraged to submit an inquiry to NYNHP for details on rare species habitat.
- Also reviewed Bedrock Geology, Surficial Geology, Natural features for Climate Adaption maps.
- Purple and maroon colors look similar on the Climate Map – Ingrid will review.
- Ingrid will add Town regulatory buffers to the Wetlands map. Will also produce 24x36" version of the Wetlands map.
- Ingrid suggested trying to do two drafts of the maps before preparing the final documents. The towns should review first drafts now and submit any additional comments to the local committee Chair prior to the next meeting. Julia and Dan will compile all comments for the next meeting.

- Discussion about replicating the Town Watercourse buffer map – Ingrid will give further thought to how to best do this.
- Arlene will reach out to Todd Baldwin, DEP Chief Forester, about deer browse data.

Public Outreach:

- Ingrid suggest letting people know what we are working on and giving the Towns an opportunity to input on the maps once we have a set of second drafts of all maps. We may push the final map revisions to the fall since the COVID-19 situation will likely prohibit in-person meetings for a while.
- The second draft set of maps will address current comments. Please wait until May/June to share maps with others – town board, planning board, ZBA.
- We talked about putting maps on website once second drafts are available.
- Jerry and Julia suggested a library forum at the Woodstock Library and placing an ad in the Woodstock Times. Ingrid said she would attend. This will likely have to wait until late summer or fall.
- Peter concluded that the biggest issue is that he runs into people looking at the County map for wetlands and not seeing Woodstock wetlands. He wants a way to get buyers, developers, and realtors to look at maps before they develop. Julia suggested reaching out to the realtors in town to view all the maps.

Next meeting will be on Zoom or WebEx on Thursday, April 9. We will divide the group by town for two calls – Woodstock will be 6-7pm, Olive will be 7-8pm.

May meeting may be at the Zena Firehouse if possible to meet in person again.

Town of Woodstock Natural Resources Inventory Project

April 9, 2020, 6:00-7:00pm

Zoom Meeting

<https://cornell.zoom.us/j/540803201>

Meeting ID: 540 803 201

Dial by your location

+1 646 876 9923 US (New York)

Agenda

Participants:

Note-taker:

1. Updates
2. Review draft maps
 - Aquifers
 - Watersheds
 - Flood Hazard Areas
 - Stream Management Units
 - Water Quality Classifications
 - Stream Habitats
 - Dams and Culverts
3. Discuss any further comments on prior draft maps
4. Review timeline
5. Library Forum date?
6. Homework
 - Provide feedback on draft Water Resource maps
 - Next meeting: Thursday, May 14, 6-7pm (Zoom)

Town of Woodstock NRI Project Meeting on 4/9/2020, 6:00 to 7:15 PM, via Zoom

Participants: Ingrid Haeckel, Hudson River Estuary Program; Tim Koch, AWSMP; Nate Nardi-Cyrus, DEC; Jim Hanson, Climate Smart Task Force; Ken Panza, TOW Liaison to UC Climate Smart Committee; Julia Blelock, Chair, WEC; Alex Bolotow, Member, WEC; Maxanne Resnick, Executive Director, WLC

Note-taker: Julia, with additions/corrections by Ingrid

Updates:

Jerry Washington and Ken compiled and sent Woodstock water data and ArcGIS shapefiles to Ingrid, Tim and Nate. The files were incorporated into several of the Woodstock aquifer- and water-related maps.

Julia reached out to the Woodstock Library Forum for available dates (their calendar is now wide open, subject to developing coronavirus conditions).

Review Draft Maps:

- Aquifers
 - Discussion about Well Field #1 vs. Well Field #2, and how to portray them on the map.
 - Should touch up the road labels (move the 212 and 375 bubbles *onto* the road lines).
 - After the meeting, Ken reached out to Woodstock's Supervisor, Bill McKenna: Bill confirms that the new water map, based on parcel boundaries, should be used.
 - Ken also suggests that it "might be wise to consider a separate, parcel-based map for the water district. The Bearsville area, with multiple overlays on the existing map, is getting crowded."
 - Additionally from Ken: "Might also consider identifying wellhead protection and water supply protection areas with a solid line."
 - Tim: "Perhaps rather than showing each of the seven wells individually, get a polygon shapefile of the two well field parcels?"
- Watersheds
 - Need to change "Saw Kill" to "Sawkill" on all maps.
 - Distinguish Ashokan (NYC) watershed from non-Ashokan: DEP vs. non-DEP? Upper Esopus vs. Lower Esopus? It would be useful for planning purposes to be able to readily make the distinction.
 - Decision made to label Ashokan watershed boundary with curved text on map. Ingrid will share example from Coeymans watershed map.
- Flood Hazard Areas
 - Jim: The flood plain data on the current map is not totally inclusive. (He cited a section of Chestnut Hill Road that flooded recently, but which is not shown on the map.) Discussion about getting additional info from Mike Reynolds and/or anecdotal info from the Fire Department.
 - Tim noted that FHA data is limited to larger streams and does not capture all locations of localized flooding.
 - Ken said he would reach out to Mike Reynolds re road closure info.
 - From Tim on 4/10: "Great idea to match NRI symbology with the FEMA FIRMS to maintain consistency when visualizing regulated floodplains. The FEMA blue and orange should provide much better contrast than red and pink."

- Stream Management Units
 - Discussion regarding Beaver Kill MUs vs. Little Beaver Kill MUs. There is a great deal of data available for the Beaver Kill, but a key report for the Little Beaver Kill won't be published until the fall of 2020. Still, the data might be incorporated then.
 - Are there any high priority sites not yet included? If so, send Tim the coordinates and he can include them.
 - Ingrid: There might be two separate maps: One for the Beaver Kill and the other for the Little Beaver Kill.
- Water Quality Classifications
 - Ingrid: This is essentially a *regulatory* map, indicating what's protected.
 - Ingrid: Make the yellow and green buffers thicker?
 - There is legislation underway (set to pass the Assembly) to add all Class C streams to protected status.
 - Need also to incorporate Woodstock protection laws.
- Stream Habitats
 - Data from NY National Heritage Program.
 - Fisheries won't permit us to mention brook trout by name for data about their locations; instead must use terms such as "cold water stream habitat."
 - Tim will move the riparian buffers onto the Watersheds map to make this map less busy. May add the other trout/trout spawning data to this map (included in Water Quality Classifications), if it doesn't make it too busy.
- Dams and Culverts
 - Discussion about which data to portray on which maps, in order to make each as readable and useful as possible.
 - Jim: It's valuable to have, for planning purposes, riparian boundary data (to assess setbacks, etc.).
 - Once Ben Ganon's project is wrapped up, could create two different looks:
 - Culverts/barriers (to the fish) vs. threats/culvert management (for flood mitigation)

Timeline Review:

Ingrid said that now we're missing only a handful of maps (land use/agricultural, recreation, and cultural resources). She will try to create a draft of those (or Ben Ganon, if he has time), with input from the group. She will also look to the group to assist with specific portions of the narrative.

Ingrid is waiting to hear from Ben Ganon (Department of the Environment), whose work has recently been diverted to Ulster County's Project Resilience, about his availability to provide additional maps.

Library Forum Date:

Ingrid had suggested several dates in the fall (including Saturday, 10/17; Saturday 10/24; and Saturday 11/14) for a Library Forum event. Alternately, we might arrange a WebEx meeting, to alert members of the public about the NRI project and to solicit their input. The group decided to hold off making a decision about this until the May meeting.

Homework:

Provide further feedback on various maps—particularly the ones related to water resources—by April 30.

Town of Woodstock Natural Resources Inventory Project

May 14, 2020, 4:00-5:00pm

Zoom Meeting

<https://cornell.zoom.us/j/99776102118?pwd=ZmZKbzdtRG9YVjVDMHpSaTU0eWYwQT09>

Meeting ID: 997 7610 2118

Password: 557973

Dial by your location

+1 646 518 9805 US (New York)

+1 646 876 9923 US (New York)

Agenda

Participants:

Note-taker:

1. Updates
2. Revised Maps
 - Review selected maps
 - Post maps to Town website
3. Outreach to local boards/public
 - Presentation at regular meetings, and/or separate event?
 - Press release
 - Other outreach?
4. NRI Report
5. Next meeting – set date

Woodstock NRI Meeting 5/14/2020

Ingrid has produced updated maps for all maps previously provided. We viewed the following:

Drinking Water Map

The main changes were that Ken and Jerry found some parcels that within the water district and these were incorporated into the map

We discussed what the Aquifer and Wellhead Protection zones should be called and whether the proposed Wellhead Protection or Overlay District areas should be included. It was decided that this is beyond the scope of this project as the town must delineate these districts themselves

In terms of aesthetics, the Mt Tobias area was incorrectly labelled and Tim spoke about maintaining consistency throughout all maps with the blue aquifer shape file

Stream Management Map

We decided that if everyone agreed to how the Beaverkill Mgmt map looked, the same would be copied for the Little Beaverkill

Decided to write into the narrative that there is not a management plan for the Sawkill, which is why there is not a separate map as there is for the BK and LBK. Discussed whether the 2007 Sawkill data should be used, and that priority recommendations from older plans should still be used despite their age

Stream Habitats

Now combined with the Water Quality Classification map
The NAOC data will be updated

Flood Map

Discussed matching the symbology to FEMA maps
Added in 2018 assessments and will add more by end of year
Discussed whether anecdotal local flood data should be included

Watershed and Riparian Buffers

New labels on major ones
Delineated the Kingston vs NYC water supply

-Ingrid shared updated wetlands maps. She added a version with parcel boundaries and updated the colors for wetlands soil layers. Also added approximation of buffers and removed National Wetlands Inventory data and replaced with Hudsonia + DEC wetlands info

- Ingrid made two different biodiversity maps because the ledger was too busy with just one: a biodiversity map and an important community map
- Discussed which size maps to post to the town website. Everyone agreed they'd like to use the maps with the parcel boundaries to give residents a sense of involvement
- The mountain map should include the 1200 ft scenic overlay
- Discussed a presentation sometime in June to the town boards
- Discussed how to do outreach regarding the draft maps. Can post to WEC website, reach out to the Planning and Zoning Boards, press release, should we have a dedicated Zoom meeting for those who are interested and solicit feedback on the maps?

Town of Woodstock Natural Resources Inventory Project

June 11, 2020, 2:00-3:15pm

Join Zoom Meeting

<https://cornell.zoom.us/j/98814275026?pwd=U3NPQkxoMFkyWWVmd1pnSmFXallidz09>

Meeting ID: 988 1427 5026

Password: 915229

Dial by your location

+1 646 518 9805 US (New York)

Agenda

Participants:

Note-taker:

1. Revised Maps Posted to Website
2. Outreach to local boards/public
 - Draft presentation for 6/16 Town Board meeting
 - Separate Zoom event for public
 - Press release
 - Other outreach
3. NRI Report
 - Background sources
 - Review outline
 - Volunteers – content, review, executive summary, photos/layout, editing
4. Review Timeline
5. Next meeting – set date

Town of Woodstock Natural Resources Inventory Project
Meeting Minutes
June 11, 2020, 2:00-3:15pm

Participants: Alex Bolotow, Julia Blelock, Ken Panza, Ingrid Haeckel, Nate Nardi-Cyrus, Maxanne Resnick, Erin Moran, and Jim Hanson

Minutes by: Nate Nardi-Cyrus

1. Revised Maps Posted to Website

A reason to celebrate! Ingrid will add drinking water map, which Ken identified as missing.

2. Outreach to local boards/public

Ingrid shared draft presentation for 6/16 Town Board meeting

Ken recommended adding Grant from NYS DOH to partners slide, adding new local data sources (Sawkill Watershed Study and Horsely Wellhead Protection Report), a discussion of how Sawkill watershed study management recommendations will be incorporated into NRI and adding the NRI Floodplain map to the presentation. The Floodplain map is especially important as it can serve as a basis for future hazard mitigation planning (will also include this idea in the 'Potential Uses' slide).

Julia expects the Town Board will be very receptive to the presentation. They are pleased with the effort thus far.

Julia will follow-up with the Town Board to inform them of the presentation timing and to assure that Ingrid can present by sharing her screen. Ingrid will provide a ~2 sentence bio for Julia to use in her presentation introduction.

Map comments should be sent to the WEC e-mail with a pre-determined subject line. Ingrid will add a slide to her presentation explaining how the Board should provide comment and Julia will add a similar description to WEC website/Facebook.

The group agrees a separate public presentation should be set for some time at the end of September 2020. Maxanne might be able to coordinate the public meeting but was unsure about WLC capacity. Ingrid offered to arrange the logistics of a public presentation via Zoom if WEC and the rest of the NRI project team can promote the event. Ingrid suggested adding another speaker to this presentation to draw in more attendees. Maxanne recommended Hudsonia present on their work for WLC. Ingrid offered to explore using Estuary Program funds to compensate Hudsonia for developing such a presentation. Ingrid will coordinate the scheduling of the public presentation sometime during the summer.

Ingrid encouraged the group to draft a simple press release to promote the NRI project and associated presentations. She suggested distributing to HV1 and other media outlets during the end of the summer.

On a similar topic, Ken and Grant will be presenting water district revisions to the Town Zoning Revision Subcommittee in July.

3. NRI Report

Erin has a copy of a newly published Hudsonia Habitat Map of the Yankeetown Pond area. Ingrid made a note to integrate this new data into the NRI narrative.

Ingrid shared the NRI narrative outline and asked WEC and the rest of project team to volunteer for specific sections. She also encouraged everyone to review the whole document if they were able to. The community NRIs that contributed to the narrative template include Putnam Valley, East Greenbush, and Coeymans.

Map descriptions should be ~2 pages each

Meeting attendees volunteered to work on narratives for specific maps, using the NRI template provided by Ingrid as a starting point:

- Introduction– Julia/Jim
- Executive Summary –Erin
- How to Use this Report – Julia
- Climate – Erin
- Physical Setting – Alex/Ingrid
 - Resources
 - Comprehensive Plan
 - Habitat Mapping Report
 - Robert Titus Books/Resources
 - Other Catskills books
- Aquifers – Ken
- Drinking Water Resources – Ken/Grant
- Stream Management – Ken
- Watersheds and Riparian Areas – Tim
- Stream Habitat – Ingrid/Tim
- Wetlands - Ingrid
- Water Quality Monitoring and Assessment – Ingrid
 - Larry (?) might have additional water quality data
- Habitats and Wildlife Section – Ingrid
- Agricultural Resources – Erin
- Conservation and Public Lands – Max/Arlene

- Report Editor – Ingrid (?)

- Photo Coordinator – Alex

- Graphic Designer

- A local graphic designer is looking to volunteer time to help WEC on projects. Alex has volunteered to reach out to this person to request assistance. In regards to the report design, the group agrees that they prefer the elegant style of Early Woodstock vs something more...avant-garde.

Ingrid will follow-up with a 1-page instructional e-mail (including citation style, etc.) for volunteers. She will coordinate the narrative development through Google Drive, where she will post all relevant materials

4. Project Timeline

- 1st draft complete by Labor Day
- 2nd draft by end of September – Ask public for input
- 3rd draft by October/November – circulated to the Town boards for final review.
- If volunteer graphic designer agrees to work on project, the final report might not be complete until 2021. There are no concerns with extending this timeline as needed.

5. Next meeting

Thursday August 20th – 2-3:15pm

Town of Woodstock Natural Resources Inventory Project

August 20, 2020, 2:00-3:00pm

Join Zoom Meeting

<https://cornell.zoom.us/j/92691017857?pwd=M2t6WmRTMmg0TjdtQ1VqajVvN0g0dz09>

Meeting ID: 926 9101 7857

Passcode: 738068

Dial by your location - 646 876 9923 US (New York)

Agenda

Participants:

Note-taker:

1. NRI Report

- Check-in on status of draft sections (run through draft)
- Call for photos?
- Timeline for internal review/revision
 - Rough draft sections to Ingrid by 9/7
 - Ingrid to compile draft for internal review by 9/9
 - Comments by 9/23, meeting on 9/24?
 - Revisions/2nd draft by ?
 - Additional review/copy edit?
 - Final layout

2. Outreach

- October 5 public presentation (Zoom)
 - Goals
 - Format/length/Q&A
 - Registration
 - Press release
- Planning Board outreach?

3. Next meeting – set date – 9/24?

Town of Woodstock Natural Resources Inventory Project
August 20, 2020, 2:00-3:00pm

Minutes

Participants: Ken Panza, Erin Moran, Maxanne Resnick, Julia Blelock, Ingrid Haeckel, Nate Nardi-Cyrus, Jim Hanson, Arlene Weissman.

Note-taker: Nate Nardi-Cyrus

NRI Report

Ingrid went through an outline with narrative assignments and the current status of each section.

- Ingrid is considering reordering the outline to fit the narrative flow better and will send the most up-to-date version of the outline to participants after the meeting.
- The group had a discussion about whether to include zoning and permitted facilities in the NRI. Arlene and Maxanne will take a look at examples of other NRIs where this has been done and reassess if the group should draft a section for the Woodstock NRI. Ken and Jim also offered to reach out to planning and zoning boards to see if they thought this information would be useful to their members.
- Erin asked clarifying questions about her narrative sections including the Executive Summary, Introduction, and Climate Sections.
- Julia indicated that Alex didn't feel comfortable reaching out to people who didn't know about the NRI and wanted to know how she should move forward with soliciting photos. At the last meeting, Alex said she knew a person who might volunteer as a graphic designer for the document but there is no word on the status of that potential opportunity.
- Ingrid mentioned that the map files are so large they will not be able to be easily attached to the same PDF as the rest of the NRI report. One solution might be to keep them in a separate file and embed lower resolution maps in the document for easy reference.
- Would Ulster County still be willing to print large format maps for the Town free of charge? Ingrid will follow up with Ben and will also ask if the Estuary Program might be able to fund the printing.
- Timeline for internal review/revision
 - o Rough draft sections to Ingrid by 9/7
 - o Ingrid to compile draft for internal review by 9/9
 - o Comments by 9/23, meeting on 9/24 @ 5pm
 - o Revisions/2nd draft by mid-November

- Additional review/copy edit
- Final layout to be completed by the end of the year but it might take longer

Outreach

- Unfortunately, Covid has limited the opportunities for in-person outreach. The group discussed other outreach methods including Facebook and direct outreach to the schools.
- Julia will create a flyer for the Oct 5th event and will circulate to group for review when it is drafted.
- The October 5th public presentation will be 30 minutes (7-8pm) and will be held over Zoom. The goals will be to highlight the Town's high quality/unique/interesting resources and rare species/habitats and how a landowner or resident can use the NRI maps to learn more. Addition time will be allotted at the end for Q&A. Ingrid suggested having registration so that the team can know who attended the presentation and follow-up with interested individuals. The team should get a press release to HV1 and other news outlets by Sept 25th for an October 5th presentation.
- Ingrid suggested that members approach the Planning Board to get on the agenda for their October meeting. She is willing to deliver a similar presentation to what she has already done for the Town.
- Ingrid and Nate discussed the anticipated release of Hudson River Estuary Grants this fall and the broad categories of available funding including planning for open space protection, financing, and watershed protection.

The next meeting will be meeting on 9/24 @ 5pm via Zoom.

Town of Woodstock Natural Resources Inventory Project
September 24, 2020, 5:00-6:00pm

Join Zoom Meeting

<https://cornell.zoom.us/j/92723548927?pwd=ck5sWXd4MHJVMjVtUllqdnBlcWRXZz09>

Meeting ID: 927 2354 8927

Passcode: 197681

Dial by your location +1 646 876 9923 US (New York)

Agenda

Participants:

Note-taker:

1. NRI Report

- Comments received
- Executive summary format
- Inclusion of photos?
- Timeline for review/revision
 - Revised sections to Ingrid by 10/12
 - Ingrid to compile draft for local board review by 10/21
 - Comments on report and maps due by 11/13
 - Revisions by 11/20
 - Copy edit/final layout and map revisions complete by 11/30
 - Present to Town Board 12/8
- Seeking volunteers for: photo selection/placement, copy edit/final layout, cover design, graphic design for executive summary?

2. Outreach

- Review rough draft October 5 public presentation
 - Flyer/promotion
 - Press release – submit by 9/25 to HV1
 - Post recording to YouTube?
- October 29 PB/ZBA workshop presentation format

3. Next meeting – set date – 10/22 at 5:30?

Town of Woodstock Natural Resources Inventory Project
October 22, 2020, 5:00-6:00pm

Join Zoom Meeting

<https://cornell.zoom.us/j/96974871315?pwd=WWtqUmlhT2tXVnRudnJaTkFMWmF2QT09>

Meeting ID: 969 7487 1315

Passcode: 254664

Dial by your location +1 646 876 9923 US (New York)

Agenda

Participants:

Note-taker:

1. NRI Report 2nd draft

- Circulation with local boards, other external reviewers?
- Graphic design for cover?
- Committee recommendations?

Possible timeline for review/discussion:

- Final comments on report and maps due by 11/12
- Revisions by 11/20
- Copy edit (Arlene and Julia) and photo selection (Erin) by 11/30
- Insert photos/final layout by 12/2
- Present to Town Board 12/8
- Town Board resolution or local law for adoption?

2. Outreach

- Feedback on Oct 5 presentation?
- October 29 PB/ZBA workshop presentation

3. Next meeting – set date – 11/12 at 5:00?

Town of Woodstock Natural Resources Inventory Project

October 22, 2020, 5:00-6:00 PM

Zoom Meeting

Meeting Notes

Participants: Alex Bolotow, Arlene Weissman, Ben Ganon, Erin Moran (briefly), Ingrid Haeckel, Jim Hanson, Julia Blelock, Ken Panza, and Maxanne Resnick

Note-taker: Julia Blelock

1. NRI Report 2nd draft

- Circulation to local boards, other external reviewers ahead of Ingrid's NRI presentation to the Planning Board on 10/29 at 7:00 PM:
 - Julia will send it to the Planning Board and the ZBA
 - Arlene will share it with Beth Reichheld, DEP
 - Max will send it to Heather for the Highway Department
 - Ben will share it with Amanda LaValle and Aaron Bennett, UC Dept. of the Environment
- To fill a gap in the report related to the Little Beaver Kill, Ingrid will reach out to Tim Koch. This issue may or may not be resolved prior to the NRI report publication.
- Regarding graphic design for the cover: Julia will contact Naomi Schmidt and get a quote. Alex will select a few photos appropriate for the cover.
- Ben said that Ulster County may be able to print 10 copies of the report with in-house printing and binding. Jim said he may have a funding source to print additional copies via a retail printer such as Print Express.
- Ingrid will share a couple of templates that would enable us to get use of the Woodstock NRI written into local law. Jim: "That will give it some teeth."
- Ingrid and/or Alex (with Erin?) will work on selecting and dropping in images to the Word version of the report. Perhaps 20 to 30 photos, at ¼ page size or smaller. This will be done as a last step prior to report completion.
- There was some discussion about missing Town-owned parcels. Ken promised to send a list.
- Missing from the report: habitat cores for the County. Ben will help with a basic description.
- Map feedback from Ken: on the Water Resources map the yellow line is too faint; please pick another color.

Timeline:

- Final comments on report and maps due by 11/12
- Revisions by 11/20
- Copy edit (Arlene and Julia) and photo selection (Erin and Alex) by 11/30
- Insert photos/final layout by 12/2
- Present to Town Board at the 12/8 meeting—or more likely, the one on 12/15

- Town Board resolution or local law for adoption? TBD once Ingrid sends us a couple of templates.

2. Outreach

- The Oct 5 presentation: Julia sent a recording link and a PDF of Ingrid's presentation file to the 30 to 40 people who registered and/or attended—plus other interested parties such as the TB, the PB and the ZBA. Feedback was unanimously positive.
- October 29 PB/ZBA workshop presentation: Ingrid sent us her proposed presentation file, which is excellent.

3. Date/time of next Woodstock NRI meeting: 11/12 at 5:00 PM

DRAFT

Town of Woodstock Natural Resources Inventory Project
November 12, 2020, 5:00-6:00pm

Join Zoom Meeting

<https://cornell.zoom.us/j/98500958065?pwd=VnlkTVpZRlpXTEIxem0rR2VoMkdxUT09>

Meeting ID: 985 0095 8065

Passcode: 282631

Dial by your location +1 646 876 9923 US (New York)

Agenda

Participants:

Note-taker:

1. Review any comments received
2. Final revision of NRI maps and report
 - Report revisions by 11/20
 - Copy edit (Arlene and Julia) and photo selection (Erin) by 11/30
 - Final map revisions by 11/30 (discuss ledger maps)
 - Insert photos/final layout by 12/4
 - Graphic design of cover by 12/4
 - County to print copies of report, maps
3. Final presentation to Town Board, 12/15
 - Options for adoption: resolution, local law, comp plan amendment
 - Review resolution example
 - Memo with recommendations?
4. Next meeting – set date – 12/3 or 12/10 at 5:00?