

1. Welcome and announcements – 95 people attended (see listing below). The meeting opened at 9:30 AM. Stuart Findlay called the meeting to order.

The Draft March 4, 2021 minutes were reviewed. A motion to approve was made by Rob Pirani, seconded by Lucy Johnson. The minutes were approved. (No nays were registered in the Chat box.)

2. Staff Updates:

Update on New Members: Fran reported that twenty people applied to serve on the Committee, however appointments have not been made to date.

3. Announcements:

Budget/Legislation: Andy Bicking reported that the State budget was resolved April 1st. Funding for the Estuary Program continues to be stable at \$5.5 million within the \$300 million EPF. This is good news and will allow our programs to move forward. The Legislative session ends June 10. There are several environmental bills at both the state and federal levels that are seeing positive movement, including one related to regulating wetlands that is moving forward for the first time in over a decade. There is also movement on a Statewide Community Preservation Act which links to affordable housing needs, as well as a climate change bill aimed at regenerative farming and carbon sequestration, supporting climate-based strategies for working farms.

Dan Shapley reported on 2 bills, one that would require testing for additional chemicals in drinking water by the NYSDOH and one that would ban coal tar sealants on driveways, noting that USGS studies show that this is a big source of contamination in runoff to streams and waterbodies.

Estuary Grants: Susan Pepe announced that the deadline for applications was June 2. We received a great response and expect to announce grant recipients in the Fall 2021.

Nancy Beard announced that the Flood Resilience Handbook for Public Access Sites along the Hudson River from Troy to Yonkers is now available on the web:
https://www.dec.ny.gov/docs/remediation_hudson_pdf/hrfloodhndbk.pdf

The report was developed to assist owners and site managers of public river access sites to adapt their facilities to existing and predicted flooding. She thanked NYC Parks for their permission to use their flood resilience report as a framework for this effort as well as the participation of HREMAC members, ex-officio agency partners, DEC staff, and the managers of the case study sites featured in the report. The consulting firm WSP developed the report, and funding was managed through NEIWPCC.

Save the Date: October 14, 2021 – A Day in the Life of the Hudson and Harbor

4. Draft Action Agenda 2021-2025 and 2020 Coordinator's Report:

Fran Dunwell announced the release of the Draft Hudson River Estuary Action Agenda 2021-2025 and the 2020 Coordinator's Report: <https://www.dec.ny.gov/lands/4920.html> .

Stuart Findlay noted that the Action Agenda (AA) provides the Program with its big-picture road map, the one place where we get to see all the moving parts together. He congratulated Fran on its release.

Fran Dunwell advised that the AA is now available for public comment until COB July 9, 2020. The Action Agenda 2021-2025(AA) is a continuation of the Program's work with the inclusion of two cross-cutting priorities which run throughout the document: the recognition and call to address social and economic inequities in our society (DEIJ), and the need to build a more climate resilient environment.

The Agenda is organized along three overarching themes, and within each theme, there are chapters for topics as follows:

-A Vital River Ecosystem: (Sustainable Estuarine Fisheries, Robust River Habitats, Clean Hudson River Water)

-A Thriving & Resilient Watershed: (Healthy Tributaries, Climate-Adaptive Communities, Conserved Natural Areas for Wildlife, Source Water, Climate Resilience and Scenery)

-People Living Well with Nature: (An Informed and Engaged Public, An Accessible Hudson River for People of All Ages and Abilities)

Each section is organized the same way, with: an aspirational goal; measurable targets that build on previous AAs (as well as the Hudson River Comprehensive Plan and the NY/NJ Harbor and Estuary Plan); Measures of Success (how we will report our progress); strategies and actions. Each part of the agenda was passed through a strategy screen, to decide what to include and what not to include, taking into consideration factors such as the program's mission, the ability to show impact, and cost effectiveness.

Work on the AA began in 2019 and included several interactive meetings with the committee facilitated by Amielle DeWan (Impact by Design). Internal review by DEC was delayed due to COVID, but we are getting back on track. During the public comment period, there will be 3 small working group meetings where staff and committee members and others, will meet to discuss in deeper detail the proposed agenda. The meetings will be two hours, via WebEx and will be recorded. There will be one meeting for each theme. In addition to the meetings, Fran encouraged anyone wishing to comment on the Draft Action Agenda to submit their comments in writing by COB July 9, either by email to: HREP@dec.ny.gov , or by mail, NYS DEC Hudson River Estuary Program, 21 South Putt Corners Road, New Paltz, NY 12561. Comments and DEC responses will be captured in a summary document.

There was a question about how cross-cutting issues such as climate change would be handled between themes. Fran replied that the impact of climate change and DEIJ are considered throughout the entire AA. The climate change chapter has very specific actions related to that team's work. She also noted that there are other parts of DEC that focus on other climate change issues such as emissions.

At this time, Fran welcomed Kelly Turturro, DEC Region 3 Director to the meeting.

5. Estuary Program Updates:

Scenic Resources Protection Guide for the Hudson River Valley: Nate Nardi-Cyrus reported that this handbook is available on the Web. The handbook focuses on identifying and protecting scenic resources in the region and is designed to be used in concert with other information available to communities in the valley, such as comprehensive plans, open space plans, and natural resource inventories. It provides citizens and local government officials tools that they can utilize to protect key scenic resources within their communities.

https://www.dec.ny.gov/docs/remediation_hudson_pdf/hrvscenicprotg.pdf

There was a question about sample regulations in the report. Nate replied that this report does not include specific regulations or model ordinances but does have examples of the use of scenic overlay districts.

Hudson River Fisheries Unit (HRFU) Updates:

Gregg Kenney reported that the spawning shad and striped bass are moving out of the river, and the Atlantic sturgeon are arriving. The HRFU staff are out on the river and are sampling spawning adult sturgeon.

He thanked the committee for their supportive comments on the circle hook regulations that are now in effect coast wide for fishing for striped bass with live bait.

The invasive fish species, round goby, has been caught by a recreational angler in Crescent, NY, in the Mohawk, about 6 miles upriver from the Hudson. This species is getting close to being in the Hudson mainstem. It is a voracious benthic predator and reproduces rapidly. While we don't understand how they will impact the estuary, there is concern about major ecosystem impacts if this fish enters the Hudson.

Dan Shapley raised a concern regarding the final regulations that were approved for circle hook use, noting that there is a loop hole in the final language that makes it legal to use J hooks if something other than live bait is used. This will jeopardize the state's ability to meet the required ASMFC mortality reduction targets, impact the species and potential access to this recreational fishery in the future.

Gregg acknowledged that the ASMFC did change the requirements and NYS has adopted the revised ASMFC language. The final emergency regulations are different from the original regulatory package proposed. In the time between the original proposal and when the season started, the ASMFC made a change and New York State adopted the ASMFC changes which includes language about hooks attached to artificial lures. There is opportunity to give comment/feedback during the public comment period. The public comment period is still open until June 28, 2021.

Dan Shapley raised a concern about the impact of near-shore fisheries by-catch on sturgeon. Riverkeeper is drafting a letter for the Committee's consideration. He will provide more detailed information for HREMAC in the near future.

Gregg Kenney responded. He is looking forward to hearing more on the by-catch letter.

Hudson River Estuary Lesson Plans: Rebecca Houser presented an overview of a curriculum being developed by the Estuary Program Education Team that covers K-12 in three units; Elementary, Middle school and High School. The program is designed to provide progression over time, expanding a student's understanding in increasing levels of depth as they move through their education. It is an inquiry based, multi-component resource guide for teachers and students and is designed to meet STEM standards.

The program covers seven topics: estuaries, water and watershed, weather and climate, American eels, interdependent relationships in ecosystems, human impacts, benefits and interactions, and "A Day in the Life of the Hudson and Harbor." Within each unit there are several (4-5) lesson plans, developed at levels of detail to provide progression toward key ideas over time as students move up through the grades. This has been reviewed by teachers and grade bands, and additional review is planned.

Nicolette Witcher asked about marketing this to teachers. Rebecca listed several ways she is spreading the word, including the professional development work she does with schools she already

works with, district-wide training, using social media, and education conferences, as well as word of mouth and Day in the Life of the River and Harbor.

Fran Dunwell noted that Steve Stanne has a new book out, "The Hudson an Illustrative Guide". Published by Clearwater, this is a great teaching resource also.

6. Members/ Partners reports:

US EPA Wappinger Creek Superfund Site update: Victoria Sacks, EPA Remedial Project Manager and Shereen Kandil, Team Leader, Community Affairs Team presented an overview of the federal superfund site on the Wappinger Creek, Dutchess County. The site is located below the dam and falls and includes about 2 miles of the tidal portion of the creek to the Hudson River and that contains contaminated sediments. The area has an industrial history that dates back over 180 years and includes a wide variety of uses; textile dying, manufactured gas plant (MGP), metal plating, felt hat manufacturing, ammunition production, chemical manufacturing and distribution, and other activities.

Between 2000-2007, NYS DEC conducted a remedial investigation (RI) of Three Star Anodizing site (the upland property and Wappinger Creek). This was split into 2 units:

Unit 1 Upland area (OU1) -this included the Three Star property, a former raceway, a lagoon, the former MGP, and former Axton-Cross building. In 2017, DEC completed the Remedial Action (site cleanup) at the Three Star Anodizing site.

In 2010, Unit 2 (OU2), in the Wappinger Creek area, NYSDEC conducted a Supplemental RI for the tidal portion of the creek and found contamination.

In 2015, EPA took over and did a site assessment for the creek, and in 2016, EPA listed the site on the National Priorities List (NPL), and the site was listed as a designated superfund site. A graphic showed the overall superfund review and cleanup process. The main steps Include: Assessment, Characterization, Selection of Remedy, Cleanup, and Post-Construction. It was noted that community involvement is very important throughout the process.

The process is currently in the Characterization phase. EPA is collecting data to identify what, and where the contamination is and what the risks are. This spring a thermo imaging drone survey was completed. This spring/summer (ongoing) EPA will conduct surface water, in-creek ground water screening, sediment cores and in the Fall 2021, will conduct fish tissue studies to study contaminants in the food chain.

The drone survey was the first to be used in EPA R2. It can be used target specific GPS points to collect data to assess ground water impacts, using thermal imaging of surface water to identify where ground water seeps into the creek. The drone flies 300' above the ground, moving from GPS coordinate to GPS coordinate.

Next steps include characterizing the contamination, where it is, and what can be done to remediate the site, evaluate the human health and ecological risks. Also taken into consideration are cultural resources that may impact remediation.

Once a Proposed Plan is released, we have a 30-day public comment period in which the public reviews the plan. Within those 30 days, approximately 10 days after the Proposed Plan is released to the public, EPA holds a public meeting to discuss the proposed plan and EPA's preferred cleanup alternative. The public meeting is an opportunity for the public to ask clarifying questions and provide verbal comments on the plan.

Contacts for this project:

Victoria Sacks, EPA Project Manager, sacks.victoria@epa.gov

Shereen Kandil, EPA Community Involvement Coordinator, kandil.shereen@epa.gov

Damian Duda, EPA Section chief

Justin Starr, NYSDEC, Project Manager

Discussion: the group asked a number of questions regarding community involvement and testing.

The EPA has site profile pages with information about the site on the web and there will be a local public repository for published documents. Presentations have been made to local councils. There will be a 30-day comment period on the proposed remediation plan, and a public meeting will be held.

Will PFAS be tested? PFAS will not be tested. This is not a superfund chemical and is not a suspected contaminant at this site.

Will bacterial pathogens be tested? No, this project is looking mainly at heavy metals.

There was discussion about the creation of a Community Advisory Group (CAG). A CAG has not been developed for this site to date. This must be initiated and led by the community. EPA can provide support. CAGs can come in many forms, but usually have a chair or co-chair who oversees the advisory group and manages the agendas and group communications. They can request a facilitator which EPA can help with. It is important that the CAG be inclusive of the community, environmental groups, voters, academics, residents, etc. EPA will send additional information to the Estuary Program on this process.

7. Discussion Continued; the Future of the NYS Canal system: Stuart Findlay, with Lucy Johnson, Scott Croft and Simon Litten updated the Committee on their work and research into various aspects of the NYS canal system. A written report will be issued soon with additional information. The Canal and Mohawk River are a major tributary to the Hudson River. They are a major source of sediments to the river and provide an aquatic pathway for invasive species both into and out of the Hudson drainage. The HREMAC Canal study group has been focusing on 4 topic areas: Ecology (Stuart Findlay), Infrastructure (Simon Litten), a Sense of Place (Lucy Johnson), and Transportation and boating (Scott Croft). The members have been engaged in a fact-finding effort to bring together what is known about the canal and future potential changes.

He noted that HREMAC may want to make recommendations in the future on proposals and the information gathered now could be helpful if and when that time comes. There are many different users of this resource and conflicting priorities are to be expected. This effort is an attempt to develop a common basis of information to support informed conversations. The following is a summary of what has been gathered to date.

Stuart Findlay: Blue Back herring is a species that actively uses the canal and is affected by the operation of the locks. There has been discussion about restoring the canal, habitat restoration, reconnecting wetlands, tributaries, and management of the water delivery systems that impact these resources. There is limited information on water quality.

One of the most contentious issues is how to manage for invasive species. The round goby has passed barriers and is knocking on the door of the Hudson. The Canal is a known avenue for invasives to get into other water bodies. Asian carp, may or not be in the Great Lakes, and once there, nothing can stop this species from coming down the canal and entering into the Hudson. This would be bad for the river, and bad for the canal as well. One option that has been proposed would

be to have a physical blockage, requiring boats to be removed from the water, inspected and cleaned and returned to the canal on the other side of the barrier.

To consider the big picture, it will be important to look at all options.

Lucy Johnson provided an overview of the Mohawk River Valley from a human and geological perspective, citing the nature of the valley as a wide trough spanning west to east, vs the Hudson, a narrow fjord positioned north to south. These are very different places and the voices of the region must be incorporated into future discussions and decisions about what is best for the Mohawk Valley. An unanswered question from this investigation is, "Was the river brackish farther north before the Federal dam was built?"

Simon Litten provided an historical perspective on the whys and who's were responsible for the Barge Canal as we know it today, taking the discussion back to the 1903 when the NYS voters approved the expenditure of funds to rebuild the original canal (1800's) with a system that used wider channels with movable dams to allow for more grain to be transported west to east.

The Barge Canal was built in response to the NY Products Exchange, to deliver grain to ships in New York City at a time when business was decreasing due to competition from the railroads. The Canal's principal use then became the transport of commercial petroleum products from NY/NJ port to upstate communities which has led to a trail of pollution. He suggested that the calculated value of benefits of the canal and its maintenance costs be reexamined.

Scott Croft worked to track down boat traffic data. He thanked Riverkeeper and Fran for their efforts to get current data. He noted the challenges he faced in getting access to data as the canal uses a no-toll system, so limited data are collected. Most recreational use is centered between locks in the central and western portions of the system, though there is thru traffic between the Great Lakes, Canada, and the Hudson. There are 67 marinas, mostly in the western and central region that service the canal and Finger Lakes. Tour boats are a big tourism use, however that has been decreasing in recent years as a result of changes in canal management. The group's written report will be out soon.

Isn't the canal being touted as a transportation corridor for wind turbines and blades manufactured or finished at the Port of Albany? Lingard Knutson: No - mostly the wind materials will go from Coeymans to the Atlantic.

8. Old Business New business.

Dan Shapley followed up on last meeting's discussion on the Ashokan-Esopus creek proposed SPDES permit for water releases from the Ashokan reservoir into the lower Esopus Creek. Amanda LaValle, Ulster County Dept. of Environment, and Dan have drafted a letter for the public comment period which ends June 16 which call for a revised draft and more complete DEIS addressing the cumulative impacts of turbidity, sedimentation, weed growth, ecology and the economic impacts on Hudson River water quality and to the cost of treatment by communities for drinking water.

Steve Stanne asked if it is clear that increasing costs of sediment removal at HR drinking water intakes are due to Ashokan turbidity releases. Heavy rains cause increase turbidity from other tributaries, notably the Mohawk. Is it possible to separate Ashokan contributions from other sources?

Emily Svenson, on behalf of the Hudson 7, thanked HREMAC for its attention to the Esopus sediment issue.

Stuart Findlay suggested that the draft letter be circulated to committee members following the meeting, with a one-week turnaround time (June 11) to express any comments to Stuart. Stuart will then transmit the letter on behalf of the Committee to DEC before the close of the comment period on June 16. If a member does not reply, that will be taken as a vote in agreement.

Motion: Lucy Johnson moved that the draft letter be circulated to committee members following the meeting, with a one-week turnaround time allowed for HREMAC members to express any comments to Stuart (by June 11). Stuart will then transmit the letter on behalf of the Committee to DEC before the close of the comment period on June 16.

Seconded: Dan Shapley.

Discussion: Dan noted that providing advice to the Commissioner on the Estuary's ecosystem health is an essential function and responsibility of the Committee.

Vote: The motion passed. (No Nays were recorded in the chat.)

It was clarified that the letter will be signed by Stuart on behalf of the Committee's voting members and will be transmitted to the Commissioner. Fran noted that any dissenting opinions will be recorded and transmitted along with the letter as well.

Kelly Turturro noted that the letter will become part of the public comment record and DEC will require NYC to respond to all comments received.

New Business: Nicolette Witcher announced that the Hudson River Park Trust (HRPT) is releasing a Draft Sanctuary Management Plan Action Agenda for the 400-acre HRPT Estuarine Sanctuary portion of the park. There will be a public comment period that runs to August 9, and a public hearing to be held on 6/29.

Rob Pirani announced the release of the "Harbor Estuary Paddle Guide" which includes 164 access sites in the lower estuary, harbor area including information on launch sites and programs. He thanked Scott Keller, Greenway and Nancy Beard for their contributions.

9. The meeting adjourned 12:01 PM. The next HREMAC meeting will be November 4, 2021.

Respectfully submitted: Nancy Beard, recorder

10. Information and links provided in the Chat: June 3, 2021

Peter Weppler: USACE's Civil Works President's Proposed Budget was released - page 31 has NY related content: <https://usace.contentdm.oclc.org/digital/collection/p16021coll6/id/2191>

Beth Roessler: Resiliency Handbook:

https://www.dec.ny.gov/docs/remediation_hudson_pdf/hrfloodhndbk.pdf

Maude Salinger: Draft AA 2021-2025 for public comment: <https://www.dec.ny.gov/lands/5104.html>

Laura Heady: Scenic Resources Protection Guide:

https://www.dec.ny.gov/docs/remediation_hudson_pdf/hrvscenicprotg.pdf

Laura Heady: New web page on scenic resources: <https://hudson.dnr.cals.cornell.edu/conservation-planning/inventory-and-planning/scenery-mapping-and-planning>

Shorna Allred: Cornell DNRE Webpage: <https://hudson.dnr.cals.cornell.edu/>

Nate Nardi-Cyrus: Scenery Mapping and Protection Website:

<https://hudson.dnr.cals.cornell.edu/conservation-planning/inventory-and-planning/scenery-mapping-and-planning> and Scenic Resource Protection Guide:

https://www.dec.ny.gov/docs/remediation_hudson_pdf/hrvscenicprotg.pdf

and Creating and Maintain Hudson River Views: A Handbook for Landowners (2020):

https://www.dec.ny.gov/docs/remediation_hudson_pdf/hrviewshbk.pdf

Shereen Kandil, EPA to everyone: Guidance for Supporting Community Advisory Groups at Superfund Sites:

<https://semspub.epa.gov/work/HQ/100002540.pdf> and Community Advisory Group (CAG) Toolkit:

<https://semspub.epa.gov/work/HQ/175055.pdf>

Carrie Roble: Hudson River Park Trust's Draft Estuarine Sanctuary Management Plan and 2021-2030 Action Agenda <https://hudsonriverpark.org/activities/esmp/>

Rob Pirani: Paddling guide for the lower Estuary - <https://mailchi.mp/harborestuary/may-2021-tidal-exchange?e=3205ce6722#Paddling>

Attendance: 95

HREMAC Members:

Allan Beers	Rockland County Environmental Resources
Andy Bicking	Scenic Hudson
Janet Burnet	Ramapo River Watershed council
Scott Croft	Hudson River Boat Yacht Club Assoc.
Stuart Findlay	Cary Institute of Ecosystem Studies
Dan Shapley	Riverkeeper, Inc. (for Paul Gallay)
Lucy Johnson	Vassar College Lifetime Learning, HV Consortium, HRES
Suzette Lopane	Westchester County Water Agency
Shino Tanikawa	Lower Hudson Coalition of Conservation Dist.

Ex-OFFICIOS:

Diana Carter	NYS OPRHP
Peter Brandt	US EPA
Jamie Ethier	NYS DOS
Nicolette Witcher	Hudson River Park Trust (for Noreen Doyle)
Rob Pirani	NYNJ - HEP
Audrey Van Genechten	NYS Dept. of Health
Peter Weppler	US Army Corps Engineers

Jessica Kuonen
Dan Jeanson

New York Sea Grant
HRV Greenway (for Scott Keller)

Guests:

Helena Andreyko	Hudson River Foundation
Shorna Broussard Allred	Cornell University
Mark Castiglione	Capital District Regional Planning Commission
Carla Castillo	HRV Council
Nikki Chung	Scenic Hudson
Linda Cooper	Taconic Region OPRHP
Dan Croft	guest
Martin Dailey	Capital District Long Term Control Plan
Rosana DaSilva	Hudson River Foundation
David Decker	Audubon Constitution Marsh
Patrice Drake	Rockland County
Chana Friedenberg	HVRCouncil
Brian Gramlich Rahm	HR Watershed Alliance
Simon Gruber	Orange County, consultant
Oded Holzinger	Groundwork Yonkers
Shereen Kandil	US EPA (speaker)
Louis Kleinman	guest
Lingard Knutson	US EPA
Jon Kramer	Hudson River Foundation
Josh Lipsman	Athens CAC
Simon Litten	Mohawk river
Jim Lodge	Hudson River Foundation
Mary McNamara	Esopus Creek Watershed
Jesse Murray	NOAA
Chris Nack	SUNY ESF
Peter Park	Farmingdale Edu
Carrie Roble	Hudson River Park Trust
Victoria Sacks	US EPA (speaker)
Donette Samuel	guest
Rich Schiafo	guest
Richard Slingerland	Town Tarrytown
Steve Stanne	Clearwater
Don Steinmetz	guest
Emily Svenson	Hudson 7, consultant
Margie Turrin	Lamont Doherty
Russell Urban Mead	Cornell University
Peter Zaykoski	NEIWPCC

DEC, Estuary Program staff and SCA interns:

Nancy Beard

Estuary Program, Administration, and Access

Jessica Best	Hudson River Fisheries Unit
Chris Bowser	Estuary Program, Research Reserve, education
Ann Marie Caprioli	HRNERR, program administration
Scott Cuppett	Estuary Program, watersheds
Kathy Czajkowski	Mohawk River Program
Fran Dunwell	Estuary Program, Hudson River Coordinator
Sarah Fernald	HRNERR, research
Heather Gierloff	HRNERR, Research Reserve Manager
Jim Gilmore	DEC, Marine Resources, Region 1
Ingrid Haeckel	Estuary Program, Conservation and Land Use
Ann Harrison	DEC, Education
Laura Heady	Estuary Program, Conservation and Land Use
Amanda Higgs	DEC, Hudson River Fisheries Unit
Rebecca Houser	Estuary Program, Education
Alanah Keddell-Tuckey	EJ Office
Gregg Kenney	DEC, Hudson River Fisheries Unit
John Ladd	Estuary Program, benthic mapping
Jessenia Laureano	SCA
Mark Lowery	Climate Change office
Megan Lung	Estuary Program, SCA intern
Sherri Mackey	Estuary Program, administration
Jeff Mapes	DEC, Lands and Forests
Susan Maresca	DEC, Region 2, permits
Dan Miller	Estuary Program, habitat restoration
Sarah Mount	HRNERR, education, eel research
Nate Nardi-Cyrus	Estuary program, land use conservation, scenery
Chuck Nieder	DEC, DEC Bureau Fish and Wildlife
Tom Niekrewicz	Estuary Program, Water team
Anna Palmer	Estuary Program, SCA intern
Susan Pepe	Estuary Program, Grants Admin.
Dan Rearick	HRECOS
Beth Roessler	Estuary Program, Trees for Tribs
Maude Salinger	Estuary Program, communications
Justin Starr	DEC Environmental Remediation project manager
Sarah Stopak	SCA
Becky Thomas	Estuary Program, Contract Admin.
Audrey Trossen	SCA
Kelly Turturro	DEC, R3 Regional Director
Libby Zemaitis	Estuary Program, resilient waterfront communities

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