NC Coastal Resilience Community of Practice Meeting
Monday, December 7, 2020; 1 pm -2:30 pm, Webinar

Purpose of the COP: Bring together diverse coastal stakeholders to focus on how ecosystem resilience can build local community resilience.

Agenda

Welcome & Introductions. Attendees:

- Cat Bowler, Audubon
- Jacob Boyd, Division of Marine Fisheries
- Sam Burdick, Division of Coastal Management (DCM)
- Mike Christenbury, DCM
- Kacy Cook, Wildlife Resources Commission (WRC)
- Lora Eddy, The Nature Conservancy
- Stacey Feken, Albemarle Pamlico National Estuary Partnership
- Eryn Futral, NC Floodplain Management Program
- Joe Heard, Town of Duck
- Whitney Jenkins, Coastal Reserve & DCM
- Rachel Love-Adrick, DCM
- Brooke Massa, Wildlife Resources Commission
- Tancred Miller, DCM
- Amanda Ohlensehlen, City of New Bern
- Charlan Owens, DCM
- Sarah Spiegler, NC Sea Grant
- Jess Whitehead, N.C. Office of Recovery and Resiliency
- Lisa Williams, Mideast Commission
- New staff and members:
    - Grace Roskar, Coastal Reserve, implementation projects
    - Mackenzie Todd, DCM, coastal resilience
- Guest: Pam Mason, VIMS

1:10pm – Using Natural and Nature-Based Features to Build Resilience to Storm-Driven Flooding– Pam Mason, Virginia Institute of Marine Science. {Will also discuss potential applicability in NC}

Pam Mason is the Principal Investigator; she's excited to join us to talk about project. In last year of a 3 yr project, granted an extension due to COVID, funded through NOAA before they started w/NFWF resilience funding.
-Project goals: support preservation and creation of Natural and Nature Based Features (NNBFs); emphasize co-benefits related to water quality protection and flooding
-Study area, coastal areas with elevation less than 10 feet. 170,000 buildings in area
-Mapped existing NNBFs, modeling approach some features not included
-Dunes, beaches, 3 diff kinds of living shorelines, database hosted at VIMS Center for Coastal Resources Management; 350,000 NNBFs / discuss how linked
-Use a process called inundation pathways, flooding elevation pathway/way to connect buildings to where risk for flooding coming from. Create geoexplicit location
-Tidal marsh, wooded areas, several different attributes, data needed fixing and cleaning up, combine into wooded.

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-Critical facilities, look at separately, schools, facilities used as shelters, where does NNBF fit within tidal frame, how frequently NNBF would be intercepting floodwaters, put together to get first ranking
-Identify NNBFs that provide multiple benefits, use to take advantage of incentives

- FEMA CRS / score / NNBFs undeveloped lands in special flood hazard area / VA has Chesapeake Bay Preservation Act, requires all features be protected, Resource Protection Area (RPA) 100 ft landward buffer,
- Water Quality / Total Maximum Daily Load (TMDL) credit / all vegetated cover potentially provide WQ credit b/c vegetation provide WQ services, varies depending on location and intrinsic factors

-Data is housed on Adapt VA.
-In process of developing outreach for local governments to use for planning, project reviews, site development, etc. in this phase right now. Originally wanted to do in person training but rethinking approach due to COVID, may create training webinars, virtual meetings, etc.
-Interactive map what looks like
-VA at state level focus on intermediate high projection/ SLR scenario 2070
-Tool, different tabs, already existed, have added features and tabs based on this project
-Next step apply rules developed to rank these
-Tools ranked / 4th tab shoreline management/ see where might want to do projects, recommendations for shoreline, Shoreline Management Model, highlights state's preference and now mandated requirement for Living Shorelines/highlights where LS suitable, but also map where not appropriate, convert into something that's more environmentally / natural resources friendly
-Targeting slides: for new NNBF creation or restoration to enhance resiliency
-Highly developed shoreline/ red no NNBF b/w waterway and flooding path to the building, found points, chose 100 ft buffer circles, 1st line of defense, want to look further
-Have shoreline management model as a piece to offer
-Overlay all together / targets/protection & restoration opportunities, have lands suitable for living shorelines in another part of viewer, put together / opportunities to create or restore NNBFs to benefit buildings

-Sam asked about living shoreline suitability, in NC so far this has only been done for Carteret and Onslow with TNC tools.
-Pam noted they are in the process of applying for a few grants to look further into this aspect.
-Use fetch as surrogate for energy rather than explicitly develop models for flooding
-Proximity of visible infrastructure, roads, houses, can't always see septic tanks, red flag for certain approaches, etc. modify bank slope / Easy / harder retrofit??
-Model shorelines based on assumption moving forward might change / based on rules on what is feasible, remove a bulkhead at grade / look at geography from gulf coast as well, Galveston/Tampa, Mobile, etc. developing a tool for Maryland with EPA

-Stacey noted we invited Pam today because APNEP is a partner, role is to evaluate the feasibility / applicability of using this approach in NC, would like to get feedback from the COP.
-Pam noted the shared waterways are in the model, could add downstream portions, making complete systems so data available on a broader scale
-Sam asked the group how they thought we might be able to apply in our state, whether or not anyone had any initial thoughts or reactions?
-Joe said a number of communities taken initial step to do vulnerability assessments and that nature/this take that and exponentially add to it. Go beyond identify issues, get into addressing solutions, build on efforts could look at what is being done in VA
-Pam will share slides that have the ranking
-NC comparable / protected, but someone can ask for a permit to impact them
-Cat: for the NC resilient coastal communities program/may be opportunities for this type of analysis to plug in to that planning and analysis

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-Sam gave a brief overview of the NC Resilient Coastal Communities Program : new program received funding from NFWF & state legislature/implement framework for local resilience / provide capacity to local governments to implement resilience planning
-Application period for first 2 phases: communication/vulnerability and risk assessment; prioritize resilience projects / eligible for funding and design/implementation funding to offer communities; put them in a better position local governments can take advantage of other opportunities for implementation
-Pam suggest: Extensive database developed for VA / Ross Weaver of Wetlands Watch / can put in touch with him avoid pitfalls /
-Sam: critical assets and infrastructure in analysis can see it having some overlap, may be synergies with NFWF CREST tool / siting tool
-Lora: VA project sounds cool, refined way to look at smaller areas, identify vulnerable areas, very site specific tool
-Pam: want to be applicable, why focused on 10 ft elevation / VA not have priorities for wooded areas, etc.
-VA Conserve VA heritage program has been developed / came out since this project started
-Want something can use right away that's consumable /
-VCAP program / funding to do these projects / link where there might be money available to funding/information / landcover turf / impervious surface / tradeoffs, co-benefits, targets very local and specific / could roll them up, 30-40 target areas/give info at 2 different scales /
-Lora: typical focus on stormwater management / communities early on determining risk and vulnerabilities / preliminary big vision/no dedicated funding sources / TMDLS not criteria / not have staff moving those projects forward / scale
-Pam SWCD players cost-share on projects on other projects / it's whatever you have / capacity and interest / co-benefits, other ways to manage once have process in place / work with local communities where they want to be and priorities
-Pam: Happy to have input / other eyes and folks looking at the VIMS tool. May be able to leverage work in NC with opportunities in VA, she shared this group with Ann Phillips and Shep Moon with VA DCM / signed onto REGI / community of practice interesting approach, VA has a resilience Technical Advisory Committee (TAC) / COP is a good concept.

1:35pm – Round robin updates / Discussion

-Jacob: NWL stakeholder group recently had a meeting, moving to implementation plan, will meet again in January, ties in with the COP, CHPP updates are ongoing. Stacey mentioned that a few folks had also been talking about NWL actions and how they dovetail with CHPP updates and outreach and the COP.

Sarah: -NOAA water initiative project risk communication with underserved communities, 1st phase of project, Hawaii, internship program for minority students / risk communication paper work with underserved communities, Literature review from NOAA NERTO graduate intern Karla Lopez, on Digital coast website: https://coast.noaa.gov/data/digitalcoast/pdf/underserved-communities.pdf
-NC Sea Grant is currently accepting applications for a climate resilience extension associate: https://jobs.ncsu.edu/postings/137886. It is a two-year funded position, that is an extension of my former position with Sea Grant as the coordinator of the NC Sentinel Site Cooperative.

Sam: updates related to Resilient Coastal Communities Program.
-Community and contractors RFPs open. Deadline January 29, 2021
-Communities can apply for direct technical assistance, average budget 30K for each community, deadline January 15, 2021. If communities interested in applying send their way. The Program planning handbook is on website, was formerly ? curriculum/guidance. Includes tools, step by step approach, phases, minimum requirements, what you can do to get credit for previous work. Please share with your networks!
-Able to receive a little over $2Million from RSF/NCORR / disaster recovery assistance fund.

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Whitney: -working on projects on protected lands, having a workshop with land managers to network on resilience issues. Cat from Audubon and Paula from the Rachel Carson Reserve will present.
-Host NOAA Office of Coastal Management Planning Effective Projects workshop; adapt to offer online and making virtual / was 2 day in person / 3 day Feb 9-feb 11 / sign up
-Host Access Grant Virtual Workshop Series for Coastal Local Governments in January
https://coast.noaa.gov/digitalcoast/training/project-design.html

Cat: -marsh restoration work in Currituck sound put together working group as part of the Currituck Sound Coalition, developing a marsh conversation plan for northeast NC
-work with Elizabeth State University and UNC, using drones to monitor SAV, marsh and other habitat types
-Ecosystem services valuation tool for the Lower Cape Fear region / contractor?? / quantify restoration work / applicable to other parts of the state. Put economic value to NNBFs

Eryn: -assist w/ASFPM conference in Raleigh May this year, will see how it plays out with restrictions with large gatherings
-Wrap up virtual workshop series, floodnc.gov : look at events page if interested/online training/outreach resources / floodplain administrators /
-start to put together floodplain administrators 101 courses/ tailor towards newer staff need background and education/virtual likely as well /
-now are part of pilot program for private flood insurance program. Will be interesting to see how roll out and impact mitigation/standards for building/tie to building codes, keep an eye on how that plays out / tie to mitigation factors, more information rolling out/ interest in maintaining standards for brining structures into compliance with building codes / how maintain and not tie to insurance /
-Private insurance pilot program. The videos are found on the North Carolina Rate Bureau site under the training and user guides tab. Link is below:
http://www.ncrb.org/ncrb/trainguserguides/instructionalvideos.aspx
-Lisa asked if there was any word on when they will offer the CFM exam again, and how losses on private insurance affect the RL/SRL list? Eryn said there is no update on the CFM exam or L273 class dates. We are discussing this weekly with FEMA and hoping to be able to schedule soon. Stay tuned. They are unsure at this time how this will affect the programs for NFIP, Hazard mitigation and CRS.

-**Brooke**: Kacy Cook and I are hosting informal Q&A sessions on the Green Growth Toolbox (4 sessions over the next 2 weeks), you can register here: https://www.ncwildlife.org/Conserving/Programs/Green-Growth-Toolbox/Training-Workshops/Workshop-Registration

Grace: first week, no updates yet

Jess: NCCORR: regional rural resilience program underway, challenge with DPS, financial support pulled off to support HOPE program / process of hiring regional resilience program manager hired, if anyone getting questions, someone to telework/ need someone to travel to eastern NC once travel feasible again.
-Get SOW for contractor set up process for guidebook/NCORR spend funding through HOPE program for /3 small projects with support from USCA / statewide flavor: different ways provide support for agencies who participated in the EO80 climate R&R plan, climate report, what help agencies who may not have thought about climate before instead of just assets, develop and scope out a statewide resilience toolbox / something like adapt VA not just coastal, work with state climate office, FTE, long term, maintain / find different ways to do equitable engagement / work CC into hazard mitigation plan / cross cutting strategies: statewide flood risk blueprint, do in equitable manner, make progress / ## recs from RSF: number of folks implement HOPE/includes same staff in policy&plan from NCORR, create a process for CBDGR and BRIC funds, outline process/ so not have to do action plan amendments at this time / need policy & plans shop back from HOPE /

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Joe: work with Sam on RCC program identified a good candidate project will talk more on that; 6 months Town of Duck work with Western Carolina Program for Study of Developed Shorelines, project dovetails with 1st step of RCC program/ ahead, identify area vulnerable to flooding in part of town
-work on adoption of OBX regional hazard mitigation plan / 1st update in 14 years to comprehensive plan identify resilience / great plans
-BRIC submit a grant resilient program/comprehensive resilience program with 3 components: LS, marsh restoration, shoreline stabilization elements / ADA accessible improvements / add component of public accessibility to LS project / show off / hope will add to value of project / individual property owners and communities see / raise elevation of Hwy 12 / ¼ mile stretch of roadway / stormwater management as part of that.
-1.38 million BRIC grant, have some matching grants as part of that/ BRIC LS/Dare county tourism / NC Dept of Public Safety / gatekeeper for grant / fall winter 2021 / neighborhood associations excited / get great project on ground / example for other communities who want to come take a look

Lisa: no updates / has been looking into RCC applications / familiar with any communities potentially apply? / reached out to several communities / feeling of being overwhelmed / sifting through opportunities what is relevant and what's not has become a real challenge / try to bring ones forward that would be relevant /hurricanes/tornadoes/COVID short staffed to begin with

> Jess: have discussed with Sam/Tancred/etc. about steer towns to certain communities maybe towards regional program coming out next vs. RCC / don't want to launch until have guidebook/training with Rural center / Lisa think makes sense to look at more regionally/ regional problem or challenge with COGs / have been in conversation with Robin from Bertie county / someone reached out from Hertford / recently added to Lisa's territory, was Pitt/Beaufort/Bertie / have offered to assist / through her position and planning department

Lora: work with Holly Town of Nags Head awarded funding under NFWF, develop a estuarine shoreline management plan, grown out of work TNC done at Nags Head Woods/ also use drones/ see if transition of habitat/erosion analysis/ were awarded $75k for that project start in 2021 / might also translate to land manager resilience group that Whitney mentioned
-TNC replace several culverts on Roanoke Big Swash easement/ hunt club/primarily provided habitat benefit for fish spawning, also see benefit flooding to hunt club/co-benefit reduce flood duration and also co-benefit of fish habitat
-done with NEPA review for Great Dismal Swamp project at headwaters of the Pasquotank River / prior ditched and drained to harvest timber in that area/put in structures in that last outparcel for refuge/ planting Atlantic White Cedar /downstream benefit /hold water back, attenuate flow/may not be in a municipal jurisdictional boundary / but provide benefit downstream / flooding issues upstream on both sides / WQ mesh resilience work on coast Lora does with WQ & floodplain protection person/
-working on Cape Fear, protection on Black river focus on explore resilience benefits habitat provide to communities downstream

Amanda: New Bern update on resilience and hazard mitigation plan process / meeting later this week with consultants unveil to staff / solutions for flood resilience / Neuse / Trent River highly vulnerable / survey geared to residents /meeting Feb 2021 / community public event 1st week in Feb / good participation from community / drive how prioritize work / https://www.surveymonkey.com/r/NBResiliency2
-receive NFWF funding prioritize Nature based solutions that scored highest, get to 90% design, thanks to all that helped with application/plans not want to sit on a shelf / lead to implementation in the future / vulnerable / economically distressed communities / lower hanging fruit with CBDG funds/ take portion of community/add linear wetland, improve retention and discharge, allow water get out of community faster / 5 feet elevation / flood hazard / replicate in other neighborhoods / bring back amenity in community areas that have had decades

of decline disinvestment, /drone in Nags head/ consultant looking to collaborate / company in east that is qualified would like them to have opportunity to do work /
-USACE doing a few SE studies with Carteret/ Craven counties / multi-year study Neuse river basin / meetings other study / large plan go before congress in future / downstream flooding / make sure voices heard at federal level as well / impacts in floodplain in future / happy to do anything to make connections

Stacey: APNEP working with Washington and Tyrrell counties, received word of funding from the Water Resources Development Grant to do a planning study, looking at flooding and water management on the northern Albemarle-Pamlico peninsula in Scuppernong River drainage adjacent to Phelps Lake/Pocosin Lakes NWR
-Tribal Resilience project with the NC Commission of Indian Affairs, NCSU, Virginia Coastal Policy Center underway
-Ecological Flows team/ contracting with ECU to do a pilot study in the Neuse River focused on the Trent River Watershed to develop flow-ecology relationships, had also been looking at the Cashie and Chowan
- MOU with VA in shared waterways that flow into Albemarle Sound, natural resource agency designees meeting regularly to discuss next steps

Mackenzie: no additional updates

Tancred: cool to hear updates from partners, there is a great deal going on, it's encouraging!

Reminder: we meet quarterly, will send out a doodle pol. Next meeting scheduled March 11, 2021 from 10-12.