

Chesapeake Conservation Partnership & Chesapeake WILD

WILD Stakeholder Engagement

A Working Session

February 23, 2021

Online - Zoom+Covision

Facilitated by:



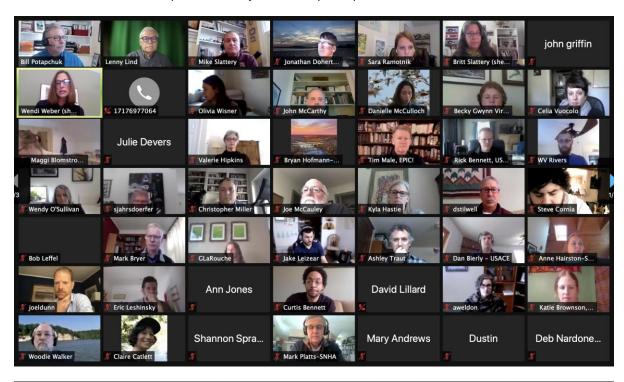


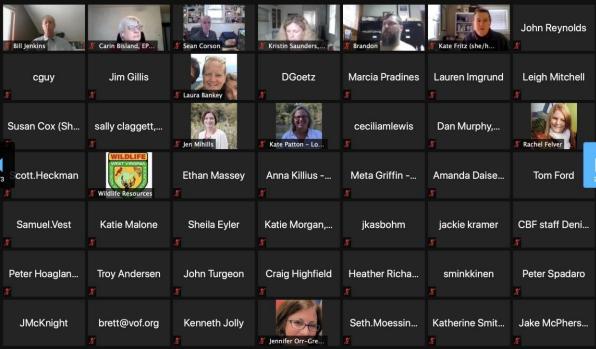
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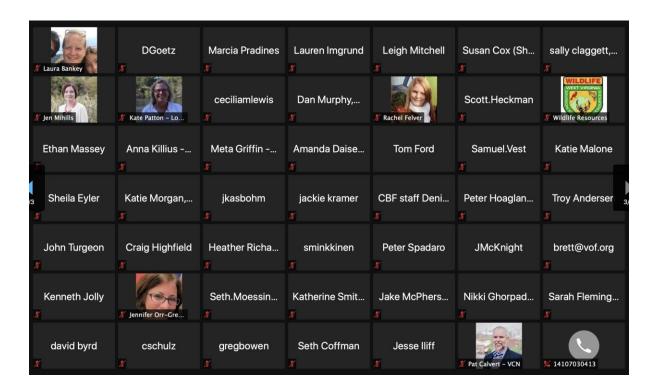
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Screenshots

Note: Screenshots overlap substantially; total 107 participants at 9:36a 2/23/21







Participant Head Count:

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107 @ 9:36
109 @ 9:39
110 @ 9:40
117 @ 9:50
118 @ 9:54
121 @ 9:57
116 @ 10:01
111 @ 10:34 (end of breakout #1)
110 @ 10:38
110 @ 10:46
111 @ 10:59
107 @ 11:05
104 @ 11:30
106 @ 11:37
104 @ 11:45
92 @ 12:00
85 @ 12:02
26 @ 12:03
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About Us

What kind of organization do you work with?

(Participants chose one item)

Item		Check	s % of Voters
Nonprofit organization		53	49%
Tribal Representative		4	4%
Executive branch Federal ag	ency	35	32%
Congress		2	2%
State government		10	9%
Local government		1	1%
Other (enter below)		3	3%
	Total Checks	108	

"Other" Organizations

001	coalition
002	academic institution
003	WVDNR
004	USFWS
005	WVDNR
006	Trout Unlimited Inc. Western Maryland Initiative

Sustain and enhance restoration and protection activities by conserving a resilient network of fish and wildlife habitats and connecting corridors, with emphasis on vulnerable species and habitats.

TASK (in small group discussions)

Identify potential programs and projects that would help make progress toward this pillar that are viable, effective, and contribute to equity.

THEMES

Developed from group input during session by Jonathan Doherty / NPS:

- Blueprints for important lands -- help articulate common Goals/Vision based on data (e.g. Delmarva Oasis)
- Integrate wildlife movement corridors in wildlife action plans, and create multi agency strategies.
- Wide range of projects help -- how to visualize overall impact?
- **Private landowner strategies** -- the bulk of the land; need to ramp up and make more efficient/effective
- Identify natural areas closed to burdened communities and enhance wildlife values & community benefits
- Connect capacities across jurisdictions vertically and horizontally ... in terms of technical assistance, technology, research.
- Intentionally link funding programs for example ...
 Integrate actions necessary to restore / protect priority habitat / species into the selection criteria / funding priorities for existing programs such as NRCS restoration programs for private landowners to ensure that private lands projects that are priorities for Ches WILD are highly ranked and

funded. Possibly encourage NRCS to create a separate ranking pool for projects that would benefit Ches WILD goals.

PARTICIPANT INPUT

- OO1 There is an Upper Rappahannock partnership that is working to add 10-15 public access points along the Rappahannock and Rapidan river corridor
- 002 USDA, NRCS Assistance programs
- OO3 Chesapeake Bay Fish Passage Workgroup providing fish passage (mostly through dam removal) for priority species (river herring, brook trout); Patapsco Dam Removal Projects (Bloede, Simkins and Daniels dam removals); other dam removal projects located throughout watershed; NOAA's community based restoration project can lend a hand with matching funds.
- OO4 DATA! Inventory of species needs matter: If you're doing a network of corridors of species, there needs to be a lot of data already available of what info those species need (forest, marsh, grasslands).
- 005 ecological site Descriptions
- OO6 James River Association's Living Shoreline Program and James River Buffer Program
- OO7 BLUEPRINT important: common goals that groups are driving toward.
- 008 Delmarva Oasis
 - Delmarva Restoration and Conservation Network
- OO9 PA looking a true wildlife corridors, potentially part of Wildlife Action Plan,

 VA linking Wildlife Action Plans to Corridor crossings to minimize conflicts with transportation
- O10 Barriers for permitting and cultural barriers within communities.
- O11 Work with community groups and local zoning authorities to preserve and restore corridors and connected-ness.
- O12 Multi state agency MOU for wildlife corridor conservation. Strategic Synergistic Sustainability. Improve existing actions by relevant agencies to ensure wildlife friendliness.
- O13 Articulation of areas needs to align with goals/metrics in the state; Consider smart growth of a growing human population, as it may shake out what will be prioritized and what can't be; consider equitable consideration for space, housing, other needs for various communities that are moving, shifting, growing in the watershed
- O14 We know the target habitats, we need to overlay with the underrepresented priorities such as tribal priorities.
- O15 Eastern Brook Trout Joint Venture; Trout Unlimited Conservation Portfolio; public and private roads with trout, eels, shad and river herring habitat corridors and conservation

- enhancement goals (Piedmont Environmental Counsel); cattle exclusion in Upper Rappahannock River Watershed (Piedmont Environmental Counsel); AOP, dam removal, ag practices; Cost share and loan programs for ag BMPs (PEC); hold conservation easements and require easements (PEC)
- O16 Upper Susquehanna Watershed Alliance includes 40 partners and 8 working groups, with some partners across state lines
- O17 complete landscape conservation designs to allow new refuges to be created
- O18 Develop habitats and corridors that are necessary to protect watershed-wide with climate effects on key species as a basis
- O19 Identify the natural areas that are closest to burdened communities and find ways to enhance the wildlife values of those areas AND community benefits from them.
- O2O Targeted outreach with planning and zoning departments
- O21 Assess Wildlife Corridor Action Plan (which is synthesized with state Wildlife Action Plan) in Virginia. Consider expanding to other states in the watershed
- O22 Need to define the idea of a "resilient network"
- O23 Use the precision database for the entire watershed as a data base from which to work...and keep the database refreshed at least yearly
- O24 Focus research away from historical lands that are important for traditional or cultural uses.
- O25 Connect existing habitat corridors. Use scientific tools to achieve this outcome.
- O26 Work with the Chesapeake Bay Program, as existing goals and outcomes of the Chesapeake Bay Watershed Agreement align with these pillars, and have committed partners to meeting these outcomes.
- O27 Make sure that the communities where you propose restoration projects are at the table to participate in design and throughout the process.
- 028 Smithsonian's Virginia Working Landscapes
- O29 Pocomoke River, large floodplain restoration replicate more projects like this in other states. Try to go big and do large-scale restoration. It takes effort to build these types of partnerships
- O30 Partners for Fish and Wildlife program; VA state working with NRCS on early successional habitats for quail; anadromous fish and aquatic connectivity programs (including funding for recreational access); Creatin of near-shore habitat (living shorelines instead of rip rap), marsh migration—corridors from salty-brackish to freshwater upstream; in urban areas, taking out failed bulkheads and restoring connectivity and access; community resilience planning for low-lying neighborhoods.
- O31 Acquire habitat corridors, conserve and protect large blocks of land in corridors, restore corridors when necessary.
- 032 work with counties and private landowners on protecting tiger beetle habitat with offshore breakwaters

- O33 In WV, easily manage state and fed lands, but want to extend to private lands (working with NRCS, other agencies, programs, etc.) to retain cold water areas, hold sediment, confine sed. loos of habitat for cold water species is a big issue. Wildlife too: migratory song birds. More programs to help us work with and leverage more engagement with Private Landowners to generate more interest. Agencies playing role in management planning, less opportunistic, more strategic. A more effective way to work on private lands. not many conservation regulations to keep those habitats degraded. Throws a wrench in any larger conservation efforts. Focus on zones that are critical habitat. ex: private lands near source waters for brook trout. Forest succession areas on private lands for certain birds. Channel efforts in areas that have been deemed a priority, regardless of ownership.
- O34 Always a lack of funding -- way more applications than what there is funding for.
- O35 Work with the Chesapeake Bay Program, as existing goals and outcomes of the Chesapeake Bay Watershed Agreement align with these pillars, and have committed partners to meeting these outcomes.
- O36 promoting existing programs to private landowners but give them support and lift with applications and regulatory hurdles
- O37 Smithsonian Virginia Working Landscape Program
- O38 Is anything missing from existing state and local programs? Should they focus more on habitat corridors?
- O39 Rappahannock tribe > Fones Cliffs habitat conservation in the middle of the Rapp watershed, near Tappahannock. Active & viable project with USFWS, state agencies, non-profits.
- O40 Piedmont Environmental Council for dam removal and focusing on brook trout restoration.
- Open space institute initiative focused on mountains, using science-based metrics, using TNC data... good example of initiative getting at this pillar.
 - In Georgia: used state revolving fund to address issues in underserved communities near habitat.
- O42 Create a specific goals oriented set of essential partnerships necessary to achieve desired results. Include land trusts, conservation and social nonprofits, all levels of government, tribes and house the partnership in the Chesapeake Conservation Partnership
- O43 Smithsonian Environmental Research Center anadromous fish research program
- O44 Partners come together around a species for unique partnerships such as NFWF funded logperch grant in Cecile and Hartford counties.
- O45 fish passage in headwaters
- O46 Use and invest in the DEIJ dashboard. https://chesapeake-deij2-chesbay.hub.arcgis.com/
- O47 learning the uses of local flora and fauna (including significance in folklore),
- O48 coldwater stream programs come together to help inform this effort

- O49 Important to connect capacities across jurisdictions vertically and horizontally... in terms of technical assistance, technology, research. For example local jurisdictions rely significantly on MD DNR and other state and fed agencies for capacity
- O50 Piedmont Grassland Bird Initiative (Virginia Working Landscapes and Piedmont Environmental Council)
- O51 Chesapeake Monitoring Cooperative
- O52 focus on resource and connections
 - encouraging private land easements
 - taking advantage of a resource based economy
 - Corps of Engineers can provide project list but needs willingness partners to sponsor and step forward prioritize; they are project funded
- O53 Programs that ensure that are corridors for species based on climate change assessments. Use best land data available.
- O54 Friends of the Rappahannock--general restoration in the watershed.
- oss scan bay program barriers identified in their analysis for aquatic species and habitat goal teams to see if we can address those with these programs
- O56 Ducks Unlimited--direct restoration around the watershed. Partnership with NRCS (working lands with wildlife program)
- 057 conservation easement promotion
- O58 Small Watershed Grants and Nutrient and Sediment Reduction Grants through National Fish and Wildlife Federation.
- O59 Leveraging multiple restoration goals to identify landscapes that accomplish simultaneous goals. Utilize existing mapping tools, agree to one mapping application. Ensuring projects serve multiple purposes (equity), restoring forest/riparian zones to improve brook trout habitat as well as water quality (drinking water) for downstream residents.
- 060 james spiny mussel, yellow lance, green floater habitat restoration
- O61 Better regional approach to oyster restoration in the Bay.
- 062 living shoreline restoration activities in migratory bird flyways Alliance for the Chesapeake Bay Cape St. Claire community in Annapolis, MD
- O63 Bringing in universities and colleges to do monitoring to help move along these projects (especially in NY and PA).
- O64 figure out how to make contribution to equity
- O65 Bring in money to graduate programs to help with monitoring opportunities.
- O66 Acquire more lands near wildlife refuges with partners. More habitat management. Also concentrate acquisition on lands that are vulnerable to sea-level rise and at high altitudes so that species can thrive in a changing climate. We need to think more about the places in between such as the Piedmont and coastal plain.

- Most of lands we work on has to happen on private lands, but participation is waning.

 Need to consider a more legislative approach. In PA, same practices, running out of places to do it. Lots of carrots, might need a stick. Lots of bay area, so much outreach, many interest groups. Hold outs are folks with ag mindset. or very private lands mindset.
- O68 Score card/criteria to evaluate conservation easement programs, compound multiple pillars (more pillars greater interest). What land may be of interest to serve multiple goals and achieve equity and co-benefits?
- 069 Regional RCPP through NRCS
 - Ditch mapping in the saltmarsh system, paired with Northeast ditch remediation techniques (filling ditches with marsh grasses)
 - Fully fund the SMART teams for technical assistance in marsh restoration
 - NAACC (North Atlantic Aquatic Connectivity Collaborative) provide aquatic organism passage at road stream crossings
- O70 Keep eye on land transitions, for private lands opportunities.
- O71 Integrate actions necessary to restore / protect priority habitat / species into the selection criteria / funding priorities for existing programs such as NRCS restoration programs for private landowners to ensure that private lands projects that are priorities for Ches WILD are highly ranked and funded. Possibly encourage NRCS to create a separate ranking pool for projects that would benefit Ches WILD goals.
- O72 Identify how connectivity can expand into urban and suburban areas within the region
- O73 Prioritize projects that link together previously protected parcels, even small acreage parcels. (Nanticoke reference linking together less than 1000 acreages to link 16k acres of protected land.) Small parcels, big impact.
 - Review existing portfolio of protected lands for habitat restoration opportunities. Building on state collaborations to investigate opportunities to identify/address fish passage barriers. (ref Wildlife Corridor Action Plan -- VA DWR/DCR pship)
- 074 Beach monitoring programs.
- O75 High-resolution land cover data to help identify areas where we are losing land.
- O76 Preserve underwater grass beds. Water to remain in 30x30 conversation.
- O77 Virginia combined blue and green infrastructure to look at things all together.
- O78 Expand extent of DOD funding in bay watershed by expanding sentinel landscapes.
- O79 Can we incorporate green energy projects for landowners (such as solar) to support climate objectives for the species and habitats we want to protect and restore?
- O80 Rappahannock River river habitat in middle of River Fones Cliffs, impt to Rappahannock Tribe
 - Headwater streams in WV protection of riparian habitat, water quality, farming practices and other programs that protect headwater streams
 - Thin layer deposition for protection of marshes
 - Fish passage and aquatic connectivity

- Conservation of at risk species and SGCN's
- **Invasive Species**
- VA Safe Wildlife Corridors--groups working to create safe pathways across the state.
- 082 STEWmap
- O83 County green infrastructure plans in MD.
- O84 Making sure that restoration and riparian buffers are designed for habitat and opportunities for access
 - Conserve existing forests and habitats as a high priority; find a way to score existing buffers
- 085 Feeds well into Trout Unlimited's programs for fish passage, dam removal, barrier surveys, etc. Fits well within National Fish Passage Program, NFWF funding through Small Watershed Grants. Lines up well with NRCS-CRP that take less productive portions of fields and returning it to natural habitat that can serve as stream buffer in improving downstream water quality. Grant could provide critical funding for implementation of projects such as barrier removals, etc. Look at what these existing sources of funding do, and identify gaps in the funding. Using the funds to targeted approach towards headwaters communities like West Virginia. A lot of funding in Chesapeake Bay is driven by TMDL for Nutrient & Sediment reductions. This funding could have additional/alternative measurements of success - i.e., barriers removed, wildlife protected, land conserved. Using these funds to increase funding for land acquisition or easements programs. Bay-specific - if there was a program that could target private landowners that live along the Bay and provide funding for "softening shorelines" to reduce erosion, at a large enough scale, could have an impact. Funding to help those landowners could be beneficial. NFWF interested in concept of "bonus payments" for high-value riparian corridors. Using these funds to help support or supplement that work would provide an easy avenue to plug in these funds to support that existing work. Implementation is Priority #1 over education, recreation, etc.
- O86 Best projects overlap pillars, want to leverage most goals. Locating of the project can have two lenses, EJ Screen. Wetlands and riparian buffers check off most of these boxes. Lot of good mapping has been done. Want to get everyone on that same page, agree on target map, agree to a set of filters in project determination. Restore areas where you will actually see a benefit. Brook trout is a good example. Have a scorecard that encompasses these pillars and rates projects. Want a robust co-impact/co-benefits, and equity filter.
- O87 -Fish Passage Connectivity; riparian, in stream, and aquatic focused restoration;

Increase capacity and support for **coordinated restoration and protection activities** in the Chesapeake Bay watershed, particularly in underserved communities, through outreach, education, and civic engagement.

TASK (in small group discussions)

Identify potential programs and projects that would help make progress toward this pillar that are viable, effective, and contribute to equity.

THEMES

Developed from group input during session by Olivia Wisner / Chesapeake Research Consortium::

- Align Chesapeake WILD work with existing efforts (ex. Chesapeake Bay Program, Gateways Network, state programs)
- Listening and working toward the goals of the community.
- Involve communities in planning/ restoration activities (ex. translation services to expand participation and engagement)
- "Looking at areas of need, overlayed with communities in need."
- Support organizations that serve historically disadvantaged communities (financial and staffing capacity). Funding meaningful work at the community level (multi-year, trust, community ownership)
- Youth leadership (MWEEs, internships, outreach programs aimed at DEIJ communities)
- Intentionally create regional partnerships (outreach and marketing)
- More programs to work with and leverage private landowners
- Gaps in funding
- Maintenance

PARTICIPANT INPUT

- OO1 James River Association's Living Shoreline Program and James River Buffer Program
- 002 Chesapeake Bay Gateways Network
- OO3 Work with the Chesapeake Bay Program, as existing goals and outcomes of the Chesapeake Bay Watershed Agreement align with these pillars, and have committed partners to meeting these outcomes.
- OO4 Prioritize areas for specific species in the watershed -- instead of widespread throughout the entire Bay
- OO5 Smithsonian Environmental Research Center is doing great work to prioritize dam removal across the watershed.
- OO6 Communities should be involved in planning and restoration activities support translation services (including real-time) so there is accessibility for non-English speakers to participate.
- 007 Smithsonian Virginia Working Landscape Program
- OO8 Piedmont Environmental Council for dam removal and focusing on brook trout restoration.
- O09 Virginia DEQ manages roundtables with purpose to coordinate conservation organization together by HUC6. Increase financial support for this type of coalitions or replicate in other states where this doesn't exist.
- 010 Smithsonian's Virginia Working Landscapes
- O11 Support a translation service for Chesapeake wide educational materials and outreach and in person support.
- O12 Improve communication of MS4 interested parties. Reduce blinders and ensure all parties are looking at the intent of the permits more holistically.
- O13 Programs that show tangible benefits and histories of the access areas acknowledging what Indigenous Nation lived there, educating people on how environmental activism impacts their everyday life,
- O14 There are lots of bright spots in the region on educational (i.e. school) engagement, but continue to expand it focused on populations we don't traditionally reach.
- O15 Alliance for the Chesapeake Bay and Bowie State University partnership: working with organic chemistry department to develop in-classroom curriculum on water quality monitoring, trash pick-up events, tree plants. Building curriculum around environmental science in colleges/universities that don't currently have them.
- O16 More 319 \$ to support more holistic and encompassing stakeholder engagement investments.
- O17 Piedmont Grassland Bird Initiative (Virginia Working Landscapes and Piedmont Environmental Council)

- O18 "scattershot" nature of preservation. There are a lot of non-profits, state agencies, and federal government with various programs -- but we often do not or cannot coordinate our efforts due to lack of capacity (staff resources)
- O19 Chesapeake Monitoring Cooperative
- O21 Rappahannock Tribe> partnering with non-profits, regional localities & state agencies for TMDL implementation funding thru grants like NFWF.
- O22 Build an outreach program focused on north African and Middle eastern first-generation immigrants and other immigrant populations that are growing the fastest in the region.
- O23 Utilizing existing conference space to coordinate efforts
- What is the capacity across the landscape to do this work? Can we determine where capacity does and does not existing through a mapping exercise?
- O25 Friends of the Rappahannock--general restoration in the watershed.
- O26 Ducks Unlimited--direct restoration around the watershed. Partnership with NRCS (working lands with wildlife program)
- O27 Working groups that focus on equity need to exist within existing alliances and associations
- O28 Small Watershed Grants and Nutrient and Sediment Reduction Grants through National Fish and Wildlife Federation.
- On private land, we need boots on the ground/knocking on doors to inform landowners. The folks who know about the programs are engaging; find out reasons why others are not. MARKETING IS KEY AND OVERLOOKED.
- Need to invest in existing and new organizations that are led by and serve underrepresented communities.
- o31 youth leadership, esp. in underserved areas (e.g., Baltimore Office of Sustainability program) to introduce to career pipeline; MWEEs--building opps for restoration and protection into these programs--authentic, place-based, community-based opportunities for youth that ready them for careers; Authentic partnerships in civic engagement with communities to co-create, co-plan for projects that provide a suite of desired co-benefits; Keep MD Beautiful grants (increased funding here) could provide resources for these activities
- O32 Looking at areas of need, overlayed with communities in need.
 - being intentional and collaborating with existing work in those communities. Working with Land Trust groups. Southside of Baltimore. Being intentional with that outreach, and figuring out what is going on, and get buy in early.
 - Connecting with communities early, seeing what they need and want.
 - broadscale ways to engage students with activities... establishing relationships. Teach people about their local ecosystems, in a scholastic manner. Hit many demographics, and kids can look out bus and see the environments described and feel ownership with it.
- O33 Choose Clean Water--building equity in their grant programs. NFWF-funding.

- VDWR Education, civic engagement, collaborate with VA Master Naturalists (citizen science, education at local events); Education workgroup from the CB Program throughout the watershed (not NY); Forest Action Plans through states addressing CB watershed activities; Urban Forestry Program through NPS addresses areas that are in underserved communities; Watershed Implementation Teams in PA through Tiers in the CB TMDL; PEC county implementation in areas of rural DEIJ communities (parks and access); Amish ombudsman
- O35 Incentives and assurances to promote environmental best management programs
- O36 Good opportunity to build out authentic MWEEs around restoration and protection. NOAA B-WET could be built out to support this -- or coordinate with a new FWS program focused on the action piece.
- O37 National Aquarium partnership with Baltimore County. Focus is on community engagement in underserved communities.
- O38 Identify non-traditional partners such as interfaith organization to engage in conservation and restoration.
- O39 Chesapeake WILD, with primary focus on Wildlife, as opposed to other co-benefits like WQ improvements, should survey as a better mechanism to communicate importance of this work to general public as they may not understand, or care about, other co-benefits.
- O40 Chesapeake Bay Partnership does have a focus on this that has generated some insight... emphasis has to be on "layering" multiple interest, and not forget that equity also applies to rural populations
- O41 Bringing concepts to classroom: remotely or virtually, or develop educational materials, field trips to refuges, make conservation part of curriculum.
- New organization: Defensoras de la Cuenta. Support grassroots groups doing this work.
- O43 National Aquarium--bring sixth graders down to the Aquarium to learn water quality testing. Working with urban youth.
- Needs to start with getting the right people in the room, the right voices
- O45 There is too much coordination within our current boxes (like this engagement) but not enough with others expand engagement with groups and communities throughout restoration planning processes.
- O46 PA and upper portion of Bay: Ches Bay Conservancy is working on this. no need to reinvent wheel, but build off their work mapping.
- O47 Provide more information for the average person to be able to create effective change in the watershed (e.g. participating in stormwater management, or local zoning)
- O48 tie into existing successful engagement entities who already do work on the ground and apply their engagement efforts to this work
- O49 Need to be on the ground doing outreach in a sustained and meaningful engagement
- O50 Create communication materials that convey the importance and benefits of natural areas to local communities.

- O51 Tap into internship, education, outreach programs ongoing in and aimed at DEIJ communities
- O52 Bringing in universities and colleges to do monitoring to help move along these projects (especially in NY and PA).
- 053 Scope 10!
 - focus on communities--> community center for Harriet Tubman and connecting to the Tubman Byway--> having a support network for people who might find it harder to access a program, if they can just do their part and not the entire system it is more accessible
 - invite/establish an advisory board that is made up solely of underserved community members that can help design it to what people there need the most
- O54 Bring in money to graduate programs to help with monitoring opportunities.
- O55 Choose Clean Water Young Professionals of Color program
- O56 Reaching out to historic communities that have been under-represented in historic preservation and connections to rivers and public lands
 - Funding ambassadors to lead trips and organize access

Supporting programs closer to home, pollinator and native plants and habitats in urban and suburban areas

Bee keeping in urban and suburban areas

Tree canopy work

day lighting streams and water systems

Focus on the role that habitat protection and restoration in urban and suburban areas

Provide funding for transportation and school programs

Connecting nature to history and cultures of communities that rely on the wildlife and habitat

Learning traditional folklore and uses of native species; connect to holistic relationships to place

Community engagement around place

- O57 Circuit rider to train local organizations on community engagement and education and outreach. Funding for capacity building of existing organizations to do community level relationship building.
- O58 PUT THE CARDS ON THE TABLE: If we're all working in the same watershed, we should put our cards on the table with other groups and be supportive of those who are going for grant cycles and know when to step back
- O59 Taking Nature Black and Naturally Latinos have momentum build on it
- O6O Chesapeake Bay Program DEIJ Implementation Strategy
- O61 FUNDING ELEPHANT IN THE ROOM: Improve financial and staffing capacity of groups in the watershed. More hands lift the load.

- O63 Improve capacity of BIPOC businesses and financial institutions
- 064 Diversity Data Dashboard through the Chesapeake Bay Program
 - Chesapeake WILD could be a great option to further support existing work done by CBP, others
 - Atlantic Coastal Fish Habitat Partnership outreach work has expanded in regards to recreational fishing/diverse communities
- O65 Chesapeake Environmental Justice and Equity Dashboard use the mapping layers and EJ screening tools to help drive the work
- O66 How do we fund the ongoing cost of meaningfully working at the community level.
- O67 Identify the key places where the inequity exists, and an improved interface between a community and the natural resources could be created. Then convene community members to build interest, education, awareness, capacity ... you can't just create the access and expect it to be used and appreciated
- O68 Support multiyear participation with schools; need to sustain over several years to build quality and intensity
 - Education around tribes and other communities connection with the landscape and ecology
- O69 CONSERVATION FINANCE: bring in non-profits and other organizations to connect with landowners/outreach component is key.
- 070 establishing regional partnerships like Delmarva Conservation Partnership (network of geographic partnerships within the partnership)
- we have made assumptions about what we can do for underserved communities--> change that mindset and be prepared to accomplish anything
- O72 Bring conservation outreach to the 21st century make targeted mailings far more informed based on analytics
- O73 Provide a program that reaches out to localities and tribes to make sure they are effectively accessing and can afford to participate in conservation efforts under Chesapeake WILD
- Use the EJ mapping to find concentrations of places and gaps to lean into
- O75 Build on existing programs that serve vulnerable/marginalized communities.
 - Prioritize urban wildlife and conservation initiative to create connections/build support for nature based conservation. (ref VA action plan to increase wildlife viewing)
- O76 Have a component to this pillar that is listening and finding out what underserved communities want. This is how we come up with good and sometimes unexpected solutions.
- O77 Intentionally create partnerships between urban and rural and rural habitat protection both for species health and realizing that the way that urban underserved populations

- define conservation differently than traditional White-based conservationists but all depend on each other to achieve objectives.
- Need to understand who has the interest and capacity in the community to expand participation
- O79 Build on the capacity through FWS Partners for Fish and Wildlife Program staff and Fisheries Conservation staff to coordinate restoration and protection activities across the landscape.
- O8O Beach monitoring programs.
- O81 Identifying NGOs or civic groups (TU, boy/girl scouts) to take responsibility with maintaining restoration activities, prior to funding the grant.
 - Funding for Green Jobs with career mobility, dedicated paid team for planting and maintaining trees/wetlands/BMPs
- O82 Tree planting and increasing urban tree canopy and more of an emphasis on the benefits to the public instead of just a water quality focus. Need to do more outreach on tree planting benefits.
 - Create more intentional partnerships at all levels.
- O83 EPA Regional Tribal Committee tribes have opportunities for grants to implement TMDLs
 - Urban wildlife refuges
 - Mentoring programs for hunting and fishing and related programs
- O84 Coalition of dedicated staff who identify projects and coordinate among various groups and keep projects moving.
- O85 Ensuring access is afforded to restoration projects. Boat ramps
- 086 Virginia Safe Wildlife Corridors Collaborative (VSWCC)
- Most agencies on the call today would be on board with implementing these types of solutions. In the Bay area, there's definitely been a ton of pamphlets & brochures made to provide to local folks. Without being redundant, what to do to really reach those communities might be to focus these funds hyper-locally. Often opposition in rural communities to govt implemented environmental/stream restoration programs. Role for University's to provide opportunities for students to work with their communities on restoration projects. Also, plugging in students with meaningful job training & learning. Connect food (like crabs and oysters, or deer in rural areas) to people in different communities.
- onservation activities. Develop a coalition of staff to coordinate project stakeholders and provide education and outreach within each group so they may develop internal capacity.
- O89 It is important to connect with well-established groups like Community Engagement, Environmental Justice, and Health. (Their goals are at this site: https://www.ceejhlab.org/our-goals) that have: a well-established network; knowledge of

- communities to reach out to and where they are located; their concerns and issues; and how to work with each respective community.
- O9O -Partnerships based with landowners (being able to work directly with landowners, walk them through programs and align with landowner needs and interest); need to support materials, supplies and esp. MAINTENANCE; training and paying volunteers (i.e. community members and students) for efforts (equitable distribution of funding amongst partners); Building in time (proposal length) and funds for relationship building and building trust
- O91 The importance of building internal capacity of organizations (allows for longevity and sustainability), especially important for DEIJ and engagement (we must look inwardly).

Enhance recreational opportunities and public access with a strong emphasis on equitable access to nature, consistent with the ecological needs of fish and wildlife habitat.

TASK (in small group discussions)

Identify potential programs and projects that would help make progress toward this pillar that are viable, effective, and contribute to equity.

THEMES

Developed from group input during session by Britt Slattery / NPS:

- Ensure availability of parks, green spaces, water access within 5 to 10minute walk from homes -- creating additional access points along key corridors
- Improve ability to access green space/ waterways -- funding, assistance, transit access, improving existing (maintenance and interpretation)
- Aligning with funding opportunities and planning for water quality/ habitat (such as Small Watershed Grants; state/local wildlife action plans and recreation plans)
- Ensure public access sites have the facilities necessary to accommodate student groups
- Engage local community members and special interest (user) groups in planning identifying needs, gaps, programming preferences, etc.
- Using nature as means for healing (physical, mental, emotional wellbeing)

PARTICIPANT INPUT

OO1 Richmond Riverfront Plan and James River Park System Master Plan

- OO2 Ensure all residents of the bay watershed have a five to ten-minute walk to parks and green spaces from their homes.
- OO3 Engage local community members near public spaces, as well as special interest groups such as Latino Outdoors, Outdoor Afro and similar groups in identifying needs, gaps, programming preferences, etc.
- OO4 Chesapeake Bay Gateways Network
- OO5 Work with the Chesapeake Bay Program, as existing goals and outcomes of the Chesapeake Bay Watershed Agreement align with these pillars, and have committed partners to meeting these outcomes.
- OO6 Refuge Management for public access; Public Lands Transportation Fellowship to improve transportation demand management to improve access

Transit Access

San Francisco Bay model

Creating additional access points along key corridors, like the Rappahannock and Rapidan

Maintenance and interpretation at water access points

Improvements to existing sites

Assistance to plan and prioritize enhancement of existing public access sites

Supporting local and regional land managers as well as federal and state to enhance access and education

Federal access improvement funds

Federal waterway access

NPS scenic trails, waterway trails

- 007 Piedmont Environmental Council
- 008 using nature to facilitate spaces to "rest for resistance" and learn how to be a steward of the earth.
- OO9 Small Watershed Grants and Nutrient and Sediment Reduction Grants through National Fish and Wildlife Federation.
- Opportunity to ensure public access sites have the facilities necessary to accommodate student groups (thereby helping achieve Pillar 3). Particularly important in lower income communities.
- O11 Expanding public hunting opportunities existing publicly owned lands.
- O12 Rappahannock Tribe> Working with regional govts and planning districts to secure rec access for low-impact activities, like fishing and paddle sports. Example includes new access on the Rapp River near Culpeper, Va.
- O13 Re-do Parks Service (2014) plan for recreational access most areas are still inaccessible.
- O14 A focused program on enhanced access and programming to the water itself.

- O15 Places for citizen scientists and student groups to access streams and other areas for monitoring. -- Connection to the Citizen Monitoring Effort of CBP.
- O16 Prioritize projects that include public access components.
- O17 Kids and Kayaks in Baltimore City (National Aquarium and Baltimore City)
- O18 Urban access to natural resources needs to be expanded. There are few hands on resources that are accessible, especially to children, to nature.
- O19 Improve access to public lands in urban environments
- 020 encourage public access on projects associated with MS4 permits.
- O21 Implement state and local recreation plans, wildlife action plans, and comprehensive conservation plans at National Wildlife Refuges.
- O22 Create informational resources for communities, specifically underserved communities. Help them learn about local public access areas.
- O24 Long term support for access and maintenance
- O25 Pursue easements on aquatic environments, a plug in a commitment to and request for public access.
- O26 Expand access to and restoration of wildlife habitat in DC's Ward 7 and 8 (and similar areas in Baltimore, other urban areas) (e.g. Anacostia waterfront park)
- O27 Recreational fishing has broad appeal across racial and socio-economic categories.
- O28 Encourage forest retention as acceptable fulfilment of MS4 permit requirements.
- O29 Expand safety of natural spaces that could be better used by people.
- O30 Consolidated effort to enhance habitat, but combine with access, and use it as an opportunity to connect ppl with nature.
- O31 Chesapeake Bay Program project underway to improve public access in underserved communities.
- O32 Encourage local fishing opportunities.
- O33 Trauma informed planning and management
 - Disconnect from nature can increase trauma; connection can be a way to reduce the trauma
- O34 Ducks Unlimited helps fund public access across the watershed.
- O35 Baltimore City also has a recreation and parks program.
- O36 In order to do good outreach with communities who may not be "invested in Bay restoration activities already," give them an opportunity to interact with it -- often times, too focused on building the thing (pier, wharf) but not focused on the community outreach; focus on programmatic aspects of the project
- O37 Friends of the Rappahannock and Piedmont Environmental Council working on a project together to improve access.
- O38 Ches Conservancy working on some of these issues... ability to build off.

- O39 Anne Arundel County stood up a committee to improving public access.
- O40 Land trusts are doing a lot of work to improve public access.
- O41 include public access as a component of stormwater management BMPs. Communicate this need to relevant parties implementing stormwater management practice and/or require it to be a component.
- O42 Support investments in a more expansive and equitable definition of recreation its less hunting and kayaking and more family picnicking and recreational services that are important to different populations.
- O43 Diversity workgroup project use the metrics to help define what we determine is access to nature
- O44 partnerships with local recreation and health groups
- O45 Diversity the opportunities that are available out there
- O46 High-resolution land cover data to help identify areas where we are losing land.
- O47 creating green space in urban areas
- O48 Target resources for public access projects (parks and small green spaces) to underserved communities.
- O49 Healthy Parks Healthy People program for the Chesapeake.
- O50 Some Land Trusts might be able to purchase lands, and allow access through that. Right of ways are being offered more and more by land owners. trails, etc.
- O51 Recreational opportunities build support for habitat restoration opportunities.

 Bringing in trade organizations and groups (AFTA) to evaluate economic impact of recreational opportunities.
- O52 Support educational courses, training programs, concessionary services to teach beginners how to use and access the resources.
- O53 Promote long term stewardship of parks, green spaces, and natural areas.
- O54 deep into communities of color to create the access and green space
- Atlantic Coastal Fish Habitat Partnership is expanding recreational fishing opportunities to underserved communities
 - Increase and diversify public access points
 - Increased support for environmental education in schools
 - Teacher/staff environmental education
- O56 Recreational access fishing pier (seeking funds) at Blackwater

Coordinate with WSFR on boating access sites anglers and recreational paddlers (public facilities for viewing as well)

Upper Rappahannock, recreational access, battlefield preservation as historical sites, opportunities to also provide access while doing land preservation

Promote entire Rappahannock watershed as a recreational opportunity - trail system

- O57 Financial barrier: to use the site or transportation to get there
- oss minimizing the barriers to recreation access is really crucial. In Annapolis, access to the water is a primary way of experiencing the area's ecology and just the idea of using a kayak is one of the best ways of doing that but is still inaccessible to many residents so the idea of an affordable paddle share program is something to advance
- O59 PEC trails and park projects, also school properties that can be enhanced that are open to the public; Culpepper County river access from a privately-owned campground; Great Parks Pursuit (CN) that allows for people to get out and involved in the community, providing access, and engaging DEIJ communities; green infrastructure projects; VDWR Urban Fishing programs, access to equipment for those who want to try fishing, host instructional fishing programs; VA statewide survey of recreational opportunities (out for comment currently); could conduct surveys of areas to make sure there are safe areas (community-based); working with spiritual communities (ex. working with Catholic Diocese in NM), can working with other pillars; working with indigenous peoples throughout the watershed can be improved, time for this; Machimococo (spelling probably wrong) State Park in VA is a good example of this; continuing to support projects that stack benefits (recreation in parks with green infrastructure and habitat enhancement); ability to have coordinated funding to realize stacked benefits
- O60 Bus line or public transportation to get to recreation opportunity sites
- O61 Public water access should be a focus; focus on urban areas--"park deserts"--to increase access to bike trails, walking trails, plus equipment (e.g., kayak and canoe rental or availability) for access; facilities to support access (e.g., school trips) like restrooms, plus the funding needed to maintain these. Balancing the need to build new access with the need to maintain/expand/improve what is already available, help keep existing sites open; POS (in MD) could potentially play a role in acquisition in maintenance. More/better planning about where access is appropriate (balancing the needs of people and wildlife) vs. where it may not be; public transportation access, bus routes and stops; lowering entrance fee barriers
- O62 Communicate with natural resource agencies to fund some of these efforts, might make these land trust agreements more
- O63 bi-lingual ranger programs across the watershed.
- 064 needs to define recreation broadly and in the context of ecology
- O65 300 access site development should have this lens on it and inform ways to make it more equitable
- O66 Supporting local land trusts in acquisitions for public lands. Boat launches and other foot access to rivers & streams is valuable. Funding for creation of "water trail" map that educate community about recreational opportunities. Public/private land lease program for public use of private sites for recreation. Could also do public outreach free fishing days to get citizens engaged. Developing a funding mechanism to create situations for people to access nature in rural areas, and also to create wildlife habitat in their community.
- O67 Mallows Bay

- investing in community centers/ education centers/ senior centers --> what are the programs where you can build connections
- expanding on capital you already have, invest in coordination
- having more programs like the Chesapeake Conservation Corps --> networking young professionals and bringing them into the work force
- O68 Outdoor Afro (https://outdoorafro.com/about/)
- -Need to consider the quality of spots (i.e. what do they look like, what types of programmatic opportunities are needed) vs just the quantity of spots;

Address climate change by increasing scientific capacity and supporting strategic planning, monitoring, and applied science activities necessary to ensure resilience of natural ecosystems and habitats impacted by changing climate and development.

TASK (in small group discussions)

Identify potential programs and projects that would help make progress toward this pillar that are viable, effective, and contribute to equity.

THEMES

Developed from group input during session by Jonathan Doherty / NPS:

- Making the science a whole community effort.
- Climate resiliency benefits should be required.
- Connect climate vulnerability and equity assessments and focus there
- Need to visualize and understand future distribution of habitats; create the transition plan
- Build climate resiliency into NRCS and other private conservation programs
- Need to invest in stewardship, across the board.
- Tribal perspective -- Shad, etc. have disappeared or are stressed; climate change is impacting shellfish, birds. Rivers highly impaired by upstream actions.

PARTICIPANT INPUT

- OO1 Factored into any programs/projects that are supported by Ches WILD
- OO2 Engaging in citizen scientists, engaging community members.
- OO3 Making impacts of climate change relevant to folks who are not in a flood zone

- OO4 Support efforts to develop regional consensus on the likely future distribution of Chesapeake habitats.
- Working with local governments is key, but resistance on climate change issues can be a challenge. Look to project specific benefits to attract and engage local governments.
- Where can we impact climate change with action that help habitat and diversity and water quality using existing science
- NOAA has done climate vulnerability assessments looking at socioeconomic and EIJ data and overlays in finding common ground. opportunity here. Number of underserved communities in coastal regions, and have needs. where does SLR and erosion impact underserved communities?
- OO8 Really good mapping exists for tidal marsh migration and where species are going to move but it's hard to understand what we are doing on adaptation outside of the obvious places (inland and tidal)
- OO9 Good work getting started at Virginia Tech and NRCS on using healthy soils as sinks for carbon. Farmers and producers are the natural conservationists in America.
- O10 Where are the best wetlands right now? Can we plan ahead for saltwater intrusion and wetland migration.
- O11 Making the science a whole community effort.
- O12 Metrics that have relevance to people not in the "conservation world" like flooding, storm surge, and expand how we understand the impacts on people's lives
- O13 Focus more on translation of existing science instead of new science. Improve access of climate related data
- O14 Aligning efforts across programs to share depth of scientific knowledge.
- 015 Include marsh migration in 30 by 30 goal.
- O16 connect with local governments to implement projects
- O17 Implementing climate change & carbon sequestration as a co-benefit of existing programs, along with water quality, etc.
- O18 Pushing information out to people who may not be aware of the looming changes so they can do something about it
- oing the assessment work on trying to understand what potential climate change is going to do on these crucial habitats and important resources --> then decide how this relates to management
- O2O Communities and local governments need access to CC science, also to help build capacity and support education in communities.
- O21 Focus on Developing monitoring and analysis of implementation projects that utilize existing research and science
- O22 create a youth advisory board for the Chesapeake Bay Program; funding for regional advisory boards that grow leaders, programs and projects from local areas (rural and urban alike); develop partnerships with local hospitals and medical groups to collaborate medical science for climate action and conservation

- O23 Urban tree canopy could be important link between climate change and urban populations for Ches WILD
- O24 If Chesapeake WILD could bring climate data to local Conservation Districts that would help make changes locally.
- O25 Scientific capacity exists. How do we disseminate information to general public and affected/underserved communities.
- O26 cold water streams are extremely vulnerable science needs to make its way down to practitioners funding needs to support monitoring to make sure we are doing things right
- O27 Need for governmental entities to plan around climate change and SLR. Need to have a lens focusing on future issues and becoming ready to tackle challenges related to rising tides
- once potential impacts are understaff, create communications materials that are effective within the community
- O29 -Enhance science communication (in effective and meaningful ways)
- O30 GLOW program (funded by NASA) could be used for the Bay, Inaturalist, itree, etc.
- O31 Spending money on riparian buffers and conservation easements, and only works if you continue to monitor. Resources are lacking for monitoring, especially for land trusts, and hard to raise money for monitoring. We need to build in long term stewardship for the local actions, and at the local level.
- O32 Focus on turning climate science into action. Not just working groups who continue to discuss science.
- O33 Consider climate impacts in restoration projects and planning (e.g. brook trout). Forward-thinking in this sense. Don't prioritize populations if they won't last.
- O34 Lots of progress needed on cover crops. Protect upper parts of the Appalachians.
- O35 Ensure local governments are receiving best scientific information and how it translates to local areas; what should they be planning for does it comestate?
- O36 PEC is working on fish passage projects for trout and American eel in partnership with USFWS. Projects have resilience benefits from a department of transportation standpoint.
- O37 Conserving large landscapes, keep together land conservation, land restoration and conversion as a unified approach.
- Need to build CC considerations better into NRCS programs and grant considerations. Need to better integrate science into practices and considerations. Especially for private landowners.
- O39 Student research symposiums. In a science poster format. Can engage students who might not be able to participate in a science fair.

- O40 Develop a common agenda, through the Bay program or otherwise, to find unifying themes (and action priorities) to a climate responsive wildlife and ecosystems strategy; one that can target diverse communities.
- O41 Identify threats. Narrow scope of science to focus on identifying most urgent threats.
- O42 Technology for monitoring is not enough relationships with property owners is key to long term success, and more durable as properties transfer ownership over time.
- O43 Create a new model for conserving corridors.
- O44 How do we apply SLR models to land conservation planning. Need to incorporate SLR projections in all planning.
 - Find ways to invest in areas that may be projected to be under water in 20 years. Hard to prioritize lands that many agencies deem as a bad investment (coastal areas).
- O45 Emphasize co-benefits of projects.
- O46 How do we use citizen science to help monitor climate change and engage local communities in an apolitical way.
- O47 Need more data to understand the current state of species population and how they are using habitat. Funding should go to support wildlife agencies that do data collection work. Prioritize species at greatest risk due to climate change.
- O48 this perhaps should have been a sub bullet under pillar #1
- O49 Habitat Restoration projects with private landowners, among other programs, will be tied to climate change. Private landowners must understand how climate change impacts their local waters. WILD could support the creation of scientific data that is localized to resonate with landowners on-the-ground.
- O50 Working with local governments on resiliency planning
 - Flood plain identification and risk assessment with FEMA
 - Evaluate impacts on aquatic ecosystems, flood impacts on population recruitment
 - Design changes with DOTs for crossings to account for increased flooding
 - WSFR funds
- O51 -Translating information in relevant and relatable ways to the general public (what does it mean to me; why should I care; how does it affect me now and later)...increasing funding and focus on this!
- O52 How do we tweak what we are currently doing to add co-benefits?
- O53 Marsh migration is extremely important for habitats, how to protect those spaces. Maybe find ways to buy migration spaces, where human infrastructure is not a sound investment.
- O54 Mounting pressure to demonstrate impacts regions are having related to climate. Need funding to support long-term monitoring efforts and data collection. These efforts do not currently exist.

- O55 Support coordination roles between this program, Chesapeake Bay program, and all the other programs; especially to focus on better understanding, articulating, quantifying cobenefits.
- O56 How do we empower people to think about how their survival is linked to the local ecology of the landscape?
- O57 Awareness of existing tools may be missing some more vulnerable communities (e.g. tribes).
- O58 sustained financial support for long-term monitoring
 - MD has good census on brook trout populations and resiliency ratings so they can prioritize restoration need assessment to define resiliency to help focus funding identify thresholds for species resiliency
 - diverse messaging with projects related to diverse audiences (can't use the same old talking points)
 - leveraging multiple CB agreement goals to maximize success and develop priorities
- O59 Making sure that you partner with academic institutes and other institutes in your area that are working on climate changes. As an example the CCEM group does work related to sea level rise. Using the information provided publicly can help to fill in informational gaps.
- O60 Cross-training for technical service providers so that people on the ground have multidisciplinary understanding of multiple programs, not just in their silo of expertise.
- Having more readily accessible and organized CC science in the Bay so everyone can access and use. Available to communities to access and act upon.
- O62 Link long-term funding efforts and data collection to restoration programs. This proves techniques moving forward.
- O63 Citizen science opportunities related to climate variability. NOAA has a community of practice in this area.
- Long planning horizons are critical. Difficult on a single project to address climate scenarios, but need to consider the durability on projects in the long term.
 - For decision makers (local government, Congressional rep's, etc.) simplifying is important. Recommend a particular planning scenario for instance.
- O65 Focus on rural underserved communities...not just assume underserved communities in urban settings.
- When you apply for grant there is no capacity funding as for a local land trust to complete due diligence, monitoring, etc...
- O67 Approach projects in a holistic manner and ensure all impacts of climate change are considered.
- O68 Bring awareness of the CC work happening in the Bay and have compiled in one place.
- O69 Consider looking at the example of NPS climate change vulnerability work that engages adjacent communities in the science, impacts and difficult decisions.

- O7O Support research that allows us to better quantify, recognize, value and support cobenefits of projects and initiatives.
- O71 Pushing out tools into a one-stop shop model so that anyone can understand multiple tools to help them make decisions on their property with multiple perspectives and a broad array of programs.
- O72 Must convey climate change outcomes (flooding, crop loss, increased drinking water costs, severe storms, etc. and their impacts on natural resources i.e., habitats and species) and not "climate change" as a standalone. It must resonate locally.
- 073 Chesapeake Monitoring Cooperative.
- O74 Highlight pilot projects for education and research; convening consortiums to see project from beginning to end.
- o75 what exactly is meant by monitoring here? defining this could be helpful
- O76 Synthesizing USGS data, before and after restoration monitoring data, temperature over time in streams data, etc. to plan.
 - Invest in landscape scale mapping tools to prioritize investments across landscape. Changes happen slowly vs action needed here now.
- one adequate funding for conservation districts so that the boots on the ground can be increased
- O78 Work with communities and private landowners to protect rare species such as endangered tiger beetles. It involves monitoring, planning and implementation
 - . This works at many different levels from community to county and above.
- O79 This pillar cuts across all other pillars so need to integrate into all other pillars actions.
- Need science communicators. Data and tools like EJ Screen do not always capture the hazards and interests of vulnerable communities such as tribes.
- Need the monitoring data when working on new and innovative solutions, this funding for ongoing monitoring is missing.
- O82 Pilot projects for "show me" purposes, that can be extrapolated, scaled up and transferred to other places.
- O83 Identify where saltwater intrusion and flooding are projected as a result of climate change.
- O84 Invest in carbon calculation of conservation projects for the Chesapeake that will facilitate the market to benefit habitat protection.
- O85 influence of groundwater on stream health is important (temperature, etc.) Need a better understanding research on this influence and how it will impact restoration priorities (cold water refugia, etc.)
 - protecting groundwater is important
 - using holistic approach for restoration
- People care about animals/wildlife but also care about their cultural and community-based experiences, so we need to relate climate change to place-based experiences

- O87 Leverage land conservation value to combat sea level rise. Wetlands restoration. Shift focus to tidal wetlands and barrier islands.
- Need more data to address specific threats such as rare amphipods and other at-risk species.
- O89 Community memory and experience need to be captured now locally to help conserve what could be lost due to climate impacts.
- O90 Convene communities in "communities of practice", develop an adaptive learning network.
- O91 Make sure research groups like the Integration Application Network at UMCES applied science and Smithsonian Environmental Research Center already doing work of monitoring and applied science are aware of each other's contributions get folks together in the Chesapeake Bay watershed to figure out next steps
 - Bring in groups with diverse backgrounds like urban planners and social scientists can balance inequities conservation in the 21st century google analytics finance groups to leverage private capital to do work on private lands make sure groups understand each other
 - Watershed planning Ensure aquatic organism passage at road stream crossings work with transportation departments to ensure infrastructure is adequately sized for projected precipitation events for 1 year/10 year storms to address future climate change
- O92 Build from communities up, make link to personal and community survival, invest in critical infrastructure, make place-based connections that evoke memory.
- O93 Expand conversations or community of practices to engage more groups
- Funding to study climate impacts on underserved communities and how restoration actions can assist in restoring habitats while helping communities.
- O95 Support efforts to ensure road crossings are designed using the Increase capacity to design and replace stream crossings with the Stream Simulation method to ensure aquatic organism passage and sustainability in the future wrt flooding and climate. This includes sponsoring Stream Simulation training for partners in the watershed to ensure all crossings are built to last.
- O96 Some critical habitats are at risk. These habitats may be lost in the near future. Instead of disregarding them, create transition plans. How does terrestrial habitat transition to aquatic habitat over time?
- O97 PA increased their definition of green park criteria now includes climate resiliency (for funding) Community Conservation Partnership Program
- Overall enhancement of community science efforts (opportunities for intentional integration with schools/education as well). Esp focus on water quality (at a variety of sites).
- 099 collaboration and coordinating
 - investing in a person who can coordinate these things

- agencies that implement this can change the way they allocate manpower --> fund someone who can be in charge of this
- 100 Introduce Ches WILD to tribes through EPA RTOCS. Associated scientific training from groups like Institute for Tribal Environmental Professionals
- 101 Adequate riparian habitats from the perspective for fisheries will help create broader corridors
 - Increase rental payments for riparian areas to be competitive with other uses like industrial scale solar
 - need to remain opportunistic to communities that are ready to move forward
- More strategic approach to connecting with private landowners, targeted marketing and outreach to targeted areas, using analytics, use more tools to inform and work with land owners.
- 103 Tribal perspective: Shad, herring and menhaden have disappeared or are stressed in VA and climate change it is impacting shellfish and associated birds. Rivers are highly impaired by development in Culpepper and other areas upstream. Sea-level rise is a huge problem with more flooding and impact.
- 104 Hampton roads/Norfolk/Annapolis areas flooding is a huge issue.
- 105 Community-based monitoring programs incorporate citizen science in ecological research to enhance community engagement and ownership in strategic monitoring and applied science activities, raising awareness for local conservation issues and ways to mitigate climate change
 - conservation as a way to leave a legacy
- Make sure climate risk and resiliency science is incorporated into local, state and federal decision making, permitting
- 107 Connect with senior as well as youth through community connections and citizen science around climate.
- 108 Don't focus conservation education entirely on youth, make sure information is accessible to everyone
- 109 Reforestation and habitat plans for climate mitigation and resiliency to make sure native habitat
- 110 Continue to prioritize areas that would benefit nature based infrastructure. Have planning tools that communities can use.
- expand the climate conservation corps to support broader functions of science (Renew Conservation Corp act is out there that has direct resilience connections)
 - find opportunities to build off other climate and restoration goals within EOs and otherwise
 - Funding support for all stages of resiliency from funding strategic planning, all the way through implementation and monitoring (examples include Blackwater 2100 (TCF, FWS, Audubon) used Hurricane Sandy funds from Congress helped with much of this but need funds now to expand on ground; and Open Space Appalachian (using TNC resiliency

- modeling to guide their efforts). Can often find money for one aspect but not the entire process soup to nuts.
- modelling new climate change induced flood regimes to make sure we are prepared for new reality (Ellicott City, etc.)
- 113 Retrofit urban areas to be resilient. Integrate nature into urban areas.

Improve and sustain water quality, upgrade water-management capability, and reduce flood damage, with an emphasis on green infrastructure and natural infrastructure to support fish and wildlife, habitats of fish and wildlife, and drinking water for people.

TASK (in small group discussions)

Identify potential programs and projects that would help make progress toward this pillar that are viable, effective, and contribute to equity.

THEMES

Developed from group input during session by Olivia Wisner / Chesapeake Research Consortium::

- Funding (SWCD, DOT, FEMA, environmental impact bonds, low-tono match grants for underserved communities)
- Quantify the benefits of green infrastructure (data analysis, drinking water, financial, wildlife and ecological benefits)
- Target areas upland and upstream that can benefit both the bay and the reservoir
- Incentive programs to promote green infrastructure (emphasis on private lands)
- Partner with local governments (planning) and community organizations. Connection to community (fishable/ swimmable waters, citizen stewardship efforts, traditional ecological knowledge from tribal nations)
- Dam removal, riparian buffers, reduction of impervious surfaces, erosion
- Related to Pillar 1

PARTICIPANT INPUT

- OO1 More green infrastructure funding for SWCDs; mini grants for communities of color for projects at churches, schools, local parks & businesses
- OO2 Targeting reduction of impervious surfaces, increased flash flooding
- 003 DOT crossing design, stormwater management on rural roads
- O04 Think beyond the 2025 goals: think about funding and where to "target" opportunities for funding; in the headwaters, money cannot go to landowners who aren't engaged in agricultural activities yet they and their properties are adjacent to habitat for critical fish and wildlife species i.e. eastern brook trout
- OO5 Engage at a local level (e.g. local government, communities, youth advisory boards). Tying in younger generations will enhance our ability to cooperate and to sustainable interest.
- O06 Stack programs and benefits: a perfect model might be addressing WQ, but also reduces flooding through storm water mgmt, decrease sedimentation. opportunities to be more deliberative in how we implement programs, leverage diff pots of money, by working together.
- OO7 Incentivize green infrastructure through environmental impact bonds (like DC)
- OO8 Dam removals, stream crossings, culvert removals.

 VA state-wide assessment of stream crossings.
- OO9 Guinea Marshes in VA Middle Peninsula is an example of restoration with multiple benefits -- habitat, climate resilience/reduce flood damage, etc.
- O10 Erosion is a considerable issue -- balance needs to be struck for a water quality perspective when you think about new/existing access for public space and its downstream outcome
- O11 Expand analysis of how to maximize wildlife and ecological benefits from green infrastructure that is already been installed or could be installed (or protected) in the future.
- O12 Figure out roles and responsibilities and how they relate to one another to avoid duplication of efforts.
- O13 Emphasis on reservoirs and the protection of those areas as they relate to drinking water improvement in addition to improvement of water quality on the bay.
- O14 Emphasis on green infrastructure--all states need funding to increase data analysis and surveys to tackle some of these programs.
- O15 This should be pillar #1 improve water quality that leads to pillar #2 sustain & enhance restoration and protection. This is not for prioritization sake, but for a logical/sequential order.
- O16 Synchronize Chesapeake Stewardship Fund with Chesapeake WILD investments to cross-leverage.

- O17 Quantify the benefits of green infrastructure so people can see and understand the value of investing in them (water quality benefits and all ancillary benefits to habitat and living resources)
- O18 Can research help us better quantify and describe the co-benefits from water quality investments in a way that builds public support for water quality investment.
- O19 Identify areas upland and upstream that can benefit both the bay and the reservoir. Need to do more education on the uplands portion.
- O2O Is pillar 5 a catch-all? Does adding water management capability, drinking water, flood management contribute to overextending already limited capacity and draw emphasis away from the intent of this program...Wildlife? There are other laws/programs that dictate how to address these other interests.
- O21 Tools in VA for Conserve VA is a prioritization tool (flooding and flood plain resilience) focuses on 1% of lands most important to conserve to reduce flood damage to infrastructure. Intersecting this with habitat / riparian restoration. Many good tools to support this pillar
- O22 Conservation Finance Act for green infrastructure, blue infrastructure -- makes watershed eligible for water quality financing.
- O23 Example: Susquehanna River Basin Commission and SRB Alliance great discussions about water conservation, flood control, community protection, reconnect to flood plains, important plantings, etc. Connect this group with Ches Bay
- Use of citizen science--particularly among tribes and underserved communities to sustain and improve water quality.
- O25 This one in particular seems like it has a lot of opportunities for building public support protecting drinking water --> action (Pillar 1).
- O26 Agricultural BMP installation to promote clean drinking water and healthy aquatic habitat.
- O27 For land preservation it is the uplands where more properties need to be identified to impact the water quality .
- O28 Comprehensive environmental finance acts so states can fix procurement barriers
- O29 Pennsylvania is the most important place to help elaborate the benefits of saving the Bay when they don't experience any of the direct benefits of the Bay. E.g. the Hellbender salamander education effort was a great way to connect people to local benefits in Pennsylvania.
- O3O MD DNR does stormwater management reviews Any stormwater management in urban areas should include headwater benefits something to offset issues in priority areas.
 - habitat restoration often improves water quality
- O31 Create incentive programs for private landowners to utilize green infrastructure porous driveways, solar, reuse / reclaimed water for irrigation, etc.
- O32 Many funding programs: climate change is now. Need to incorporate in funding decisions. Issues directly related to avoiding impacts from climate change more

- competitive. Stacking and weighting all these types of benefits, and get away "scatter-shotting" to get at best "bang for the buck"
- O33 Focusing on drinking water supply protection, underserved populations
- O34 As sea level rises there will be the potential for more salt in wells making water supply in communities. How do you keep the groundwater from becoming more saline?
- O35 Share traditional ecological knowledge tribal nations.
- O36 Continue to work with private land partnerships to engage in restoration work that improves water quality
- O37 Protect large forest tracts.
- O38 Maintenance BMPs in the ground need to be included. Chesapeake Bay Landscape Professional Training goes out to landscape contractors on how to properly maintain BMPs and projects.
- O39 headstream water issues have big impact of downstream water quality a good focus area
- 040 Improve outreach and make them aware of money and programs available to them
- O41 Need to think about emerging contaminants such as microbeads in addition to nitrogen and phosphorous.
- O42 Look to COE comprehensive strategic plan and get some of these projects off the ground.
- O43 GASB 62 to add value of natural assets to government balance sheets of green infrastructure to open financing opportunities.
- O44 Install riparian buffers to promote healthy aquatic habitat.
- O45 Create a network of riparian buffers and green infrastructure.
- O46 Water quality is important but also water MANAGEMENT flood protection. Natural systems buffer and protect community infrastructure.
- O47 Co-investment by localities and large land trust institutions to protect drinking water supplies -- and as a co-benefit, get wildlife connectivity and improved natural resources as an outcome
- O48 Natural lands Network tool, looks at natural corridors and cores that would support this effort. stack these data layers together to develop a useful planning tool that weights all of these priorities.
- O49 Making sure there are incentives for producers and farmers for BMPs; cost-share money differs every year. Enrollment fluctuates as a result. Need to be better secured and stable.
- oso a program with hyper-focus on wildlife (like Chesapeake WILD) will help improve equitability in access to grant funds within the conservation community.
- O51 Make sure local planning incorporates climate risk and resiliency
- O52 Can't tread lightly anymore when it comes to people's livelihoods (considering mitigating and addressing flood risk).

- Work with communities in flood plain to abate flooding, relocate people, and help build financial support.
- audit of existing programs to see where Wild can fill in
 NRCS has new emphasis on source water protection -can they be overlain with drinking water supplies for towns/cities in the watershed
- O55 Growth of living shorelines as a tool to curb erosion/flood damage; community associations are embracing them at a local level
- O56 Integrate resource protection and associated funding into WIPs.
- O57 Increase the use of precision conservation tools to get biggest return on investment.
- having capacity of people to go and take care of BMPs that have been implemented
 #5 comes naturally if we are doing the other ones correctly
- O59 People don't generally understand the financial benefits of green infrastructure, and therefore don't invest. Financing structures are therefore not set up for it.
- O60 Does Green Infrastructure really need to be a focus i.e., does it build landscape-scale success? In developed landscapes, perhaps it is the only solution, but perhaps is identified in other sources. There are other grant programs that do GI is that really where WILD will have the biggest success?
- O61 Emphasize the importance of working with local communities.
- O62 Ensure water quality standards equate to fishable/swimmable waters to support utilitarian uses by native tribes (sustenance fishing).
- O63 Dam removals (enhancing aquatic connectivity)
- O64 regional planning commission has developed water quantity plan for municipalities can we look at those to incorporate green infrastructure
- Need to emphasize flood control, slowing down the water and reducing impervious surface. Sometimes the highly technical terms make it difficult for people to relate. More grass and trees, fewer parking lots.
- O66 Restoration and land protection efforts along streams and rivers and forest buffers/fencing for impaired waters. Identify source, monitoring and mitigation.
- O67 Funding to help quantify the impact of water quality BMPs to show decision-makers the value of co-benefits.
- of a cognizant of the multiple benefits that are gained by figuring where we are going and what we can do
- O69 Plan and implement complete and green streets projects in urban geographies in which flooding and urban heat are concerns to promote local water quality and habitat.
- O70 Community science involvement in water quality improvement and monitoring How do we build economies that support good management?
- O71 New emphasis on flood protection, climate change, and jobs at the federal level open up opportunities for us to tuck into those infrastructure investments.

- O72 Increase financial incentives for private landowners to implement BMPs i.e. nutrient and sediment reduction, forest buffers, stream restoration projects, wetland restoration, etc.
- O73 Allowing species to drive the location of water quality improvements instead of the other way around.
- O74 Utilize funds to protect existing forest areas that provide streamside buffers in communities and/or protect drinking water supplies. i.e. aquifers.
- Need to include representatives of water utilities in the conversations, individuals that work with municipal water.
- 076 Monitoring is critical but underfunded.
- 077 micro-plastics is a larger concern than currently receiving focus.
- O78 Swimmable waters metric that helps people recognize the importance of improving water quality
- O79 Atlantic slope mussels need restoration and monitoring for the status of the species and how effective the restoration is.
- O80 FEMA disaster funds and disaster risk mitigation funds could be better used if we helped create a priority plan for their deployment for green infrastructure that addresses both FEMA (and municipal) priorities and CB ones. Create and coordinate a FEMA-focused green infrastructure working group (in which FEMA participates) to develop a strategy, over a year, to write a regional plan for the use of FEMA funds for green infrastructure. Support a strategy to step this down to the state and local level as well.
- O81 Include criteria / priorities from Ches Wild Act are utilized by NRCS, NFWF and other programs that fund private lands restoration / BMPs.
- O82 Need to make sure that restoration is effective.
- O83 Transportation agencies in states are important partners in this new roads, road stream crossing, wildlife habitat, etc. We need them on board.
- O84 Work with local and regional water suppliers on water supply planning innovative water storage--- wing structures to divert during high flow periods
- focusing on headwaters and stream health in upper watershed; temperature and water flow
- O86 Takes a lot of effort to figure out WHERE to do restoration.
- O87 Rural coastal sea level rise inundating septics. Landowners want to fill in the wetlands. Need incentives to address differently.
- O88 Involving farmers in the conservation management discussion, so that we identify practices that work for farmers AND conservation
- O89 Army Corps of Engineers' role in green infrastructure could be expanded.
- O9O State revolving funds through CWA that provide loan funding to do projects to pursue CWA

- FEMA BRICK- trying to use disaster mitigation funds to reduce flooding risks. Integrate climate resiliency projects into this, untapped. Getting these practices into their implementation plan will open up the funding.
- find ways to integrate into local municipalities and bring equity into different regions.
- O91 Declining species in a location that indicates some moderate-level potential for restoration, compared to other locations where we may be too far guide (in support of letting species guide the restoration).
- O92 Make a connection with residence that go beyond drinking water to how they recreate and interact with water
- O93 Utility manages understand that the cleaner the water is coming in the less it costs to send it out, and this is a good way to get them to the table. As an example Washington DC gets its water from the Potomac.
- O94 Balance societal demands on fishing by using aquaculture.
- Improve infrastructure using better data (future projections of precipitation) to determine priority areas for flood protection, including storm water management, appropriately sized road-stream crossings, sewage treatment
 - Green roof and other green infrastructure programs like in Washington DC and Lancaster used as an example for other localities
 - agricultural BMPs and decrease non-point source to protect and enhance riparian and aquifer recharge areas
 - maintenance, monitoring and verification of BMP programs that have been put in place
 - Recognizing and implementing wetland protection and restoration in areas throughout the watershed (rural and urban areas). In urban areas, wetlands play an important part in water quality and flood mitigation.
 - Forest conservation measures
 - Bay friendly landscaping on private lands in suburban areas outreach needed
- 096 Low-to-no match grants for underserved communities
- 097 David Bacon requirement should be increased above \$2,000 threshold
- O98 Need to make sure that the document the document mentions tribes
- O99 Use natural resource based economies to support rural livelihoods and active resource management that maintains native species.
- 100 urban green infrastructure and BMPs like floating wetlands
- 101 Local Stormwater/Wastewater Efforts/Collaboratives:
 - RVAH2O (Richmond, Virginia)
 - East End Green Infrastructure Collaborative (Richmond, Virginia)

To the Design Team ...

What insights from this meeting can you pass along to the Design Team for this effort?

PARTICIPANT INPUT

- OO1 I think that sustained commitments to fund capacity projects -- have the ability to fund efforts that last 5-10 years.
- Figure out how to fund things at the grass roots level where non-profit and public educators work directly with the public through programs and projects.
- OO3 Ask land trusts and watershed groups about some of the "gaps" in funding that are out there for holistic land conservation, watershed protection, and resource protection. We are often trying to shoehorn our concepts into existing funding pools (RCPP, NFWF-INSR) where it may not fit for practical metrics matters.
- OO4 I think a lot of the pillars interconnect. For example, climate impacts resonate with underserved communities, public access and restoration projects.
- Need to make sure you circle back with those on the call as you tweak these ideas. All the implementation should be in a coordinated method instead of scattershot.
- We have a LOT of mapping, and yet everyone is still making their own maps and analysis. How can we embed the USACE comprehensive plan map, the Chesapeake Conservation Atlas mapping, and DEIJ Dashboard mapping into one portal and use it to drive the implementation (similar to how NFWF uses a map for their priority areas in their business plan)
- OO7 Don't recreate the wheel, build on existing efforts. New focus here should be Wildlife. CBP already doing water, DEIJ, Climate. This funding will help but Team should emphasize new programs/expanding options and working smarter
- OO8 If funding is provided for conservation easements, land trusts should be able to charge the cost of doing the easement and the cost of monitoring to the program in addition to funding for paying landowners for the easements.
- OO9 Just as we map all of the scientific layers we need to map the institutional layers. What I mean by that is that it is often very difficult to have multi- benefits in a project that is already being funded. So if you do a stream restoration could you include public access and stream crossings for walking paths, etc.
- O10 Incorporate the theme of connectivity throughout. Build on the current focus of improving connectivity within aquatic ecosystems to include connectivity between terrestrial and aquatic ecosystems, cross-cultural connectivity, rural-urban connectivity, etc.
- O11 Also, appropriate maintenance for green infrastructure installations

- O12 In Virginia, the largest land use decisions effecting habitat and water quality are transportation and land use. Need to get the Department of Transportation and local governments to understand larger habitat connectivity goals, how (1) WIPS, (2) recreational access, and (3) habitat and wildlife plans can be incorporated into planning, design and decision making
- O13 In a lot of talk about programs and initiatives and planning, please don't lose sight of supporting the on the ground restoration activities with Ches WILD funding. Also connecting the restoration activities to the economic impact of outdoor recreation that comes along with restored landscapes and new recreation opportunities.
- O14 Co-benefits is essential. There is a lack of quantifying impacts of BMPs. Money talks to local governments. Need to fund more research to show how BMPs are benefitting water quality, habitat, underserved communities, public access, climate, wildlife, etc.
- O15 Take an inventory of what is already working the programs, collaborations and projects and make an effort to streamline support to these programs so that we can harness existing expertise, enhance collaborations, and build capacity for achieving these pillars.
- O16 We need to focus on increasing resources and layering rather than endless prioritization models
- O17 There's never a lack of things that need to be done. Identify those things that are truly important and things that can be done on a scale to cause real-world change. Focus your energy and efforts where they can actually accomplish something. Casting too broad a net is a sure way to spend the maximum funds and efforts for the least amount of benefit.
- O18 To build broader support, need to have a mix of projects in urban and suburban areas with more obvious conservation of rural areas to rebuild connectivity
- O19 Protecting drinking water supplies needs to be a bigger priority. Protecting aquifers and surface water supplies from depletion and contamination.
- When thinking about funding on-the-ground projects, need funding to go to the "hard to fund" parts of the project including feasibility, design and post project monitoring. Do adaptive management by assessing the positive (or negative) effects of protection and restoration projects on the their target species and determine which projects should be funded in the future.
- O21 Habitat and wildlife planning needs to recognize the potential on conserved private lands as well as public lands management and access. Wildlife Action Plans in Virginia tend to downplay the potential of connectivity on private lands
- O22 Green infrastructure has to be built into local land use and transportation planning
- O23 Tribes should be directly included in the coordination of Chesapeake WILD, development of the framework and operations, the decision making process, and priorities and grant program development.
- O24 Follow the flows: water, people, funding.
- Rural, upstream areas are way behind when it comes to coming to grips with climate change issues and the realities of it.

- We badly need to preserve and restore healthy riparian areas and consider legislation to prevent damage, not just an offering for private land owners to spend high volumes of funding to fix what was broken.
- We desperately need to lead an effort into our education system to dovetail the importance of ENVIRONMENTAL CONSERVATION AND RESTORATION into education, as local as possible. Public School Systems are ubiquitous, so it offers a chance to equitably learn issues with environmental degradation, examples of how we are trying to deal with it, and expose youths to how interesting local wildlife interactions can be.
- 026 We must be bold; bigger, better, faster.
- -Consider how under-served/under-resourced communities are defined; importance of an engagement and co-design approach with partners; what diversity, equity, inclusion and justice mean in the context of this program; funding for maintenance efforts; funding for capacity building for organizations and partners; what are the filters/parameters or tools that people can and should use to help prioritize where we do our work and why;
- O28 In underserved communities in rural Virginia, there is a high correspondence between poor draining soils and wetlands, so drinking water supplies are often compromised
- We need a truly diverse collaborative, inviting as many perspectives as possible. Think outside of the conservation community.
- O30 Find those messages that really resonate with the public to help drive collective action.
- O31 Do a scan for who was missing today and make sure to reach out and incorporate that stakeholder (agriculture for instance) so no one feels left out.
- O32 Maybe this is out of the box, but to save critical habitat areas and prime agricultural soils, incentives are needed for locating commercial renewable energy facilities on already developed sites (parking lots, rooftops of office complexes etc.).
- O33 Make sure to keep "Wildlife & Habitat" alive (pun intended) through the drafting of the framework, and to put them in the context of "Defense" at the "Landscape" scale. A lot of ideas we heard today are really great, but I worry they don't truly hit these marks. The Pillars are good, but at times also felt like they were trying to check a lot of buzzword boxes, as opposed to really having the focused, precision approach to accomplishing the above. Lastly, keep up the good work!
- O34 Integration among the science approaches and the people-engagement approaches is critical to reaching more effective and sustainable outcomes. People need to see themselves in all of this, understand how to have a role, know that they are welcome and important to conservation practices, and that their quality of life, health, and existence are dependent upon an ecosystem that is biodiverse, balanced, resilient, and healthy.
- o35 -ensure the way that you prioritize projects are expanded to get more co-benefits.
 - -Riparian buffers (especially forest buffers) and wetlands are key- they get so many cobenefits and a good place to focus.
 - -Then when you have a buffer/ wetland project, there is a lot of ways it can be tweaked to get co-benefits and think about access, talk to local communities about siting.

- -Don't just fund the shiny new thing that so many grant programs do. Maintenance is ESSENTIAL. Don't ever assume this is something volunteers should do- especially in underserved communities. This should fund jobs with family supporting wages for maintenance. Look at the CCC and see if we can make a more inclusive and equitable version of Roosevelt's vision.
- -Don't forget about native American tribes as important stakeholders in this.
- O36 There are already a lot of cross-jurisdictional efforts happening that could be amplified/made more effective through Chesapeake WILDS, important to acknowledge the functioning partnerships already in place.
- O37 The opportunities for Chesapeake WILD are significantly different at the urban, suburban, rural context, but all are extremely viable and critical to the success of the program.

 Important to define the key types of projects in each context to help partners prioritize
- 038 Unite with the public health sector
- O39 I am working on a strategy within the Forest Service. We want to have Tribal input as they are partners/stakeholders. We were advised to not group Tribes with our other stakeholders as they are sovereign. With CB and potential to incorporate TEK, engaging Tribal Elders separate from other communities seems to be a good thing.
- O40 First, thanks so much for organizing this meeting. It's been both insightful and inspiring. I am speaking from the Virginia perspective, where I work and live, so I understand if certain thoughts/ideas that I offer may not apply or be different in other parts of the watershed.

In Virginia, we are working on the Wildlife Corridor Action Plan, which will be integrated into the State Wildlife Corridor Action Plan (due for re-write in 2025). So much of this funding can be directed through these two planning efforts, and I feel strongly that other states would benefit from a wildlife habitat connectivity analysis to guide funding and resources.

I work on aquatic organism passage restoration efforts, as it pertains to Eastern brook trout. There is a nexus between EBT conservation and flood resiliency that is of particular interest to the VA DOT, and they have been a mostly willing partner in this effort, but they do not have specific funding pools to address fish passage barriers on public roads. We have had to fundraise and find grant opportunities to VDOT in order to make these projects happen. VDOT and county government needs to have access to reliable sources of funding for fish passage projects. On the other side of things, with private landowners, there is also a need to access restoration funds. Replacing undersized driveway crossings on trout streams costs on average \$100k, which is not feasible for most landowners to pay. Having a grant pool that is managed by the state DWR that landowners could apply for would be incredibly helpful. NRCS cost-share for AOP work is problematic because of staffing capacities. In Virginia, we do not currently have a state NRCS engineer and only one or two staff statewide that can sign landowners up into cost-share programs. Supporting NRCS, if possible, with staffing shortfalls, would also be helpful. Lastly, I am working with stakeholders in our state to develop and prioritize a statewide assessment of AOP barriers for a variety of anadromous fish species. This will help address the aquatic organism opportunities that may arise from the WCAP. Additionally, it will provide DWR and other stakeholders with a "road map" of AOP opportunities. But-- we will need

funding support to train volunteers and staff to do the physical assessments of road stream crossings, and there is not currently a funding source that exists to support this effort.

Additionally, once the WCAP is developed and opportunities are identified, funding will be needed to implement these activities. The WCAP will not just be looking at habitat connections, but will also include opportunities for land protection and acquisition and as well identify hotspots for wildlife vehicle collisions, public access and aquatic organism passage barriers. I envision the most successful projects as having a combination of these factors that are worthy of funding support.

Lastly, there is a serious need in Virginia, and I imagine other states as well, for a coordinated pollinator conservation effort. My expertise is in native bees, and I promote pollinator conservation as part of my job duties, but there is a major vacuum in opportunities to fund pollinator habitat (aside from NRCS programs, not much exists for smaller landowners and/or landowners that are not producers) projects and also not any specific positions at the state or non-profit level that focus on promoting pollinators. This is a great opportunity that could be supported through Chesapeake WILD.

- O41 Thoughtful new and enhanced opportunities for recreation is such a powerful tool for expanding education, awareness, stewardship... we need to be extremely mindful of the barriers that currently exist to what might often be considered simple acts of recreation such as paddling or hiking. There are so many communities that do not have access to these and it's important to understand why that is to ensure more equitable access
- O42 Thank you for bringing in so many partners and stakeholders early in the process. I hope we will continue to seek ways to engage people of color and underserved communities in the planning for Chesapeake WILD, as well as in ongoing/future activities under the program.

Saved Chat Text:

Saved Charles		
(Only relevant chats saved; time coding is in U.S. Eastern time)		
09:30:35	Good morning all!	
09:38:19	Thank you Wendi for your leadership. We're rooting for your nomination!!	
09:41:13	Good morning, everyone. Greetings from the Rappahannock Tribe on the Middle Peninsula.	
09:41:42	Good morning Woodie! Glad you're here!	
09:41:43	Greetings, Woodie! Thank you for joining us!	
09:42:23	Greetings from Congressman Mfume's Office and the Patapsco Tributaries	
09:42:32	That's who we're working for, Joel!	
09:43:06	Great to have you Katie!	
09:54:15	Here is the fact sheet if you would like to see it for reference: https://drive.google.com/file/d/1JTKwsZkbPYm9F4YnEZx- ShS8JUpjgSUf/view?usp=sharing	
09:57:27	The scope of action needed for conserving a network of natural areas and corridors is substantial. You can see a watershed-wide map and analysis of these lands here: http://www.chesapeakeconservation.org/our-work/goal-mapping/habitat/	
10:00:57	Curtis, thank you for framing this for us. This past year has made it so clear that your points are, right on point!	
10:03:25	Great stuff-thanks!	
10:03:40	Inclusive design is really important.	
10:05:23	Inclusive design. Inclusive planning. Inclusive interpretation	
10:05:41	Why is it pillar 1 3 4 but not 2?	
10:06:00	We will be doing pillars 2 and 5 in the next small groups.	
10:32:19	Are we able to get copies of the comments?	
10:32:26	Hard to input into three pillars simultaneously	
10:34:32	We need to be sure to recognize the potential to reestablish habitat in urban and suburban communities and not limit the restoration to already rural and wild	
10:35:05	@ Chris Miller − our group did focus on that.	
10:35:52	Combine wildlife corridors with outdoor people corridors= more green space, less car habitat	
10:36:11	https://chesapeake-deij2-chesbay.hub.arcgis.com/	
	This is the new DEIJ Dashboard in BETA form that is being developed under the CBP Diversity Workgroup. It draws data from multiple sources and provides an equity lens. We are hopeful it will be a valuable tool for our communities and partners as it is built out.	

10:36:49	Wendy we put specific reference to that mapping so that we remember to cite it in the plan.
10:36:50	©Chris Miller I think VA has some tools for that potential with the new Wildlife Viewing Plan
10:39:11	Great point. Re-establishing wildlife and land conservation corridors in urban areas - and educating people about living with wildlife. The great upwelling of interest in birding in the past year is an example of the opportunity.
10:40:33	Important that we make sure local governments are at the table with these mapping/prioritization efforts.
10:41:05	Amen, Ashley. Very, very critical.
10:41:10	Agree with Ashley on the need to include local government.
10:43:00	One other thing the group I was in discussed was the importance of making the connection between land protection, habitat restoration with the economic impact of outdoor recreation.
10:43:16	Within the context of WILD, we should also be looking at other existing programs offered throughout Chesapeake Watershed (CBP state funding; NFWF; Farm Bill programs, etc.) to identify critical gaps in funding. What do those funding sources NOT support, and could they be supported through WILD?
10:44:03	Tanner, I agree
10:44:24	Totally agree, Sally
10:44:46	Tanner absolutely
10:44:59	And make people are compensated! Paid!
10:45:04	Also, strong opportunity to look at vacant land in urban areas
10:45:20	can we make a concentrated effort to do this work ON SCHOOL GROUNDS?
10:45:38	yes!^
10:45:46	Would love to see school grounds become model areas/landscapes
10:46:00	There are some good examples of youth internships == see Baltimore Office of Sustainability Youth Environmental Internship.
10:47:08	As for prioritizing areas and resources, the Corps of Engineers recently completed the study at this link. We didn't have the time or money to get to the granularity we'd like in all areas, but it's a start, and some areas, like the Choptank, are well documented. https://www.nab.usace.army.mil/Missions/Civil-Works/Chesapeake-Bay-Comprehensive-Plan/
10:47:24	We need to keep in mind that underserved communities also include areas of rural low income, etc.
10:47:27	Agree with working to transform school grounds. In Loudoun, school site as a large as 50-75 acres!
10:47:28	School engagement and efforts on school grounds are great opportunities (and to Shannon's point, there are models in Baltimore with the office of sustainability and

	partners, of engaging schools and providing funding to schools for green space creation)
10:47:54	GIT 5 worked on a GIT-funded project that overlaid EJ data with school data with environmental literacy data. We are working with John Wolf to get this into the new Diversity Dashboard.
10:47:56	That was a theme in our discussion: balancing the new and the maintenance/improvement of existing access.
10:48:01	Thanks, Ben! The idea of job training came up in our group as well to build the workforce and create long-term sustainability of restoration efforts.
10:48:41	Agree with granting now and improved over maintaining successful projects. I also see issues with matching requirements on grants. It seems the more local a project is, the harder to come up with the grant
10:48:41	Re: School Grounds YES!
10:48:57	Anyone want to develop a work group to brainstorm the creation of a "Chesapeake Climate Corps?"
10:49:03	Remembering to invite communities and engage them in meaningful ways- not just as a check on a list to have "diversity"
10:49:27	Like the idea of CCC!
10:49:33	Also overwhelmed are states trying to meet their WIPs and also new priorities of CC, habitat and DEIJ need to keep focus on WIPs and add others
10:49:33	Need to have a concerted effort, almost a position to that coordinates funding opportunities across programs and perhaps allows similar applications (volunteers often get swamped in grant applications, etc.)
10:49:33	If ecosystem impacts are ubiquitous and ecosystem management goes on/needs to go on everywhere, then why not partner with federal education systems to make ecosystem learning modules where real examples of efforts can be used?
10:49:39	well said Tanner!
10:51:47	WIPs need to include native habitat preservation and restoration
10:52:33	Bookmark this for reading after the session. Brett Glymph's thoughts on "Creating the Commons" in today's CCP Lightning Update. It's relevant to doing work at schools and other public spaces. https://conta.cc/3pLTz3x
10:52:47	Not everyone kayaks!
10:52:56	YES Chris focus on WIPs should be nature-based solutions
10:54:28	I encourage everyone to watch Kiss the Ground about resilient agriculture and soil health - it brings another lens to this set of work given the large number of agricultural acres in the watershed. The resilient practices for soil health have huge positive implications for habitat and species conservation and water quality.
10:54:41	Great points, Curtis!

10:54:50	I agree that we need to re-think what "wildlife-related recreation" means to people. And what we want to achieve in land conservation - small places in strategic locations in communities likely provide more benefits overall than we recognize.
10:55:17	And make sure the space is welcoming and accessible to all. Everyone should feel comfortable in that space.
10:55:18	Yes, Becky.
10:55:37	Internal DEIJ capacity building is key (both for existing or and helping new org). An important shift would be to ensure Ches WILD and other govt funding can provide seed funding and support the ongoing work of community building and outreach.
10:55:47	Well said Curtis!
10:55:53	Thanks Kristin—we are trying encourage viewings in PEC region
10:55:57	Absolutely agreed Curtis.
10:56:14	Well-said, Curtis.
10:56:27	Absolutely agree Alyssa.
10:56:36	Access also means knowing/learning how to do recreation safely. We talked about it in our group
10:56:53	"hippie dippie granola people" LOL!
10:56:59	Kiss the Ground is a fabulous documentary! I just watched it, too.
10:57:38	Communities centers as well as schools- could be a focus for investment in underinvested communities and getting involvement in hands on restoration and connections to historical life on the land, minorities and otherwise.
10:58:10	Same goes for Forestry (as with Ag)
11:01:31	Idea re Pilar 4: Barometer for economics and equity related to outdoor recreation/hunting/fishing in Chesapeake that CBP can integrate into their annual barometer and perspective.
11:01:33	What is our role in engaging the business community related to climate change?
11:02:39	Yes to Kristin's point about soil health as a way to build watershed resilience. Healthy soils and ag BMPs are great companions to forest buffers for streams that are supporting the range of life.
11:05:24	Ashley, that is a great point. The Sustainable Business Councils are really interested in being more invested in this work. This can create some really strong public/private partnerships around conservation.
11:05:39	To Ashley's point, there is tremendous investment in socially responsible investment and corporate sustainability, and much room for improvement in how they could support land conservation and restoration.
11:09:05	I second that for Bill!
11:09:48	Remember to submit often
11:29:53	I just love seeing all my favorite people!

11:33:40	John asked me to post a link to this MD bill on conservation finance. Text is linked to the thumbtack in the upper left corner. http://mgaleg.maryland.gov/mgawebsite/Legislation/Details/sb0737?ys=2021RS
11:34:39	Thanks Tim.
11:34:51	Communities that are not already engaged
11:34:58	Monitoring of conservation actions.
11:35:04	capacity needed for implementation!
11:35:43	And I think we also have to unpack what community means (there are a lot of dynamics, when you consider place, interest and identity/affinity)
11:35:55	Local governments are making land use decisions; most important to be sure that gets incorporated into local comprehensive planning
11:36:04	true Curtis
11:36:06	the Chesapeake Monitoring Co-Op is great for helping with citizen science efforts and making water quality data collected make sense!
11:37:00	"Mine existing data then translate" this from Valerie in our group
11:37:05	Hear, hear, Joe!
11:37:07	I agree with Chris - local land use decision making. Localities need confidence that their decisions are legally and scientifically sound.
11:37:15	We have been talking in the Bay program both in the Healthy Watersheds and Climate workgroups to identify "signals of change" knowing that we cannot monitor everything, at least being able to pick up signals of change in areas on the ground or in the water would help drive resources to further investigate those areas and understand the cause
11:37:22	Carbon needs to done in a way that improves habitat, not simply maximize carbon
11:37:22	In community education, because we need their advocacy since environment/climate impacts us all, but often the conversations aren't accessible to them, especially in language. If we want their participation they deserve to be informed and learn how these things impact them. Understanding that we can't conserve without community.
11:37:40	Joel, I agree with you. We have a good base layer for high res land cover and CAST, but need to build on it for climate resiliency.
11:38:26	Conservation planning goals need to flow through to regulators so that permit review and permit design incorporates climate resiliency and habit connectivity goals
11:38:43	I know some Tribes have been involved with USDA climate Hubs. Not sure if they are CB Tribes
11:38:48	Local communities feel like the state is forcing new regulations on them to incorporate the resiliency element in the comp plan. The council members take recommendations from the planning commission and members do not have the training or understanding to make necessary recommendations. They should have

	ongoing training or continuing education credits to remain on commissions or boards.
11:39:09	In addition to quantifiable scientific data, we must also center lived experiences (contextual knowledge)
11:39:37	Great point Chris and we should also work with local governments beyond comp plans to implementing them via zoning, subdivision, etc.
11:39:42	Can you share the Healthy Watershed Assessment
11:40:19	Please don't forget upstream, rural areas when talking about goals for climate change. Many of these areas are nowhere near coping with climate change because so many are doubtful that it exists. Education is still very important in some of these areas, particularly actual examples of impact that are conclusively occurring due to climate change.
11:41:20	yes to performance monitoring!
11:42:17	We need to make restoration and conservation the norm, not the "Best pilot" or the "best project".
11:42:18	Agree with John Griffin. Engaging local governments are essential. They control land use, MS4 permits, etc.
11:42:51	Agreed, Chris.
11:43:04	
	https://www.chesapeakebay.net/who/group/maintaining_healthy_watersheds_goal_implementation_team
11:43:19	Link to Chesapeake Bay Healthy Watershed assessment above
11:44:23	Related to lived experience, or contextual knowledge, I'm stressing the importance of Traditional Ecological Knowledge (TEK) from Native communities. Great example is river herring> our tribal elders have extensive knowledge about historical runs > numbers of fish & locations
11:45:12	Quantify and relentlessly tout/market the co-benefits of GI, to funders, to public
11:46:01	In our group, we talked about whether or not "Green Infrastructure" is where WILD will have the biggest impact?
11:46:19	Woodie, do you have any materials on TEK? Really think this is an important perspective and dataset to include in our efforts.
11:46:29	Great comment, Sally! Thank you.
11:46:40	Agree with Tanner this program should focus where other programs do not fund. Habitat, species, etc.
11:46:40	Not that we'd ever advocate against green infrastructure, just within the context of this potential, future grant program, is that where we'll have landscape-scale successes.
11:47:55	Agree with Sally. Also ensuring that there is a good alignment with what CBP is already doing and committed to doing. This has the potential of bringing more thought, focus, and implementation to the efforts already ongoing

11:48:07	Community connections will give us stronger ways to build co-benefits. More upfront work but more durable solutions that meet social as well as environmental benefits.
11:48:13	I think depends on your definition of green infrastructure- landscape level GI - focusing on hubs and corridors- is key
11:48:30	Great points, Ben and Ashley.
11:48:40	Sally, agreed! Ultimately, the CBP is based on the water being "fishable and swimmable" wildlife and people. So all thishabitat, climate, equity, etc. should be foundational.
11:50:01	Natural infrastructure may be a better term that avoids the stormwater BMP associations that come with green infrastructure
11:50:02	I think Riparian buffers (especially forest buffers) and wetlands are key- they get so many co-benefits and a good way to focus and get a lot of these benefits
11:50:49	Agreed Jonathan. Water quality improvements in the Chesapeake Bay are not ends in themselves but purpose to improve a use (habitat, drinking water, etc.)
11:51:16	Actually, Green Infrastructure started out in the 1990's as the hub and corridor approach to landscape conservation. Then EPA started using the term to define "green" stormwater management in the late 2000's.
11:51:35	Agree with that definition of green infrastructure, Ben. And the comment on drinking water resonates strongly.
11:51:45	https://drive.google.com/drive/folders/1bzKaOX29-ivTJJfNuEfEb3EtfTrOe3Lr?usp=sharing
11:52:51	Green infrastructure should be seen as not just infrastructure but also an educational/teaching tool that builds awareness about how water quality is actually improved and how it ties into community activityimportant to be strategic about the locations where we implement GI for both water quality function and public visibility/opportunity for engagement
11:53:07	Gotta go to the next meeting. Please keep us involved.
11:53:18	This all takes me back to the thoughts of Ian McHarg, my former professor, when he set out his manifesto Design with Nature. https://www.bloomberg.com/news/articles/2019-06-10/the-legacy-of-design-with-nature-50-years-later
11:53:38	where is the link for feedback? thanks!
11:55:04	Will we get a list of participants?
11:56:18	Please look at Section 223, Justice 40, of the President's Climate EO, that calls for a plan to shift many fed investment programs so that 40% of the investments serve disadvantaged communities. We should do this WILD and other EPA Bay Programs. state programs etc.
11:56:34	Thank you, Wendy.
11:57:04	Thank you Wendy for acknowledging that!

11:57:19	Yes, John Griffin that EO is really important to follow.
11:57:25	And John Griffin!!
11:58:15	Hear, hear, Joel!
11:58:15	Silos or cylinders of excellence?
11:59:11	Will the resources provided in the chat be shared with the group? The recording? The participant list?
12:01:11	have to hop off sorry!
12:02:09	Great job, as always, Bill Potapchuk!
12:02:26	Thank you everyone! Very exciting!
12:02:35	It was a pleasure!