Chesapeake Conservation Partnership

Data and Analysis for Driving Equity In Public Health and Conservation

A Working Session

October 29, 2020

Online – Zoom+Covision

Facilitated by:

COMMUNITY BUILDING INSTITUTE

covision design

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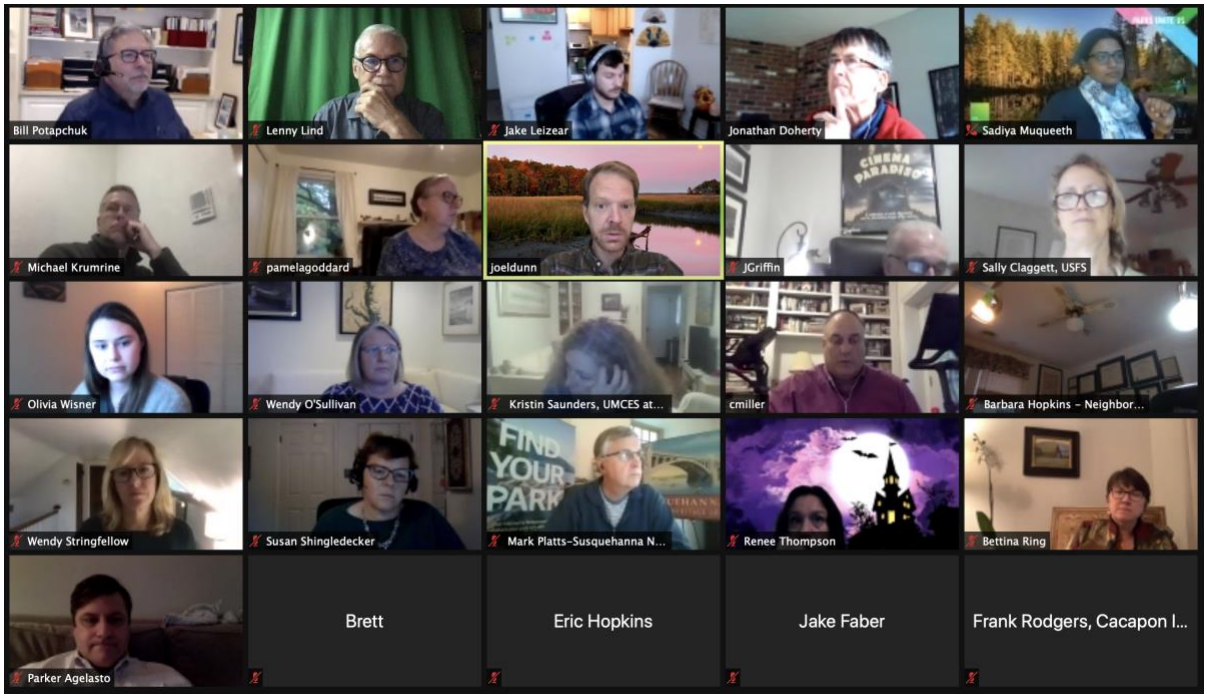
Zoom Photo



Apologies for the expressions! This taken only as a record of who was present. Upgrade: make a moment with the group when we “take a screenshot together” !

About Us

What kind of organization do you work for?

(22 Participants chose one item)

Item	Votes	Percentage of Votes
Local government	0	| 0%
State government	4	||||||| 18%
Federal government	4	||||||| 18%
Nonprofit organization	14	|||||||||||||||||||| 64%
For profit business	0	| 0%
Total Votes	*22*	

I am primarily …

(22 Participants chose one item)

Item	Votes	Percentage of Votes
A user of GIS and data products	12	|||||||||||||||||| 55%
A generator of geospatial analysis and data	1	|| 5%
I really am both a user and a generator	9	|||||||||||| 41%
Total Votes	*22*	

What is your level of experience in working with racial equity and health disparities in relation to conservation?

(22 Participants chose one item)

Item	Votes	Percentage of Votes
I'm a veteran, I have worked on these issues for a number of years	5	||||||| 23%
I have some experience	13	|||||||||||||||||| 59%
I'm relatively new to this work	4	||||||| 18%
Total Votes	*22*	

Inequities, Possibilities, Priorities

What are fresh approaches, using data and GIS, that can be used to illustrate the underlying inequities in the elements of the public health goal?

THEMES re Underlying Inequities

- Baseline inclusion of equity information in ALL analyses, not just analyses that are equity specific
- Don’t assume we know the answer.
- Pivot to grow our mindset from solely large landscape conservation to include smaller spaces within urban areas that need to have the same greening
- Look at acreage per capita investments. Look at funding from public and philanthropic investments
- Access to community gardens, farms, farmers markets, grocery stores, PYO orchards,
- Green space needs to be a diverse term, including trails, parks, open space, parks, school sites, etc.
    - Huge local investment in local school sites that are not fully utilized as common open space resource.
    - Track homeowner open spaces, though may not be full public access, only for residents. issue with some schools (closed during non-school hours). work with schools to get facilities open
    - Are private areas included in (public access data) where permissible e.g., (Mt. Vernon)
    - How do we treat facilities that have a fee? Is a private facility excluded simply for having fee? Many publicly owned parks have fees, so should private fee based facilities be excluded
    - Follow London "national park city"-- multiple facets of greening the city using a green-density type heat map
    - include improved sidewalk/bike trails in the assessment.
- Accessing green space:

- 30 minutes is too far especially in rural areas where there is no public transportation and isolated communities - find areas closer. 10 minutes in Urban areas may be too much too.
- Transit access to open space. Good model in San Francisco, to expand the universe of accessibility.
- Do more with trails that aren't technically trails and parks that aren't parks, but used as such
- some sort of existing location-based tool (google analytics) to show where people are going outside and where they aren't, where they are coming from.
- Address different users of public areas/recreation areas that have multi-use and whether there are conflicts or overuse.
- Access measurements utilizing public transit routes are key!
- Map public access vs. private access and how to differentiate, including fees. Are fees exclusionary?
- Look at mapping police activity and crime data in/near parks; need partners in public safety

- Data Sources and Data to include:
  - Looking at open source public health data, BRFSS data rich surveillance data sets to overlay.
  - Robert Wood Johnson community health data sets, and city health dashboard, county health rankings
  - WVU Department of Geology and Geography, looking at food insecurity.
  - take existing tools (e.g., reporting potholes), grow them, and use maps
  - Use sensing data as well as geospatial data to understand underlying conditions in communities
  - Address how to identify and improve blighted public access areas or areas that are not perceived as safe.
  - find good health indicator (similar to diabetics data or asthma) data but ensure that disease used is demographically neutral

PARTICIPANT DATA

001 Access to community gardens, farms, farmers markets

002 Use sensing data as well as geospatial data to understand underlying conditions in communities

003 This area is really new for me, but there are well-developed programs here at WVU in the Department of Geology and Geography, on the Geography side, looking at food insecurity. I will definitely share this program with Bradley Wilson and others.

004 use big data (a la ebird) where people post pictures of their local parks (is there an app doing this now?)

005 Looking at open source public health data, BRFSS data rich surveillance data sets to overlay

006 Look at Robert Wood Johnson community health data sets, and city health dashboard, county health rankings

007 DE tracks homeowner open spaces but are not public access, only for residents and some issue with some schools (closed during non-school hours). - work with schools to get facilities open

008 Baseline inclusion of equity information in ALL analyses, not just analyses that are equity specific

009 take existing tools (e.g., reporting potholes), grow them, and use maps

010 What other policies and practices beyond redlines help illustrate the disparity, city based investment and county investments in conservation

011 Use GIS to map community interests and integrate with other related datasets.

012 Green space needs to be a diverse term, including trails, parks, open space, parks, etc.

013 Look at acreage per capita investments. Look at funding from public and philanthropic investments.

014 surge multiple work groups' work toward school grounds - school grounds for learning, greening for communities, combined with water quality improvements

015 Follow London "national park city"-- multiple facets of greening the city using a green-density type heat map

016 Community gardens, community farms, farmers markets, pick your own orchards,

017 "Don't assume we know the answer"

018 30 minutes is too far especially in rural areas where there is no public transportation and isolated communities - find areas closer

019 Are private areas included in (public access data) where permissible e.g., (Mt. Vernon)

020 use apps that a wide swath of the public uses

021 Address how to identify and improve blighted public access areas or areas that are not perceived as safe.

022 Data and GIS can help us prioritize high need areas

023 - Prevalence of impervious surface

- Median assessed property values

024 We need to do more with trails that aren't technically trails and parks that aren't actually parks, but are still used as such

025 some sort of existing location-based tool (google analytics?) to show where people are going outside and where they aren't

026 Access measurements utilizing public transit routes are key!

027 Mapped out location of public access vs. private access and how to differentiate them as well as fees. Are fees exclusionary?

028 could map police activity in parks

029 pivot to grow our mindset from large landscape conservation to include smaller spaces within urban areas that need to have the same greening

030 need partners in public safety

031 How do we treat facilities that have a fee? Is a private facility excluded simply for having fee? Many publicly owned parks have fees, so should private fee based facilities be excluded

032 Transit access to open space. There is a good model in San Francisco, to expand the universe of accessibility.

033 Encroachment of salt water impacting forest health and well water from sea level rise

034 Pocket parks provide direct opportunities for access

035 find good health indicator (similar to diabetics data or asthma) data but ensure that disease used is demographically neutral

036 Social science data to understand people's connection to the land - and how that correlates with their ability to prioritize and advocate for conservation

037 How do we serve up our data? Making sure it is accessible on mobile devices is becoming more and more important

038 Examine people's connection to water (as well as land) with social surveys

039 Address different users of public areas/recreation areas that have multi-use and whether there are conflicts or overuse.

040 Investigate the use of crime data to understand where parks or open space may not be "safe" for further analysis at the community level.

041 do park visitor surveys and do zip code mapping to better understand where people are coming from

042 Are the measures like (30 minutes or 10 minutes) inclusive enough. Some are willing to drive further to get "more" (nature, facilities).

043 do outreach/survey populations that aren't using parks

044 Tying of land conservation to schools and hospitals, with using GIS to identify those specific schools and hospitals with land

045 what are barriers?

046 urban areas purposefully thinking about multiple uses

What fresh approaches can be used to identify priorities and possibilities for action?

THEMES – Identifying Priorities & Actions

- Look common open space in suburban areas (e.g. HOAs, school grounds, playgrounds)
- Examine patterns of trespassing (fishing, walking, hiking) to identify places where people want to recreate
- Public health
    - Gardening access as measure of health (map access to farms, farmers markets, community gardens)
    - Identify assets based approaches that engage existing networks and partners
    - Connect mental health value to scenic access
    - COVID-19 rates as indicator identifying communities most impacted by pandemic and how it has influenced park use
- Identify food priority areas - opportunity to connect people to land
- Public Access
    - Cross reference public access (NCED and other data)
    - Determine value of scenic areas for recreational activities
    - Map transit access to public and private facilities/ make public right of ways to connect public
    - Include private lands that are open (Mount Vernon, Montpelier, Monticello)

- Map current use of parks and trails

- Get community insight on GIS analyses/ data
  - Community concerns of drinking water contamination
  - Understanding conflicts of use and how that relates to management
  - Planning against gentrification before it happens
  - Tying community land trust work on housing security to conservation

PARTICIPANT DATA

001 Look hard at schools and HOA common open space in suburban areas

002 Track HOA open spaces; problem is that they are considered private and posted as no trespassing

Schools are tracked; schools are also posted, fenced off, and locked

Working with schools and school districts to open facilities <..h6

003 Playgrounds often closed to public after school hours

004 Mapping is important to ID certain areas, but how to we meet the people IN those certain areas?

005 track cell phone data to see where people go on weekends and after work

006 look for patterns of trespassing for fishing/walking/hiking to identify places where people want to go to recreate close to home, and make them public spaces

007 Gardening access as a measure of health

008 Identifying the areas of greatest need that have community partners who can participate in the co-creation of solutions.

009 Public health often looks at a deficit -based approach (high rates of diabetes) Look to identify assets based approaches - existing networks and partners

010 How to include private lands that are open? Mount Vernon, Montpelier, Monticello

011 Identifying and bringing to the table people within the community - to help identify the priority areas and actions

012 Public access trails on private land

013 Going back to the board for GIS analyses/data once we get community insight

014 Cross reference Public Access, NCED and other data to determine which private lands area public access.

015 Engage the local community and community leaders - ask them what their priorities are and what their needs are

016 A question of scale: how does large landscape conservation fit into smaller geographies?

017 What is the value of scenic values for providing recreational and public access

018 Access to waterways - recreational issue

Access to food double edged - benefit, but potential for ag pollution.

Differences in Urban and rural access and public health challenges

019 Include recreational (Sunday drives) as part of a "recreational"/"health activity"

020 Have community leaders identify priorities then we chose 5 pilot projects to implement. Foster stewardship within the community post project

021 - Build public preferences into any GIS model

022 We need to be willing to include the mental health value of scenic access and scenic drives for populations that may not seek access for physical recreation

023 Food priority areas - opportunity to connect people to the land.

024 What role to private recreational activities contribute to this goal (public golf courses, national parks?)

025 Need to map transit access to public and private facilities

026 Is there fear of drinking water contamination in various communities?

027 Can localities make public right of ways as public open space

E.g. Wharf, Georgetown Waterfront, Yards Park in DC

028 Understanding conflicts of uses and manage to minimize conflicts

managing use has to be factored in

029 What do you do with facilities that are located in high crime areas? How are they classified in an analysis?

Might have to map crime data as a reality check

030 Partner with community land trusts (or establish some) so that we can do targeted improvements in urban communities while also protecting the existing residents so they don't get gentrified out

031 How to measure use levels, overcrowding, etc.

032 Do we need to look at COVID impact/rate/cases/mortality as a public health indicator identifying communities most impacted and how it has impacted park use

033 How do we accurately incorporate the willingness to travel greater distances for a better visitor experience?

Where do youth sports and other fee based activities fit in?

034 Map access to farms, farmers markets, community gardens, pick your own orchards/ healthy markets

035 People are already at these parks, already at these trails: are we accurately mapping that reality?

036 Planning against gentrification before it happens

037 Tying housing security done by community land trusts to land conservation

Building Public and Political Will

What are the most powerful ways we might use data and geospatial analysis to build public and political will for action?

PARTICIPANT DATA

001 Mapping places that accurately reflect USAGE of land by people, not designation of land

002 Data and geospatial is a very powerful tool, and can turn will negative quickly, it's important to be aware of this

003 Data visualization to communicate with a less tech savvy audience decision makers and community leaders.

004 Believe in the power of visual illustration. Need to find a compelling example of integrated data related to holistic community health (parks, trails, jobs, health, homeownership, the whole bit) and learn from it.

005 Mapping public lands and seeking ways to connect and create corridors so dispersed spaces become one.

Saved Chat Text:

(Only relevant chats saved; time coding is in U.S. Eastern time)

10:00:41	Good morning folks!
10:01:13	Yes good morning. Zeta arrived.
10:01:17	Good morning all!
10:04:26	Good morning! John McCarthy sends his regrets and covering a NRCS meeting this morning
10:05:13	Good morning
10:05:45	Hi Parker!
10:08:51	https://www.tpl.org/the-heat-is-on
10:08:57	This is the link to the report
10:09:10	Good morning Bettina. Thanks for joining.
10:10:35	A few additional links:
	https://www.tpl.org/parkscore
	https://www.tpl.org/parkserve/about
10:11:33	https://www.chesapeakeconservation.org/last-week-rural-this-week-gis/
10:12:14	Last link includes link to several tools Joel mentioned.
10:21:40	The maps Jake is sharing are all still works in process. For example, we recently had a productive working session with a series of experts on how best to map areas that would protect drinking water. More to come.
10:22:07	The West Virginia Trails Inventory may be of use: http://mapwv.gov/trails/
10:22:26	Great, thanks Eric. All this work is iterative!
10:22:36	Have you explored the AllTrails data set—seems inclusive of local, regional and state options.
10:24:12	Great work and presentation Jake. Always impressive.
10:24:23	Our CSTREAM intern Lucy over the summer also did an analysis related to public access on protected areas (in relation to how much "public shoreline access" there is. Labeeb can share this information with you Jake
10:24:40	Transit access assessment ought to be included as well. Good work in the San Fran bay region on that issues
10:24:40	Thank you Sally! And sounds good Renee, I'll touch base with him

10:25:33 Good point Chris.

10:25:34 The experience we are having now is that there is a 90 minute drive radius for access to hiking trails

10:28:01 bike/pedestrian accident info could bring forward areas that need attention and solutions

10:29:36 Clearly one of the things we have heard in the last two sessions is the need for holistic, integrated approaches. These maps you are showing really paint that picture.

10:30:28 Baltimore's Black Butterfly.

10:30:41 How do we ensure that we are mapping local resources, including the informal?

10:31:09 Agreed, Chris. This really calls out for understanding things at the community level.

10:31:27 I'm interested in dissecting the issues and maps around access to healthy, secure food vis a vis the need to have access to locally sourced food.

10:32:05 Yes, Sally. In both urban and rural areas.

10:32:26 Jeremy Hoffman is with the Science Museum of Virginia in Richmond

10:32:47 There are discussions within the Coalition for Smarter Growth on how to include improved sidewalk/bike trails in the assessment. My experience during the pandemic is that increasingly the sidewalks and streets are part of the trail network, with high percentages of neighborhood populations using the resource

10:32:51 I have been wonder this too Chris. I agree community level (data and gathering information charrettes) where we work to map and attribute local resources, art, murals, community gardens, food banks, churches or other things that are important to those areas. YES both rural and urban.

10:33:34 Dumbarton Oakes Mellon Program is supporting research on this issue as well. Director Taisa Way.

10:33:37 Yes, Chris. Streets in my neighborhood definitely.

10:34:06 Love the focus on school properties as shared use

10:34:41 Yes, me too! They are already conserved, we just need to green them!

10:34:50 resources) that include parks, schoolyards, streets, sidewalks, ...

10:34:54 Huge local investment in local school sites that are not fully utilized as common open space resource. A high school site in Loudoun averages over 75 acres, most dedicated to parking

10:35:37 Fantastic presentation Sadiya. Right on point.

10:35:45 Another target is HOA common open space and stormwater management areas

10:37:06 Also, just to note not all parks are good. In some areas (urban in particular) parks have been taken over by people lacking stable housing, drug users and others whom make the area perceived as unsafe. Safety is an important component of health.

10:37:41 Thus the point, Renee, that it takes more than parks, but also jobs, etc.

10:37:47 In Richmond there are issues - legal and liability -that prohibit schools from opening their property for public use. Does anyone have examples where there are shared use agreements. In Virginia most School Boards are independent government agencies.

11:09:34 Wendy O'Sullivan : Who's the puppy Olivia?

11:17:34 Can this dashboard link be shared in chat?

11:18:10 https://gis.chesapeakebay.net/diversity/dashboard/

11:18:32 https://gis.chesapeakebay.net/diversity/dashboard

11:19:09 Parker, that's great.

11:19:45 Thank you John for the link and the information!

11:26:15 Is there a good example of a comprehensive, holistic approach to healthy community mapping that includes a lot of these factors?

11:27:15 Everything from access to grocery stores and farm markets, to parks, to health data, jobs, etc. I'd love to see a really great total unsiloed model.

11:27:21 PEC is trying to incorporate the access to open space in local comprehensive planning, zoning, and project review as well as provision of publicly owned and managed facilities

11:28:03 Loudoun County’s fiscal impact model included a detailed open space and recreational access criteria

11:29:23 There is a sliding scale of access from walkable access for daily recreation to regional scale facilities

11:29:37 yes good partners and listening sessions important

11:33:01 It would be really interesting to take a look at the most comprehensive approach and dataset for community health from a rural area and one from an urban area. Regardless of where the examples come from.

11:33:55 The gentrification prevention point is really really important

11:34:25 I agree …

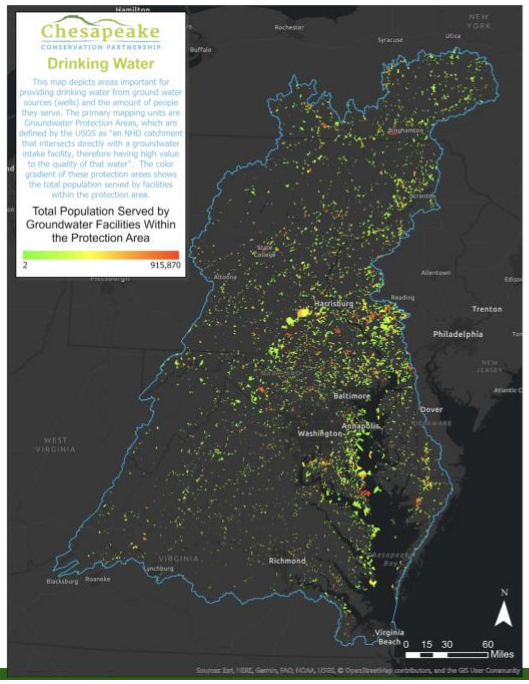
11:35:48 VOF has been a leader on focusing on providing new opportunities for access

11:36:37 Totally agree, Kristin. Community land trusts are definitely addressing a critical component of what supports public health -- homeownership,

	which contributes to accumulating personal wealth among disenfranchised communities -- and it involves land protection. Need to work with those folks.
11:37:47	https://www.fauquiernow.com/fauquier_news/article/fauquier-habitat-goes-native-around-haiti-st-house-2020
11:37:59	https://www.vof.org/protect/grants/go/
11:39:17	https://dailyprogress.com/community/orangenews/news/town-to-trail-seeking-to-improve-gordonsvilles-verling-park/article_a9e35850-a985-11e9-b2eb-5f47ec20f2d6.html
11:40:03	VOF has proved grant support for the work at Verling Park in Gordonsville.
11:40:54	LOVE Renee’s Zoom background
11:41:18	In response to your question Bill, I think if you are managing a city or a county, you have to understand the systems of things affecting communities. Sadiya's maps she showed today are a great example. Same in Richmond.
11:41:27	On topic of gentrification, there is a book in the works, maybe out now, called Just Green Enough, which is all about not overdoing it to guard against gentrification. Here's an early article on the topic: https://nextcity.org/daily/entry/gentrification-green-neighborhoods-just-green-enough
11:42:49	And GIS data can help communities access the factual data to prove their needs. As Barbara says, we are showing what is needed
11:43:27	I would encourage the CCP and Bay program to look at data sets beyond GIS to identify community health factors. This should include environmentally sensed data with in-situ sensors for air and water quality as well as social science community data including
11:44:06	Our latest We Need to Talk included an important exchange that communities should not have to decide between clean air, a grocery store, or green space. Panelists urged an integrated approach.
11:48:29	https://conbio.onlinelibrary.wiley.com/doi/full/10.1111/cobi.13315
11:55:12	Local governments have to deal with this integration—need to engage local governments that have been innovators
11:55:57	We have had some success with community based design and planning
11:56:25	Yes, Chris, I'd really like to find a few best case local government examples, from anywhere, for us to look at.
11:56:28	Remington Walks was a project at the town level (2,000 pop) to explore connectivity, open space resources, etc.
11:56:47	for the conversation. I have an Alliance for Community Trees call. Good day all.

11:56:50	PEC raised $ for facilitated public engagement process
11:57:22	Barbara Hopkins - NeighborSpace of Balt Cnty : I have to run to something else. Nice to be with you all.
11:57:39	How about the interface between stormwater management planning and design with open space access
11:58:00	Mitigation dollars benefiting most impacted communities
11:58:28	Regional fee on energy and fuels that goes to address EJ issues
11:59:26	I have a noon call that I need to head off to. Thank you all!!
12:00:06	Have to run! Good meeting. Looking forward to future discussions.
12:02:52	Great job Bill
12:02:58	Thanks you for this opportunity to learn so much about this effort!

Slides from Presentation:


Chesapeake
CONSERVATION PARTNERSHIP
Drinking Water
This map depicts areas important for providing drinking water from ground water sources (wells) and the amount of people they serve. The primary mapping units are Groundwater Protection Areas, which are defined by the USGS as "an NHD catchment that intersects directly with a groundwater intake facility, therefore having high value to the quality of that water". The color gradient of these protection areas shows the total population served by facilities within the protection area.
Total Population Served by Groundwater Facilities Within the Protection Area
2
915,870
Rochester
Syracuse
Utica
Buffalo
Binghamton
Scranton
Allentown
Reading
Trenton
Philadelphia
Baltimore
Dover
Annapolis
Washington
Richmond
Virginia Beach
Blacksburg
Roanoke
WEST VIRGINIA
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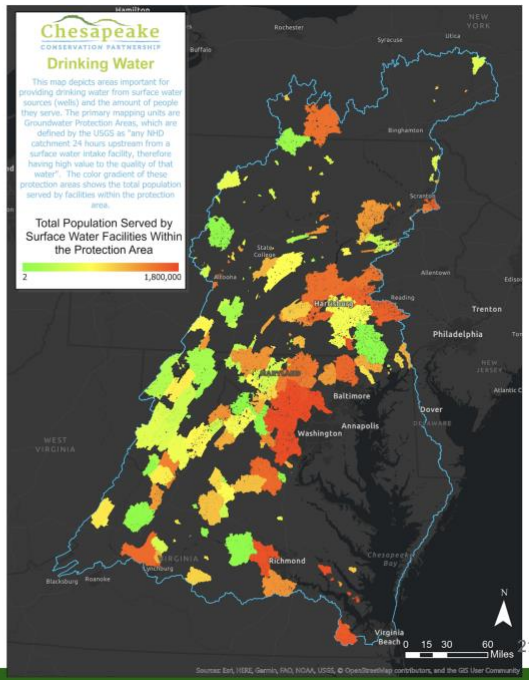
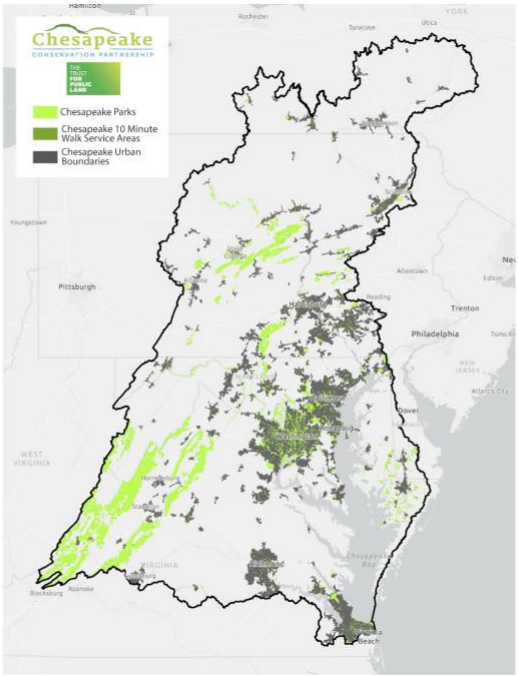

Chesapeake
CONSERVATION PARTNERSHIP
Drinking Water
This map depicts areas important for providing drinking water from surface water sources (wells) and the amount of people they serve. The primary mapping units are Groundwater Protection Areas, which are defined by the USGS as "any NHD catchment 24 hours upstream from a surface water intake facility, therefore having high value to the quality of that water". The color gradient of these protection areas shows the total population served by facilities within the protection area.
Total Population Served by Surface Water Facilities Within the Protection Area
2
1,800,000
Rochester
Syracuse
Utica
Buffalo
Binghamton
Scranton
Allentown
Reading
Trenton
Philadelphia
Baltimore
Dover
Annapolis
Washington
Richmond
Virginia Beach
Blacksburg
Roanoke
WEST VIRGINIA
VIRGINIA
0 15 30 60
Miles

21


Chesapeake
CONSERVATION PARTNERSHIP
Chesapeake Parks
Chesapeake 10 Minute Walk Service Areas
Chesapeake Urban Boundaries
Rochester
Syracuse
Utica
Youngstown
Pittsburgh
Allentown
Trenton
Philadelphia
Dover
WEST VIRGINIA
VIRGINIA
Blacksburg
Roanoke
Virginia Beach

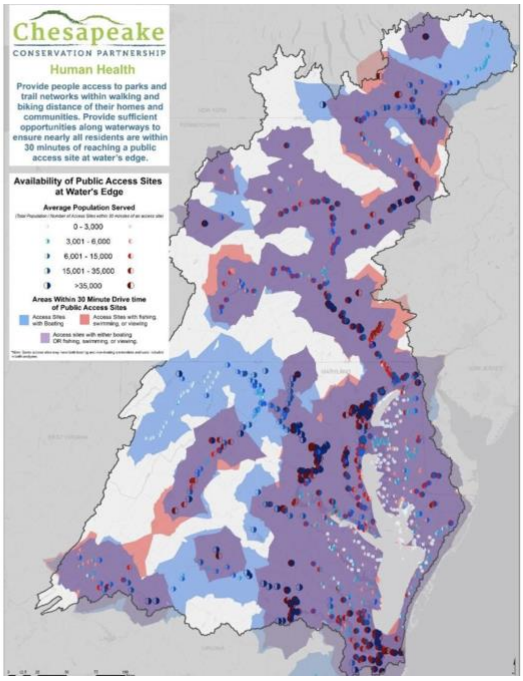
23

Goals

Human Health

Access to water:

- Areas within 30 minute drive time of access sites
- Average population served



29