Recommendations for Future Enhancements to the Blueprint

The American Planning Association's Green Communities Center (APA) was engaged by the South Atlantic Landscape Conservation Cooperative (South Atlantic LCC) in a 2016-2018 scoping project that examined how large-scale, conservation-based green infrastructure definitions and urban scale definitions can be bridged to identify areas of shared conservation interest across the rural – urban continuum. Work products included:

- *South Atlantic Urban Conservation Summit: Thinking Megaregionally,* which identified opportunities and challenges in the integration of local government green/blue infrastructure efforts with regional approaches like the Conservation Blueprint through one-on-one interviews as well as an in-person summit of planners and conservation professionals; and
- *Using the South Atlantic Conservation Blueprint to Improve Integration Between the Natural and Built Environments*, a report aimed at improving the ability of planners and conservation professionals to depict areas and actions of shared conservation interest near and within cities by using the South Atlantic Conservation Blueprint.

APA has also reviewed the Conservation Blueprint and is recommending several enhancements to improve both the functionality of the Blueprint within urban areas as well as how the Blueprint can be used by urban planning professionals. These recommendations are grouped into the following categories:

- Indicators
- Resolution; and
- Connecting with planners.

Indicators

The Conservation Blueprint is based upon 27 measures of ecosystem health, including species, habitats, and abiotic factors. These indicators were developed with input from more than 240 experts in marine, freshwater, and terrestrial resources in the South Atlantic region and all five adjacent LCCs.

The indicators can be modeled using existing data and allow the South Atlantic LCC to track progress toward ecosystem goals. They were chosen to reflect the natural and cultural resource components of ecosystem integrity, using the following criteria:

- Ecological: Indicators must represent a variety of other organisms or ecological attributes and respond to landscape change.
- Practical: The LCC must be able to monitor and model indicators based on current programs and resources.
- Social: Indicators receive extra consideration if they resonate with a variety of audiences.

The indicators are valuable to planners because they indicate the presence of sensitive species, quality of habitats, and other gauges of a healthy ecosystem that can be used to make planning decisions.

Urban Open Space

The existing urban open space indicator represents the ability of the upland hardwood forest ecosystem to connect urban residents and nature through nearby open space. It is an index based on the distance of urban areas from open space that could be refined to better reflect how this indicator reflects the relationship between people and open space.

Currently, there is no limitation on the size of undeveloped land that is included within the indicator (beyond the functional limitations of the available datasets). However, smaller parcels of land do not have the same benefits as larger parcels of land, whether the benefits being considered are ecological or recreational.[1] The urban open space indicator would benefit from a minimum size requirement to ensure that undeveloped areas considered in the analysis are of a suitable size to provide benefits to the surrounding urban areas.

The National Recreation and Park Association recommends a minimum size of five acres for neighborhood parks, which are considered to be the foundation of a local park system.[2] A threshold of five acres would also allow for the minimum necessary adequate habitat patch size for many birds and small mammals, ensuring that the undeveloped areas in question are of sufficient size to benefit both people and wildlife.[3]

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[1] Janzen, Daniel H. 1996. "No Park Is an Island: Increase in Interference from Outside as Park Size Decreases." In Fred B. Samson and Fritz L. Knopf (Eds.), *Ecosystem Management* (pp.192-202). New York: Springer; Ren, Zhibin, Xingyuan He, Haifeng Zheng, Dan Zhang, Xingyang Yu, Guoqiang Shen and Ruichao Guo. 2013. "Estimation of the Relationship between Urban Park Characteristics and Park Cool Island Intensity by Remote Sensing Data and Field Measurement." *Forests*, 4(4): 868-886; Rigolon, Alessandro. 2016. "A Complex Landscape of Inequity in Access to Urban Parks: A Literature Review." *Landscape and Urban Planning*, 153: 160-169.

[2] Mertes, James D. and James R. Hall. 1995. *Park, Recreation, Open Space and Greenway Guidelines*. Arlington, VA: National Recreation and Park Association.

[3] Environmental Law Institute. 2003. *Conservation Thresholds for Land Use Planners*. Washington, D.C.: Environmental Law Institute.

A minimum required size of 10 acres would also be appropriate and within the ideal range of sizes for a community park, but we are uncertain as to the distribution of sizes within the existing dataset and do not wish to unreasonably limit the number of sites considered.[4]

Although we are recommending acreages based on parks and recreation research, it is important to note that the undeveloped areas being examined within the Blueprint are typically not parks. Privately held parklands and undevelopable land (such as wetlands and conservation areas) should not be included within a community's assessment of its parks and recreation facilities.[5] However, as the urban open space indicator is intended to capture the relationship between people and conservation areas, we believe that it is appropriate for this analysis to conceptualize undeveloped areas as potential locations for passive recreation.

The prioritization for the existing urban open space indicator assigns the highest value to protected lands, then gives the next highest values to open spaces that are furthest away from existing protected lands. Undeveloped land within 400m of protected land is given the lowest priority. This was done with equity in mind, to address the very real problem of park/urban green space deserts.

Although that prioritization has merit, it is based on land values, and for municipal operations, undeveloped land is often considered to be a drag on property tax revenues.[6] This type of valuation does not take into account the potential significance of an undeveloped area as an amenity for the people living within a given distance of that land. A 10-acre park within a very low-density suburban setting would benefit far fewer people than a 10-acre park in a dense urban neighborhood, simply because there are fewer potential users within walking distance.

We recommend that a complementary indicator be developed to measure the number of people who could be served (in a recreational capacity) by an undeveloped area.

In addition, we recommend that the urban open space indicator be applied at the landscape scale and not be limited to the upland hardwood forest ecosystem, as urban areas can be found within every ecosystem classification.

Tree Canopy

Tree canopy is an excellent candidate for a future indicator due to both its value within urban and nonurban areas and the availability of data from the U.S. Geological Survey. Cities adopt minimum tree canopy requirements for many reasons, including resistance to infestation or disease and meeting clean air and water requirements.[7] Tree canopy is also important as a green infrastructure

[4] Mertes and Hall, *Guidelines.*

[5] Barth, David. 2016. *Alternatives for Determining Parks and Recreation Level of Service* (PAS Memo May/June 2016). Chicago: American Planning Association.

[6] Bonham, J. Blaine, Gerri Spilka and Darl Rastorfer. 2002. *Old Cities/Green Cities: Communities Transform Unmanaged Land* (Planning Advisory Service Report Number 506/507). Chicago: American Planning Association.

[7] Schwab, James C. (ed). 2009. *Planning the Urban Forest: Ecology, Economy, and Community Development.* Planning Advisory Service Report no. 555. Chicago: American Planning Association.

indicator, as even a slight increase in tree canopy cover can have a dramatic increase in the reduction of stormwater runoff.[8]

Greenways

The popular recreation component of greenways allows communities that may not otherwise prioritize conservation to do sustainability work associated with local and regional trails and the length or connectivity of the greenway and trail network. This makes greenways a potentially valuable indicator for urban conservation activity. However, the availability of data is a challenge. Known sources of greenway data are limited to the municipal, county, and regional scale, which creates a lack of consistency due to their varying scopes, coverage areas, definitions, and fields.

Given the potential value to use greenways and trails as a vehicle for realizing urban conservation work, it would be worthwhile to investigate a way of stitching together the various local datasets or perhaps creating a greenway/trails indicator that is more advisory in nature and not intended to have a comprehensive scope.

Backyard Habitats

Although spatial data is not currently available for the National Wildlife Federation's Certified Wildlife Habitat program, this information would be valuable for locating microhabitats and migratory corridors within urban areas. Should this data become available, APA recommends that it be incorporated into the Conservation Blueprint.

Resolution

Resolution of the Blueprint is currently 200 meters (approximately one acre in size) per pixel. While this coarse scale works well for landscape-level planning, it does not allow for the parcel-level decision making that typically occurs at the local level. As finer-scale input data becomes available, the Blueprint should be adjusted to allow for the highest possible resolution. This will allow planners to use the data in more decision-making processes, as well as make it easier to communicate those decisions to local residents and property owners who may primarily be interested in how an individual property is depicted.

Connecting with Planners

Perhaps the most important way to encourage planners to integrate the Blueprint with their work and begin to contribute their local data is to ensure that they are aware of the Blueprint and what it can do for them. This can be addressed through two primary vehicles: communications and training. In both

[8] Duryea, Mary L., Eliana Kampf Binelli, and Henry L. Gholz. 2000. "Basic Ecological Principles for Restoration." In Restoring the Urban Forest Ecosystem, edited by Mary L. Duryea, Eliana Kampf Binelli, and Lawrence V. Kohrnak. CD–ROM produced by the School of Forest Resources and Conservation, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida.

cases, the Blueprint should be emphasized as a valuable planning tool, and case studies of its use to achieve planning goals should be incorporated where possible.

Communications

The American Planning Association has numerous ways in which it interacts with members, including:

- Planning.org
    - Sponsored research project pages, such as the one for APA's work with the South Atlantic LCC at planning.org/nationalcenters/green/blueprint/
    - Research KnowledgeBase, a set of curated collections of topic-based resources
    - Blogs
- Publications
    - *Planning* magazine, a monthly publication for all members
    - *Zoning Practice*, a monthly publication for planning practitioners
    - *Interact*, APA's weekly member e-newsletter
    - *Planning Advisory Service* Reports, Memos, and QuickNotes
    - *Journal of the American Planning Association*, the quarterly, peer-reviewed journal of record for the planning profession
- National Planning Conference activities
- Social media

All of the above communications can (and do) discuss conservation issues from time to time, but some are more accessible than others. The most direct path to promoting the Blueprint may be one or more blog posts on how planners are using the Blueprint. The blog posts could then be featured in the weekly newsletter and on social media, as appropriate.

At the local level, the South Atlantic LCC should reach out to the six state chapters within its service area to gain access to their newsletters, events, and other activities. APA could facilitate introductions for this purpose.

The Blueprint would also be of interest to members of APA's Environment, Natural Resources and Energy Division as well as the Sustainable Communities Division. Both of these divisions have members within the six-state South Atlantic LCC area.

Training

Webinar-based training is a good way to introduce planners to the Blueprint, but it can be difficult to cut through the webinar "clutter" in a way that entices planners to aside time to learn about a new tool. For this reason, a web-based Blueprint training for planners would ideally offer Certification Maintenance (CM) credits. The roughly 16,000 planners who have a certification from the American Institute of Certified Planners are required to earn 32 continuing education credits every two years, making CM a powerful incentive to attend a webinar.

State planning conferences are an excellent way to get face time with planners, and each state APA Chapter within the South Atlantic LCC holds at least one conference per year that offers educational sessions and training for its members. The Florida, North Carolina, and Alabama/Mississippi have their annual conferences in the fall, and Virginia holds its annual conference every July. Georgia hold conferences each spring and fall, and South Carolina hold two to three conferences per year. South Atlantic LCC staff could consider presenting at one or more of these conferences to promote the Blueprint and build stronger relationships with the local planning community.