Portland State University PDXScholar

University Honors Theses

University Honors College

2014

Neighborhood Sustainability: The Genesis of Three EcoDistricts Within Portland, Oregon

Laura Waddick
Portland State University

Let us know how access to this document benefits you.

Follow this and additional works at: http://pdxscholar.library.pdx.edu/honorstheses

Recommended Citation

Waddick, Laura, "Neighborhood Sustainability: The Genesis of Three EcoDistricts Within Portland, Oregon" (2014). *University Honors Theses*. Paper 85.

10.15760/honors.50

This Thesis is brought to you for free and open access. It has been accepted for inclusion in University Honors Theses by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

Neignbornood sustainability: The genesis of three Ecopistricts within Portland. Of	ability: The genesis of three EcoDistricts within Po	ortland	. Oregon
--	--	---------	----------

Ву

Laura Waddick

An undergraduate honors thesis submitted in partial fulfillment of the

requirements for the degree of

Bachelor of Science

in

University Honors

and

Community Development

Thesis Adviser

Dr. Thaddeus Miller

Portland State University

2014

Acknowledgements

A special thanks to:

Dr. Thaddeus Miller – Portland State University
Fletcher Beaudoin – Institute for Sustainable Solutions
Liz Hormann – South of Market EcoDistrict
Kate Carone – Foster Green EcoDistrict
Cameron Herrington – Living Cully EcoDistrict
Tony DeFalco – Living Cully EcoDistrict
Linda Nettekoven – Office of Neighborhood Involvement

Researched and written by: Laura Waddick

Advised by: Dr. Thaddeus Miller, Assistant Professor, Nohad A. Toulan School of Urban Studies and Planning at Portland State University

Abstract

This undergraduate research study is a requirement to graduate from the Honors Program at Portland State University. This research aims to gain a better understanding for how the processes, goals, and actions are formulated and implemented throughout three EcoDistricts within Portland—Foster Green, Living Cully, and South of Market (SoMa). More specifically, this study will analyze how these districts are formed around three different drivers in the push for sustainability. These drivers include Portland State University, located within the boundaries of SoMa, Foster Green's suburban environment, and poverty within Cully. The research will use case studies to provide insight into those three drivers, and then what this means for on-the-ground results. As EcoDistricts currently reside as the most well-known example for neighborhood sustainability in Portland, and arguably across the United States, this research will analyze the EcoDistricts process and look to infer how this translates to general neighborhood-scale efforts. Challenges and possible solutions will then be brought forth to help set up future research into the field. This paper will draw out the major themes present in neighborhood scale literature that suggest successful sustainable efforts. I will then use this research to provide context for Portland's biggest neighborhood scale effort, EcoDistricts. Through the analysis of SoMa, Foster Green, and Cully, I will then be able to draw on the successes and failures of the districts, tie them back to the literature, and finish by analyzing

what this means for the future of neighborhood scale sustainability efforts. Methods of research include qualitative content analysis, interviews, and extensive scholarly research to ascertain a full understanding of the processes, goals, and actions within the three varying EcoDistricts.

Neighborhood-Scale Sustainability

As more than half of the world's population resides in urban centers, and the number continues to grow, trends project that urban lands will triple by 2030. This growth has brought about vast discussions how to best develop our cities in an all-around sustainable manner. (World Health Organization, 2013; Luederitz et al., 2013). Tackling the definition of "sustainable development" is a complicated task, therefore, it will be best to define it as it is being used in this research. As the Brundtland Commission defines it, sustainable development "meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). As urban populations continue to grow, so does the concentration of our world's production, consumption, and transportation. As these sources of environmental degradation become more concentrated, discussions on sustainability are most often framed in the urban context. Cities are also structured with one main policy institution, allowing for efficient decision making. Whether or not this efficient decision making structure benefits or detriments environmental policy is where several industry experts are forming their arguments on which scale is best to pursue sustainable efforts (Finko and Nijkamp, 2001). Many scholars in the field of city-wide sustainability are arguing for the idea of "neighborhood-scale sustainability," an idea based on

the belief that taking on sustainable measures is best done at the small-scale, neighborhood level. In this method, a greater sense of community is incurred, on-the-ground results are expedited, and cities begin to manage their sustainable practices in a piece-by-piece, grassroots approach (Seltzer et al., 2011). Through neighborhood sustainability, larger city-wide sustainability puzzle can be accomplished through the piece-by-piece success of small scale efforts. The success of these smaller scale efforts also provides evidence for the benefits of certain actions, potentially influencing policy. For example, if a neighborhood-wide composting program can be proven effective, it has the possibility to further along city-wide mandatory composting policy.

To define sustainable neighborhood development, it is necessary to consider meeting the needs of the present without compromising the future through a range of ecological, social, cultural, and economic aspects. For the neighborhood, this means not only developing "green" infrastructure and promoting sustainable practices, but also maintaining strong communities and taking their cultural and economic circumstances into account. This idea is well-said by Tim Smith who describes all areas of focus by classifying them as either "hardware" or "software." Hardware refers to the sustainable infrastructure, and software refers to the relationships between the people within the community (Seltzer et al., 2010).

Imperative to the success of neighborhood scale sustainability efforts is civic engagement. Kent Portney and other scholars advocate for residents as the first piece of the neighborhood sustainability puzzle. If neighborhood residents are participating in the processes of planning for sustainable development, their awareness for sustainable practices is raised,

and, thus, furthers the effort's success. Ultimately, it takes the majority of people pursing sustainable practices to effectively change the outcome of sustainability efforts in any given area. Creating a cohesive effort towards sustainability is much easier to achieve on a smaller scale, and it is the piecing of these smaller efforts that leads to large-scale change. Civic engagement also allows for the opinions of citizens to be taken into consideration, and it is the citizens who have the best understanding for what they need in their community to be successful. For example, it might sound like a nice idea to build a community garden in a lowincome area with the thought that it might provide more food security and economic viability, but it has the potential to be rendered useless if the majority of the community works two jobs and has no time to take up gardening.

Cultivating an environment of civic engagement in sustainability efforts also provides an arena for community togetherness. The coalescence of a community around sustainability furthers one's ties to their neighborhood, inherently creating more interest in the area's success and promoting the social sustainability of the neighborhood. As Portney states, "many advocates of sustainability seem to believe that greater civic engagement is itself an integral part of what it means for a city to be more sustainable and that cities need to adopt policies that will promote civic participation." (Portney, 2005) Portney also touches on the benefits of community driven sustainable measures to counter "deadly sins," such as NIMBYism. With the importance of neighborhood togetherness is also neighborhood identification. If residents are able to identify with their neighborhood boundaries, as many are, they are more apt to becoming involved in neighborhood efforts. People grow their roots in neighborhoods and have

a tendency to take more stock in the economic, social, and sustainable future of their respective communities. This is what Smith would refer to as "software."

Another theme present in neighborhood scale literature is the need to be inclusive in sustainability efforts. Research conducted by Christopher Luederitz, Daniel Lang, and Henrik Von Wehrden is currently one of the only quantitative analyses to be found in the field of sustainable neighborhood development. The authors obtained such information through a process of scouring academic search engines for all articles published between 1990 and 2012 having to deal with the topic, taking the 515 articles found, and narrowing the sample down to 21 articles that best complied with the determined criteria. These 21 articles were then further analyzed in order to obtain a quantifiable number of which papers covered which of 17 topics having to deal with sustainable urban neighborhood development. Through this process, the authors were able to identify where the current research into the field was falling short. Here they established the need for a further look into the toll sustainable development takes on less privileged citizens and how discussions around sustainability fail to include low income residents' voice. For a neighborhood to be sustainable, it is important that sustainability remain inclusive and benefit every resident. If sustainable development were to only benefit the affluent, drive up property values, and push out low-income residents, less wealthy citizens would be forced elsewhere without sustainable resources. This would inherently cause "patchy" sustainability and contradict the neighborhood-scale's vision for piece-by-piece efforts leading to city-wide sustainability.

The next theme is apparent in the effort's name, neighborhood-*scale* sustainability. While the title suggests working strictly on a local scale, scholars suggest it is most effective to operate cross-scale. Working across various scales allows for more options when it comes to funding which can offer a constant challenge for local efforts. If small-scale, local efforts are able to work in congruence with larger scaled efforts, such as an organization, they are open doors to larger capacity, whether it be with funding, man-power, or credibility. From there, if both scales are able to work with even larger scales, such as city agencies, opportunities only continue to grow. If these scales are able to form an operational understanding for one another, efforts can be large, well-represented, and well-funded. Working cross-scale offers fluid lines of communication that can benefit all parties, and allows for efforts that work in the interest of everyone involved. It is when these boundaries of scales are not crossed that small-scale sustainable efforts often fumble (Cash et al, 2008).

Taking these themes present in the literature and applying them to the context of EcoDistricts will help further my investigation on the state of neighborhood-scale sustainability efforts, and help inform suggestions for future research.

Methodology

As EcoDistricts are only about six years old, there is very little quantitative data available which I can use to draw conclusions on certain indicators of success, such as greenhouse gas emissions. I am, however, able to glean some quantitative data from the information collected from each of the pilot districts that helped guide the target goals for each of the districts. The

report focuses on opportunities for improvement within each of the pilot EcoDistricts, i.e. energy, air quality and carbon, water, access and mobility, placemaking, social cohesion, habitat and ecosystem function, materials management, and equitable development. Further quantitative data is explored through work done by Christopher Luederitz, Daniel Lang, and Henrik Von Wehrden. The scholars scoured all studies through a literature search relating to sustainable neighborhood development, and then managed to put into numeric terms which topics were being adequately covered in sustainable neighborhood development, and which ones need further research.

Further, a lot of focus will be put on comparative analysis, as I am comparing and contrasting three Portland EcoDistricts. Content analysis of each of these neighborhood's framework plan will allows me to recognize what aspects or effects of sustainable development the plans are failing to address and what they are pursuing (successfully or unsuccessfully). It is important to acknowledge these shortcomings in order to look ahead into the future and see what future neighborhood based sustainable initiatives can do to address these issues for a more successful end result.

Extensive content analysis has also been imperative in my research as most of the information to be found related to EcoDistricts and neighborhood scales of sustainable development are strictly qualitative. In regards to the specifics of EcoDistricts, some are Ethan Seltzer, Ellen Bassett, Joseph Cortright, Vivek Shandas, and Timothy Smith, as they are the authors of several of the institution's reports and work closely with EcoDistricts. Another key scholar is Kent Portney, a professor at Tufts University who has conducted several studies on

civic participation and its connection with sustainable development, and is cited by many scholars in the field. Along with these key pieces of literature comes a series of other qualitative scholarly articles-- primary and secondary—and popular sources that will require extensive analysis.

The final critical research method that has ultimately informed much of my research was be through interviews. The key players that greatly benefitted my research are as follows:

Fletcher Beaudoin, Sustainability Partnerships Director at Institute for Sustainable Soultions and former employee of EcoDistricts; Cameron Herrington of Verde and a representative of Living Cully; Tony DeFalco, Living Cully EcoDistrict Coordinator at Verde; Liz Hormann, South of Market EcoDistrict Coordinator; and Kate Carone, a steering committee member from the Foster Green EcoDistrict. Interviewing these people will allow for on-the-ground insight as to what is truly going on within EcoDistricts.

EcoDistricts as a Means

Portland, Oregon is often thought as residing on the forefront of sustainable practices, and thus, many cities worldwide look to Portland to determine the future of sustainable development. Portland has taken kindly to this idea of sustainable neighborhood development, and perhaps the most visible signs of their commitment to this scale of practice can be seen in the EcoDistrict movement, which launched in 2009 (EcoDistricts, 2013). Found on EcoDistrict's website, the movement defines themselves as "a new model of public-private partnership that emphasizes innovation and deployment of district-scale best practices to create the neighborhoods of the future – resilient, vibrant, resource efficient and just." (EcoDistricts,

2013). The concept behind EcoDistricts mirrors that of sustainable neighborhood development in that term district and neighborhood are used interchangeably, and both designate a line around a geographical area in which all efforts are focused. Formerly known as the Portland Sustainability Institute (referenced interchangeably as PoSI and "the EcoDistrict organization" throughout this paper), the EcoDistrict movement has launched and been affiliated with five EcoDistricts, South of Market, Lloyd District, Gateway, University, and Foster Green; and a sixth that is unaffiliated the institution, but operates under the same concept, Living Cully (EcoDistricts, 2013). This study will mainly be looking at Foster Green, South of Market, and Living Cully, in order to achieve a more detailed and concise analysis.

Each district is based off of varying framework plans that guide the goals and actions of the entire district. Each framework plan looks into the strengths and opportunities of each district, and develops the plan around these aspects, from which goals are then formed.

EcoDistricts are also synonymous with neighborhood scale development in that they are governed within the community, and the levels at which the community is involved in the decision making processes vary between all districts. This contrasts from traditional sustainable development, which is typically led by public agencies or professional planners (Seltzer et al, 2011). This form of governance brings about an arena for discussion over topics many citizens are interested in, and offers greater empowerment and involvement to the people within the community.

Pilot EcoDistricts and Branching EcoDistricts

The EcoDistrict movement took off with a trip to Sweden, taken by the former Portland mayor, Sam Adams, and other fellow influential Portland leaders in the push for sustainability. The team travelled to Malmo, a city known for integrated infrastructure design, to study what was going on in the way of greenfield and brownfield development. After becoming inspired by the city's pockets of sustainable neighborhoods, Sam Adams, Rob Bennett, one of the aforementioned sustainable leaders who accompanied the former mayor, a well-known pioneer in the green building industry, and other sustainability leaders and local officials, became deeply invested in how to take sustainability beyond the top-down, green building scale. They saw a strong connection between tax increment financing and sustainability, and attempted to think beyond updating storefronts and began asking questions such as "how can we make better investments and increase property values?" Based on their experiences in Sweden, Bennett and Adams started the EcoDistricts movement, housed under the former Portland Sustainability Institute (PoSI).

In its initial phases, the conversation was focused around where to start these district-wide efforts. PoSI decided on five Pilot EcoDistricts within Portland Development Commission's designated Urban Renewal Areas. The final vote on which scale to pursue favored URA's, as they allowed for the initial funding from the PDC needed to implement the various district's efforts. In attempts to settle on five pilot districts that were all inherently different in physical and economic composition, PoSI worked with the PDC to choose the Gateway, Foster Green, Lloyd District, South Waterfront, and South of Market (formerly known as the University

District) Urban Renewal Areas. URA boundaries also allow for flexibility, such as in the case of South of Market where there are talks to expand its boundaries to include the waterfront, since the South Waterfront EcoDistrict's efforts are currently stagnant (Personal contact, Fletcher Beaudoin).

The Living Cully EcoDistrict, one of the districts studied in this paper, chose to remain unaffiliated with the EcoDistrict organization. According to Tony DeFalco, Living Cully EcoDistrict Coordinator, there is too little focus on equity for low-income residents in the EcoDistrict framework, and finds it impossible to coordinate with an organization who's foundation for their efforts fails to line up with Cully's needs.

Early Governance of EcoDistricts

In launching the five districts, much more organizational support was given by PoSI.

Naomi Cole, an EcoDistrict organizing leader, was in the districts, on the ground, facilitating good practice, and setting up much-needed volunteer bases. The overarching organization also helped with the creation of roadmaps for each of the various districts, which included baselines and goals moving forward. The EcoDistricts organization created these roadmaps with the intention that they would act as a plan for future action for the respective districts. Based on EcoDistricts early research, the goals represented the districts' biggest opportunities. With that, much of the organizations efforts were also focused in cultivating a persistent volunteer base, but the organization also helped foster support and resources, as well as creating connections to the city (Personal contact, Fletcher Beaudoin).

Why Cully, Foster Green, and South of Market?

For the purpose of this report, understanding neighborhood sustainability will best be done through the analysis of the Foster Green, South of Market, and Living Cully EcoDistricts.

Each of the districts have very distinct characteristics about them that will allow for a comprehensive drawing of the differences between them, and establish a base for showing how the different districts can be formed around different drivers. Taking this understanding and projecting it across the scope of the United States and the push for sustainability will be helpful in showing the viability of neighborhood sustainability as a vehicle for city wide sustainability.

The South of Market EcoDistrict was chosen as it is based around the wealth of resources at Portland State University. The district was originally formed around strictly the university itself, and then it was decided to incorporate more of the businesses and residents (Personal contact, Liz Hormann). The mission of the district is to promote sustainability through establishing themselves as a bank of knowledge and resources for people in the district to utilize when in need. Issues such as composting- residents want to know how to start composting in their district, they know to contact people at SoMa. SoMa works to facilitate resource connections throughout various people within the district. They strive for community by attempting to build these connections.

Foster Green was chosen as the boundaries encompass a range of well-established

Portland neighborhoods, including Foster-Powell, Mt. Scott Arleta, Brentwood-Darlington,

Lents, Powellhurst-Gilbert, and Pleasant Valley neighborhoods, and is almost a suburban area in

nature (EcoDistricts, 2013). Analyzing how this district has taken shape since creation will help argue for neighborhood-scale sustainability across a range of neighborhood compositions.

Living Cully was chosen as it is a separate case and has a completely different than the rest of the districts. The Cully EcoDistrict is a special case as the four organizations that started the district chose to remain unaffiliated from the EcoDistricts organization. Their mission is to prevent poverty through sustainability, rather than promoting sustainability through other means. Foster Green and SoMa both have had some sustainability promoting measures in place before the creation of the district. Cully, on the other hand, has experienced an extreme lack of equity and is a neighborhood of unpaved streets, minimal greenspaces, dilapidated housing, poor economic conditions, and terrible connectivity. Analyzing Cully will be critical in showing the flexibility of EcoDistricts- establishing how they can be created around an entire mix of conditions and indicators (Personal contact, Cameron Herrington).

SoMa- South of Market EcoDistrict

The South of Market EcoDistrict was created in 2009 as one of Portland's pilot

EcoDistricts. The area encompasses a total of 92 acres, 90 blocks, 9 city owned park blocks, and

10 LEED certified buildings. Of the 9 million square feet building total, the district consists of 3.6

million square feet of housing, 2.3 million square feet of office, 200,000 square feet of retail, 3

million square feet of Portland State owned space. The area's population makeup consists of

4,000 residents, 10,000 "daytime dwellers," and around 30,000 PSU students. (SoMa Roadmap,

2013). In its earlier phases, it was formerly known as the University District, as its created was

focused around Portland State University. After the residents of the area chimed in, and the

South Waterfront district began to disband, the organization chose to encompass a bigger portion of the area the pushed the boundary closer to the waterfront, and changed the name to reflect the shift.

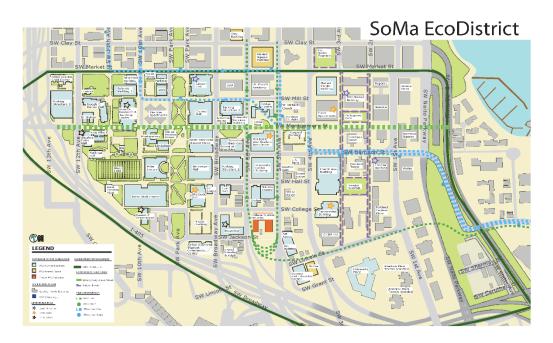


Photo source: SoMa Roadmap, 2013

Below are the goals for the SoMa EcoDistrict, according to the EcoDistrict Organization.

- -Equitable Development
 - Promote equity and opportunity and ensure fair distribution of benefits and burdens of investment and development
- -Health + Wellbeing
 - -Promote human health and community wellbeing
- -Community Identity
 - -Create cohesive neighborhood identity through the built environment And a culture of community
- -Access + Mobility
 - -Provide access to clean and affordable transportation efforts

-Energy

-Achieve net zero energy usage annually

-Water

-Meet both human and natural needs through reliable and affordable Water management

-Habitat + Ecosystem Function

-Achieve healthy urban ecosystems that protect and regenerate habitat And ecosystem function

-Materials Management

-Zero waste and optimized materials management

(SoMa Roadmap, 2013)

Goals:

After securing money from the PDC, the Bullitt Foundation, and EcoDistrict organization helped fund the SoMa Roadmap and helped establish a stable volunteer base. This marked the end of the EcoDistrict organization's formal involvement, and since then, SoMa has taken on their own operation and governance (Personal Contact, Liz Hormann).

When the EcoDistrict Framework was initially created, the certain marks that the district aimed to achieve were clear, such as carbon emissions and net zero energy, and felt inherently rigid and top-down. There was a much bigger emphasis on the aforementioned "hardware" of the various districts. In line with the argument of this research, the organization has admitted the need to focus on the software before successfully tackling the hardware. With no funding to achieve PoSl's goals and a clear understanding of how people are the first piece of the sustainable puzzle, SoMa created their own goals to promote their vision of neighborhood sustainability. According to Liz Hormann, the SoMa EcoDistrict Coordinator, SoMa's main goal is

"building cohesion around sustainability." In other words, what does the community within the district look like, and how can SoMa promote and build community through sustainability. The South of Market EcoDistrict looks to operate within its strengths, and according to Hormann, that means building a network of resources for businesses and residents within the district. As a small example, SoMa strives to be the hub one goes to when looking for resource connections to start a joint composting program within their strip of businesses.

Governance

The South of Market EcoDistrict is governed by a steering committee with major property owners within the district boundaries, including Bob Naito and John Russell. They meet three times a year and act as the overarching advisory committee to oversee the overall operations of the district. The district has just recently created a Board of Directors that meets once a month. With certain projects, there is a working group that is pulls in various people from the community, such as students and stakeholders, who help work and implement the projects.

The South of Market steering committee is often knocked for having a small resident representation, with only one resident on board, but the committee admits their need for a stronger residential base. In regards to residential involvement, the district is looking to seriously boost residential involvement in both the Board of Directors and the Steering committee throughout the year. Although, when asked if the steering committee meetings were public, Liz stated "they aren't exclusive, but they aren't an open public meeting." This suggests steering committee meetings are accessible when on the inside of the SoMa network, which poses problems when it comes to engaging the masses — a huge piece of SoMa's goals,

according to Liz. In SoMa's eyes, the district network can help and engage residents by acting as their advocate for sustainable measures, also helping them getting involved on smaller steering committees, such as composting programs.

Deciding on which projects to pursue in the district happens within the monthly meeting working group. The district works in conjunction with the university, residents, and the EcoDistrict provided roadmap to create potential projects. When a project is decided on by the working group, the working group often times seeks final approval from the steering committee, especially when funding is required. In fact, voting up or down for funding is the main job of the steering committee.

As for Liz Hormann, the subject of the interview, her position as the South of Market EcoDistrict Coordinator is the only paid position within the district. Part funded by PSU and the Institute for Sustainable Solutions, the home for sustainability curriculum development, student leadership, and research at Portland State Unviersity, the job is part-time and acts as a facilitator between all invested parties and oversee the day-to-day happenings of the district (Personal contact, Liz Hormann).

On-the-Ground Results

In the three years since creation, the South of Market EcoDistrict has done some reputable work to promote neighborhood scale sustainability. The district has been relatively successful

through the use of partnerships with other stakeholders within the neighborhood, including Portland State University, Bureau of Planning and Sustainability, Bureau of Transportation, the Department of Parks and Recreation, and the Halprin Land Conservancy.

The Halprin Landscape Conservancy is a nonprofit that is dedicated to the preservation and restoration of what is known as the "Portland Sequence," a set of downtown parks including the Source Fountain, Lovejoy Fountain, Pettygrove Park, and Forecourt Fountain (Halprin Landscape Conservancy, 2013). In working with the Conservancy, SoMa has experienced huge crossover between the Halprin board and the SoMa steering committee, and has been able to do incredible work on activating those Halprin blocks that are a part of the district. The district was able to forge the connection between the civil engineering department at Portland State and the Conservancy to create a design to restore Lovejoy Fountain. The students worked with the Conservancy and a local architecture firm to perform research and approach the needs of the fountain's dilapidated state, and attempted to keep the design in line with its history. The district also worked with the Conservancy and PSU to work on a stormwater restoration project at Pettygrove Park. As for Lovejoy Park, a steering committee member funded the installment of colored plastic chairs within the public space, and he district worked with PSU students and the city to work out the logistics of the installment. The chairs are a relatively inexpensive attempt to draw people into the park and create "third spaces," as the chairs are appealing through their color, comfort, and mobility.

In line with working with the parks to create these third spaces, the district has also made an effort to work with a concept called "parklets." Parklets are parking lot spaces that are

sectioned off and repurposed as public seating spaces. This idea has been championed by the private restaurant industry, but is being widely tackled by the public sector. As for SoMa, their idea is to convert some parking spaces in front of the Fourth Avenue food carts into seating areas for consumers of the carts. These parklets are being designed by architecture students at PSU, and the funding is currently being worked out with property owners and city.

A lot of SoMa's work has to do with activating portions of the district that are currently underutilized. After the South Waterfront EcoDistrict disbanded, SoMa attempted to take on the waterfront through Montgomery Green Street. The Green Street is supposed to act as a bike and pedestrian connection from Portland State to the Willamette River. Plans are in the works to line the street with green infrastructure, such as bioswales and the new PSU, OHSU, and OSU shared Collaborative Life Sciences Building. The district is also in conversation with Lincoln station, University Place Hotel, and PSU to try and reactivate the far Southwestern side of the district. Although SoMa is not directly involved with any projects, they have a huge stake in the process and in their future sights for how to liven up that end of the district.

The South of Market also does important work on a smaller scale. For the past two years,

SoMa has worked with neighborhood businesses to create a "reduce, reuse, recaffinate"

campaign during Earth Week, which offers a fifty cent discount to customers who choose using

reusable coffee cups over café offered disposable ones (Personal contact, Liz Hormann).

Social Sustainability in the Works

When asked what sorts of social sustainability efforts were being made throughout the district, Liz informed that there was no overt social component to their neighborhood efforts.

With that comment though, she offered up several examples of how she attempts to bring the neighborhood together.

SoMa takes on the EcoDistrict approach by capitalizing in the areas which they are most successful. In Hormann's eyes, that takes the shape of resource network sharing. With a very limited amount of funding and capacity, SoMa finds most of its success by attempting to create an arena where residents and business owners are able to come together and talk about sustainability within the neighborhood. For example, one shop owner might look to installing solar panels in order to reduce energy costs, and this said business owner would know to come to Liz, or volunteers with SoMa, to ascertain information and forge connections with a wellknown solar companies. Creating this arena amongst trusted neighbors allows for people share success stories, or even be frank with one another about past experiences. Liz provided a perfect example of when a community member came to her asking about Portland State's Reuse Room, a room within the university where students donate their old school supplies and others are able to reuse the donated supplies for free, and asked for the right person to get in contact with in order to start that sort of system in their building. Another example, one property has issue with rigid plastic recyclables, just solving that issue for one building can be difficult, but if the district comes together with other people with the same material issue, then they've created a market and they can come together to solve it. Herein lies SoMa's strengths, the ability to connect residents with one another to produce better results in the effort to create a sustainable neighborhood.

SoMa has also talked of implementing a composting program at restaurants within same block, by connecting them with the resources to share a compost in the back, and inherently forging relationships with restaurant owners. The EcoDistrict also sends out a monthly newsletter, filled with upcoming events and district success stories, to all who choose to be on the email list. They also work to foster community through their summer concert series in Pettygrove Park. Every week in March, during lunch hour, they host various musicians every week in attempts to pull in residents and people from surrounding businesses. They are also working with the Halprin Landscape Conservancy and Portland State to activate future programming with the park. The district is also working to partner with the Portland State Planning Club in order to reach out to students via methods other than traditional classroom connections. In this sense, Liz sees a huge opportunity for continued collaboration with Portland State students. For example, there is talk of a potential SoMa student group in order to connect students with the group, provide them with opportunities to learn about neighborhood scale efforts, and also provide more capacity for SoMa (Personal contact, Liz Hormann).

Successes

Overwhelmingly, efforts that show a direct benefit to property owners are the proven successful efforts thus far, as the property owners are typically the sources of funding. For example, the district initiated an "Adopt-a-block" program in order to maintain the physical appearance of blocks within the district as a result of a major property owner (John Russell) wanting to take care of the land around the 200 block building. One can guess this program

would be a harder sell in another place that property owners cannot directly see the benefits.

According to Liz, this is a barrier they're trying to break down — "they are business men- but it is a community, beyond that, they really do see the value in making these connections throughout the community." But it is not just business people who have large stakes in the success of the neighborhood. St. Mary's, an all-girls Catholic school, is on the steering committee, and have a piece of property that they are looking to develop. Within the organizational arena that is the South of Market EcoDistrict, they can talk about the development regionally with other business owners, and work to determine what would benefit with the district as a whole. Liz also worked with a Portland State business class to work on the messaging "I am a business owner...why is an EcoDistrict good for me?"

Within the SoMa EcoDistrict, it isn't the physical or technological advances that are proving most successful for the community, but rather to partnerships and connections the district is forging. Not only has the district created a wealth of opportunities for students to gain handson experience, but it has created the arena for large stakeholders to come together and think about regional solutions that benefit the district as a whole. Now, whether or not this collaboration across opposing interests is actually happening, well, that seems to be a work in process (Personal Contact, Liz Hormann).

Challenges

As with most organizations, funding is the biggest challenge to the continued work of the district. As stated before, the district received minimal funding from the overarching

EcoDistrict organization, and are forced to rely on the property holder's pockets or tedious grant writing. Coupled with this is the lack of what Liz refers to as "bandwidth capacity." As Liz's position is the only funded position with SoMa, and it is only part-time, only so much can be done within the district. While there are volunteers, there is not enough dedicated staff to take on tasks such as continual grant writing; and the paid position has always been a student, which in turn creates a high turnover rate. As the steering committee has remained relatively stable, it has become a hurdle in-and-of-itself to find someone long-term who can see projects through fully (Personal contact, Liz Hormann).

The Future of SoMa

Looking at the challenges facing SoMa, funding and capacity issues can be mitigated by turning SoMa into a sustainable, long living organization, with a committed structure. One suggestion from Liz is to possibly create a business committee working on the things that affect them, a residential committee doing the same, and a committee of all the different entities. In essence, focused committees that are able to get things going, but also make sure residents, students, property holders, and businesses are in communication with one another.

Representatives from the district openly admit that if the district is to continue, they need to ramp up engagement from every player within the district. Speaking to SoMa's strengths, it is imperative for the district to continue to build and solidify the networks they work to create for the benefit of network resource sharing throughout the district. To put it simply, the South of Market EcoDistrict is looking to strengthen their bones, and once the district feels strong and capable, they hope to apply to become a nonprofit (Personal contact, Liz Hormann).

Foster Green EcoDistrict

Like South of Market, the Foster Green EcoDistrict was also one of PoSl's pilot

EcoDistricts launched in 2009. Following Urban Renewal Area boundaries, the 4508 acre district encompasses parts of the Foster-Powell, Mt. Scott Arleta, Brentwood-Darlington, Lents,

Powellhurst-Gilbert, and Pleasant Valley neighborhoods, within southeast Portland. The area is comprised of 80% residential buildings, 6% commercial buildings, and 6% institutional buildings.

Foster Green is different from South if Market in that the area is mostly comprised of single-family residential units, and almost feels suburban in nature, while still being in Portland city limits. The area is widely known for the historic Lents Town Center and Johnson Creek

Watershed, and has experienced extensive restoration efforts (Foster Green EcoDistrict

Assessment, 2011).

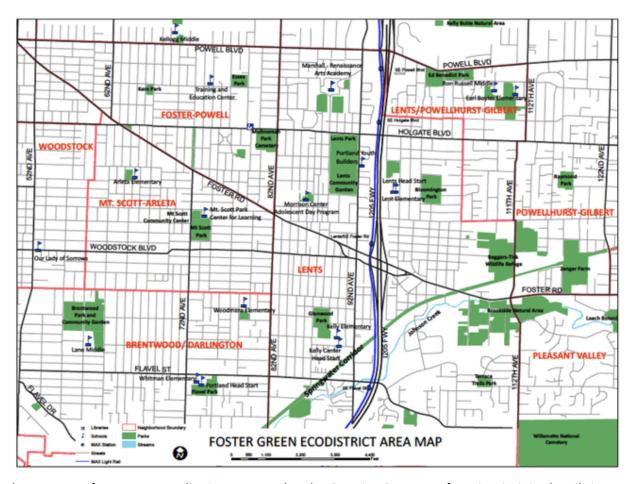


Photo source: fostergreenecodistrict.com, used under Creative Commons from jontintinjordan, jhritz

Understanding the physical and social landscape of the area, the EcoDistricts organization laid out the following goals for Foster Green to achieve.

- -Energy
 - -Net-zero energy usage annually
- -Air Quality and Carbon
 - -Beyond carbon neutrality & healthy air quality
- -Water
 - -Water, in all forms, meets both natural and human needs
- -Access and Mobility
 - -Healthy, clean, and affordable transportation options

- -Placemaking
 - -District form and physical infrastructure supports community functionality, resilience, and identity
- -Social Cohesion
 - -Social infrastructure fosters community connection, inclusion, and self-governance
- -Habitat and Ecosystem Function
 - -Integrate built and natural environments for healthy urban ecosystems
- -Materials Management
 - -Zero waste and optimized materials management
- -Equitable Development
 - -Fair distribution of investment burdens and benefits

(Foster Green EcoDistrict Assessment, 2011)

Governance

As Foster Green is a pilot district, the governance structure formed in a manner much similar to that of South of Market. When the EcoDistricts were launched in 2009, PoSI entered Foster Green and helped cultivate a stable volunteer base, and helped craft the memorandum of understanding between the EcoDistrict organization, the city, and the volunteer base with their affiliate organizations. Unlike South of Market, through the MOU, Foster Green was able to fund many of its initial projects and board members. But when the funded commitment ended in 2012, several invested stakeholders divested from their engagement, and the board is now completely volunteer driven. Kate Carone, a currently serving chair on the Foster Green Board, holds an opinion similar to that of Liz, the SoMa representative, "I think it would have been really nice if before stepping away from the EcoDistrict, the institutional partners, like

PoSI and PDC, had helped secure some admin support through grants or government funding, foundation grants."

The operations within Foster Green are headed by a board comprised of a very wide array of Foster Green residents, including representatives from Zenger Farms, Hacienda CDC, Rose CDC, OPAL, Leach Botanical Garden, business owners, community leaders, neighborhood associations, and Portland State students. Foster Green has a very strong organizational backbone, and find Zenger Farms to be a strong component of their continued work and success. The board meets once a month, and roles of each of the present bodies on board are outlined through the MOU. Different from South of Market, board meetings are advertised and completely open to the public (Personal contact, Kate Carone).

On-the-Ground Results

The Foster Green EcoDistrict has been relatively successful in acquiring funds to implement several projects. In recent success, the Portland Development Commission awarded the district a \$600,000 livability grant funding, which Kate classifies as "a great show of faith." This funding is to go towards two of the biggest anchor projects for the district—the Mercado and the Grange Hall. The Mercado was headed by Hacienda CDC and will be Portland's first of its kind Latino-themed public market. The market aims to promote Latino culture in Portland, and will provide an affordable rent space for small businesses within the community. The Grange Hall is supposed to act as a traditional grange hall where people come together for meetings and resource sharing.

Along with the districts larger-scale projects, are multiple smaller-scale projects as well. For example, Green Lents is heading the retrofit of several neighborhood bioswales, and building raingardens on resident's property. The Foster Powell Neighborhood Association is going to be doing a street tree inventory, in order to figure out what trees are present so the community can better plan for increasing the canopy. Depave, an organization that takes unused parking lots and converts them into various types of gardens and playgrounds, transformed a site at Mt. Scott-Arleta school parking lot. There will also be a new community garden on Powell, and a community orchard on Alden. While Kate finds great importance in the large-scale projects, she says "it's the smaller-scale projects like these that really add up for the district." Foster street scaping- big effort and pretty catalytic (Personal contact, Kate Carone).

Social Sustainability in the Works

Like South of Market, Foster-Green has no real direct social effort at the time, but establishes a great deal of community building through many of their other efforts. For example, most, if not all, of the memorandum of understanding signers have a strong equity and community building component to what they do. Projects like the Mercado encourage the community to come together to not only show support for their new public market, but ti also work together to see it take off. The Mercado and Grange Hall are also working in conjunction with one another to provide low-income community members the chance to create higher income careers for themselves. The monthly meetings open to the public are also great, persistent arenas to bring the community together. Residents of the district can also stay

informed on the happenings of the EcoDistrict through their blog (Personal contact, Kate Carone).

Successes

According to Kate Carone, Foster Green is still in their transitioning period, and feels it is "yet to be seen if the foster green construct provides value," and that "so many great organizations and associations doing things on their own, I don't know what value we're adding currently." Kate can attest Foster Green to being a type of overarching advisory group that ensures nothing slips through the cracks on projects, and that organizations are able to work together to maintain cohesiveness of the district. For example, in regards to the district's streetscaping project that is being headed by the city, the Foster Green board made sure high quality trees are included where possible, and it is believed that without Foster Green, trees and bioswales might get sidelined (Personal contact, Kate Carone).

Challenges

When asked about the district's current, pressing challenges, Kate hit hard on the district's administrative capacity. As Foster Green is entirely compromised of volunteers with lives outside of the EcoDistrict, much of their time is spent meeting, making agendas, and simply saying rather than doing. In the way of grant writing as well, it is a challenge to ask community members to write the large grants they need for several of their projects, and would benefit greatly from a part-time staff member to pursue these smaller tasks so that volunteers could be freed up to pursue more doing rather than saying (Personal contact, Kate Carone).

The Future of Foster Green

While Foster Green is successful as the acting bridge between organizations and residents of the community, it must be realized that these organizations in alliance with Foster Green would be pursuing these projects whether or not the EcoDistricts organization was present. In Kate's eyes, it is currently unknown how necessary the Foster Green EcoDistrict is, and how much longer it will continue. In the meantime, there are issues that the district is beginning to take into serious account, and will eventually direct much of its focus towards. Affordability is a serious concern of all residents within the area, as it becomes more of a desirable locale. Rose Community Development is currently doing all they can to provide subsidized housing, but a more systematic approach to maintain affordability is necessary. The district also notices a huge gap in the educational component of their efforts and are looking to start including community based learning in all future projects. Foster Green's vision is to take students from grade school, high-school, and at-risk youths and get them involved hands-on in all future projects, almost as an apprentice opportunity (Personal contact, Kate Carone).

Living Cully EcoDistrict

The Living Cully EcoDistrict is located in the northeast Cully neighborhood of Portland, and was annexed in 1985. Being one of the newer neighborhoods to Portland, the same development standards were not held for Cully as they were for earlier annexed portions of the city. Therefore, typical Portland infrastructure is not present in the neighborhood, making it unwalkable and relatively affordable compared to the rest of the city. This history shines some

light on the statistical makeup of the neighborhood, with 20% of the population living in poverty, and only 34% of the only neighborhood containing sidewalks (Banuelos et al, 2013).

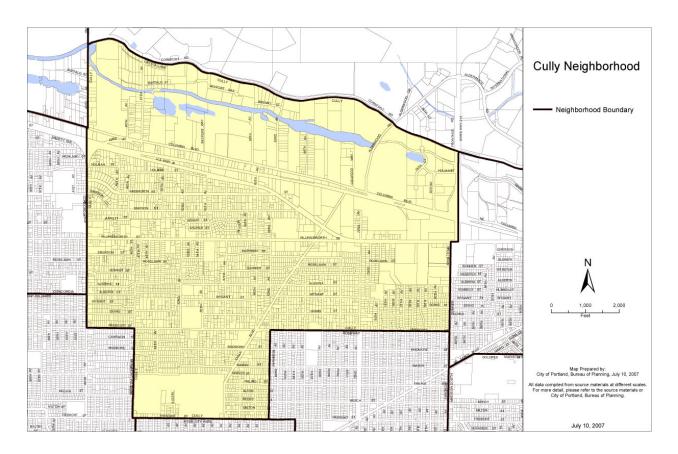


Photo source: Terra Fluxus, 2013

The Birth of Cully as an EcoDistrict

Due to its current affordability, developable land, and proximity to downtown, Cully has been determined as a neighborhood on the verge of gentrification (Banuelos et al, 2013). As a form of preemptive strike, four influential organizations, Verde, Hacienda CDC, NAYA, and Habitat for Humanity, formed the Living Cully EcoDistrict in 2010 (Verde, 2010). Completely unlike South of Market and Foster Green, Living Cully is the first EcoDistrict in Portland to grow organically, rather than being implemented as one of PoSI's pilot EcoDistricts. Living Cully

reinterprets the EcoDistrict framework by using neighborhood sustainability as an anti-poverty strategy. The decision to recognize as an EcoDistrict was made because Cully had already been working on a neighborhood scale for years. They appropriated the EcoDistrict name because they knew resources would be directed to efforts at that scale with that name, and, otherwise, the likelihood of those resources going to unlabeled, low-income communities would be low. The idea is to capitalize on something that does not have a focus on equity, and put it towards equity.

Although establishing themselves as an EcoDistrict, Living Cully chose to remain completely unaffiliated with the EcoDistrict organization. Tony Defalco, Living Cully EcoDistrict Coordinator at Verde, spent a good deal of time working with the EcoDistrict organization when it started out as a means of learning from it and to share his personal knowledge to help benefit low-income people. But the needs of low income people and people of color never became a focus of the EcoDistrict framework, so, Living Cully found it impossible to be a part of something that was not a part of generating benefits for low-income community members (Personal contact, Tony DeFalco).

Governance

The Living Cully EcoDistrict is comprised of five major players—Verde, Hacienda

Community Development Corporation, Native American Youth and Family Center, Habitat for

Humanity, and the residents of Cully. A memorandum of understanding was signed between

the four organizations, they meet five times a year, and make decisions through consensus. The

EcoDistrict contains a few advisory committees comprised of neighborhood residents that

meets twice a month to coordinate activities and provide input on the efforts of the four organizations. While the organizations do work closely with residents, it is still mainly the staff of the four organizations that maintain leadership and are the driving forces behind the efforts of the district. The Living Cully EcoDistrict is currently applying for the necessary grant funding to formalize the coalition (Personal contact, Cameron Herrington).

On-the-Ground Results

Thus far, the biggest result of the EcoDistrict is the development of Cully Park, a converted landfill. The park is the result of a collaboration between 15 different community organizations coming together to fight the resident's lack of access to nature. The park contains several features, such as a community garden, a nursery, a restoration area, a tribal garden, a playground, and a greenstreet along 72nd Avenue is in the works. The park is also said to include nature paths and sports fields in the future. The park just recently received \$1.25 million from the Portland Parks Department help the development of the 25 acre park.

With large, busy streets in the neighborhood, such as Cully Boulevard, solving issues around walkability and bikability of the area have been important in Living Cully's work. Groups such as Living Cully Walks are performing extensive research to improve on the infrastructure of the area. The district is building rain gardens at low-income resident's homes for both the environmental and financial benefits (Personal contact, Cameron Herrington).

Although the purpose of these projects is to benefit Cully residents educationally, culturally, environmentally, and financially, what takes utmost importance in Living Cully's work is how these projects can be used to abate displacement of long-time, low-income residents. At

first glance, it seems most of these projects would raise property values of the area, inherently forcing residents out. Important research performed by Portland State Masters of Urban and Regional Planning students identified six key strategies to fight displacement in the area, including preserving housing affordability, retaining existing neighborhood businesses, and promoting economic self-sufficiency. The district makes it a point to educate residents on the dynamics of neighborhood change and the property market as a residents help design change in their neighborhood, they understand how these changes might contribute to displacement pressures. It is Living Cully's hope that this method will advocate for policy changes, or shifts in the allocation of government funding and resources, in order to promote affordable housing (Not in Cully, 2013).

Social Sustainability in the Works

Developing Cully Park has become a catalyst for the future Living Cully projects, and has been successful in ensuring community voices are heard. Students worked with community based development firms to learn about basic architecture and help design their new play area. The community garden was also partly designed by students, construction of the site employed low-income residents of Cully, and Oregon Tradeswomen's Building Girls were able to provide training and work on the site (Let Us Build Cully Park, 2013). It is Living Cully's hope that these projects will increase resident's ties to the neighborhood and, in turn, decrease the risk of displacement (Personal contact, Cameron Herrington).

Successes

By and large, the development of Cully Park has been the most successful undertaking for the district. It is looked upon as the neighborhood's crowing jewel, and its accomplishments have inspired more projects within the district. As the district is still relatively new, many of projects are still in the pilot phases, but hold great promise and expectations for the sustainable, equitable future of Cully (Personal contact, Cameron Herrington).

Challenges

When asked of the challenges Living Cully is currently facing, it was inspiring to hear Cameron Herrington, an employee of Verde, respond with the issues that spurred the creation of Living Cully, rather than limitations to their work in addressing these issues. Although issues around affordability, a lack of environmental resources, a lack of infrastructure, and poverty are deeply woven into the social construct of society, and are often viewed at as "wicked" problems, Living Cully remains hopeful in their attempts to mitigate these problems in a way that promotes justice and equity for residents.

When further probed about the challenges in addressing these neighborhood issues,

Cameron questioned the longevity of the EcoDistrict name, as the four organizations that make

up the umbrella of the Living Cully EcoDistrict would most likely be working on similar projects

without being in accordance with one another. With that being said though, benefits to

collaboration are obvious, such as increased access to funds, increased human capacity, and

cohesive regional plans (Personal contact, Cameron Herrington).

The Future of Cully

As Living Cully continues to pursue projects that make no money for anyone involved, Cameron Herrington says "it's time to get creative to raise funds. It's a lot easier to find funding to do big, flashy projects such as the park, but less in the way of things as educating residents on displacement. Not a lot of people want to fund things when you can't visibly see its success." As for the Cully EcoDistrict model, Tony DeFalco, the Living Cully EcoDistrict Coordinator at Verde, sees a long term future for the model, and challenges the EcoDistrict organization to prioritize low-income people in their efforts. Living Cully acknowledges the changing market is adjusting for low-income people of color, and understands the success of the district really lies in the ability to be more inclusive with community building. It is Living Cully's ultimate intention to keep their focus on anti-displacement while bringing about positive, equitable change to the long-time resident of the Cully neighborhood (Personal contact, Tony DeFalco).

The Shift in EcoDistricts as an Organization

Early discussion of how to pursue neighborhood-scale sustainability focused around what the organization calls "hardware" and "software." The conversation lent heavier towards the hardware side- questions of how do we optimize these mechanical systems across multiple buildings and save money became a huge focus, rather than the software related questions such as how do we use EcoDistricts as a way to build and leverage community and bring people together? While the software efforts were on the table, there wasn't enough movement, thus, efforts remained mostly technical. Eventually, the organization realized the hardware wasn't going to work without good process and without people making that the first part of the

strategy. They increasingly learned how important the people were and how it's a starting point for other conversations. According to Fletcher Beaudoin, Sustainability Partnerships Director at the Institute for Sustainable Solutions, "It's all about the people who want to be engaged in a place and support it and from there you can do a lot of things- district energy systems, etc."

After editing the EcoDistrict Framework to reflect the organization's focus on grassroots, software efforts, the EcoDistrict organization then shifted their focus to national EcoDistrict programs. Through the mayoral change, the allocation of resources changed as well, and there were only so many resources within Portland to focus on Portland; while many more resources available on a national scale. As the EcoDistricts organization currently exists, efforts are focused on the success 18 "incubator" cities, which stretch from Vancouver, B.C., to Guadalajara, Mexico, as well as launching future movements in more cities. (EcoDistricts, 2013)

Conclusions

The Future of EcoDistricts as a Driver

When it EcoDistricts started originally, there was little activity around the movement, but EcoDistricts has done a good job cultivating movement and an image, and now they see a need for a national discussion. Educating city leaders across the nation on the concept of EcoDistricts has become the current focus of the EcoDistrict organization. With their 18 incubator cities, Target Cities program, and their yearly summit, EcoDistricts has removed themselves from their Portland pilots, and rather than being on the ground, working in the various districts, the organization has begun to emphasize their overarching role (Personal

contact, Fletcher Beaudoin). While this poses challenges, this shift in scale has some serious benefits. As the most well-known neighborhood-scale sustainability effort, it is important for the organization to spread their knowledge and knowhow across the globe, starting in Portland, and then moving transnationally. As Fletcher Beaudoin puts it, "I genuinely hope that they're (EcoDistricts) able to refine and cultivate innovation at this district scale. And provide learning and synthesis in a way that's helpful in cultivating and growing innovation in various contexts, but continuing to be a voice based on what works and what doesn't work based on conditions."

Acting as the knowledge hub, EcoDistricts has fostered relative success in various cities. For example, the SW EcoDistrict in Washington D.C. has created a plan to renovate a 15-block federal precinct in hopes of producing a system for onsite stormwater management and energy creation. The South of Market Central Corridor EcoDistrict in San Francisco is working to perpetuate smart growth practices and create 10,000 new housing units and 35,000 new jobs. Boston's Innovation EcoDistrict is working to develop its neighborhood with the most undeveloped land in the city through sustainable infrastructure investments. A repurposed power plant, affordable housing, increased transit, increased greenspace, and a new library will all be a part of Austin's Seaholm EcoDistrict (EcoDistricts, 2013). Now, whether or not EcoDistricts decide to turn any focus back on their pilot programs in Portland, only time will tell. Though it must be understood the problems inherent in the organization's decision to remove themselves from their initial districts.

Challenges

As Portland's South Waterfront EcoDistrict has collapsed, and many other local districts are in this nebulous space of not knowing exactly who they are and where they are going, it is a huge threat to the EcoDistricts organization that their personally erected pilot districts are not as successful as their frameworks and roadmaps suggest. One must ask what sort of evidence they are giving these target and incubator cities to prove this neighborhood-scale method is a viable solution if they are unable to show how their districts have been successful, under the constraints of their framework. It does not help that if one were to look at the EcoDistrict website, they would find Portland's non-operational South Waterfront EcoDistrict as a case study, and even a highlight of its success. When looking at the South of Market case study, a person looking to ascertain information on the district might feel frustrated finding out their listed person to contact is no longer even employed by SoMa. As an organization based in Portland, it is also slightly off-putting that a student researching their organization, at the university one of their more successful districts partners with so strongly, was unable to make contact with anyone at EcoDistricts.

In the beginning of the organization's work, employees of EcoDistricts were on the ground, in the districts, working to set-up a stable volunteer base, people to see the actions of the each of the districts through. EcoDistricts created issues for themselves by not ensuring the funding of at least one, part-time person for each district. In Fletcher Beaudoin's words, "in the successful districts, there's a person thinking about collaboration, the collective, the drum beat." Kate Carone, the representative from Foster Green, made mention of the challenges

with having an entirely volunteer board. People have jobs and other responsibilities outside of their volunteer work, so, often times capacity falls short. Even in South of Market, with a paid, part-time employee of the district, Liz Hormann expressed a lack capacity.

Based on the state in which Portland pilot EcoDistricts find themselves in, it could be believed that the EcoDistricts organization departed from their home districts all too soon, without giving the districts enough resources to be as successful as they had projected. While there are positive implications in letting their "children" grow on their own, govern themselves, and ensure their own success—which seems to have been their intentions—how they set them up must be refined for future success. For example, a better understanding for how to best allocate funding might be surmised.

One of the most evident issues plaguing EcoDistricts today is the rooted in the concept of scale. EcoDistricts has made their name by working on this neighborhood scale, but how are they defining neighborhood scale? In the simplest terms, EcoDistricts, a body of well-connected industry leaders, came together and created a framework to implement the concept of neighborhood scale sustainability. They then established pilot EcoDistricts within boundaries that are completely different than that of traditional Portland neighborhood boundaries. After which, they entered these districts and attempted to set goals for the community to achieve, with very little resources and the expectation that it is up to them to make it happen. Even in layman's terms, this approach sounds particularly top-down. Now, this is not saying that top-down is necessarily a bad thing, but this is saying that to establish and perpetuate successful, sustainable districts, EcoDistricts must understand the dynamic between top-down approaches

and grassroots implementation, and how the two can work together harmoniously. To live their "vision for creating sustainable cities from the neighborhood up," EcoDistricts must be challenged to work cross-scale (EcoDistricts, 2013).

Work done by Cash et al, suggests there are common issues in working cross-scale without having a clear understanding that one is even working cross-scale. An issue that is present in EcoDistricts is what Cash et al calls "mismatch." According to the piece, "mismatch is the challenge of matching the scale of what is known about the world and the scale at which decisions are made and action taken." Simply, large-scale knowledge about what is best that is irrelevant to local bodies (Cash et al., 2006). In EcoDistricts' case, the creation of a framework with district-specialized roadmaps that district representatives can willingly admit they have read little of, and roadmaps with proposed actions are completely misaligned with actions the various districts are actually taking. According to the research done by Cash et al, to take part is successful cross-scale work, it is critical to understand one's position in the production. A clearer identification for EcoDistricts as an organization is posed in the suggestions portion of this paper.

There are also challenges inherent in the organization's decision to match their district's boundaries with Urban Renewal Area boundaries. When in contact with representatives from South of Market and Foster Green, both mentioned the complications with resident's lack of identification with their EcoDistrict. With no set understanding for what their EcoDistrict actually is, people within the pilot districts have little perception for what the term EcoDistrict means to them. Especially in the coOntext of cities, people have a tendency to identify with

their neighborhood and hold more stake in the success of their neighborhood. The resident's lack of knowledge, involvement, and stake in their EcoDistrict is rooted in their inability to identify with their district's boundaries. It is a mutual partnership between the people and their neighborhood—if people are able to identify with and appreciate their neighborhood, then they are able to perpetuate the success of their neighborhood. And if the people directing the neighborhood efforts understand the people within the district, they will have a much better understanding of what is good for them. What's more, if people are able to hold a conversation at the grassroots, neighborhood scale about sustainability and what it means directly to people in their homes, issues like climate change and other major global issues that are very difficult for people to grasp will become much easier to swallow. Embedding sustainable practices into our daily lives will only help further us down the road in the way we think about sustainability, and how we do business. It is hard to envision these conversations happening on a regular basis between residents within their ambiguous EcoDistrict.

What this Means for Neighborhood Scale Sustainability Efforts

There is no "one size fits all" plan to promote neighborhood scale sustainability. The social, economic, and environmental makeup various tremendously from neighborhood to neighborhood. Comparing both Foster Green and SoMa's original goals to the actions they have actually taken to build their respective districts, it is seen that operating under a set of goals laid out by a higher organization is relatively ineffective. Without allowing the neighborhood effort to be foster organically, the necessary level of capacity needed to cultivate a sustainable district is hard to create. Establishing district boundaries in Urban Renewal Areas rather than

traditional neighborhood boundaries has made it nearly impossible to identify with one's district, unless they are directly involved with the daily operations of the districts. Looking at Living Cully, the district was formed through four organizations who had a handle on what movements were bubbling under the surface, really listening to what residents could coalesce around. Hearing this, they built off their existing assets to create a district and an effort residents could identify with. Residents of Cully have a strong understanding of what they are fighting for, and how success in sustainable efforts might affect them. While Living Cully is still in its initial phases, it will be exciting to watch what comes of their efforts.

So, what does that say for neighborhood scale sustainability efforts? That they need to be exactly *that*—neighborhood efforts. The piece by piece neighborhood efforts that hopefully will make up a city-wide movement towards sustainability is sensible and a nice thought, but to start from the ground-up with a grassroots movement, people of the community need to be on board and have a clear understanding of what it means to them. EcoDistricts operates as a nice namesake for up-and-coming neighborhood efforts, but, at the end of the day, it is up to neighborhood residents to decide what goals and actions they can work together around.

With this being said, all EcoDistricts studied in this paper experienced a relative level of success, and all have at least somewhat established where their strengths lie as they have all formed or been formed around three different drivers. For example, SoMa's strong partnership with PSU has encouraged multiple applied learning projects for students that benefit both the district and the students. Foster Green has done quite a successful job cultivating a committed volunteer base, even post initial funding, and have been able to tack on several small,

successful community projects to their name. Living Cully has become the ideal example for learning how to develop environmentally consciously and equitably. Thus, however successful the processes were in setting up these various districts, they have all brought about varying levels of positive neighborhood change; and however minimal their impact on the larger effort, EcoDistricts are a step in the right direction towards the sustainable future.

Suggestions

As stated before, were EcoDistricts to have a better understanding for their position in their cross-scale relationship with local, neighborhood-based efforts in the push for city-wide sustainability, salient, harmonious processes might occur. Referencing the Cash et al piece, EcoDistricts, as it is today, classifies as a "bridging organization," organizations that "play an intermediary role between different arenas, levels, or scales and facilitate the co-production of knowledge." (Cash et al, 2006). In EcoDistricts' case, the bridge between industry experts, city officials, other people in power, and community leaders, residents of the district. As the acting hub of knowledge and connection to resources, it is imperative for EcoDistricts to understand everywhere does neighborhoods differently, and there is no one overarching framework that can be prescribed to every neighborhood. In understanding this, EcoDistricts' position in their cross-scale relationship might just be best suited for that of a sort of educational hub that helps guide neighborhoods to resources, connections, and solutions that are best suited for their individual neighborhood.

In regards to the Portland pilots, establishing these districts involuntarily, unlike that of the rest of the EcoDistricts across the nation who voluntarily took park in the summit or

incubator out of pure interest, poses its own set of challenges. There is a definite need for the EcoDistricts organization to shift some focus back on the pilot EcoDistricts. As stated before, it is imperative for the organization to have something to show for themselves. Understandably, this contradicts the earlier suggestion of acting as the "educational bridge," but as Portland remains as the original testing grounds for this style of neighborhood-scale sustainability, it is important to come back to Portland and look to establish reasons why these district's successes are relatively lackluster, and look into ways to boost efforts.

Now, herein lies a whole other set of suggestions to bolster EcoDistricts within Portland. To start, a hat tipped to Living Cully for their decision to build off of existing assets, rather than starting from scratch with something brand new. Cully established an understanding for the social, economic, and physical makeup of their neighborhood, and used that to leverage an entire movement around the equitable vitality of their neighborhood. With the four organizations that make up the Living Cully umbrella, they also have the organizational capacity to continue to move forward. As for Foster Green and SoMa, with little committed personnel, it is important to get creative with resources. In talking with Fletcher Beaudoin, the Sustainability Partnerships Director for the Institute of Sustainable Solutions, he sold his opinions on the power of the university, "I think that there is a fundamental role for universities to engage with district scale sustainability efforts. Our neighborhood sustainability initiative is particularly aimed at that, usually these district scale, grassroots sustainability efforts aren't well resourced and can use energy and support from a variety of sources, but I think students and researchers are a great place for that because I think that the neighborhoods are also a little more of a

testing ground, there's a little less of a barrier for students to enter and get engaged." There is real power in managing a student and district interface, where students are posed with applied learning projects that benefit the community, and do not overburden them.

The use of universities also plays well into another suggestion, education. Educating the residents of the importance of their EcoDistrict and how it affects them not only acts as a sustainable practice accelerator, but also a community-building tactic. And this can be interfaced with another important feature Portland pilots are missing—district identity.

Something as simple a community gathering type meet-and-greet allows the chance for a district to come together meet their neighbors, learn about the importance and benefits of a sustainable district, and build stronger community ties to the neighborhood. In research based around social theory, it was found that social constructs, whether they be in the classroom or your neighbors, have tremendous impacts on sustainable practices in the household (Goldsmith, E.B., Goldsmith, R.E., 2011).

Districts also need to be monitored. Hearing the representative from South of Market has never even spoken once with someone from EcoDistricts suggests the districts might not be monitored. Successful programs are monitored to ascertain information on changes in the environment, and how these changes were brought about, whether they be positive or negative (Vos, P., Meelis, E., Ter Keurs, W.J., 1999). This role is one that is well-suited for the EcoDistricts organization. As a body with the most expertise on how to encourage neighborhood-wide sustainability movements, it would be most effective for EcoDistricts to

Neighborhood sustainability: The genesis of three EcoDistricts within Portland, Oregon

keep an eye on the success of the districts, at least while there are still a relatively small number of district efforts housed under the title of "EcoDistrict."

Future Research

This research has broken down the processes, goals, and actions that have formed three of Portland's EcoDistricts, and has established barriers to the success of the EcoDistrict framework. Future research lies in the breaking down these barriers for a more effective movement around neighborhood-scale sustainability. Future research topics might include how to work cross-scale with the EcoDistricts framework, what is the most effective role for the overarching EcoDistricts organization, and how to better engage the masses in this "grassroots" neighborhood effort.

References

Banuelos, R., Jordan, B., Kennedy, R., Norby, D., Olson, E., Watters, C. (2013). Not in Cully: Anti-Displacement Strategies for the Cully Neighborhood. *Living Cully: A Cully EcoDistrict*. http://www.pdx.edu/usp/sites/www.pdx.edu.usp/files/A_LivingCully_PrinterFriendly_0.pdf Beaudoin, Fletcher. Personal Interview. (2014).

Cash, D.W., Adger, W.N., Berkes, F., Garden, P., Lebel, L., Olsson, P., Pritchard, L., Young, O. "Scale and Cross-Scale Dynamics: Governance and Information in a Multilevel World." *Ecology and Society* 11.2 (2008). http://www.ecologyandsociety.org/vol11/iss2/art8/.

Carone, Kate. Personal Interview. (2014).

Chaskin, Robert J.; Sunil Garg. "The Issue of Governance in Neighborhood-Based Initiatives." *Urban Affairs Review* 32.5 (1997): 631–661. *uar.sagepub.com.proxy.lib.pdx.edu*. Web. 27 Nov. 2013.

Cole, N., Crane, M., Gutierrez, M., Puttman, T., Shandas, V., Smith, E., "SoMa EcoDistrict Roadmap." *Portland Sustainability Institute*. (2012). Print.

Cronin, K., Cole, N., Mason, V., Piekarski, C., Shandas, V. "Foster Green EcoDistrict Assessment." *Portland Sustainability Institute*. (2012). Print.

DeFalco, Tony. Phone Interview. (2014).

Dempsey, N., Bramley, G., Power, S., Brown, C. "The Social Dimension of Sustainable Development: Defining Urban Social Sustainability." *Sustainable Development*. 19 (2009), 289-300. http://onlinelibrary.wiley.com.proxy.lib.pdx.edu/doi/10.1002/sd.417/pdf

Douglas, J., Cole, N., Mason, V., Piekarski, C., Shandas, V. "Gateway EcoDistrict Assessment." *EcoDistricts*. (2011). Print.

Finko, A., Nijkamp, P. "Pathways to Urban Sustainability." *Journal of Environmental Planning & Policy.* 3 (2001): 289–302.

Goldsmith, E.B., Goldsmith, R.E. "Social influence and sustainability in households." *International Journal of Consumer Studies*. 35 (2011): 117-121.

Halprin Landscape Conservancy. "About HLC." (2013). Web: http://halprinconservancy.org/about/

Hawkins, Christopher V., and XiaoHu Wang. "Sustainable Development Governance Citizen Participation and Support Networks in Local Sustainability Initiatives." *Public Works*

Neighborhood sustainability: The genesis of three EcoDistricts within Portland, Oregon

Management & Policy 17.1 (2012): 7–29. pwm.sagepub.com.proxy.lib.pdx.edu. Web. 12 Dec. 2013.

Herrington, Cameron. Personal Interview. (2014).

Hormann, Liz. Personal Interview. (2014)

Kim, Kyung-Bae. "Towards Sustainable Neighborhood Design: A Sustainability Evaluation Framework and a Case Study of the Greenwich Millennium Village Project." *Journal of Architectural & Planning Research* 22.3 (2005): 181–203. Print.

Let Us Build Cully Park. (2013). Web. http://letusbuildcullypark.org/

Luederitz, Christopher, Lang, Daniel J., Von Wehrden, Henrik. "A systematic review of guiding principles for sustainable urban neighborhood development." *Landscape and Urban Planning* 118 (2013): 40-52. Print.

Moore, Steven. "Alternative Routes for a Sustainable City: Austin, Curitiba, and Frankfurt." Lexington Books. (2007). Book.

Nettekoven, Linda. Personal Interview. (2014).

Portney, Kent. "Civic Engagement and Sustainable Cities in the United States." Public Administration Review 65.5 (2005): 579-590. Print.

Portney, K., Berry, J. "Participation and the Pursuit of Sustainability in U.S. Cities." *Urban Affairs Review.* (2010) 46(1): 119-139.

http://uar.sagepub.com.proxy.lib.pdx.edu/content/46/1/119.full.pdf+html

Seltzer, Ethan; Bassett, Ellen M.; Cortright, Joseph; Shandas, Vivek; Smith, Timothy W. "Making EcoDistricts: City-scale climate action one neighborhood at a time." *Institute for Sustainable Solutions Publications*. (2011). Paper 32. http://pdxscholar.library.pdx.edu/iss_pub/32

Verde. "Outreach-Advocacy." (2010). Web. http://www.verdenw.org/outreach-and-advocacy

Vos. P., Meelis, E., Ter Keurs, W.J. "A Framework for the Design of Ecological Monitoring Programs as a Tool for Environmental and Nature Management." *Institute for Evolutionary and Ecological Sciences*. (1999).